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Agenda for 98th St Panda Express Scoping Meeting
February 23, 2022
-Meeting Notes in Red-

Attendees:
Matt Grush – City of Albuquerque
~~**Jeanne Wolfenbarger – City of Albuquerque**~~
~~**Eric Abeln – HVA**~~
Jonathon Kruse – Lee Engineering
Rose Miranda – HVA
Timothy Shoemaker - RTMEC

1. Introductions
2. Review of Site Plan
    a. Site Plan & land Uses
3. Discussion of Scope for TIS
    a. Study Intersections
        i. Site Driveways
        ii. 98th St & Avalon Rd / Bluewater
        iii. 98th St & North Road
        iv. 98th St & South Road
        v. 98th & Volcano Rd
    b. Data Collection
    c. Trip Generation, Pass By, & Internal Capture
        i. Trip Generation Manual (10th Edition) Land Use – See attachments for details.
            ~~1. AM Peak Hour: 68 Entering / 63 Exiting~~
            2. PM Peak Hour: 67 Entering / 65 Exiting
                a. Just PM peak hour
        ii. Pass-by trips Yes
        iii. No Internal Capture
        iv. Trips distributed based on existing traffic patterns
    d. Known Developments or Pending Improvements in Area:
        i. East side of 98th
        ii. North east corner of 98th & Bluewater
    e. Build-out Year and Growth Rate
        i. Build-Out Year (2023)
            1. Will look at MRCOG Model Projections and calculate growth rate (if any), otherwise will assume 1% growth per year.
    f. Analysis scenarios
        i. Existing Conditions
        ii. Opening Year Background (No Build)
            1. Look at phases for adjacent developments
        iii. Opening Year Buildout (Full Build)
        iv. Opening Year Buildout Optimized (if required)

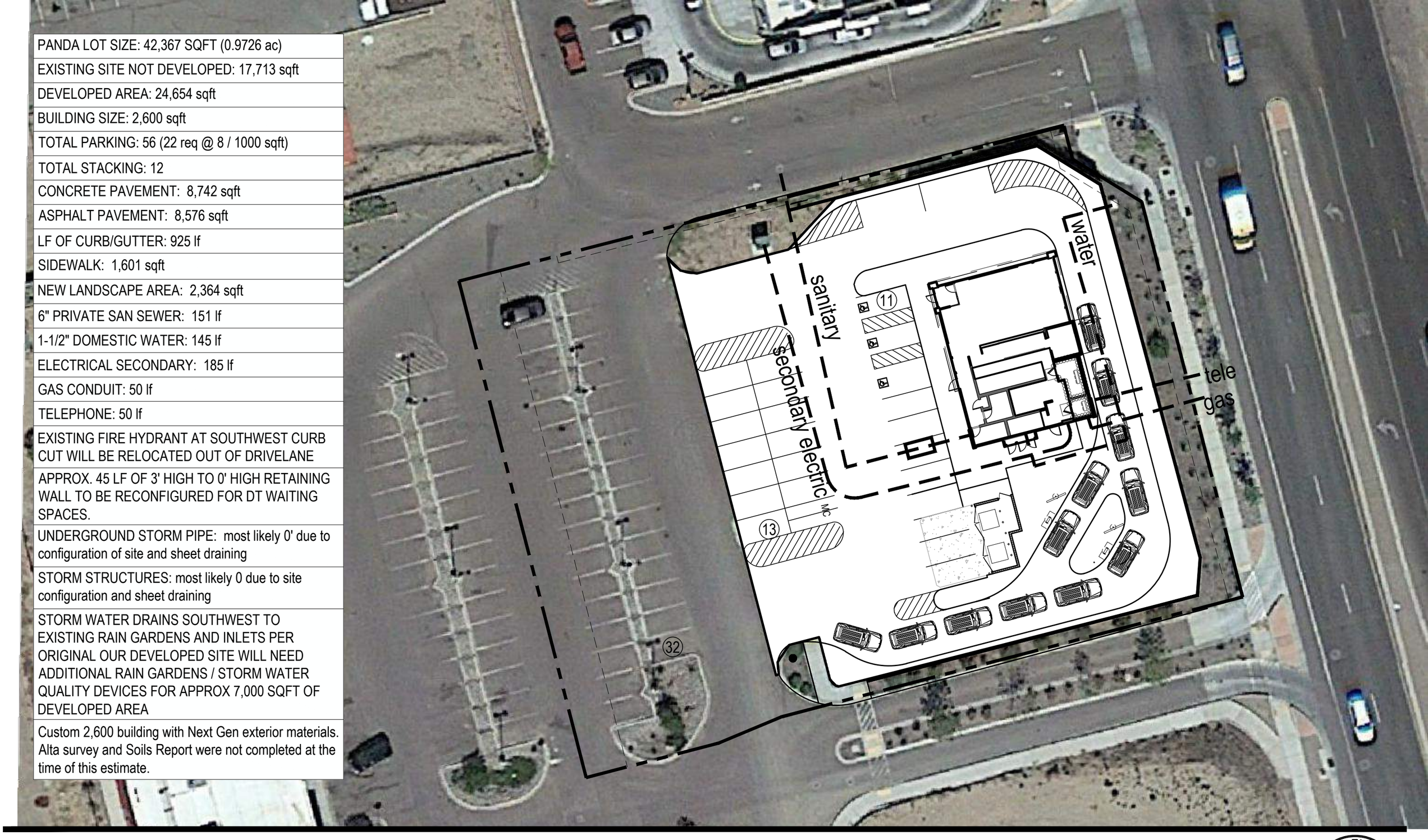
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1. All scenarios with existing signal timings except opening year buildout optimized.

g. Required Analysis & Methodology
   i. LOS Capacity analysis based on HCM 6th Edition (HCS)
      1. Will use balanced volumes on 98th
   ii. 95th Percentile Queue demands (HCS)
      1. Capacity & Queueing for network peak rather than individual intersection peaks
   iii. Auxiliary Lane Analysis
      1. Consider re-striping turn lane
   iv. Sight Distance Analysis at Proposed Driveways
   v. No Safety (Crash) Summary
      1. Yes 5 years with emphasis on SBR into site
   vi. Drive Through Queueing Analysis
   vii. Review Long Range Bike Plan

4. Agency Input (Comments & Issues)
5. Meeting Notes (distributed by Lee Engineering)

PANDA LOT SIZE: 42,367 SQFT (0.9726 ac)
EXISTING SITE NOT DEVELOPED: 17,713 sqft
DEVELOPED AREA: 24,654 sqft
BUILDING SIZE: 2,600 sqft
TOTAL PARKING: 56 (22 req @ 8 / 1000 sqft)
TOTAL STACKING: 12
CONCRETE PAVEMENT: 8,742 sqft
ASPHALT PAVEMENT: 8,576 sqft
LF OF CURB/GUTTER: 925 lf
SIDEWALK: 1,601 sqft
NEW LANDSCAPE AREA: 2,364 sqft
6" PRIVATE SAN SEWER: 151 lf
1-1/2" DOMESTIC WATER: 145 lf
ELECTRICAL SECONDARY: 185 lf
GAS CONDUIT: 50 lf
TELEPHONE: 50 lf
EXISTING FIRE HYDRANT AT SOUTHWEST CURB CUT WILL BE RELOCATED OUT OF DRIVELANE
APPROX. 45 LF OF 3' HIGH TO 0' HIGH RETAINING WALL TO BE RECONFIGURED FOR DT WAITING SPACES.
UNDERGROUND STORM PIPE: most likely 0' due to configuration of site and sheet draining
STORM STRUCTURES: most likely 0 due to site configuration and sheet draining
STORM WATER DRAINS SOUTHWEST TO EXISTING RAIN GARDENS AND INLETS PER ORIGINAL OUR DEVELOPED SITE WILL NEED ADDITIONAL RAIN GARDENS / STORM WATER QUALITY DEVICES FOR APPROX 7,000 SQFT OF DEVELOPED AREA
Custom 2,600 building with Next Gen exterior materials. Alta survey and Soils Report were not completed at the time of this estimate.



Heights Venture
ARCHITECTURE DESIGN
David Scott Roselius, #5200
Not for regulatory approval, permit or construction.

0 15 30 60
1:30

PANDA EXPRESS RESTAURANT
261 98th St. NW, Albuquerque, NM 87123
Site V6.2 - preferred - 12-02-21

PLAN NORTH
TRUE NORTH
N

PANDA EXPRESS · CHINESE KITCHEN ·

City of Albuquerque

Planning Department

Development Review Services Division

Traffic Scoping Form (REV 12/2020)

Project Title: Volcano Road Panda Express Building Permit #: _____ Hydrology File #: _____

Zone Atlas Page: K-9-Z DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: TR 2 CORRECTION PLAT FOR 98TH STREET PLAZA (BEING COMPRISED OF PORTIONS OF TRACTS 1 AND 2, ROW 2, UNIT A,ORIGINAL TOWNSITE OF WESTLAND)

City Address: 261 98th Street NW

Applicant: RTM Engineering Consultants Contact: Tim Shoemaker

Address: 9225 Indian Creek Parkway #1075, Overland Park, KS 66210

Phone#: 913-303-0080 Fax#: _____ E-mail: Tim.Shoemaker@RTMEC.com

Development Information

Build out/Implementation Year: 2022 Current/Proposed Zoning: MX-M

Project Type: New: (✔) Change of Use: ( ) Same Use/Unchanged: ( ) Same Use/Increased Activity: ( )

Proposed Use (mark all that apply): Residential: ( ) Office: ( ) Retail: (✔) Mixed-Use: ( )

Describe development and Uses:
Fast Food Restaurant with Drive-Thru

Days and Hours of Operation (if known): 10 AM - 10 PM

Facility

Building Size (sq. ft.): 2,500

Number of Residential Units: _____

Number of Commercial Units: _____

Traffic Considerations

Expected Number of Daily Visitors/Patrons (if known):* _____

Expected Number of Employees (if known):* 3 per shift / 2 shifts

Expected Number of Delivery Trucks/Buses per Day (if known):* _____

Trip Generations during PM/AM Peak Hour (if known):* 128 AM / 129 PM (Store not open for Breakfast)

Driveway(s) Located on: Street Name Internal shopping center

Adjacent Roadway(s) Posted Speed: Street Name 98th St. NW Posted Speed 45 mph

Street Name _____ Posted Speed _____

** If these values are not known, assumptions will be made by City staff. Depending on the assumptions, a full TIS may be required*

Roadway Information (adjacent to site)

Comprehensive Plan Corridor Designation/Functional Classification: 98th St NW: Principal Arterial
(arterial, collecdtor, local, main street)

Comprehensive Plan Center Designation: None
(urban center, employment center, activity center)

Jurisdiction of roadway (NMDOT, City, County): City of Albuquerque

Adjacent Roadway(s) Traffic Volume: 35,987 AWDT Volume-to-Capacity Ratio: 0.25 - 0.5 AM SB, 1.0 AM NB (Store not open for Breakfast) 0.75 - 1.0 PM SB, 0.5 - 0.75 PM NB
(if applicable)

Adjacent Transit Service(s): Nearby 54 & 198 1,700 feet to South Nearest Transit Stop(s): 98th & Central

Is site within 660 feet of Premium Transit?: No

Current/Proposed Bicycle Infrastructure: Existing bike lanes
(bike lanes, trails)

Current/Proposed Sidewalk Infrastructure: Existing sidewalk on west side of 98th

Relevant Web-sites for Filling out Roadway Information:

City GIS Information: http://www.cabq.gov/gis/advanced-map-viewer

Comprehensive Plan Corridor/Designation:https://abc-zone.com/document/abc-comp-plan-chapter-5-land-use (map after Page 5-5)

Road Corridor Classification: https://www.mrcog-nm.gov/DocumentCenter/View/1920/Long-Range-Roadway-System-LRRS-PDF?bidId=

Traffic Volume and V/C Ratio: https://www.mrcog-nm.gov/285/Traffic-Counts and https://public.mrcog-nm.gov/taqa/

Bikeways: http://documents.cabq.gov/planning/adopted-longrange-plans/BTFP/Final/BTFP%20FINAL_Jun25.pdf (Map Pages 75 to 81)

TIS Determination

Note: Changes made to development proposals / assumptions, from the information provided above, will result in a new TIS determination.

Traffic Impact Study (TIS) Required: Yes [✓] No [ ] Borderline [ ]

Thresholds Met? Yes [✓] No [ ]

Mitigating Reasons for Not Requiring TIS: Previously Studied: [ ]

Notes:

P.E. 1/27/2022

TRAFFIC ENGINEER DATE

Submittal

The Scoping Form must be submitted as part of any building permit application, DRB application, or EPC application. See the Development Process Manual Chapter 7.4 for additional information.

Submit by email to the City Traffic Engineer mgrush@cabq.gov . Call 924-3362 for information.

Site Plan/Traffic Scoping Checklist

Site plan, building size in sq. ft. (show new, existing, remodel), to include the following items as applicable:

1. Access -- location and width of driveways
2. Sidewalks (Check DPM and IDO for sidewalk requirements. Also, Centers have wider sidewalk requirements.)
3. Bike Lanes (check for designated bike routes, long range bikeway system) *(check MRCOG Bikeways and Trails in the 2040 MTP map)*
4. Location of nearby multi-use trails, if applicable *(check MRCOG Bikeways and Trails in the 2040 MTP map)*
5. Location of nearby transit stops, transit stop amenities (eg. bench, shelter). Note if site is within 660 feet of premium transit.
6. Adjacent roadway(s) configuration (number of lanes, lane widths, turn bays, medians, etc.)
7. Distance from access point(s) to nearest adjacent driveways/intersections.
8. Note if site is within a Center and more specifically if it is within an Urban Center.
9. Note if site is adjacent to a Main Street.
10. Identify traffic volumes on adjacent roadway per MRCOG information. If site generates more than 100 vehicles per hour, identify v/c ratio on this form.

Fast-Food Restaurant with Drive-Through Window
(934)

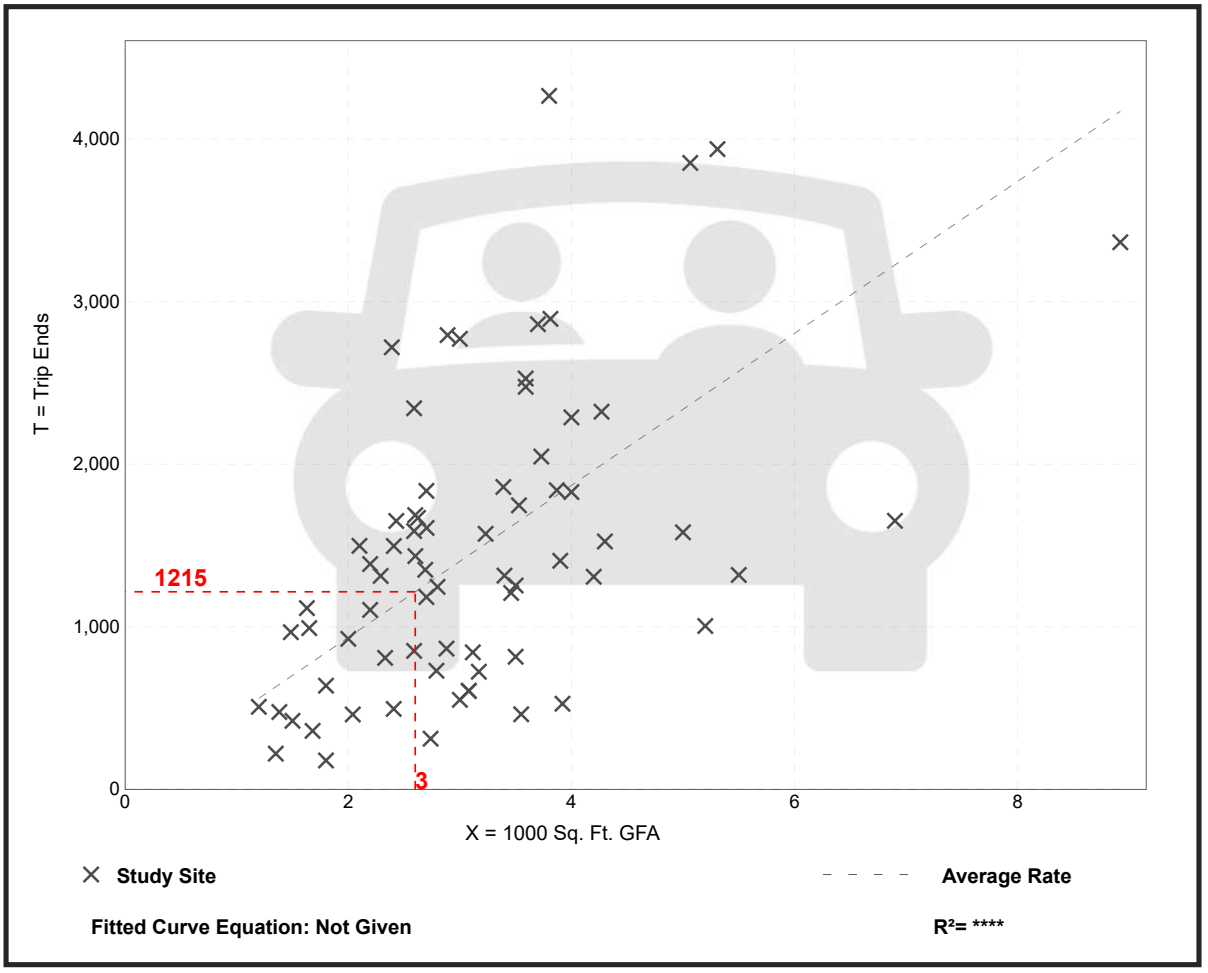
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast-Food Restaurant with Drive-Through Window
(934)

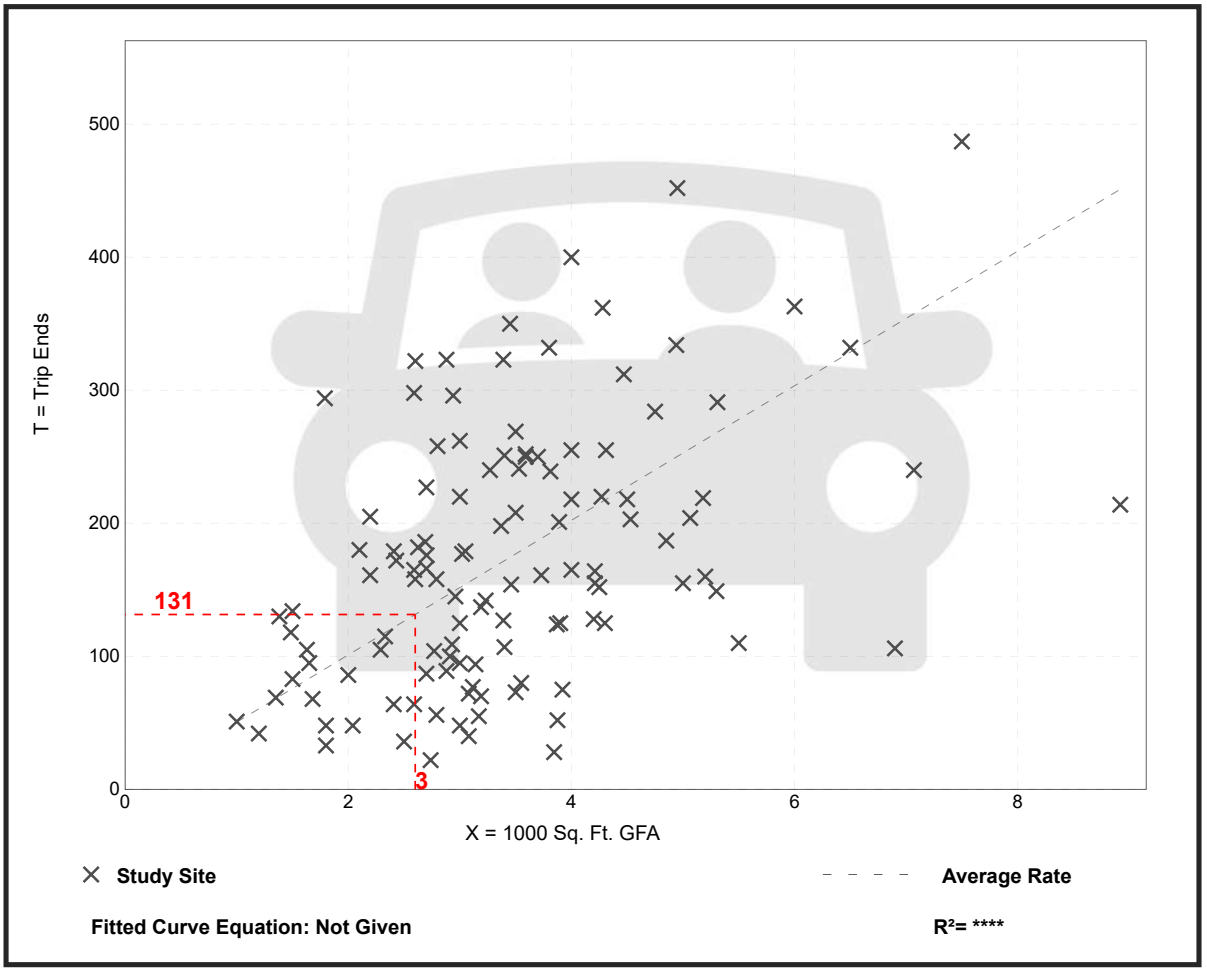
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 118
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
50.57	7.28 - 164.25	25.99

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Fast-Food Restaurant with Drive-Through Window
(934)

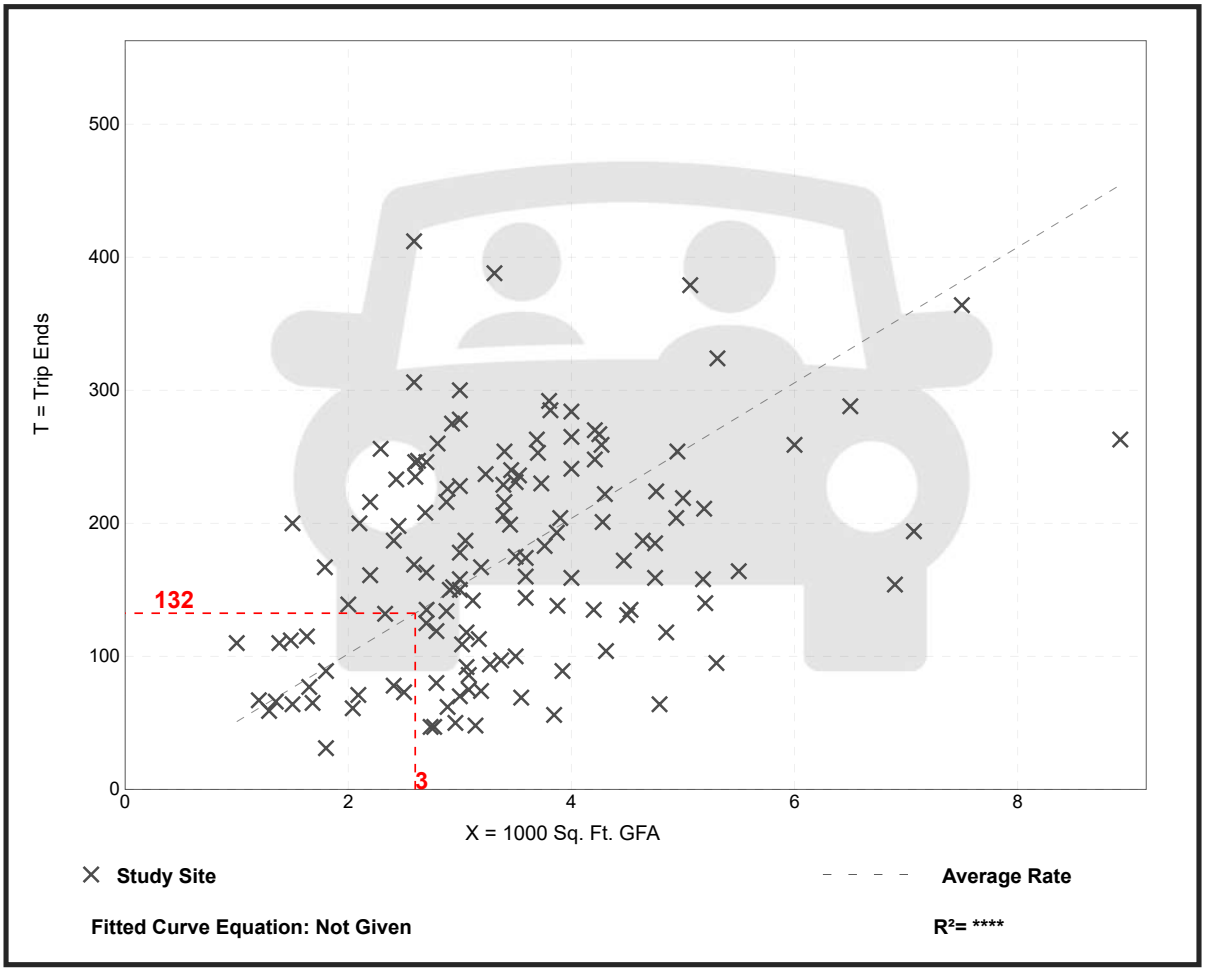
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 135
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
50.94	13.36 - 159.07	24.91

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

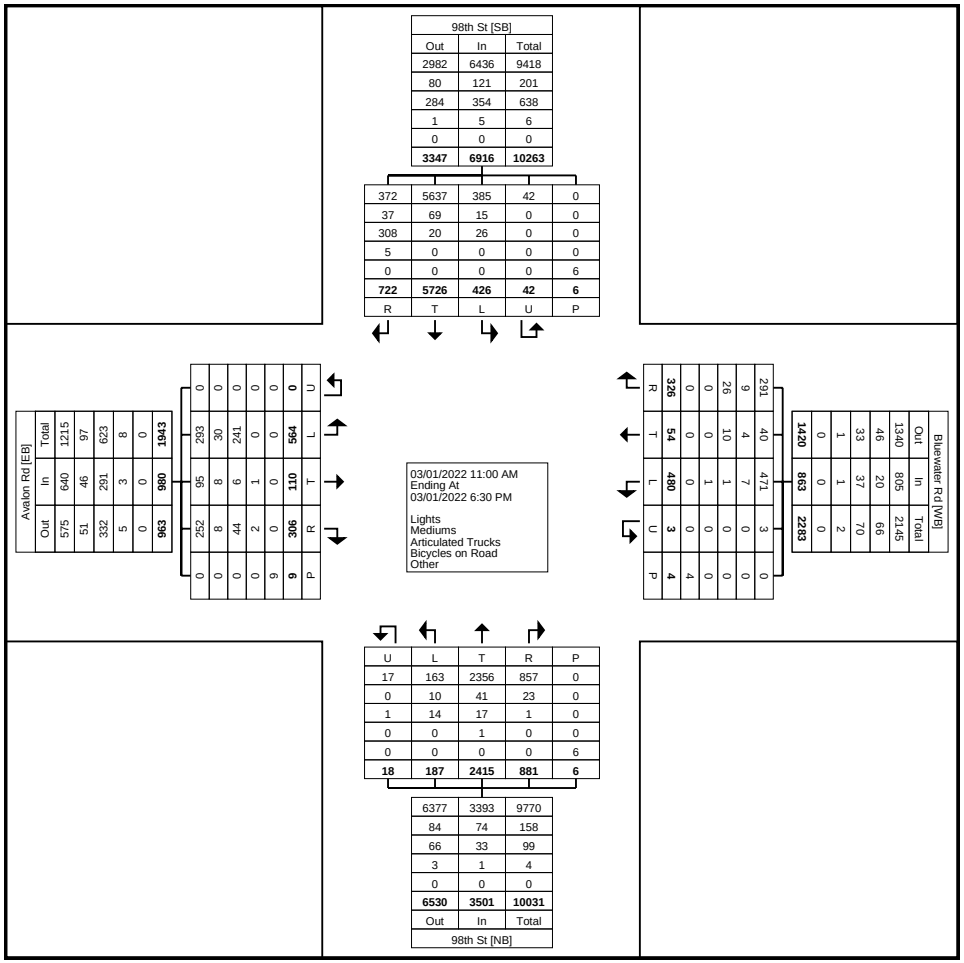
Turning Movement Data

Start Time	98th St Southbound						Bluewater Rd Westbound						98th St Northbound						Avalon Rd Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	25	120	9	3	0	157	4	2	7	0	0	13	25	83	7	0	0	115	14	2	18	0	0	34	319
11:15 AM	27	119	15	2	0	163	14	3	10	0	0	27	38	93	10	2	0	143	14	4	12	0	0	30	363
11:30 AM	30	130	13	4	1	177	11	1	12	0	0	24	23	79	11	1	0	114	4	5	31	0	0	40	355
11:45 AM	21	127	14	3	0	165	12	2	18	0	0	32	31	82	9	1	0	123	15	4	18	0	0	37	357
Hourly Total	103	496	51	12	1	662	41	8	47	0	0	96	117	337	37	4	0	495	47	15	79	0	0	141	1394
12:00 PM	36	151	14	2	1	203	11	8	16	0	0	35	35	84	13	1	1	133	12	3	32	0	1	47	418
12:15 PM	37	165	12	0	0	214	12	0	11	0	0	23	35	81	10	0	0	126	11	8	26	0	1	45	408
12:30 PM	43	174	12	0	0	229	13	1	17	1	0	32	32	114	8	0	0	154	18	3	29	0	0	50	465
12:45 PM	28	155	11	1	0	195	6	2	7	0	0	15	36	77	5	2	0	120	8	7	31	0	0	46	376
Hourly Total	144	645	49	3	1	841	42	11	51	1	0	105	138	356	36	3	1	533	49	21	118	0	2	188	1667
1:00 PM	26	177	10	1	0	214	9	1	13	0	0	23	29	80	5	2	0	116	11	5	31	0	1	47	400
1:15 PM	29	190	15	0	0	234	10	2	16	0	0	28	32	85	9	0	1	126	12	5	31	0	1	48	436
1:30 PM	24	188	22	1	0	235	17	1	23	0	0	41	40	91	8	1	0	140	15	6	26	0	0	47	463
1:45 PM	30	192	15	1	0	238	11	1	14	0	0	26	24	113	7	1	0	145	12	3	23	0	0	38	447
Hourly Total	109	747	62	3	0	921	47	5	66	0	0	118	125	369	29	4	1	527	50	19	111	0	2	180	1746
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:30 PM	27	363	23	6	0	419	26	3	18	0	0	47	51	143	9	1	0	204	16	1	25	0	0	42	712
3:45 PM	28	343	38	2	1	411	15	1	26	0	0	42	39	109	8	1	0	157	11	2	19	0	1	32	642
Hourly Total	55	706	61	8	1	830	41	4	44	0	0	89	90	252	17	2	0	361	27	3	44	0	1	74	1354
4:00 PM	38	327	22	3	0	390	17	2	29	0	0	48	42	105	9	0	1	156	19	3	21	0	0	43	637
4:15 PM	19	321	22	1	0	363	13	1	19	0	0	33	48	109	15	0	0	172	13	7	17	0	0	37	605
4:30 PM	32	285	18	0	0	335	19	2	35	0	0	56	45	135	4	2	0	186	11	4	22	0	1	37	614
4:45 PM	28	311	17	1	0	357	22	2	30	1	0	55	40	108	6	1	0	155	13	7	28	0	1	48	615
Hourly Total	117	1244	79	5	0	1445	71	7	113	1	0	192	175	457	34	3	1	669	56	21	88	0	2	165	2471
5:00 PM	36	331	22	2	0	391	9	3	34	0	1	46	33	107	10	0	0	150	10	6	19	0	0	35	622
5:15 PM	22	334	21	0	0	377	17	3	27	1	1	48	39	106	4	1	1	150	15	8	24	0	0	47	622
5:30 PM	37	321	23	1	1	382	15	4	30	0	0	49	39	115	3	0	0	157	10	6	26	0	1	42	630
5:45 PM	38	295	23	1	1	357	19	4	26	0	2	49	52	116	5	0	2	173	18	2	16	0	0	36	615
Hourly Total	133	1281	89	4	2	1507	60	14	117	1	4	192	163	444	22	1	3	630	53	22	85	0	1	160	2489
6:00 PM	30	290	18	5	1	343	10	3	18	0	0	31	34	104	8	1	0	147	13	6	18	0	1	37	558
6:15 PM	31	317	17	2	0	367	14	2	24	0	0	40	39	96	4	0	0	139	11	3	21	0	0	35	581
Grand Total	722	5726	426	42	6	6916	326	54	480	3	4	863	881	2415	187	18	6	3501	306	110	564	0	9	980	12260
Approach %	10.4	82.8	6.2	0.6	-	-	37.8	6.3	55.6	0.3	-	-	25.2	69.0	5.3	0.5	-	-	31.2	11.2	57.6	0.0	-	-	-
Total %	5.9	46.7	3.5	0.3	-	56.4	2.7	0.4	3.9	0.0	-	7.0	7.2	19.7	1.5	0.1	-	28.6	2.5	0.9	4.6	0.0	-	8.0	-
Lights	372	5637	385	42	-	6436	291	40	471	3	-	805	857	2356	163	17	-	3393	252	95	293	0	-	640	11274

% Lights	51.5	98.4	90.4	100.0	-	93.1	89.3	74.1	98.1	100.0	-	93.3	97.3	97.6	87.2	94.4	-	96.9	82.4	86.4	52.0	-	-	65.3	92.0
Mediums	37	69	15	0	-	121	9	4	7	0	-	20	23	41	10	0	-	74	8	8	30	0	-	46	261
% Mediums	5.1	1.2	3.5	0.0	-	1.7	2.8	7.4	1.5	0.0	-	2.3	2.6	1.7	5.3	0.0	-	2.1	2.6	7.3	5.3	-	-	4.7	2.1
Articulated Trucks	308	20	26	0	-	354	26	10	1	0	-	37	1	17	14	1	-	33	44	6	241	0	-	291	715
% Articulated Trucks	42.7	0.3	6.1	0.0	-	5.1	8.0	18.5	0.2	0.0	-	4.3	0.1	0.7	7.5	5.6	-	0.9	14.4	5.5	42.7	-	-	29.7	5.8
Bicycles on Road	5	0	0	0	-	5	0	0	1	0	-	1	0	1	0	0	-	1	2	1	0	0	-	3	10
% Bicycles on Road	0.7	0.0	0.0	0.0	-	0.1	0.0	0.0	0.2	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.7	0.9	0.0	-	-	0.3	0.1
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	16.7	-	-	-	-	-	0.0	-	-	-	-	-	16.7	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	4	-	-	-	-	-	5	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	83.3	-	-	-	-	-	100.0	-	-	-	-	-	83.3	-	-	-	-	-	100.0	-	-

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Data Plot

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jpham@lee-eng.com

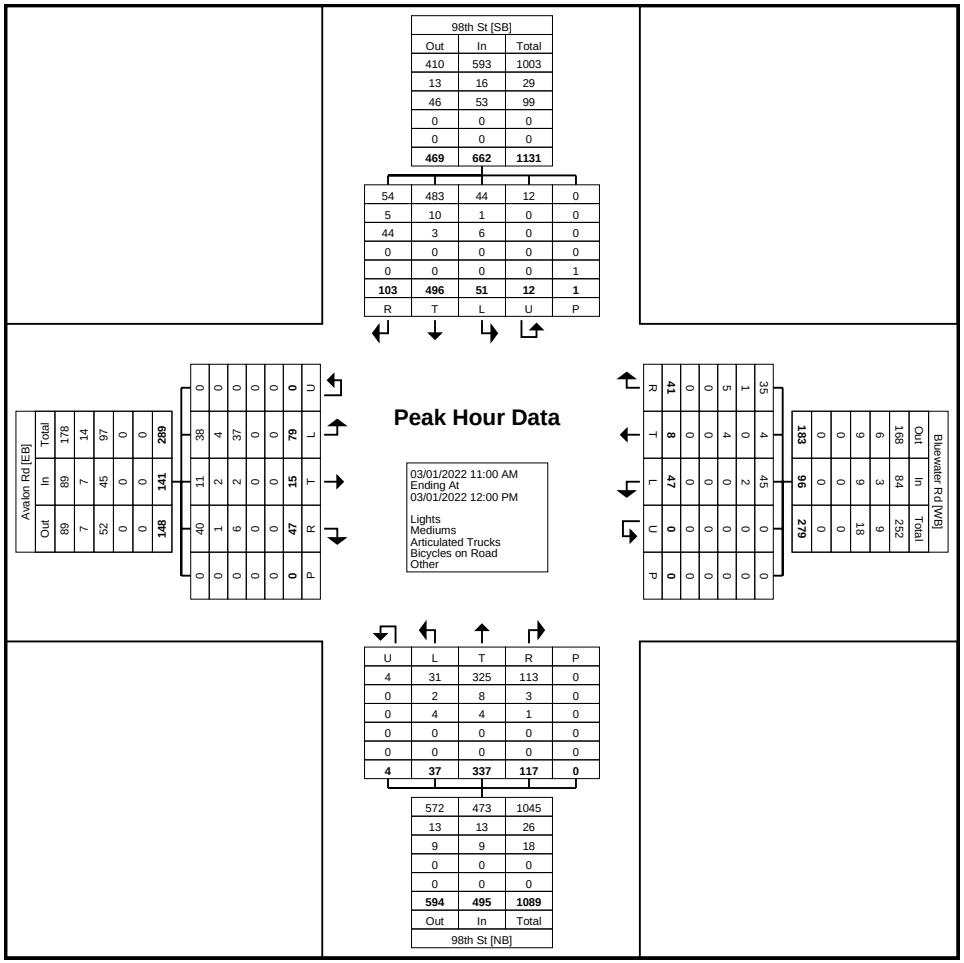
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (11:00 AM)

Start Time	98th St Southbound						Bluewater Rd Westbound						98th St Northbound						Avalon Rd Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	25	120	9	3	0	157	4	2	7	0	0	13	25	83	7	0	0	115	14	2	18	0	0	34	319
11:15 AM	27	119	15	2	0	163	14	3	10	0	0	27	38	93	10	2	0	143	14	4	12	0	0	30	363
11:30 AM	30	130	13	4	1	177	11	1	12	0	0	24	23	79	11	1	0	114	4	5	31	0	0	40	355
11:45 AM	21	127	14	3	0	165	12	2	18	0	0	32	31	82	9	1	0	123	15	4	18	0	0	37	357
Total	103	496	51	12	1	662	41	8	47	0	0	96	117	337	37	4	0	495	47	15	79	0	0	141	1394
Approach %	15.6	74.9	7.7	1.8	-	-	42.7	8.3	49.0	0.0	-	-	23.6	68.1	7.5	0.8	-	-	33.3	10.6	56.0	0.0	-	-	-
Total %	7.4	35.6	3.7	0.9	-	47.5	2.9	0.6	3.4	0.0	-	6.9	8.4	24.2	2.7	0.3	-	35.5	3.4	1.1	5.7	0.0	-	10.1	-
PHF	0.858	0.954	0.850	0.750	-	0.935	0.732	0.667	0.653	0.000	-	0.750	0.770	0.906	0.841	0.500	-	0.865	0.783	0.750	0.637	0.000	-	0.881	0.960
Lights	54	483	44	12	-	593	35	4	45	0	-	84	113	325	31	4	-	473	40	11	38	0	-	89	1239
% Lights	52.4	97.4	86.3	100.0	-	89.6	85.4	50.0	95.7	-	-	87.5	96.6	96.4	83.8	100.0	-	95.6	85.1	73.3	48.1	-	-	63.1	88.9
Mediums	5	10	1	0	-	16	1	0	2	0	-	3	3	8	2	0	-	13	1	2	4	0	-	7	39
% Mediums	4.9	2.0	2.0	0.0	-	2.4	2.4	0.0	4.3	-	-	3.1	2.6	2.4	5.4	0.0	-	2.6	2.1	13.3	5.1	-	-	5.0	2.8
Articulated Trucks	44	3	6	0	-	53	5	4	0	0	-	9	1	4	4	0	-	9	6	2	37	0	-	45	116
% Articulated Trucks	42.7	0.6	11.8	0.0	-	8.0	12.2	50.0	0.0	-	-	9.4	0.9	1.2	10.8	0.0	-	1.8	12.8	13.3	46.8	-	-	31.9	8.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (11:00 AM)

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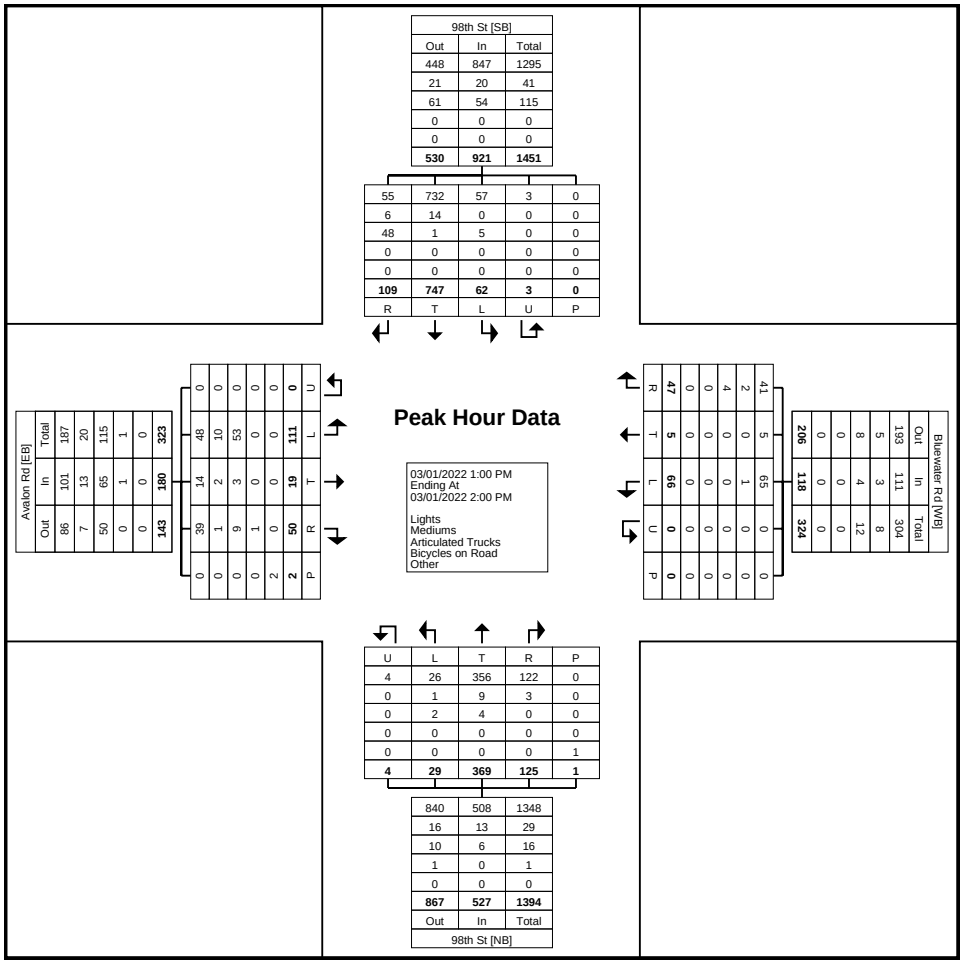
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (1:00 PM)

Start Time	98th St Southbound						Bluewater Rd Westbound						98th St Northbound						Avalon Rd Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
1:00 PM	26	177	10	1	0	214	9	1	13	0	0	23	29	80	5	2	0	116	11	5	31	0	1	47	400
1:15 PM	29	190	15	0	0	234	10	2	16	0	0	28	32	85	9	0	1	126	12	5	31	0	1	48	436
1:30 PM	24	188	22	1	0	235	17	1	23	0	0	41	40	91	8	1	0	140	15	6	26	0	0	47	463
1:45 PM	30	192	15	1	0	238	11	1	14	0	0	26	24	113	7	1	0	145	12	3	23	0	0	38	447
Total	109	747	62	3	0	921	47	5	66	0	0	118	125	369	29	4	1	527	50	19	111	0	2	180	1746
Approach %	11.8	81.1	6.7	0.3	-	-	39.8	4.2	55.9	0.0	-	-	23.7	70.0	5.5	0.8	-	-	27.8	10.6	61.7	0.0	-	-	-
Total %	6.2	42.8	3.6	0.2	-	52.7	2.7	0.3	3.8	0.0	-	6.8	7.2	21.1	1.7	0.2	-	30.2	2.9	1.1	6.4	0.0	-	10.3	-
PHF	0.908	0.973	0.705	0.750	-	0.967	0.691	0.625	0.717	0.000	-	0.720	0.781	0.816	0.806	0.500	-	0.909	0.833	0.792	0.895	0.000	-	0.938	0.943
Lights	55	732	57	3	-	847	41	5	65	0	-	111	122	356	26	4	-	508	39	14	48	0	-	101	1567
% Lights	50.5	98.0	91.9	100.0	-	92.0	87.2	100.0	98.5	-	-	94.1	97.6	96.5	89.7	100.0	-	96.4	78.0	73.7	43.2	-	-	56.1	89.7
Mediums	6	14	0	0	-	20	2	0	1	0	-	3	3	9	1	0	-	13	1	2	10	0	-	13	49
% Mediums	5.5	1.9	0.0	0.0	-	2.2	4.3	0.0	1.5	-	-	2.5	2.4	2.4	3.4	0.0	-	2.5	2.0	10.5	9.0	-	-	7.2	2.8
Articulated Trucks	48	1	5	0	-	54	4	0	0	0	-	4	0	4	2	0	-	6	9	3	53	0	-	65	129
% Articulated Trucks	44.0	0.1	8.1	0.0	-	5.9	8.5	0.0	0.0	-	-	3.4	0.0	1.1	6.9	0.0	-	1.1	18.0	15.8	47.7	-	-	36.1	7.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	1	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	2.0	0.0	0.0	-	-	0.6	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Site Code:
Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (1:00 PM)

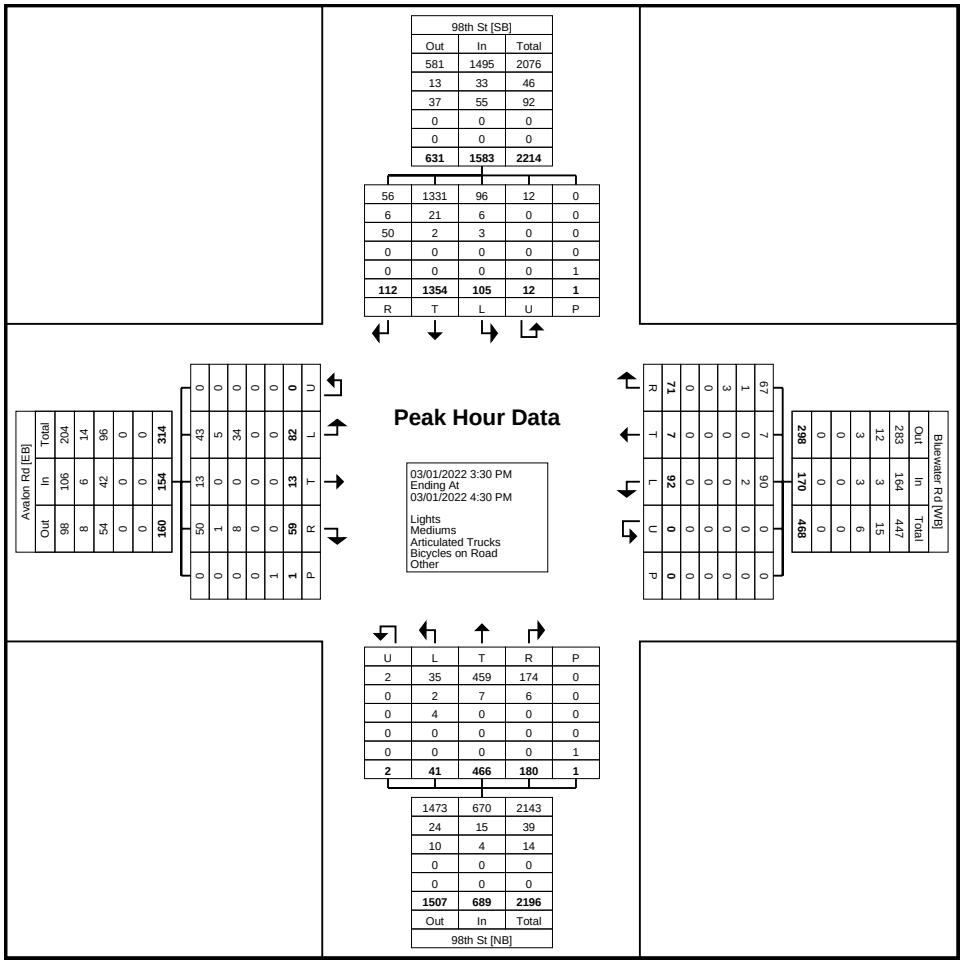
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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (3:30 PM)

Start Time	98th St Southbound						Bluewater Rd Westbound						98th St Northbound						Avalon Rd Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
3:30 PM	27	363	23	6	0	419	26	3	18	0	0	47	51	143	9	1	0	204	16	1	25	0	0	42	712
3:45 PM	28	343	38	2	1	411	15	1	26	0	0	42	39	109	8	1	0	157	11	2	19	0	1	32	642
4:00 PM	38	327	22	3	0	390	17	2	29	0	0	48	42	105	9	0	1	156	19	3	21	0	0	43	637
4:15 PM	19	321	22	1	0	363	13	1	19	0	0	33	48	109	15	0	0	172	13	7	17	0	0	37	605
Total	112	1354	105	12	1	1583	71	7	92	0	0	170	180	466	41	2	1	689	59	13	82	0	1	154	2596
Approach %	7.1	85.5	6.6	0.8	-	-	41.8	4.1	54.1	0.0	-	-	26.1	67.6	6.0	0.3	-	-	38.3	8.4	53.2	0.0	-	-	-
Total %	4.3	52.2	4.0	0.5	-	61.0	2.7	0.3	3.5	0.0	-	6.5	6.9	18.0	1.6	0.1	-	26.5	2.3	0.5	3.2	0.0	-	5.9	-
PHF	0.737	0.933	0.691	0.500	-	0.945	0.683	0.583	0.793	0.000	-	0.885	0.882	0.815	0.683	0.500	-	0.844	0.776	0.464	0.820	0.000	-	0.895	0.912
Lights	56	1331	96	12	-	1495	67	7	90	0	-	164	174	459	35	2	-	670	50	13	43	0	-	106	2435
% Lights	50.0	98.3	91.4	100.0	-	94.4	94.4	100.0	97.8	-	-	96.5	96.7	98.5	85.4	100.0	-	97.2	84.7	100.0	52.4	-	-	68.8	93.8
Mediums	6	21	6	0	-	33	1	0	2	0	-	3	6	7	2	0	-	15	1	0	5	0	-	6	57
% Mediums	5.4	1.6	5.7	0.0	-	2.1	1.4	0.0	2.2	-	-	1.8	3.3	1.5	4.9	0.0	-	2.2	1.7	0.0	6.1	-	-	3.9	2.2
Articulated Trucks	50	2	3	0	-	55	3	0	0	0	-	3	0	0	4	0	-	4	8	0	34	0	-	42	104
% Articulated Trucks	44.6	0.1	2.9	0.0	-	3.5	4.2	0.0	0.0	-	-	1.8	0.0	0.0	9.8	0.0	-	0.6	13.6	0.0	41.5	-	-	27.3	4.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Turning Movement Peak Hour Data Plot (3:30 PM)

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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

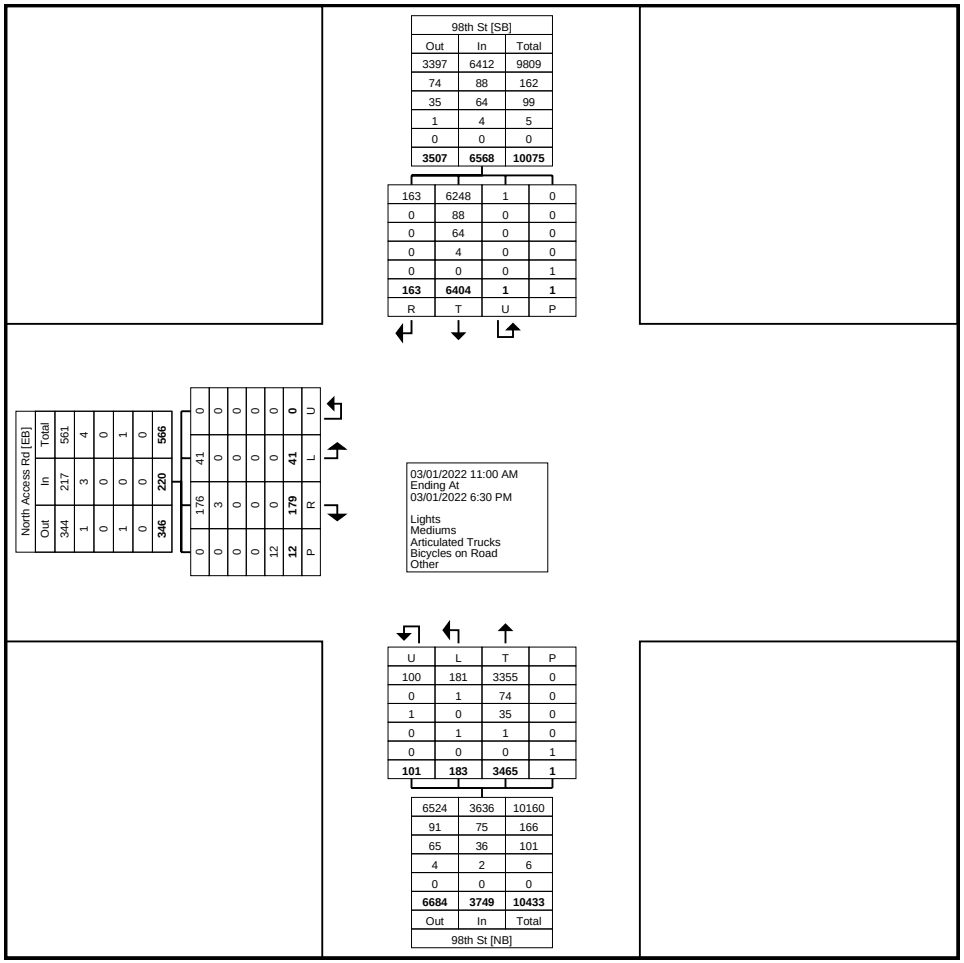
Turning Movement Data

Start Time	98th St Southbound					98th St Northbound					North Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
11:00 AM	4	136	1	0	141	114	5	3	0	122	7	1	0	1	8	271
11:15 AM	3	150	0	0	153	143	1	5	0	149	4	0	0	3	4	306
11:30 AM	3	147	0	0	150	108	10	1	0	119	3	0	0	1	3	272
11:45 AM	4	152	0	0	156	133	6	3	0	142	6	2	0	0	8	306
Hourly Total	14	585	1	0	600	498	22	12	0	532	20	3	0	5	23	1155
12:00 PM	5	177	0	0	182	130	8	2	0	140	8	2	0	0	10	332
12:15 PM	3	185	0	0	188	127	13	4	0	144	5	2	0	0	7	339
12:30 PM	6	202	0	0	208	139	12	2	0	153	8	2	0	1	10	371
12:45 PM	3	177	0	0	180	123	5	4	0	132	6	1	0	1	7	319
Hourly Total	17	741	0	0	758	519	38	12	0	569	27	7	0	2	34	1361
1:00 PM	5	187	0	1	192	115	5	8	0	128	3	8	0	0	11	331
1:15 PM	6	204	0	0	210	119	6	10	0	135	6	3	0	0	9	354
1:30 PM	8	229	0	0	237	141	3	1	0	145	6	2	0	0	8	390
1:45 PM	2	215	0	0	217	147	7	3	1	157	4	2	0	2	6	380
Hourly Total	21	835	0	1	856	522	21	22	1	565	19	15	0	2	34	1455
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:30 PM	8	373	0	0	381	195	4	0	0	199	7	1	0	0	8	588
3:45 PM	9	390	0	0	399	162	6	7	0	175	10	1	0	0	11	585
Hourly Total	17	763	0	0	780	357	10	7	0	374	17	2	0	0	19	1173
4:00 PM	5	376	0	0	381	151	16	5	0	172	13	1	0	0	14	567
4:15 PM	8	368	0	0	376	173	5	6	0	184	7	2	0	0	9	569
4:30 PM	11	317	0	0	328	186	9	5	0	200	7	0	0	0	7	535
4:45 PM	12	338	0	0	350	149	14	5	0	168	7	0	0	0	7	525
Hourly Total	36	1399	0	0	1435	659	44	21	0	724	34	3	0	0	37	2196
5:00 PM	14	371	0	0	385	142	11	6	0	159	16	0	0	0	16	560
5:15 PM	6	371	0	0	377	165	8	6	0	179	7	2	0	1	9	565
5:30 PM	13	341	0	0	354	153	12	4	0	169	12	0	0	1	12	535
5:45 PM	9	338	0	0	347	174	5	3	0	182	9	3	0	1	12	541
Hourly Total	42	1421	0	0	1463	634	36	19	0	689	44	5	0	3	49	2201
6:00 PM	7	310	0	0	317	139	6	3	0	148	11	2	0	0	13	478
6:15 PM	9	350	0	0	359	137	6	5	0	148	7	4	0	0	11	518
Grand Total	163	6404	1	1	6568	3465	183	101	1	3749	179	41	0	12	220	10537
Approach %	2.5	97.5	0.0	-	-	92.4	4.9	2.7	-	-	81.4	18.6	0.0	-	-	-
Total %	1.5	60.8	0.0	-	62.3	32.9	1.7	1.0	-	35.6	1.7	0.4	0.0	-	2.1	-
Lights	163	6248	1	-	6412	3355	181	100	-	3636	176	41	0	-	217	10265
% Lights	100.0	97.6	100.0	-	97.6	96.8	98.9	99.0	-	97.0	98.3	100.0	-	-	98.6	97.4

Mediums	0	88	0	-	88	74	1	0	-	75	3	0	0	-	3	166
% Mediums	0.0	1.4	0.0	-	1.3	2.1	0.5	0.0	-	2.0	1.7	0.0	-	-	1.4	1.6
Articulated Trucks	0	64	0	-	64	35	0	1	-	36	0	0	0	-	0	100
% Articulated Trucks	0.0	1.0	0.0	-	1.0	1.0	0.0	1.0	-	1.0	0.0	0.0	-	-	0.0	0.9
Bicycles on Road	0	4	0	-	4	1	1	0	-	2	0	0	0	-	0	6
% Bicycles on Road	0.0	0.1	0.0	-	0.1	0.0	0.5	0.0	-	0.1	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	12	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Turning Movement Data Plot

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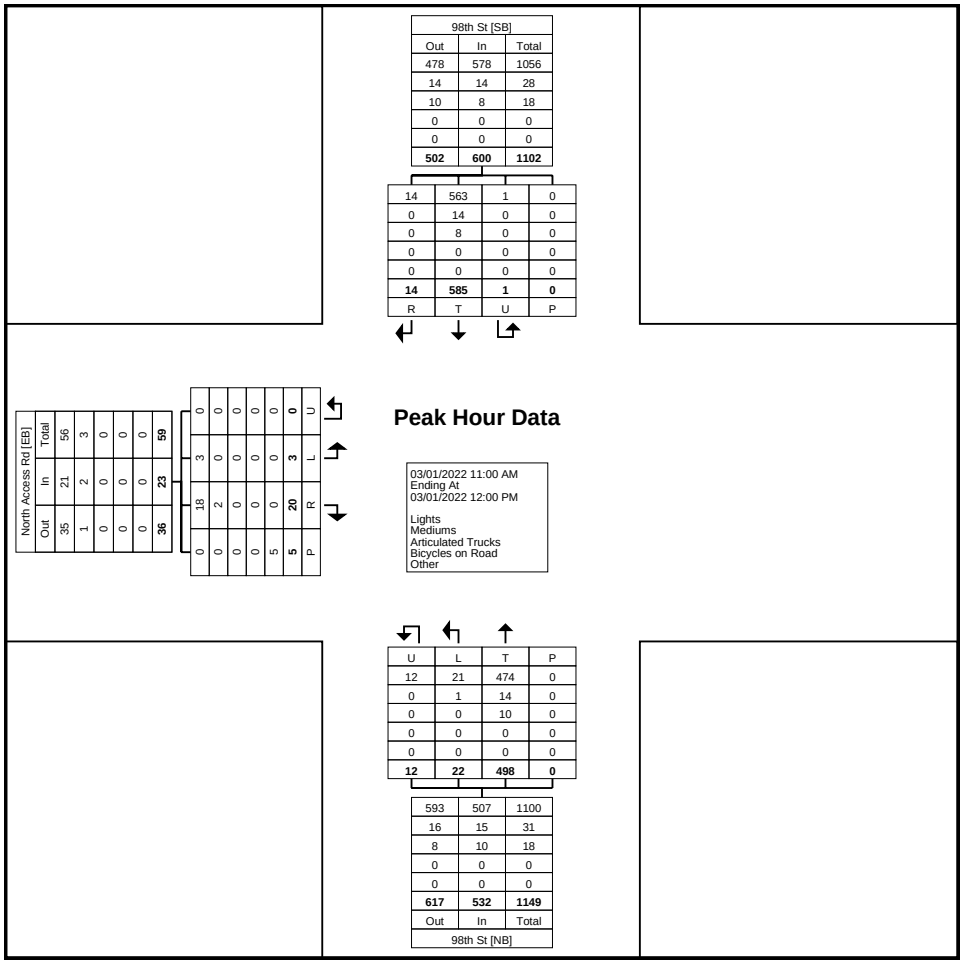
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (11:00 AM)

Start Time	98th St Southbound					98th St Northbound					North Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
11:00 AM	4	136	1	0	141	114	5	3	0	122	7	1	0	1	8	271
11:15 AM	3	150	0	0	153	143	1	5	0	149	4	0	0	3	4	306
11:30 AM	3	147	0	0	150	108	10	1	0	119	3	0	0	1	3	272
11:45 AM	4	152	0	0	156	133	6	3	0	142	6	2	0	0	8	306
Total	14	585	1	0	600	498	22	12	0	532	20	3	0	5	23	1155
Approach %	2.3	97.5	0.2	-	-	93.6	4.1	2.3	-	-	87.0	13.0	0.0	-	-	-
Total %	1.2	50.6	0.1	-	51.9	43.1	1.9	1.0	-	46.1	1.7	0.3	0.0	-	2.0	-
PHF	0.875	0.962	0.250	-	0.962	0.871	0.550	0.600	-	0.893	0.714	0.375	0.000	-	0.719	0.944
Lights	14	563	1	-	578	474	21	12	-	507	18	3	0	-	21	1106
% Lights	100.0	96.2	100.0	-	96.3	95.2	95.5	100.0	-	95.3	90.0	100.0	-	-	91.3	95.8
Mediums	0	14	0	-	14	14	1	0	-	15	2	0	0	-	2	31
% Mediums	0.0	2.4	0.0	-	2.3	2.8	4.5	0.0	-	2.8	10.0	0.0	-	-	8.7	2.7
Articulated Trucks	0	8	0	-	8	10	0	0	-	10	0	0	0	-	0	18
% Articulated Trucks	0.0	1.4	0.0	-	1.3	2.0	0.0	0.0	-	1.9	0.0	0.0	-	-	0.0	1.6
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (11:00 AM)

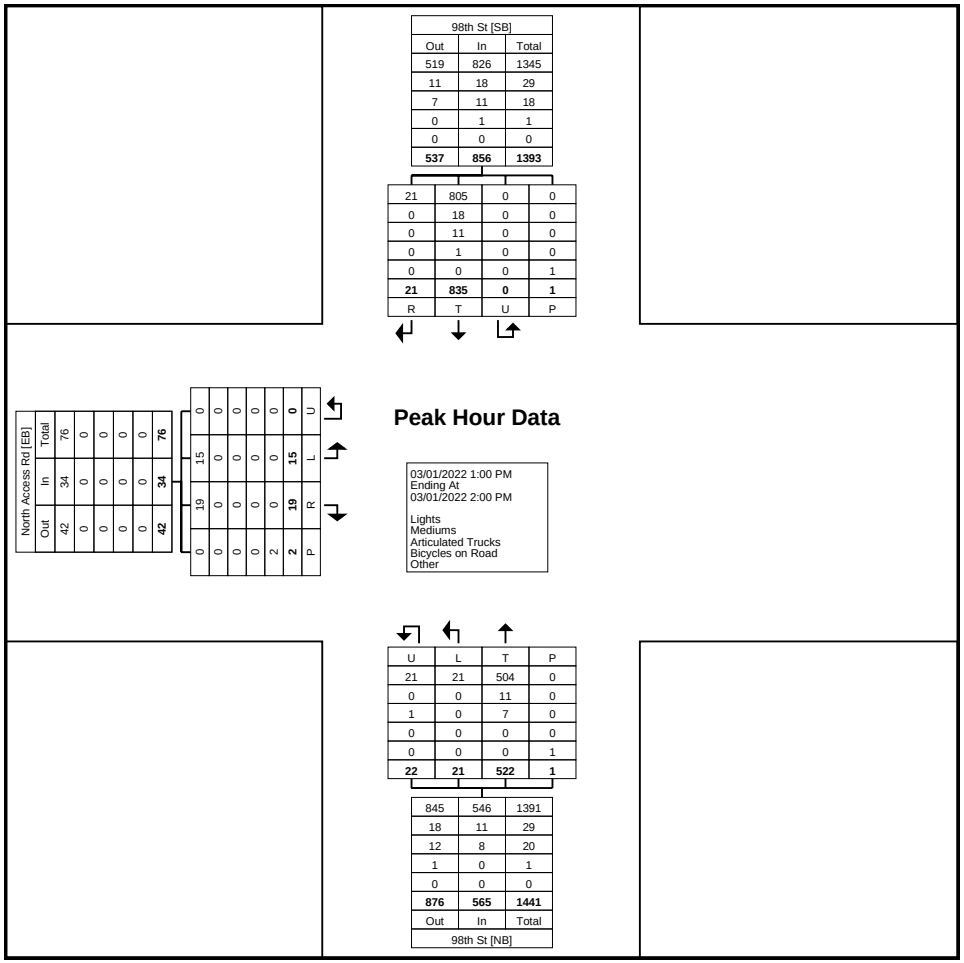
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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (1:00 PM)

Start Time	98th St Southbound					98th St Northbound					North Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
1:00 PM	5	187	0	1	192	115	5	8	0	128	3	8	0	0	11	331
1:15 PM	6	204	0	0	210	119	6	10	0	135	6	3	0	0	9	354
1:30 PM	8	229	0	0	237	141	3	1	0	145	6	2	0	0	8	390
1:45 PM	2	215	0	0	217	147	7	3	1	157	4	2	0	2	6	380
Total	21	835	0	1	856	522	21	22	1	565	19	15	0	2	34	1455
Approach %	2.5	97.5	0.0	-	-	92.4	3.7	3.9	-	-	55.9	44.1	0.0	-	-	-
Total %	1.4	57.4	0.0	-	58.8	35.9	1.4	1.5	-	38.8	1.3	1.0	0.0	-	2.3	-
PHF	0.656	0.912	0.000	-	0.903	0.888	0.750	0.550	-	0.900	0.792	0.469	0.000	-	0.773	0.933
Lights	21	805	0	-	826	504	21	21	-	546	19	15	0	-	34	1406
% Lights	100.0	96.4	-	-	96.5	96.6	100.0	95.5	-	96.6	100.0	100.0	-	-	100.0	96.6
Mediums	0	18	0	-	18	11	0	0	-	11	0	0	0	-	0	29
% Mediums	0.0	2.2	-	-	2.1	2.1	0.0	0.0	-	1.9	0.0	0.0	-	-	0.0	2.0
Articulated Trucks	0	11	0	-	11	7	0	1	-	8	0	0	0	-	0	19
% Articulated Trucks	0.0	1.3	-	-	1.3	1.3	0.0	4.5	-	1.4	0.0	0.0	-	-	0.0	1.3
Bicycles on Road	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.1	-	-	0.1	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Turning Movement Peak Hour Data Plot (1:00 PM)

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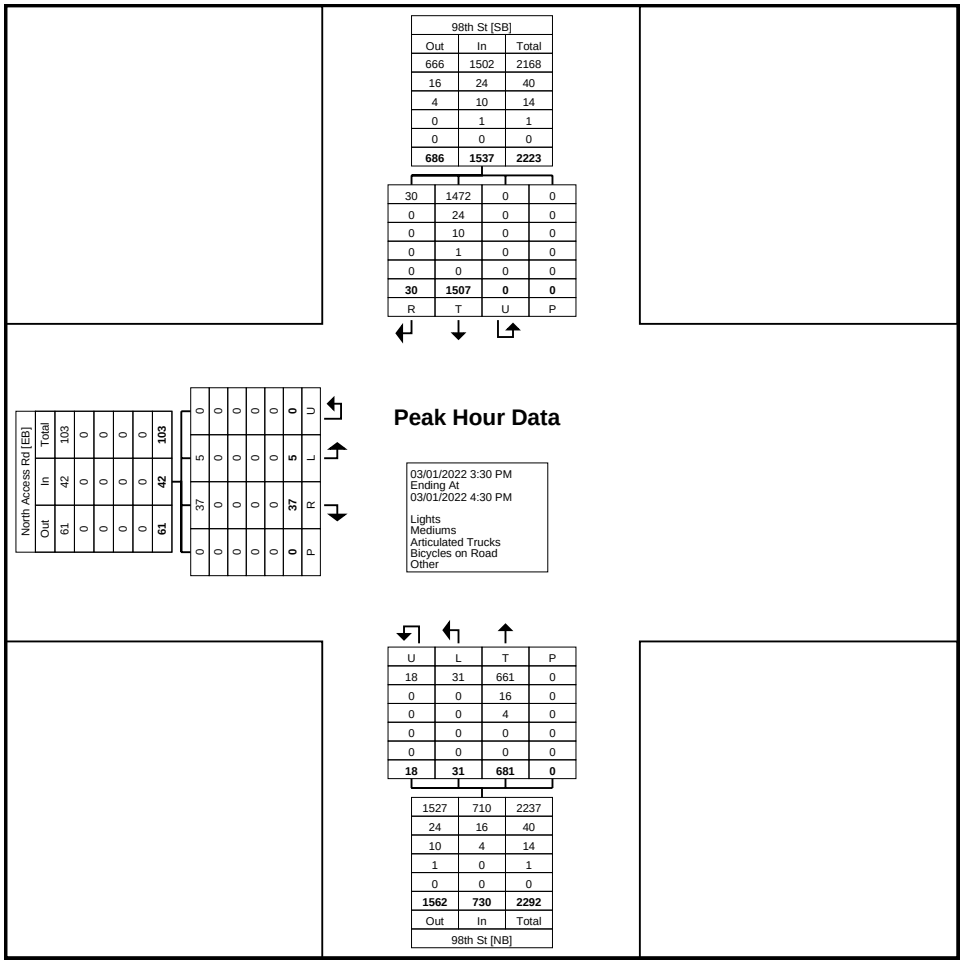
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (3:30 PM)

Start Time	98th St Southbound					98th St Northbound					North Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
3:30 PM	8	373	0	0	381	195	4	0	0	199	7	1	0	0	8	588
3:45 PM	9	390	0	0	399	162	6	7	0	175	10	1	0	0	11	585
4:00 PM	5	376	0	0	381	151	16	5	0	172	13	1	0	0	14	567
4:15 PM	8	368	0	0	376	173	5	6	0	184	7	2	0	0	9	569
Total	30	1507	0	0	1537	681	31	18	0	730	37	5	0	0	42	2309
Approach %	2.0	98.0	0.0	-	-	93.3	4.2	2.5	-	-	88.1	11.9	0.0	-	-	-
Total %	1.3	65.3	0.0	-	66.6	29.5	1.3	0.8	-	31.6	1.6	0.2	0.0	-	1.8	-
PHF	0.833	0.966	0.000	-	0.963	0.873	0.484	0.643	-	0.917	0.712	0.625	0.000	-	0.750	0.982
Lights	30	1472	0	-	1502	661	31	18	-	710	37	5	0	-	42	2254
% Lights	100.0	97.7	-	-	97.7	97.1	100.0	100.0	-	97.3	100.0	100.0	-	-	100.0	97.6
Mediums	0	24	0	-	24	16	0	0	-	16	0	0	0	-	0	40
% Mediums	0.0	1.6	-	-	1.6	2.3	0.0	0.0	-	2.2	0.0	0.0	-	-	0.0	1.7
Articulated Trucks	0	10	0	-	10	4	0	0	-	4	0	0	0	-	0	14
% Articulated Trucks	0.0	0.7	-	-	0.7	0.6	0.0	0.0	-	0.5	0.0	0.0	-	-	0.0	0.6
Bicycles on Road	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.1	-	-	0.1	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (3:30 PM)

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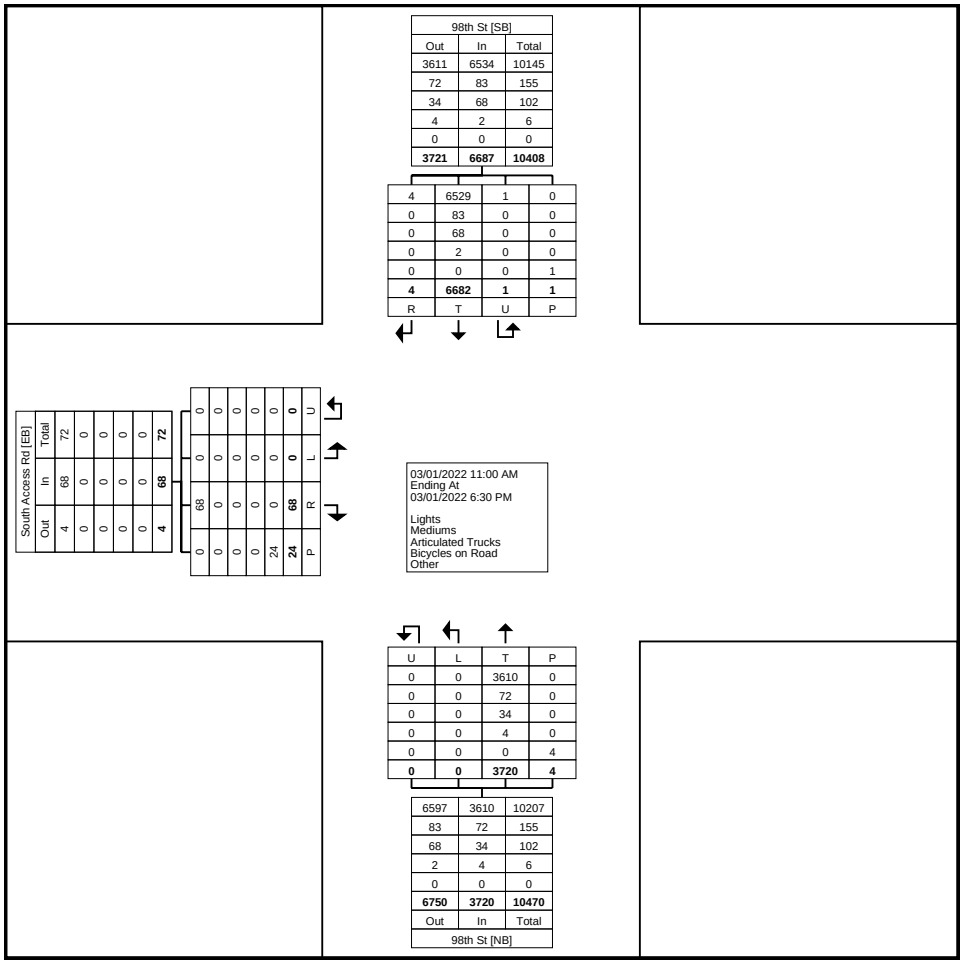
Turning Movement Data

Start Time	98th St Southbound					98th St Northbound					South Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
11:00 AM	0	147	0	0	147	129	0	0	0	129	0	0	0	1	0	276
11:15 AM	0	153	0	0	153	145	0	0	0	145	3	0	0	3	3	301
11:30 AM	0	152	0	0	152	124	0	0	0	124	0	0	0	2	0	276
11:45 AM	0	169	0	0	169	129	0	0	0	129	4	0	0	0	4	302
Hourly Total	0	621	0	0	621	527	0	0	0	527	7	0	0	6	7	1155
12:00 PM	1	186	0	0	187	148	0	0	0	148	0	0	0	0	0	335
12:15 PM	1	194	0	0	195	142	0	0	0	142	6	0	0	0	6	343
12:30 PM	0	213	0	0	213	159	0	0	0	159	2	0	0	1	2	374
12:45 PM	0	179	0	0	179	134	0	0	1	134	0	0	0	1	0	313
Hourly Total	2	772	0	0	774	583	0	0	1	583	8	0	0	2	8	1365
1:00 PM	0	211	0	0	211	124	0	0	0	124	3	0	0	0	3	338
1:15 PM	1	226	0	0	227	136	0	0	0	136	2	0	0	0	2	365
1:30 PM	0	225	0	0	225	147	0	0	1	147	2	0	0	0	2	374
1:45 PM	0	225	0	0	225	147	0	0	1	147	1	0	0	3	1	373
Hourly Total	1	887	0	0	888	554	0	0	2	554	8	0	0	3	8	1450
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:30 PM	0	407	0	0	407	192	0	0	0	192	1	0	0	0	1	600
3:45 PM	1	404	0	0	405	168	0	0	0	168	6	0	0	0	6	579
Hourly Total	1	811	0	0	812	360	0	0	0	360	7	0	0	0	7	1179
4:00 PM	0	394	0	0	394	179	0	0	0	179	3	0	0	3	3	576
4:15 PM	0	355	0	0	355	188	0	0	0	188	4	0	0	0	4	547
4:30 PM	0	342	0	0	342	193	0	0	0	193	3	0	0	2	3	538
4:45 PM	0	355	1	0	356	164	0	0	0	164	5	0	0	0	5	525
Hourly Total	0	1446	1	0	1447	724	0	0	0	724	15	0	0	5	15	2186
5:00 PM	0	388	0	0	388	168	0	0	0	168	3	0	0	1	3	559
5:15 PM	0	378	0	0	378	164	0	0	0	164	6	0	0	3	6	548
5:30 PM	0	341	0	0	341	173	0	0	0	173	2	0	0	2	2	516
5:45 PM	0	335	0	1	335	180	0	0	1	180	5	0	0	2	5	520
Hourly Total	0	1442	0	1	1442	685	0	0	1	685	16	0	0	8	16	2143
6:00 PM	0	350	0	0	350	142	0	0	0	142	4	0	0	0	4	496
6:15 PM	0	353	0	0	353	145	0	0	0	145	3	0	0	0	3	501
Grand Total	4	6682	1	1	6687	3720	0	0	4	3720	68	0	0	24	68	10475
Approach %	0.1	99.9	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	63.8	0.0	-	63.8	35.5	0.0	0.0	-	35.5	0.6	0.0	0.0	-	0.6	-
Lights	4	6529	1	-	6534	3610	0	0	-	3610	68	0	0	-	68	10212
% Lights	100.0	97.7	100.0	-	97.7	97.0	-	-	-	97.0	100.0	-	-	-	100.0	97.5

Mediums	0	83	0	-	83	72	0	0	-	72	0	0	0	-	0	155
% Mediums	0.0	1.2	0.0	-	1.2	1.9	-	-	-	1.9	0.0	-	-	-	0.0	1.5
Articulated Trucks	0	68	0	-	68	34	0	0	-	34	0	0	0	-	0	102
% Articulated Trucks	0.0	1.0	0.0	-	1.0	0.9	-	-	-	0.9	0.0	-	-	-	0.0	1.0
Bicycles on Road	0	2	0	-	2	4	0	0	-	4	0	0	0	-	0	6
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.1	-	-	-	0.1	0.0	-	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	25.0	-	-	-	-	8.3	-	-
Pedestrians	-	-	-	1	-	-	-	-	3	-	-	-	-	22	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	75.0	-	-	-	-	91.7	-	-

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Turning Movement Data Plot

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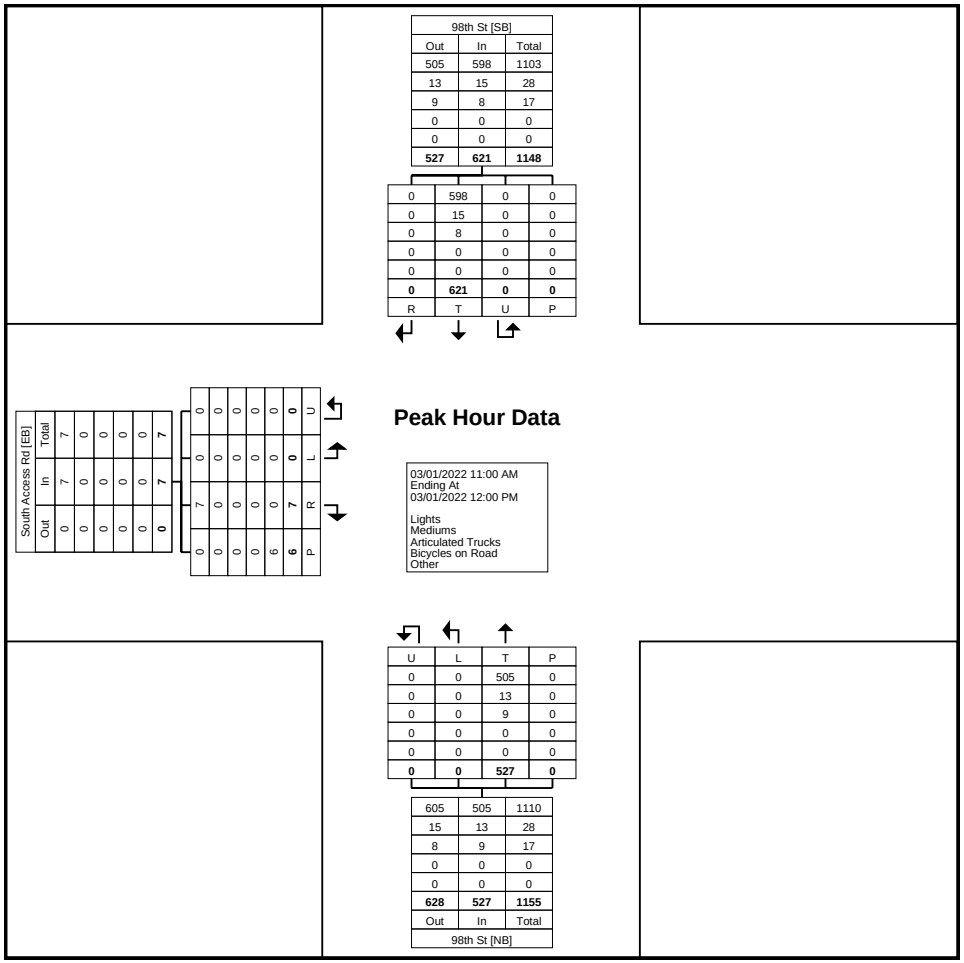
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (11:00 AM)

Start Time	98th St Southbound					98th St Northbound					South Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
11:00 AM	0	147	0	0	147	129	0	0	0	129	0	0	0	1	0	276
11:15 AM	0	153	0	0	153	145	0	0	0	145	3	0	0	3	3	301
11:30 AM	0	152	0	0	152	124	0	0	0	124	0	0	0	2	0	276
11:45 AM	0	169	0	0	169	129	0	0	0	129	4	0	0	0	4	302
Total	0	621	0	0	621	527	0	0	0	527	7	0	0	6	7	1155
Approach %	0.0	100.0	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	53.8	0.0	-	53.8	45.6	0.0	0.0	-	45.6	0.6	0.0	0.0	-	0.6	-
PHF	0.000	0.919	0.000	-	0.919	0.909	0.000	0.000	-	0.909	0.438	0.000	0.000	-	0.438	0.956
Lights	0	598	0	-	598	505	0	0	-	505	7	0	0	-	7	1110
% Lights	-	96.3	-	-	96.3	95.8	-	-	-	95.8	100.0	-	-	-	100.0	96.1
Mediums	0	15	0	-	15	13	0	0	-	13	0	0	0	-	0	28
% Mediums	-	2.4	-	-	2.4	2.5	-	-	-	2.5	0.0	-	-	-	0.0	2.4
Articulated Trucks	0	8	0	-	8	9	0	0	-	9	0	0	0	-	0	17
% Articulated Trucks	-	1.3	-	-	1.3	1.7	-	-	-	1.7	0.0	-	-	-	0.0	1.5
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	-	0.0	0.0	-	-	-	0.0	0.0	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Turning Movement Peak Hour Data Plot (11:00 AM)

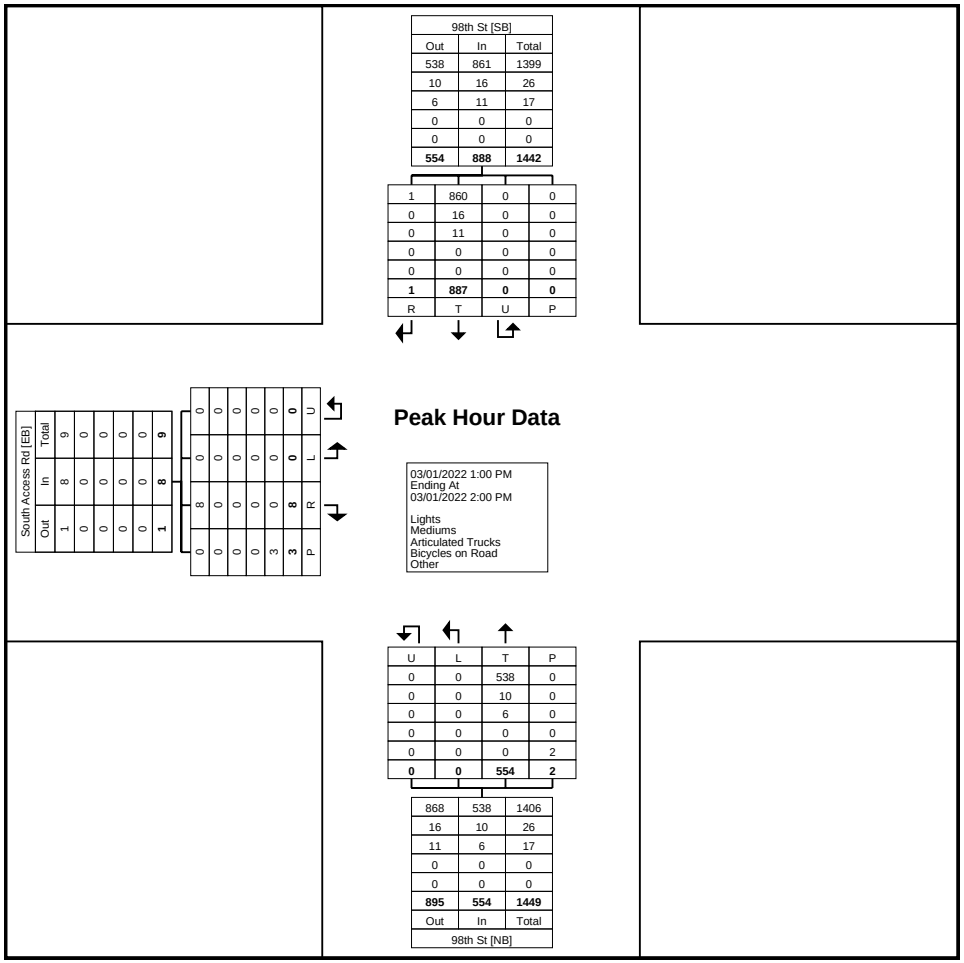
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Count Name: NM307.03 98th St Panda Express
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Start Date: 03/01/2022

Turning Movement Peak Hour Data (1:00 PM)

Start Time	98th St Southbound					98th St Northbound					South Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
1:00 PM	0	211	0	0	211	124	0	0	0	124	3	0	0	0	3	338
1:15 PM	1	226	0	0	227	136	0	0	0	136	2	0	0	0	2	365
1:30 PM	0	225	0	0	225	147	0	0	1	147	2	0	0	0	2	374
1:45 PM	0	225	0	0	225	147	0	0	1	147	1	0	0	3	1	373
Total	1	887	0	0	888	554	0	0	2	554	8	0	0	3	8	1450
Approach %	0.1	99.9	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.1	61.2	0.0	-	61.2	38.2	0.0	0.0	-	38.2	0.6	0.0	0.0	-	0.6	-
PHF	0.250	0.981	0.000	-	0.978	0.942	0.000	0.000	-	0.942	0.667	0.000	0.000	-	0.667	0.969
Lights	1	860	0	-	861	538	0	0	-	538	8	0	0	-	8	1407
% Lights	100.0	97.0	-	-	97.0	97.1	-	-	-	97.1	100.0	-	-	-	100.0	97.0
Mediums	0	16	0	-	16	10	0	0	-	10	0	0	0	-	0	26
% Mediums	0.0	1.8	-	-	1.8	1.8	-	-	-	1.8	0.0	-	-	-	0.0	1.8
Articulated Trucks	0	11	0	-	11	6	0	0	-	6	0	0	0	-	0	17
% Articulated Trucks	0.0	1.2	-	-	1.2	1.1	-	-	-	1.1	0.0	-	-	-	0.0	1.2
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0	0.0	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	50.0	-	-	-	-	33.3	-	-
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	50.0	-	-	-	-	66.7	-	-

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Turning Movement Peak Hour Data Plot (1:00 PM)

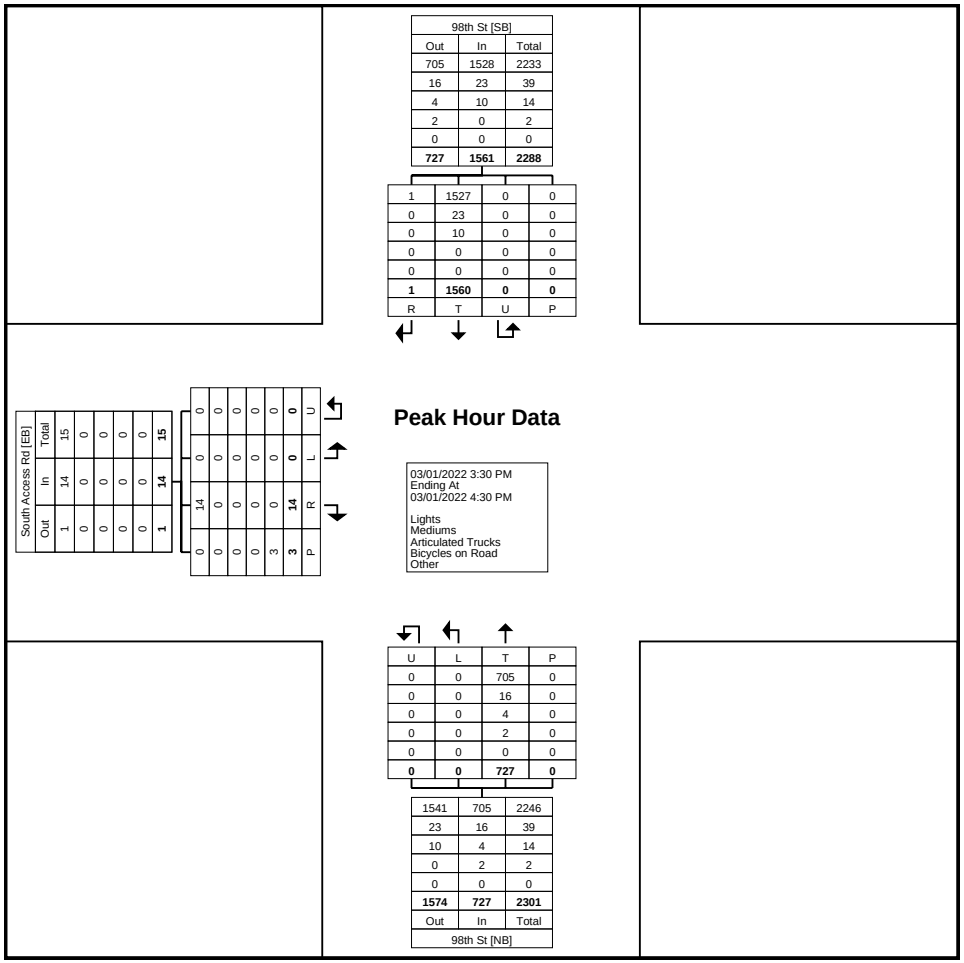
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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (3:30 PM)

Start Time	98th St Southbound					98th St Northbound					South Access Rd Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
3:30 PM	0	407	0	0	407	192	0	0	0	192	1	0	0	0	1	600
3:45 PM	1	404	0	0	405	168	0	0	0	168	6	0	0	0	6	579
4:00 PM	0	394	0	0	394	179	0	0	0	179	3	0	0	3	3	576
4:15 PM	0	355	0	0	355	188	0	0	0	188	4	0	0	0	4	547
Total	1	1560	0	0	1561	727	0	0	0	727	14	0	0	3	14	2302
Approach %	0.1	99.9	0.0	-	-	100.0	0.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	67.8	0.0	-	67.8	31.6	0.0	0.0	-	31.6	0.6	0.0	0.0	-	0.6	-
PHF	0.250	0.958	0.000	-	0.959	0.947	0.000	0.000	-	0.947	0.583	0.000	0.000	-	0.583	0.959
Lights	1	1527	0	-	1528	705	0	0	-	705	14	0	0	-	14	2247
% Lights	100.0	97.9	-	-	97.9	97.0	-	-	-	97.0	100.0	-	-	-	100.0	97.6
Mediums	0	23	0	-	23	16	0	0	-	16	0	0	0	-	0	39
% Mediums	0.0	1.5	-	-	1.5	2.2	-	-	-	2.2	0.0	-	-	-	0.0	1.7
Articulated Trucks	0	10	0	-	10	4	0	0	-	4	0	0	0	-	0	14
% Articulated Trucks	0.0	0.6	-	-	0.6	0.6	-	-	-	0.6	0.0	-	-	-	0.0	0.6
Bicycles on Road	0	0	0	-	0	2	0	0	-	2	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	-	-	0.0	0.3	-	-	-	0.3	0.0	-	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Turning Movement Peak Hour Data Plot (3:30 PM)

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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

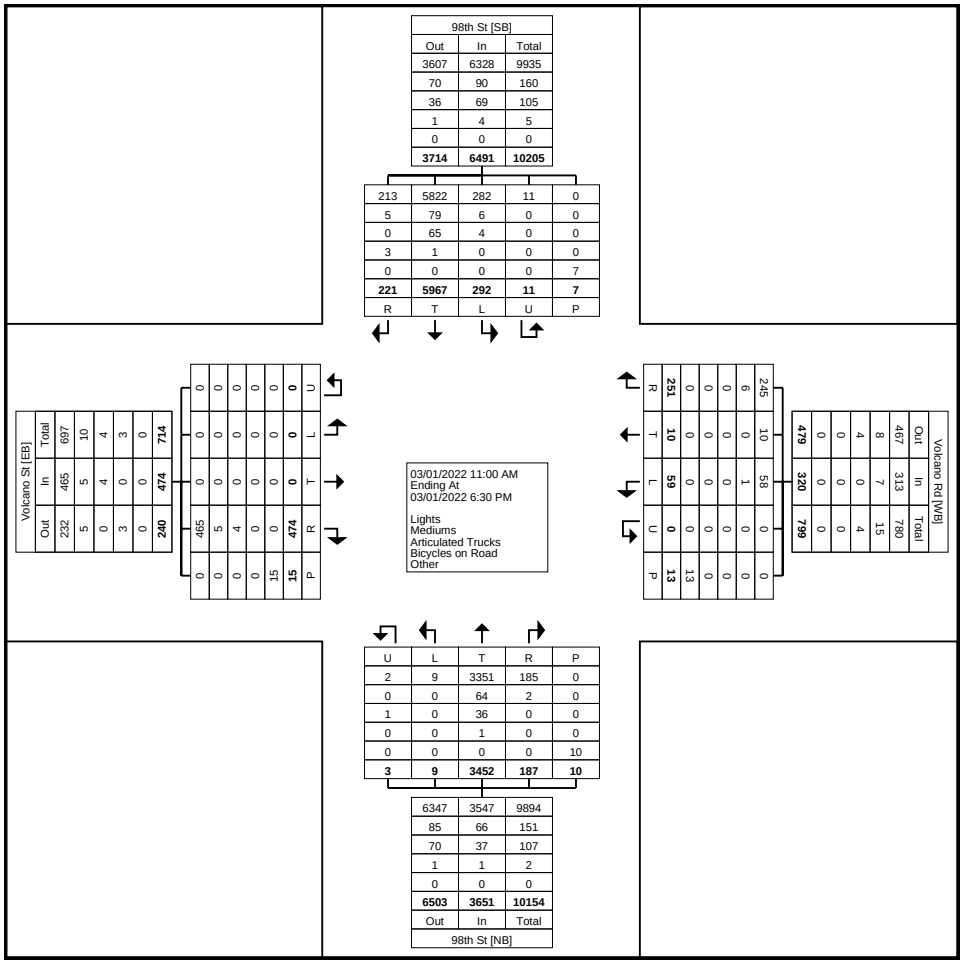
Turning Movement Data

Start Time	98th St Southbound						Volcano Rd Westbound						98th St Northbound						Volcano St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	2	135	5	1	0	143	8	0	1	0	0	9	4	107	1	0	0	112	18	0	0	0	0	18	282
11:15 AM	6	127	14	1	1	148	5	1	4	0	1	10	3	140	0	0	0	143	17	0	0	0	4	17	318
11:30 AM	4	134	11	0	3	149	6	0	2	0	3	8	3	111	0	0	2	114	17	0	0	0	1	17	288
11:45 AM	0	154	7	1	0	162	14	0	2	0	0	16	9	119	0	0	1	128	16	0	0	0	0	16	322
Hourly Total	12	550	37	3	4	602	33	1	9	0	4	43	19	477	1	0	3	497	68	0	0	0	5	68	1210
12:00 PM	5	163	6	0	0	174	4	1	1	0	1	6	4	141	0	1	2	146	9	0	0	0	2	9	335
12:15 PM	7	175	10	0	0	192	8	0	5	0	0	13	3	136	3	0	0	142	13	0	0	0	0	13	360
12:30 PM	11	183	10	0	0	204	15	3	1	0	0	19	12	142	0	0	0	154	20	0	0	0	1	20	397
12:45 PM	8	166	5	0	0	179	11	1	2	0	0	14	6	118	0	0	0	124	18	0	0	0	0	18	335
Hourly Total	31	687	31	0	0	749	38	5	9	0	1	52	25	537	3	1	2	566	60	0	0	0	3	60	1427
1:00 PM	3	178	8	0	0	189	8	0	2	0	0	10	2	125	0	0	0	127	16	0	0	0	0	16	342
1:15 PM	6	186	10	1	0	203	9	0	0	0	1	9	7	125	1	0	0	133	23	0	0	0	0	23	368
1:30 PM	12	210	11	0	1	233	10	0	7	0	2	17	3	136	0	0	1	139	28	0	0	0	0	28	417
1:45 PM	7	195	10	2	1	214	7	0	0	0	1	7	10	140	1	1	1	152	24	0	0	0	1	24	397
Hourly Total	28	769	39	3	2	839	34	0	9	0	4	43	22	526	2	1	2	551	91	0	0	0	1	91	1524
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:30 PM	14	340	13	0	0	367	20	0	3	0	0	23	10	185	0	0	1	195	28	0	0	0	1	28	613
3:45 PM	13	345	27	0	0	385	15	1	4	0	1	20	11	156	0	0	0	167	19	0	0	0	0	19	591
Hourly Total	27	685	40	0	0	752	35	1	7	0	1	43	21	341	0	0	1	362	47	0	0	0	1	47	1204
4:00 PM	8	338	27	0	0	373	10	0	4	0	0	14	9	167	0	0	1	176	33	0	0	0	2	33	596
4:15 PM	16	342	13	0	0	371	14	0	0	0	0	14	9	168	0	0	0	177	27	0	0	0	0	27	589
4:30 PM	8	296	12	0	0	316	12	0	3	0	0	15	9	176	0	0	0	185	22	0	0	0	0	22	538
4:45 PM	13	308	16	1	1	338	11	0	2	0	1	13	13	154	0	0	1	167	17	0	0	0	0	17	535
Hourly Total	45	1284	68	1	1	1398	47	0	9	0	1	56	40	665	0	0	2	705	99	0	0	0	2	99	2258
5:00 PM	14	345	13	1	0	373	6	0	3	0	0	9	16	163	1	0	0	180	11	0	0	0	0	11	573
5:15 PM	12	341	13	0	0	366	13	0	4	0	0	17	6	147	0	1	0	154	24	0	0	0	2	24	561
5:30 PM	7	325	19	0	0	351	12	0	2	0	2	14	9	160	0	0	0	169	17	0	0	0	1	17	551
5:45 PM	13	342	11	2	0	368	12	0	1	0	0	13	2	163	2	0	0	167	17	0	0	0	0	17	565
Hourly Total	46	1353	56	3	0	1458	43	0	10	0	2	53	33	633	3	1	0	670	69	0	0	0	3	69	2250
6:00 PM	18	292	14	1	0	325	10	0	1	0	0	11	14	136	0	0	0	150	22	0	0	0	0	22	508
6:15 PM	14	347	7	0	0	368	11	3	5	0	0	19	13	137	0	0	0	150	18	0	0	0	0	18	555
Grand Total	221	5967	292	11	7	6491	251	10	59	0	13	320	187	3452	9	3	10	3651	474	0	0	0	15	474	10936
Approach %	3.4	91.9	4.5	0.2	-	-	78.4	3.1	18.4	0.0	-	-	5.1	94.5	0.2	0.1	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	2.0	54.6	2.7	0.1	-	59.4	2.3	0.1	0.5	0.0	-	2.9	1.7	31.6	0.1	0.0	-	33.4	4.3	0.0	0.0	0.0	-	4.3	-
Lights	213	5822	282	11	-	6328	245	10	58	0	-	313	185	3351	9	2	-	3547	465	0	0	0	-	465	10653

% Lights	96.4	97.6	96.6	100.0	-	97.5	97.6	100.0	98.3	-	-	97.8	98.9	97.1	100.0	66.7	-	97.2	98.1	-	-	-	-	98.1	97.4
Mediums	5	79	6	0	-	90	6	0	1	0	-	7	2	64	0	0	-	66	5	0	0	0	-	5	168
% Mediums	2.3	1.3	2.1	0.0	-	1.4	2.4	0.0	1.7	-	-	2.2	1.1	1.9	0.0	0.0	-	1.8	1.1	-	-	-	-	1.1	1.5
Articulated Trucks	0	65	4	0	-	69	0	0	0	0	-	0	0	36	0	1	-	37	4	0	0	0	-	4	110
% Articulated Trucks	0.0	1.1	1.4	0.0	-	1.1	0.0	0.0	0.0	-	-	0.0	0.0	1.0	0.0	33.3	-	1.0	0.8	-	-	-	-	0.8	1.0
Bicycles on Road	3	1	0	0	-	4	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	5
% Bicycles on Road	1.4	0.0	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	7.7	-	-	-	-	-	0.0	-	-	-	-	-	6.7	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	12	-	-	-	-	-	10	-	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	92.3	-	-	-	-	-	100.0	-	-	-	-	-	93.3	-	-

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5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Data Plot

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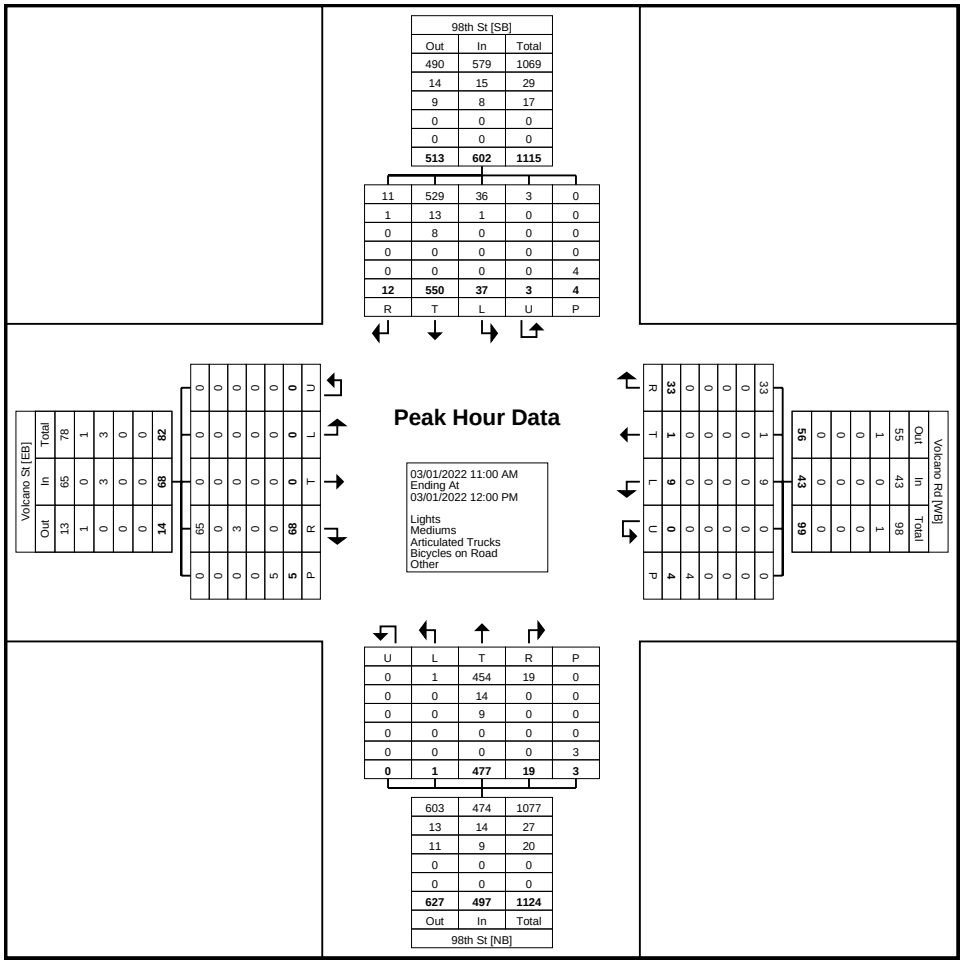
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (11:00 AM)

Start Time	98th St Southbound						Volcano Rd Westbound						98th St Northbound						Volcano St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	2	135	5	1	0	143	8	0	1	0	0	9	4	107	1	0	0	112	18	0	0	0	0	18	282
11:15 AM	6	127	14	1	1	148	5	1	4	0	1	10	3	140	0	0	0	143	17	0	0	0	4	17	318
11:30 AM	4	134	11	0	3	149	6	0	2	0	3	8	3	111	0	0	2	114	17	0	0	0	1	17	288
11:45 AM	0	154	7	1	0	162	14	0	2	0	0	16	9	119	0	0	1	128	16	0	0	0	0	16	322
Total	12	550	37	3	4	602	33	1	9	0	4	43	19	477	1	0	3	497	68	0	0	0	5	68	1210
Approach %	2.0	91.4	6.1	0.5	-	-	76.7	2.3	20.9	0.0	-	-	3.8	96.0	0.2	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	1.0	45.5	3.1	0.2	-	49.8	2.7	0.1	0.7	0.0	-	3.6	1.6	39.4	0.1	0.0	-	41.1	5.6	0.0	0.0	0.0	-	5.6	-
PHF	0.500	0.893	0.661	0.750	-	0.929	0.589	0.250	0.563	0.000	-	0.672	0.528	0.852	0.250	0.000	-	0.869	0.944	0.000	0.000	0.000	-	0.944	0.939
Lights	11	529	36	3	-	579	33	1	9	0	-	43	19	454	1	0	-	474	65	0	0	0	-	65	1161
% Lights	91.7	96.2	97.3	100.0	-	96.2	100.0	100.0	100.0	-	-	100.0	100.0	95.2	100.0	-	-	95.4	95.6	-	-	-	-	95.6	96.0
Mediums	1	13	1	0	-	15	0	0	0	0	-	0	0	14	0	0	-	14	0	0	0	0	-	0	29
% Mediums	8.3	2.4	2.7	0.0	-	2.5	0.0	0.0	0.0	-	-	0.0	0.0	2.9	0.0	-	-	2.8	0.0	-	-	-	-	0.0	2.4
Articulated Trucks	0	8	0	0	-	8	0	0	0	0	-	0	0	9	0	0	-	9	3	0	0	0	-	3	20
% Articulated Trucks	0.0	1.5	0.0	0.0	-	1.3	0.0	0.0	0.0	-	-	0.0	0.0	1.9	0.0	-	-	1.8	4.4	-	-	-	-	4.4	1.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (11:00 AM)

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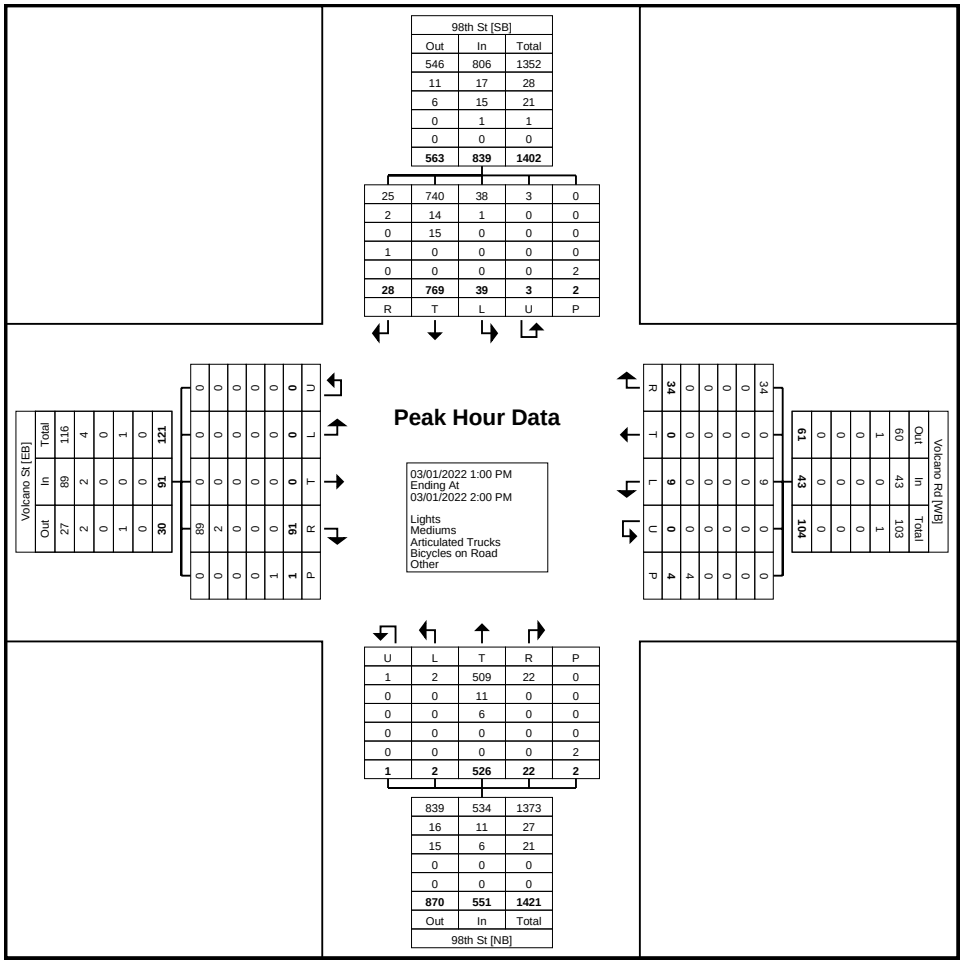
Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (1:00 PM)

Start Time	98th St Southbound						Volcano Rd Westbound						98th St Northbound						Volcano St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
1:00 PM	3	178	8	0	0	189	8	0	2	0	0	10	2	125	0	0	0	127	16	0	0	0	0	16	342
1:15 PM	6	186	10	1	0	203	9	0	0	0	1	9	7	125	1	0	0	133	23	0	0	0	0	23	368
1:30 PM	12	210	11	0	1	233	10	0	7	0	2	17	3	136	0	0	1	139	28	0	0	0	0	28	417
1:45 PM	7	195	10	2	1	214	7	0	0	0	1	7	10	140	1	1	1	152	24	0	0	0	1	24	397
Total	28	769	39	3	2	839	34	0	9	0	4	43	22	526	2	1	2	551	91	0	0	0	1	91	1524
Approach %	3.3	91.7	4.6	0.4	-	-	79.1	0.0	20.9	0.0	-	-	4.0	95.5	0.4	0.2	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	1.8	50.5	2.6	0.2	-	55.1	2.2	0.0	0.6	0.0	-	2.8	1.4	34.5	0.1	0.1	-	36.2	6.0	0.0	0.0	0.0	-	6.0	-
PHF	0.583	0.915	0.886	0.375	-	0.900	0.850	0.000	0.321	0.000	-	0.632	0.550	0.939	0.500	0.250	-	0.906	0.813	0.000	0.000	0.000	-	0.813	0.914
Lights	25	740	38	3	-	806	34	0	9	0	-	43	22	509	2	1	-	534	89	0	0	0	-	89	1472
% Lights	89.3	96.2	97.4	100.0	-	96.1	100.0	-	100.0	-	-	100.0	100.0	96.8	100.0	100.0	-	96.9	97.8	-	-	-	-	97.8	96.6
Mediums	2	14	1	0	-	17	0	0	0	0	-	0	0	11	0	0	-	11	2	0	0	0	-	2	30
% Mediums	7.1	1.8	2.6	0.0	-	2.0	0.0	-	0.0	-	-	0.0	0.0	2.1	0.0	0.0	-	2.0	2.2	-	-	-	-	2.2	2.0
Articulated Trucks	0	15	0	0	-	15	0	0	0	0	-	0	0	6	0	0	-	6	0	0	0	0	-	0	21
% Articulated Trucks	0.0	2.0	0.0	0.0	-	1.8	0.0	-	0.0	-	-	0.0	0.0	1.1	0.0	0.0	-	1.1	0.0	-	-	-	-	0.0	1.4
Bicycles on Road	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	3.6	0.0	0.0	0.0	-	0.1	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	-	-	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022



Turning Movement Peak Hour Data Plot (1:00 PM)

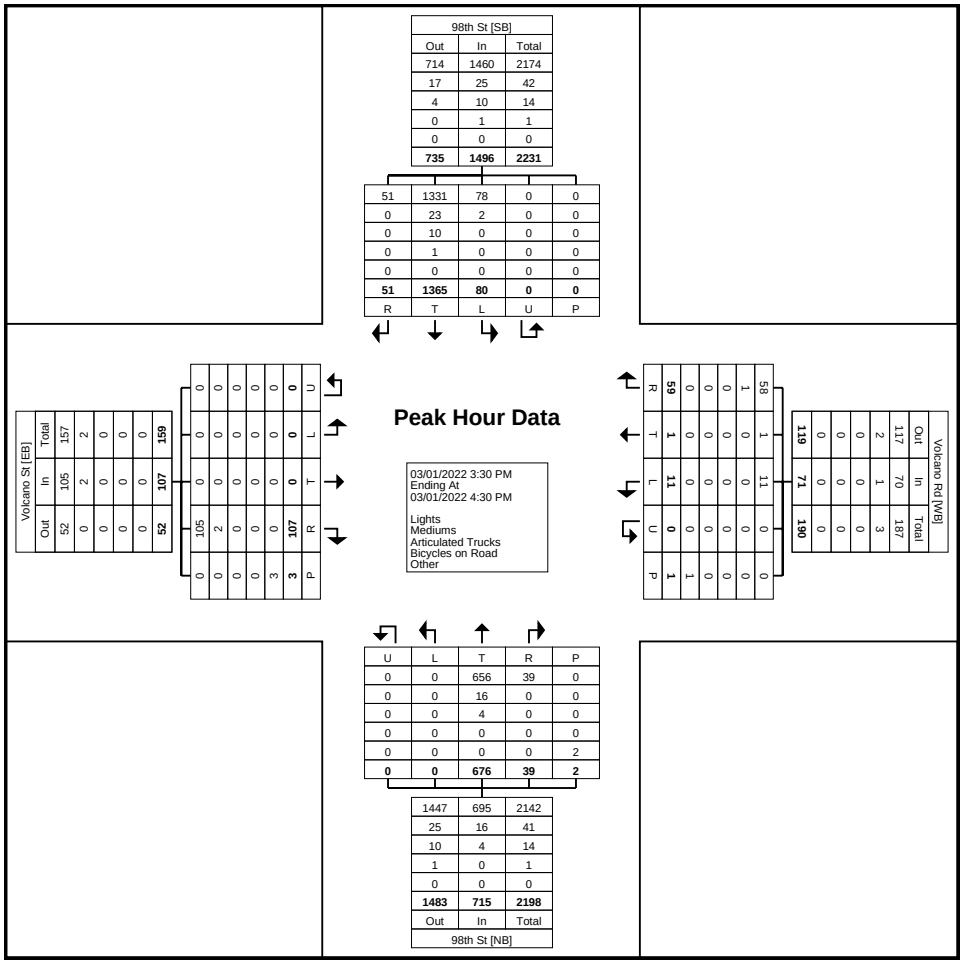
Lee Engineering, LLC
Phoenix, Arizona - Dallas, Texas
Oklahoma City, Oklahoma - San Antonio, Texas
Albuquerque, New Mexico, United States 87113
5053380988 jpham@lee-eng.com

Count Name: NM307.03 98th St Panda Express
Site Code:
Start Date: 03/01/2022

Turning Movement Peak Hour Data (3:30 PM)

Start Time	98th St Southbound						Volcano Rd Westbound						98th St Northbound						Volcano St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:30 PM	14	340	13	0	0	367	20	0	3	0	0	23	10	185	0	0	1	195	28	0	0	0	1	28	613
3:45 PM	13	345	27	0	0	385	15	1	4	0	1	20	11	156	0	0	0	167	19	0	0	0	0	19	591
4:00 PM	8	338	27	0	0	373	10	0	4	0	0	14	9	167	0	0	1	176	33	0	0	0	2	33	596
4:15 PM	16	342	13	0	0	371	14	0	0	0	0	14	9	168	0	0	0	177	27	0	0	0	0	27	589
Total	51	1365	80	0	0	1496	59	1	11	0	1	71	39	676	0	0	2	715	107	0	0	0	3	107	2389
Approach %	3.4	91.2	5.3	0.0	-	-	83.1	1.4	15.5	0.0	-	-	5.5	94.5	0.0	0.0	-	-	100.0	0.0	0.0	0.0	-	-	-
Total %	2.1	57.1	3.3	0.0	-	62.6	2.5	0.0	0.5	0.0	-	3.0	1.6	28.3	0.0	0.0	-	29.9	4.5	0.0	0.0	0.0	-	4.5	-
PHF	0.797	0.989	0.741	0.000	-	0.971	0.738	0.250	0.688	0.000	-	0.772	0.886	0.914	0.000	0.000	-	0.917	0.811	0.000	0.000	0.000	-	0.811	0.974
Lights	51	1331	78	0	-	1460	58	1	11	0	-	70	39	656	0	0	-	695	105	0	0	0	-	105	2330
% Lights	100.0	97.5	97.5	-	-	97.6	98.3	100.0	100.0	-	-	98.6	100.0	97.0	-	-	-	97.2	98.1	-	-	-	-	98.1	97.5
Mediums	0	23	2	0	-	25	1	0	0	0	-	1	0	16	0	0	-	16	2	0	0	0	-	2	44
% Mediums	0.0	1.7	2.5	-	-	1.7	1.7	0.0	0.0	-	-	1.4	0.0	2.4	-	-	-	2.2	1.9	-	-	-	-	1.9	1.8
Articulated Trucks	0	10	0	0	-	10	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	14
% Articulated Trucks	0.0	0.7	0.0	-	-	0.7	0.0	0.0	0.0	-	-	0.0	0.0	0.6	-	-	-	0.6	0.0	-	-	-	-	0.0	0.6
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Turning Movement Peak Hour Data Plot (3:30 PM)

Intersection No.:	305
Intersection Name:	AVALON - 98TH
Revision Date	11/20/2020

CENTRAC
1

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	3	10	3	20	3	10	3	20
Walk:		7		7		7		7
Ped Clr:		32		25		35		28
Veh Ext:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Veh Ext2:								
Max 1:	20	30	20	40	20	30	20	40
Max 2:								
Max 3:								
Yellow:	3.0	3.0	3.0	4.5	3.0	3.0	3.0	4.5
Red Clr	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:				X				X

Flash Mode:	ALL RED
Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	4 & 8
Start In:	GREEN
Overlap Phases:	

NOTES:	
	1. Timings provided by Lee Engineering following intersection modifications 11/20/2020

ASC3 COORDINATION PLAN DATA

4/4/2022 5:31 PM

305 - 98th St & Avalon Rd

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%
TS2 (PAT-OFF)	0-1		
CYCLE	130s	STD (COS)	111
OFFSET VAL	75%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	34	12	42	12	34	12	42

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	7%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	40	14	34	12	40	12	36

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

ASC3 COORDINATION PLAN DATA

4/4/2022 5:31 PM

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%
TS2 (PAT-OFF)	0-5		
CYCLE	110.00	STD (COS)	151
OFFSET VAL	0%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	11	39	14	36	10	40	10	40

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

4/4/2022 5:31 PM

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME
1	21	6:00
2	23	9:00
3	25	14:30
4	23	19:00
5	100	22:00
6	0	00:00
7	0	00:00

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

4/4/2022 5:31 PM

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

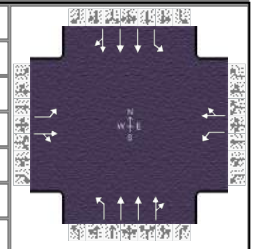
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering.
4. New Day Plan implemented 12-27-2016, Lee Engineering.
5. Signal re-phased & East leg constructed July 2020
6. New coordination timings implemented 7/31/2020 by Lee Engineering

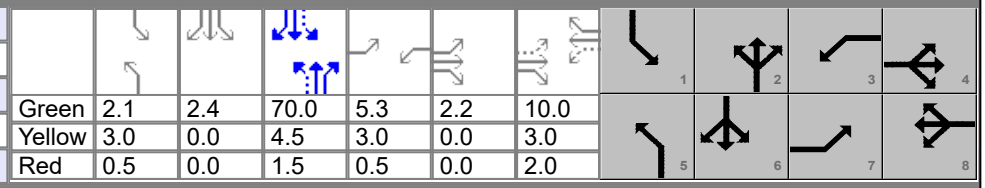
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	0.250
Analyst		Analysis Date	3/30/2022	Area Type	Other
Jurisdiction		Time Period	3:30-4:30 PM	PHF	1.00
Urban Street	98th St	Analysis Year	2022	Analysis Period	1> 15:30
Intersection	98th St and Avalon	File Name	98th and Avalon Existing Year.xus		
Project Description	PM Peak Hr				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	100	4	64	72	12	104	40	572	204	116	1452	108

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	2.1	2.4	70.0	5.3	2.2	10.0						
Yellow	3.0	0.0	4.5	3.0	0.0	3.0						
Red	0.5	0.0	1.5	0.5	0.0	2.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.0	17.2	8.8	15.0	5.6	76.0	8.0	78.4
Change Period, (*Y+R c*), s	3.5	5.0	3.5	5.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	3.3	3.1	3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s	9.5	6.3	5.9	9.6	2.9		4.4	
Green Extension Time (*g e*), s	0.0	0.4	0.0	0.4	0.1	0.0	0.2	0.0
Phase Call Probability	0.95	1.00	0.89	1.00	0.71		0.97	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

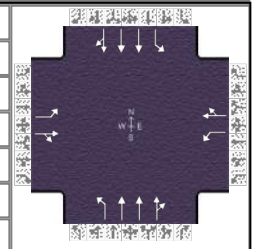
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	100	68		72	116		40	537	239	116	1053	507
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1217	1621		1810	1636		1668	1900	1646	1767	1900	1830
Queue Service Time (*g s*), s	7.5	4.3		3.9	7.6		0.9	6.6	6.8	2.4	14.4	14.4
Cycle Queue Clearance Time (*g c*), s	7.5	4.3		3.9	7.6		0.9	6.6	6.8	2.4	14.4	14.4
Green Ratio (*g/C*)	0.17	0.11		0.14	0.09		0.66	0.64	0.64	0.69	0.66	0.66
Capacity (*c*), veh/h	167	180		226	149		255	2418	1048	534	2501	1204
Volume-to-Capacity Ratio (*X*)	0.598	0.378		0.319	0.780		0.157	0.222	0.229	0.217	0.421	0.421
Back of Queue (*Q*), ft/ln (95 th percentile)	157.8	77.8		79	144.7		15.1	115.9	107.8	37.6	234.8	234.2
Back of Queue (*Q*), veh/ln (95 th percentile)	4.7	3.1		3.2	5.8		0.6	4.6	4.3	1.5	9.4	9.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.73	0.00		0.22	0.00		0.09	0.00	0.00	0.18	0.00	0.00
Uniform Delay (*d 1*), s/veh	42.8	45.4		42.5	48.9		7.7	8.5	8.5	6.2	8.9	8.9
Incremental Delay (*d 2*), s/veh	4.1	0.5		0.3	3.3		0.1	0.2	0.5	0.1	0.5	1.1
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	46.8	45.8		42.8	52.2		7.8	8.7	9.0	6.2	9.4	10.0
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	46.4	D		48.6	D		8.7	A		9.4	A	
Intersection Delay, s/veh / LOS	14.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.88	B	1.87	B
Bicycle LOS Score / LOS	0.76	A	0.80	A	0.94	A	1.41	A

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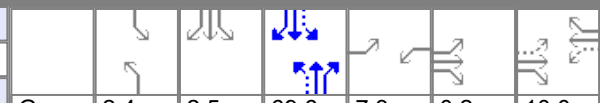
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	0.250
Analyst		Analysis Date	3/30/2022	Area Type	Other
Jurisdiction		Time Period	3:30-4:30 PM	PHF	0.91
Urban Street	98th St	Analysis Year	2022	Analysis Period	1> 15:30
Intersection	98th St and Avalon	File Name	98th and Avalon Build-Out Year Background.xus		
Project Description	PM Peak Hr				

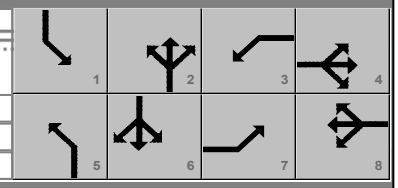


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	13	60	94	7	73	43	471	183	119	1368	113

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Green	2.4	2.5		69.6	7.3	0.2	10.0					
Yellow	3.0	0.0		4.5	3.0	0.0	3.0					
Red	0.5	0.0		1.5	0.5	0.0	2.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.0	15.2	10.8	15.0	5.9	75.6	8.4	78.1
Change Period, (*Y+R c*), s	3.5	5.0	3.5	5.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	3.3	3.1	3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s	9.5	7.1	7.6	7.7	3.1		4.8	
Green Extension Time (*g e*), s	0.0	0.3	0.0	0.3	0.1	0.0	0.2	0.0
Phase Call Probability	0.94	1.00	0.96	1.00	0.76		0.98	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

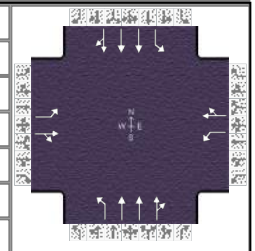
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	91	80		103	88		47	497	222	131	1100	528
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1217	1651		1810	1632		1668	1900	1632	1767	1900	1822
Queue Service Time (*g s*), s	7.5	5.1		5.6	5.7		1.1	6.1	6.3	2.8	15.4	15.5
Cycle Queue Clearance Time (*g c*), s	7.5	5.1		5.6	5.7		1.1	6.1	6.3	2.8	15.4	15.5
Green Ratio (*g/C*)	0.16	0.09		0.16	0.09		0.65	0.63	0.63	0.69	0.66	0.66
Capacity (*c*), veh/h	184	153		223	148		246	2404	1033	562	2490	1194
Volume-to-Capacity Ratio (*X*)	0.497	0.524		0.462	0.593		0.192	0.207	0.215	0.233	0.442	0.442
Back of Queue (*Q*), ft/ln (95 th percentile)	136.1	95.3		113.1	105.8		17.9	107	99.5	42.6	249	247.8
Back of Queue (*Q*), veh/ln (95 th percentile)	4.1	3.8		4.5	4.2		0.7	4.3	4.0	1.7	10.0	9.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.63	0.00		0.31	0.00		0.11	0.00	0.00	0.20	0.00	0.00
Uniform Delay (*d 1*), s/veh	42.2	47.6		41.7	48.0		8.0	8.5	8.6	6.2	9.2	9.2
Incremental Delay (*d 2*), s/veh	0.8	1.0		0.6	1.4		0.1	0.2	0.5	0.1	0.6	1.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	43.0	48.6		42.2	49.4		8.1	8.7	9.1	6.2	9.8	10.4
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	B
Approach Delay, s/veh / LOS	45.6	D		45.5	D		8.8	A		9.7	A	
Intersection Delay, s/veh / LOS	14.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.88	B	1.87	B
Bicycle LOS Score / LOS	0.77	A	0.80	A	0.91	A	1.45	A

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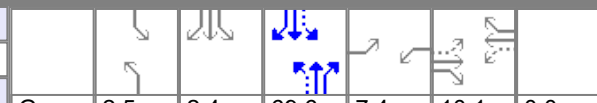
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	0.250
Analyst		Analysis Date	3/30/2022	Area Type	Other
Jurisdiction		Time Period	3:30-4:30 PM	PHF	0.91
Urban Street	98th St	Analysis Year	2022	Analysis Period	1> 15:30
Intersection	98th St and Avalon	File Name	98th and Avalon Build-Out Year Total.xus		
Project Description	PM Peak Hr				

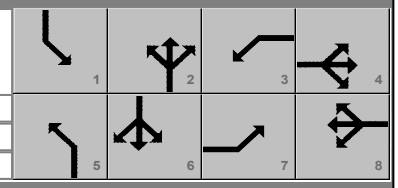


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	13	61	96	7	73	44	487	184	119	1385	113

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	2.5	2.4	69.6	7.4	10.1	0.0						
Yellow	3.0	0.0	4.5	3.0	3.0	0.0						
Red	0.5	0.0	1.5	0.5	2.0	0.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	11.0	15.1	10.9	15.0	6.0	75.6	8.4	78.0
Change Period, (*Y+R c*), s	3.5	5.0	3.5	5.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	3.3	3.1	3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s	9.5	7.2	7.7	7.7	3.1		4.8	
Green Extension Time (*g e*), s	0.0	0.3	0.0	0.3	0.1	0.0	0.2	0.0
Phase Call Probability	0.94	1.00	0.96	1.00	0.77		0.98	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

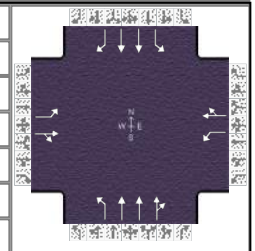
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	91	81		105	88		48	510	227	131	1112	534
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1217	1650		1810	1632		1668	1900	1637	1767	1900	1823
Queue Service Time (*g s*), s	7.5	5.2		5.7	5.7		1.1	6.3	6.5	2.8	15.7	15.7
Cycle Queue Clearance Time (*g c*), s	7.5	5.2		5.7	5.7		1.1	6.3	6.5	2.8	15.7	15.7
Green Ratio (*g/C*)	0.16	0.09		0.16	0.09		0.66	0.63	0.63	0.69	0.65	0.65
Capacity (*c*), veh/h	184	151		223	148		243	2404	1036	554	2488	1194
Volume-to-Capacity Ratio (*X*)	0.497	0.539		0.473	0.593		0.199	0.212	0.220	0.236	0.447	0.447
Back of Queue (*Q*), ft/ln (95 th percentile)	136.1	97		115.4	105.8		18.3	110.4	102.7	42.4	251.8	250.7
Back of Queue (*Q*), veh/ln (95 th percentile)	4.1	3.9		4.6	4.2		0.7	4.4	4.1	1.7	10.1	10.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.63	0.00		0.32	0.00		0.11	0.00	0.00	0.20	0.00	0.00
Uniform Delay (*d 1*), s/veh	42.2	47.7		41.6	48.0		8.0	8.6	8.6	6.2	9.3	9.3
Incremental Delay (*d 2*), s/veh	0.8	1.1		0.6	1.4		0.1	0.2	0.5	0.1	0.6	1.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	43.0	48.9		42.2	49.4		8.2	8.8	9.1	6.3	9.8	10.5
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	B
Approach Delay, s/veh / LOS	45.8	D		45.5	D		8.8	A		9.8	A	
Intersection Delay, s/veh / LOS	14.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.88	B	1.87	B
Bicycle LOS Score / LOS	0.77	A	0.81	A	0.92	A	1.46	A

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HCS7 Signalized Intersection Results Summary

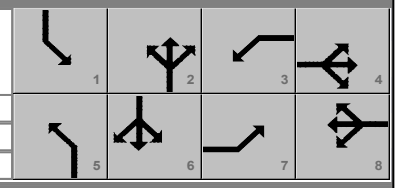
General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	0.250
Analyst		Analysis Date	3/30/2022	Area Type	Other
Jurisdiction		Time Period	3:30-4:30 PM	PHF	0.91
Urban Street	98th St	Analysis Year	2022	Analysis Period	1> 15:30
Intersection	98th St and Avalon	File Name	98th and Avalon Build-Out Year RT Only.xus		
Project Description	PM Peak Hr				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	13	61	96	7	73	44	487	184	119	1385	113

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.5	2.4	69.6	7.4	10.1	0.0	
Yellow	3.0	0.0	4.5	3.0	3.0	0.0	
Red	0.5	0.0	1.5	0.5	2.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	11.0	15.1	10.9	15.0	6.0	75.6	8.4	78.0
Change Period, ($Y+R_c$), s	3.5	5.0	3.5	5.0	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	3.3	3.1	3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	9.5	7.2	7.7	7.7	3.1		4.8	
Green Extension Time (g_e), s	0.0	0.3	0.0	0.3	0.1	0.0	0.2	0.0
Phase Call Probability	0.94	1.00	0.96	1.00	0.77		0.98	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	91	81		105	88		48	510	227	131	1522	124
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1217	1650		1810	1632		1668	1900	1637	1767	1809	1609
Queue Service Time (g_s), s	7.5	5.2		5.7	5.7		1.1	6.3	6.5	2.8	27.6	3.2
Cycle Queue Clearance Time (g_c), s	7.5	5.2		5.7	5.7		1.1	6.3	6.5	2.8	27.6	3.2
Green Ratio (*g/C*)	0.16	0.09		0.16	0.09		0.66	0.63	0.63	0.69	0.65	0.65
Capacity (*c*), veh/h	184	151		223	148		227	2404	1036	554	2369	1054
Volume-to-Capacity Ratio (*X*)	0.497	0.539		0.473	0.593		0.213	0.212	0.220	0.236	0.642	0.118
Back of Queue (*Q*), ft/ln (95 th percentile)	136.1	97		115.4	105.8		18.3	110.4	102.7	42.4	386.3	47.9
Back of Queue (*Q*), veh/ln (95 th percentile)	4.1	3.9		4.6	4.2		0.7	4.4	4.1	1.7	15.5	1.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.63	0.00		0.32	0.00		0.11	0.00	0.00	0.20	0.00	0.00
Uniform Delay (d_1), s/veh	42.2	47.7		41.6	48.0		10.7	8.6	8.6	6.2	11.3	7.1
Incremental Delay (d_2), s/veh	0.8	1.1		0.6	1.4		0.2	0.2	0.5	0.1	1.4	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	43.0	48.9		42.2	49.4		10.9	8.8	9.1	6.3	12.7	7.3
Level of Service (LOS)	D	D		D	D		B	A	A	A	B	A
Approach Delay, s/veh / LOS	45.8	D		45.5	D		9.0	A		11.8	B	
Intersection Delay, s/veh / LOS	15.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.60	C	1.88	B	1.87	B
Bicycle LOS Score / LOS	0.77	A	0.81	A	0.92	A	1.95	B

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HCS7 Two-Way Stop-Control Report

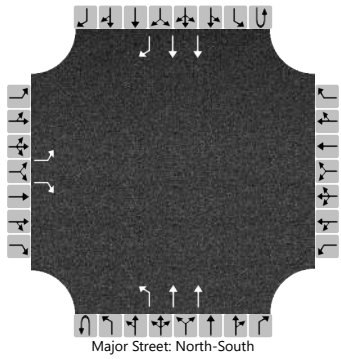
General Information

Analyst	
Agency/Co.	Lee Engineering
Date Performed	3/17/2022
Analysis Year	2022
Time Analyzed	9:00
Intersection Orientation	North-South
Project Description	98th St Panda Express

Site Information

Intersection	98th St & North Access Rd
Jurisdiction	
East/West Street	North Access Rd
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	0	2	1
Configuration		L		R						L	T				T	R
Volume (veh/h)		5		37					18	31	681				1507	30
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No												No		
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9					6.4	4.1						
Critical Headway (sec)		6.80		6.90					6.40	4.10						
Base Follow-Up Headway (sec)		3.5		3.3					2.5	2.2						
Follow-Up Headway (sec)		3.50		3.30					2.50	2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5		38						50						
Capacity, c (veh/h)		127		348						239						
v/c Ratio		0.04		0.11						0.21						
95% Queue Length, Q_{95} (veh)		0.1		0.4						0.8						
Control Delay (s/veh)		34.4		16.6						24.1						
Level of Service (LOS)		D		C						C						
Approach Delay (s/veh)		18.7								1.6						
Approach LOS		C														

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HCS7 Two-Way Stop-Control Report

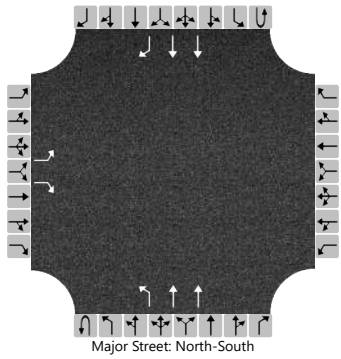
General Information

Analyst	
Agency/Co.	Lee Engineering
Date Performed	3/17/2022
Analysis Year	2022
Time Analyzed	9:00
Intersection Orientation	North-South
Project Description	98th St Panda Express

Site Information

Intersection	98th St & North Access Rd
Jurisdiction	
East/West Street	North Access Rd
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	0	2	1
Configuration		L		R						L	T				T	R
Volume (veh/h)		5		37					18	31	689				1523	30
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No												No		
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9					6.4	4.1						
Critical Headway (sec)		6.80		6.90					6.40	4.10						
Base Follow-Up Headway (sec)		3.5		3.3					2.5	2.2						
Follow-Up Headway (sec)		3.50		3.30					2.50	2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5		38						50						
Capacity, c (veh/h)		125		344						234						
v/c Ratio		0.04		0.11						0.21						
95% Queue Length, Q_{95} (veh)		0.1		0.4						0.8						
Control Delay (s/veh)		35.0		16.8						24.6						
Level of Service (LOS)		E		C						C						
Approach Delay (s/veh)		18.9								1.6						
Approach LOS		C														

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HCS7 Two-Way Stop-Control Report

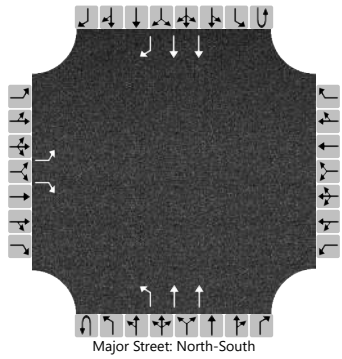
General Information

Analyst	
Agency/Co.	Lee Engineering
Date Performed	3/17/2022
Analysis Year	2022
Time Analyzed	9:00
Intersection Orientation	North-South
Project Description	98th St Panda Express

Site Information

Intersection	98th St & North Access Rd
Jurisdiction	
East/West Street	North Access Rd
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	0	2	1
Configuration		L		R						L	T				T	R
Volume (veh/h)		37		63					18	55	676				1500	72
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No												No		
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9					6.4	4.1						
Critical Headway (sec)		6.80		6.90					6.40	4.10						
Base Follow-Up Headway (sec)		3.5		3.3					2.5	2.2						
Follow-Up Headway (sec)		3.50		3.30					2.50	2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38		64						74						
Capacity, c (veh/h)		123		350						264						
v/c Ratio		0.31		0.18						0.28						
95% Queue Length, Q_{95} (veh)		1.3		0.7						1.2						
Control Delay (s/veh)		47.2		17.6						24.0						
Level of Service (LOS)		E		C						C						
Approach Delay (s/veh)		28.6								2.3						
Approach LOS		D														

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HCS7 Two-Way Stop-Control Report

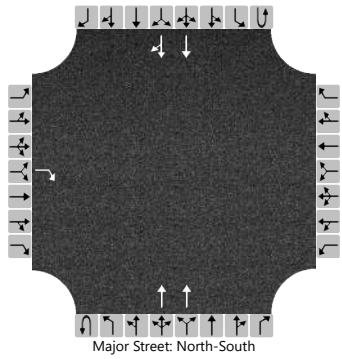
General Information

Analyst	
Agency/Co.	Lee Engineering
Date Performed	3/17/2022
Analysis Year	2022
Time Analyzed	9:00
Intersection Orientation	North-South
Project Description	98th St Panda Express

Site Information

Intersection	98th St & South Access Rd
Jurisdiction	
East/West Street	South Access Rd
North/South Street	98th St
Peak Hour Factor	0.96
Analysis Time Period (hrs)	1.00

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				14							727				1560	1
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				15												
Capacity, c (veh/h)				323												
v/c Ratio				0.05												
95% Queue Length, Q_{95} (veh)				0.1												
Control Delay (s/veh)				16.7												
Level of Service (LOS)				C												
Approach Delay (s/veh)		16.7														
Approach LOS		C														

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Pedestrian Level of Service				
Flow (ped/hr)	3		0	0
Two-Stage Crossing	No			
Pedestrian Platooning	No			
Conflicting Vehicular Flow (veh/h)				
Average Delay (s)	0.1			
Level of Service (LOS)	A			

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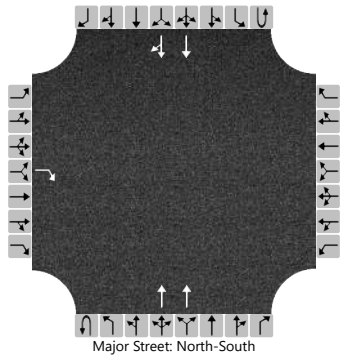
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Site Information

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Jurisdiction	
East/West Street	South Access Rd
North/South Street	98th St
Peak Hour Factor	0.96
Analysis Time Period (hrs)	1.00

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				14							735				1577	1
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				15												
Capacity, c (veh/h)				319												
v/c Ratio				0.05												
95% Queue Length, Q_{95} (veh)				0.1												
Control Delay (s/veh)				16.8												
Level of Service (LOS)				C												
Approach Delay (s/veh)		16.8														
Approach LOS		C														

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Pedestrian Level of Service				
Flow (ped/hr)	3		0	0
Two-Stage Crossing	No			
Pedestrian Platooning	No			
Conflicting Vehicular Flow (veh/h)				
Average Delay (s)	0.1			
Level of Service (LOS)	A			

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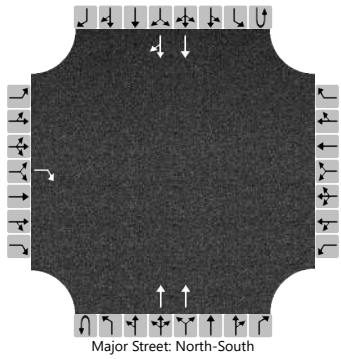
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Project Description	98th St Panda Express

Site Information

Intersection	98th St & South Access Rd
Jurisdiction	
East/West Street	South Access Rd
North/South Street	98th St
Peak Hour Factor	0.96
Analysis Time Period (hrs)	1.00

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				21							746				1576	3
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				22												
Capacity, c (veh/h)				319												
v/c Ratio				0.07												
95% Queue Length, Q_{95} (veh)				0.2												
Control Delay (s/veh)				17.1												
Level of Service (LOS)				C												
Approach Delay (s/veh)		17.1														
Approach LOS		C														

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Pedestrian Level of Service				
Flow (ped/hr)	3		0	0
Two-Stage Crossing	No			
Pedestrian Platooning	No			
Conflicting Vehicular Flow (veh/h)				
Average Delay (s)	0.1			
Level of Service (LOS)	A			

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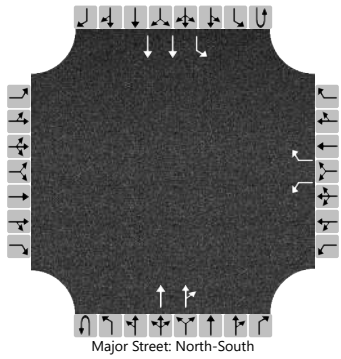
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Agency/Co.	Lee Engineering
Date Performed	3/17/2022
Analysis Year	2022
Time Analyzed	9:00
Intersection Orientation	North-South
Project Description	98th St Panda Express

Site Information

Intersection	98th St and Volcano
Jurisdiction	
East/West Street	Volcano
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	2	0	0	1	2	0
Configuration						L		R			T	TR		L	T	
Volume (veh/h)						11		59			676	39	0	80	1365	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.80		6.90						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						11		60						82		
Capacity, c (veh/h)						220		636						882		
v/c Ratio						0.05		0.09						0.09		
95% Queue Length, Q_{95} (veh)						0.2		0.3						0.3		
Control Delay (s/veh)						22.3		11.2						9.5		
Level of Service (LOS)						C		B						A		
Approach Delay (s/veh)						13.0								0.5		
Approach LOS						B										

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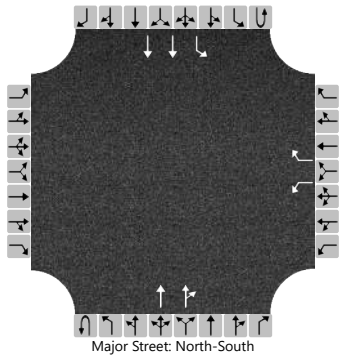
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Site Information

Intersection	98th St and Volcano
Jurisdiction	
East/West Street	Volcano
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	2	0	0	1	2	0
Configuration						L		R			T	TR		L	T	
Volume (veh/h)						11		60			684	39	0	81	1380	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.80		6.90						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						11		61						83		
Capacity, c (veh/h)						216		633						876		
v/c Ratio						0.05		0.10						0.09		
95% Queue Length, Q_{95} (veh)						0.2		0.3						0.3		
Control Delay (s/veh)						22.5		11.3						9.5		
Level of Service (LOS)						C		B						A		
Approach Delay (s/veh)						13.0								0.5		
Approach LOS						B										

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HCS7 Two-Way Stop-Control Report

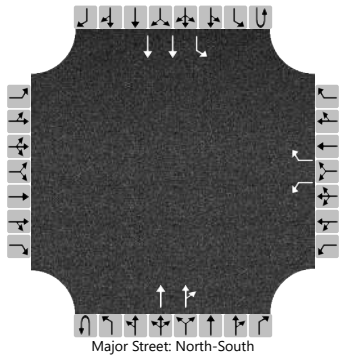
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Project Description	98th St Panda Express

Site Information

Intersection	98th St and Volcano
Jurisdiction	
East/West Street	Volcano
North/South Street	98th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	2	0	0	1	2	0
Configuration						L		R			T	TR		L	T	
Volume (veh/h)						11		62			693	39	0	82	1389	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.80		6.90						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						11		63						84		
Capacity, c (veh/h)						214		628						869		
v/c Ratio						0.05		0.10						0.10		
95% Queue Length, Q_{95} (veh)						0.2		0.3						0.3		
Control Delay (s/veh)						22.8		11.4						9.6		
Level of Service (LOS)						C		B						A		
Approach Delay (s/veh)						13.1								0.5		
Approach LOS						B										

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Terry O. Brown P.E.

Westpointe 40 Industrial Park Development

(Interstate 40 / 98th St.)

Traffic Impact Study

April 10, 2021

D R A F T

HT#K09D041
Received 4/13/2021



Presented to:

City of Albuquerque
Transportation Development
&
New Mexico Department of Transportation
District 3

Prepared for:

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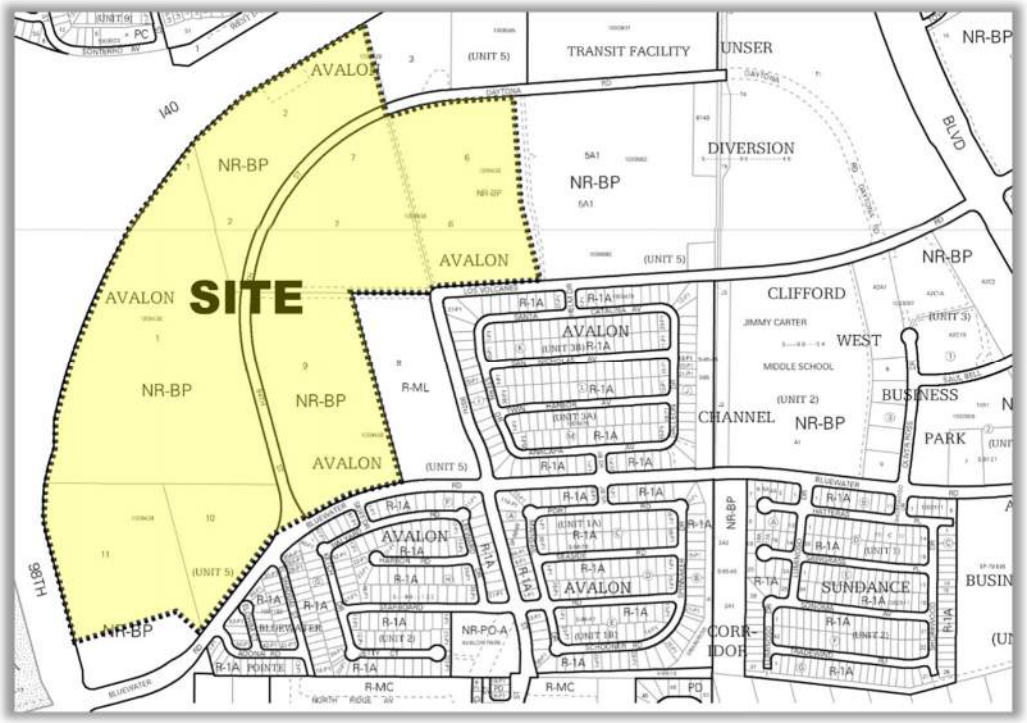
Westpointe 40 Industrial Center
(Interstate 40 / 98th St.)
Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Westpointe 40 Industrial Center, determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared to meet the requirements of the City of Albuquerque Transportation Development Section, Planning Department, and the New Mexico Department of Transportation (District 3) associated with their review of the Westpointe 40 Industrial Center as shown on the plan on Page A-3 in the Appendix of this report.

The proposed development is located at the southeast corner of Interstate 40 / 98th St. The study area includes the intersections of Bluewater Dr. / Unser Blvd., Los Volcanes Rd. / Unser Blvd., I-40 N. Ramp / Unser Blvd., I-40 S. Ramp / Unser Blvd., Central Ave. / 98th St., Bluewater Rd. (Avalon Rd.) / 98th St., I-40 N. Ramp / 98th St., I-40 S. Ramp / 98th St., and Los Volcanes / Daytona as well as driveways for the project.

The project will be bound on the north by Interstate 40, on the west by 98th St., and on the south by Bluewater Rd. Following is a vicinity map depicting the limits of the project:



The proposed project is to be developed with approximately 820,000 S.F. Industrial type uses in three phases summarized as follows:

- Phase 1 – 20,000 S.F. Southern Tire Mart (Implementation Year – 2022)
- Phase 2 – 300,000 S.F. Undefined Distribution Center (Implementation Year - 2025
- Phase 3 – 500,000 S.F. Undefined Distribution Center (Implementation Year – 2030)

The phased trip generation rates for each phase and for the collective phases are summarized in the following table:

Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE) / DESCRIPTION		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
			GROSS	ENTER	EXIT	ENTER	EXIT
	Summary Sheet	Units					
Phase 1	**Tire Superstore (849)**	**20.00**	**407**	**17**	**9**	**20**	**22**
Phase 2	Industrial Park (130)	300.00	1,662	97	23	25	95
	Subtotal (Phases 1 and 2)		**2,069**	**114**	**32**	**45**	**117**
Phase 3	Industrial Park (130)	500.00	2,168	162	38	42	158
	Subotal Trips Generated (All Phases)		**4,237**	**276**	**70**	**87**	**275**

Following is a conceptual site plan the shows the overall project and its anticipated phases:


PHASE 1
SOUTHERN TIRE MART 20,000 SF
"A"
"B"
"C"
"D"
"E"
"F"
"G"
0.26 in
Daytona RD NW
0.61 in
INTERSTATE 40
PROPOSED DISTRIBUTION CENTER 5 100,000 SF
PROPOSED DISTRIBUTION CENTER 1 200,000 SF
PHASE 2
POND
PROPOSED DISTRIBUTION CENTER 2 200,000 SF
PROPOSED DISTRIBUTION CENTER 3 200,000 SF
90TH ST. NW
PHASE 3
Bluewater RD. NW
PROPOSED DISTRIBUTION CENTER 4 100,000 SF
98TH Street N.W.
MAVERIK GAS STATION
N
Avalon RD. N.W.

Phase 1 of the Westpointe 40 development is comprised of a 20,000 S.F. Southern Tire Mart store and will be accessed from the intersection of Los Volcanes Rd. / Unser Blvd. Daytona will not yet be extended to connect to Bluewater Rd. and then to 98th St. The Phase 1 analysis will not evaluate the 98th St. signal corridor. Driveways "A" and "B" will be constructed with Phase 1, but will only have minimal traffic directly related to the trips generated by the Southern Tire Mart facility with minimal conflicting movements.

Phase 2 of the Westpointe 40 development will be comprised of an additional 300,000 S.F. of undefined proposed distribution center. Daytona Rd. will be extended west and south upon construction of Phase 2 to connect with Bluewater Rd. approximately 1,500 feet east of 98th St. Driveways "C" and "D" will be constructed with Phase 2. Driveway "C" will serve the proposed building to the northwest of Daytona Rd. and Driveway "D" will serve the proposed buildings on both sides of Daytona Rd.

Phase 3 of the Westpointe 40 development will add approximately 500,000 S.F. of proposed undefined distribution center. Driveways "E", "F", and "G" will be constructed with Phase 3. Driveways "E", "F", and "G" will serve the proposed buildings along the west side of Daytona Rd. The proposed building on the east side of Daytona Rd. will be served by Driveway "D" constructed in Phase 2.

Analysis of signalized and unsignalized intersections / driveways in this Study will be performed for each of the three phases and then for the horizon year. The analysis in this Study will evaluate the following conditions for the following intersections:

1) Bluewater Rd. / Unser Blvd. (Signalized)
    a. Phase 1 (2022) AM and PM Peak Hour NO BUILD and BUILD Conditions
    b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
    c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
    d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
2) Los Volcanes Rd. / Unser Blvd. (Signalized)
    a. Phase 1 (2022) AM and PM Peak Hour NO BUILD and BUILD Conditions
    b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
    c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
    d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
3) I-40 North Ramp / Unser Blvd. (Signalized)
    a. Phase 1 (2022) AM and PM Peak Hour NO BUILD and BUILD Conditions
    b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
    c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
    d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
4) I-40 South Ramp / Unser Blvd. (Unsignalized)
    a. Phase 1 (2022) AM and PM Peak Hour NO BUILD and BUILD Conditions
    b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions

c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions

5) Los Volcanes Rd. / Daytona Rd. (Unsignalized)
   a. Phase 1 (2022) AM and PM Peak Hour NO BUILD and BUILD Conditions
   b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
   d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
6) Central Ave. / 98th St. (Signalized)
   a. No Phase 1 analysis. Connection to 98th St. does not exist.
   b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
   d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
7) Bluewater Rd. (Avalon Rd.) / 98th St. (Signalized)
   a. No Phase 1 analysis. Connection to 98th St. does not exist.
   b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
   d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
8) I-40 N. Ramp / 98th St. (Signalized)
   a. No Phase 1 analysis. Connection to 98th St. does not exist.
   b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
   d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
9) I-40 S. Ramp / 98th St. (Signalized)
   a. No Phase 1 analysis. Connection to 98th St. does not exist.
   b. Phase 2 (2025) AM and PM Peak Hour NO BUILD and BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour NO BUILD and BUILD Conditions
   d. Horizon Year (2040) AM and PM Peak Hour NO BUILD and BUILD Conditions
10) Bluewater Rd. / Daytona Rd.
   a. No Phase 1 analysis. Driveways do not exist for Phase 1.
   b. Phase 2 (2025) AM and PM Peak Hour BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour BUILD Conditions
   d. Horizon Year (2040 AM and PM Peak Hour NO BUILD and BUILD Conditions
11) Driveways “A” and “B” (Unsignalized)
   a. No Phase 1 analysis. No conflicting movements.
   b. Phase 2 (2025) AM and PM Peak Hour BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour BUILD Conditions
12) Driveways “C” and “D” (Unsignalized)
   a. No Phase 1 analysis. Driveways do not exist for Phase 1.
   b. Phase 2 (2025) AM and PM Peak Hour BUILD Conditions
   c. Phase 3 (2030) AM and PM Peak Hour BUILD Conditions
13) Driveways “E”, “F”, and “G” (Unsignalized)

a. No Phase 1 analysis. Driveways do not exist for Phase 1.
b. No Phase 2 analysis. Driveways do not exist for Phase 2.
c. Phase 3 (2030) AM and PM Peak Hour BUILD Conditions

Analysis results by analysis year are included in the following table

Executive Summary Results Table

			Phase 1		Phase 2		Phase 3		Horizon Year	
			2022 Conditions		2025 Conditions		2030 Conditions		2040 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1 - Bluewater Rd. / Unser Blvd.	Signalized	NO BUILD	F - 80.2	D - 37.8	F - 80.2	D - 37.8	F - 161	D - 38.8	F - 754.1	D - 45.3
		BUILD	F - 81.6	D - 38.2	F - 81.6	D - 38.2	F - 173.5	D - 39.7	F - 784.2	D - 48.5
		BLD MIT					C - 23.9	D - 39.7	C - 27.1	E - 62.9
2 - Los Volcanes Rd. / Unser Blvd.	Signalized	NO BUILD	F - 282.2	E - 67.5	F - 282.2	E - 67.5	F - 609.1	F - 417.5	F - 1417	F - 1303
		BUILD	F - 285.5	F - 88.0	F - 285.5	F - 88.0	F - 549.1	F - 432.2	F - 1408	F - 1310
		BLD MIT					F - 377.2	F - 281.4	F - 1228	F - 874
3 - I-40 N. Ramp / Unser Blvd.	Signalized	NO BUILD	B - 13.4	C - 33.9	B - 13.4	C - 33.9	B - 14.9	D - 38.6	C - 20.9	F - 106.5
		BUILD	B - 14.2	C - 34.2	B - 14.2	C - 34.2	B - 16.7	D - 42.2	C - 24.3	F - 237.5
4 - I-40 S. Ramp / Unser Blvd.	Signalized	NO BUILD	C - 24.9	B - 14.1	D - 27.4	B - 14.7	D - 33.0	C - 15.9	F - 53.3	C - 18.9
		BUILD	C - 22.4	B - 14.1	D - 27.7	B - 14.7	D - 34.5	C - 15.9	F - 56.7	C - 19.9
5 - Los Volcanes Rd. / Daytona Rd.	Signalized	NO BUILD	C - 23.3	B - 12.9	D - 25.3	B - 13.2	D - 30.1	B - 13.8	E - 46.7	C - 15.4
		BUILD	C - 24.9	B - 13.6	D - 28.3	B - 14.3	E - 35.2	C - 16.4	F - 64.1	C - 18.9
6 - Central Ave. / 98th St.	Signalized	NO BUILD			F - 623.6	F - 243.9	F - 1053	F - 400	F - 1892	F - 790
		BUILD			F - 691.4	F - 296.6	F - 1141	F - 519.2	F - 1974	F - 1015
		BLD MIT			F - 145.2	F - 206.0	F - 311.8	F - 181.6	F - 779	F - 393
7 - Bluewater Rd. (Avalon Rd.) / 98th St.	Signalized	NO BUILD			F - 1966	F - 1170	F - 1899	F - 1821	F - 1971	F - 2983
		BUILD			F - 1756	F - 1119	F - 1593	F - 1711	F - 1697	F - 2720
		BLD MIT			B - 16.6	C - 20.8	F - 1010	F - 1202	F - 1193	F - 2296
8 - I-40 N. Ramp / 98th St.	Signalized	NO BUILD			C - 22.6	C - 28.6	C - 23.3	C - 29.8	C - 25.2	D - 37.4
		BUILD			C - 24.6	C -28.7	C - 24.7	C - 30.1	C - 26.4	D - 41.7
9 - I-40 S. Ramp / 98th St.	Signalized	NO BUILD			D - 34.7	F - 358	E - 42.4	F - 729	F - 61.8	F - 1907
		BUILD			E - 36.3	F - 273.8	E - 47.7	F - 811	F - 69.9	F - 1907
10. Bluewater Rd. / Daytona Rd.	Unsignalized	NO BUILD			N/A	N/A	N/A	N/A	N/A	N/A
		BUILD			B - 12.7	B - 10.6	C- 17.1	C - 16.2	C - 18.2	C - 18.2
11. Driveway "F" (Adonai Rd.) / Bluewater Rd.	Unsignalized	NO BUILD			N/A	N/A	N/A	N/A	N/A	N/A
		BUILD			A - 9.9	A - 9.8	B - 11.5	B - 11.9	B - 12.0	B - 12.4
12. Daytona Rd. / Driveway "A"	Unsignalized	NO BUILD			DNE	DNE	DNE	DNE	DNE	DNE
		BUILD			A - 9.6	A - 9.9	B - 10.8	B - 10.5	B - 10.2	B - 10.7
13. Daytona Rd. / Driveway "B"	Unsignalized	NO BUILD			DNE	DNE	DNE	DNE	DNE	DNE
		BUILD			A - 9.8	A - 9.4	B - 10.3	A - 9.6	B - 10.6	A - 9.8
14. Daytona Rd. / Driveway "C"	Unsignalized	NO BUILD			DNE	DNE	DNE	DNE	DNE	DNE
		BUILD			A - 9.4	A - 9.5	B - 10.3	B - 10.1	B - 10.5	B - 10.1
15. Driveway "D" / Daytona Rd.	Unsignalized	NO BUILD					DNE	DNE	DNE	DNE
		BUILD					B - 13.0	B - 12.6	B - 13.5	B - 13.2
16. Driveway "E" / Daytona Rd.	Unsignalized	NO BUILD					DNE	DNE	DNE	DNE
		BUILD					B - 11.3	B - 11.4	B - 11.5	B - 11.6

N/A - No Analysis
DNE - Does Not Exist

In summary, the proposed development does not have a significant adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated by the recommended measures described in this report and summarized in the table above. The analysis revealed that there are significant capacity issues associated with the Implementation Year NO BUILD Conditions. This project contributes to the existing background congestion, but should not be held responsible to mitigate what is not an impact of the proposed Westpointe 40 Industrial development. In summary, the recommendations of this study are:

Recommendations

2022 Conditions (Phase 1):

Phase 1 is a relatively minor traffic generator on Daytona Rd. north of Bluewater Rd. and west of Unser Blvd. Therefore, no recommendations are made associated with Phase 1 other than to recommend that any development related to Phase 1 be designed and constructed to maintain adequate sight distances at driveways and intersections to the extent possible.

2025 Conditions (Phase 2):

Phase 2 is a moderate traffic generator on Daytona Rd. west of Phase 1 and north of Bluewater Rd. The following recommendations are made associated with the approval and development of Phase 2:

- **Construct the extension of Daytona Rd.** to the west and to the south to connect to Bluewater Rd. approximately 1,600 feet east of 98th St. The new intersection of Bluewater Rd. / Daytona Rd. should be designed and constructed as an at-grade unsignalized intersection. This new connection will distribute some of the traffic generated by the proposed Westpointe 40 development towards 98th St. and relieve Unser Blvd. to some degree.
- **Central Ave. / 98th St.** – the signalized intersection of Central Ave. / 98th St. is congested based on the 2025 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2025 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Central Ave. / 98th St. to improve the operation of the intersection. The recommended improvements are:
    - Add a third northbound thru lane on 98th St. through the intersection of Central Ave.
    - Add a southbound right turn lane on 98th St. at Central Ave.
    - Add a northbound and southbound right turn overlap phase to the signal operation at Central Ave. / 98th St.
- **Avalon (Bluewater Rd.) / 98th St.** – convert the existing northbound right turn lane to a thru / right turn lane.

2030 Conditions (Phase 3):

Phase 3 is a significant traffic generator on Daytona Rd. north of Bluewater Rd., west of Unser Blvd., and east of 98th St. The following recommendations are made associated with the approval and development of Phase 3:

- **Bluewater Rd.** / **Unser Blvd**. – the signalized intersection of Bluewater Rd. / Unser Blvd. is congested based on the 2030 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2030 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Bluewater Rd. / Unser Blvd. to improve the operation of the intersection. The recommended improvements are:
    - Add a third northbound thru lane on Unser Blvd. through the intersection of Bluewater Rd.
- **Los Volcanes Rd.** / **Unser Blvd.** - the signalized intersection of Los Volcanes Rd. / Unser Blvd. is congested based on the 2030 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2030 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Los Volcanes Rd. / Unser Blvd. to improve the operation of the intersection. The recommended improvements are:
    - Add a fourth northbound thru lane on Unser Blvd. through the intersection of Los Volcanes Rd.

The fair share contribution from the developer shall be established based on the percentage of traffic that the project (Phases 1 through 3) contribute to the total 2030 intersection BUILD volumes. On that basis the following percentages for the developer should be:

- Bluewater / Unser – 2.3%
- Los Volcanes Rd. / Unser Blvd. – 2.7%
- Central Ave. / 98th St. – 2.0%
- Bluewater Rd. / 98th St. – 5.3%

2040 Conditions (Horizon Year):

Same recommendations as listed in Phases 1, 2, and 3. Also, implement a third northbound thru lane on 98th St. at the I-40 North Ramp. This can be accomplished by re-striping the approach.

Westpointe 40 Industrial Center
(Interstate 40 / 98th St.)
Traffic Impact Study

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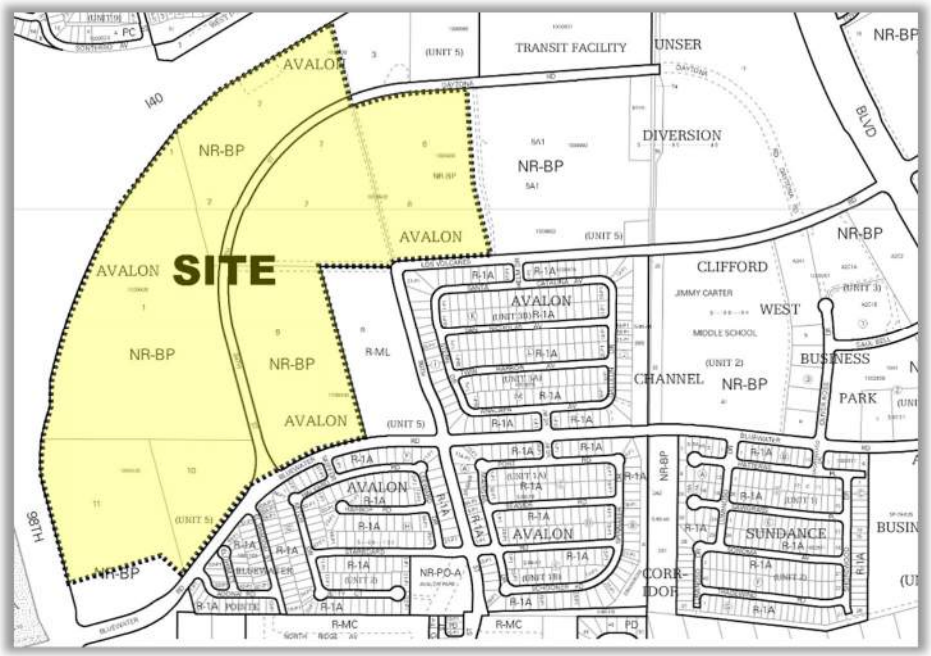
Westpointe 40 Industrial Center
(Interstate 40 / 98th St.)
Traffic Impact Study

Introduction

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Westpointe 40 Industrial Center and determine the impact of the development on the adjacent transportation system. The recommendations of this study will provide measures to mitigate the impact of the development of the site plan on critical intersections and street segments. This study is prepared to meet the requirements of the City of Albuquerque Transportation Development Section, Planning Department associated with their review of the Westpointe 40 Industrial development as shown on the plan on Page A-3 in the Appendix of this report and of the New Mexico Department of Transportation, District 3 associated with their review of the I-40 Ramps only.

The proposed development is located at the southeast corner of Interstate 40 / 98th St. in Albuquerque, New Mexico. If the property was to develop in a manner significantly different than the proposed plan considered in this report such that the number of generated trips is significantly greater, then an update to this study may be required by the City of Albuquerque Transportation Development Section and the New Mexico Department of Transportation.

Following is a vicinity map depicting the location of the proposed project:



Description of Proposed Development

The proposed project is described as a 820,000 s.f. Industrial Park type of development. The project lies in the city limits of Albuquerque, NM. The project will be required to comply with the requirements of the City of Albuquerque with regard to the overall development. The project includes the analysis of two ramps for Interstate 40 which are maintained by the New Mexico Department of Transportation. The project will be required to comply with the requirements of the City of Albuquerque with regard to the overall development and with the requirements of the New Mexico Department of Transportation with regard to transportation issues along the Interstate, only.

The proposed project is to be developed with approximately 820,000 S.F. Industrial type uses in three phases summarized as follows:

- Phase 1 – 20,000 S.F. Southern Tire Mart (Implementation Year – 2022)
- Phase 2 – 300,000 S.F. Undefined Distribution Center (Implementation Year - 2025
- Phase 3 – 500,000 S.F. Undefined Distribution Center (Implementation Year – 2030)

The phased trip generation rates for each phase and for the collective phases are summarized in the following table:

Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE) / DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units					
Phase 1	**Tire Superstore (849)**	**20.00**	**407**	**17**	**9**	**20**	**22**
Phase 2	Industrial Park (130)	300.00	1,662	97	23	25	95
	Subtotal (Phases 1 and 2)		**2,069**	**114**	**32**	**45**	**117**
Phase 3	Industrial Park (130)	500.00	2,168	162	38	42	158
	Subotal Trips Generated (All Phases)		**4,237**	**276**	**70**	**87**	**275**

Following is a conceptual site plan the shows the overall project and its anticipated phases:


PHASE 1
SOUTHERN TIRE MART
20,000 SF
"A"
"B"
"C"
Daytona RD NW
INTERSTATE
40
POND
PROPOSED DISTRIBUTION CENTER 5
100,000 SF
PROPOSED DISTRIBUTION CENTER 1
200,000 SF
PHASE 2
"D"
"E"
PROPOSED DISTRIBUTION CENTER 2
200,000 SF
PROPOSED DISTRIBUTION CENTER 3
200,000 SF
90TH ST. NW
PHASE 3
"F"
Bluewater RD. NW
PROPOSED DISTRIBUTION CENTER 4
100,000 SF
98TH Street N.W.
"G"
MAVERIK GAS STATION
N
Avalon RD. N.W.

Study Area Conditions

A Traffic Impact Study Scoping Meeting was held with the City of Albuquerque Transportation Development Section, Planning Department with staff (Matt Grush) and the New Mexico Department of Transportation (District 3 – Nancy Perea, Margaret Haynes, and Brad Julian). During the meeting, it was determined that the study area would include the following list of intersections to be analyzed in the Traffic Impact Study:

1. Bluewater Rd. / Unser Blvd.
2. Los Volcanes Rd. / Unser Blvd.
3. I-40 N. Ramp / Unser Blvd.
4. I-40 S. Ramp / Unser Blvd.
5. Los Volcanes Rd. / Daytona Rd.
6. Central Ave. / 98th St.
7. Bluewater Rd. / 98th St.
8. I-40 N. Ramp / 98th St.
9. I-40 S. Ramp / 98th St.
10. Bluewater Rd. / Daytona Rd.
11. Bluewater Rd. / Adonai Rd. (Driveway "G")
12. Access Driveways (Driveway "A" through Driveway "F")

This scope of study was based on the assumption that the parcel in question would be developed as a industrial park type of development as shown on the proposed site plan.

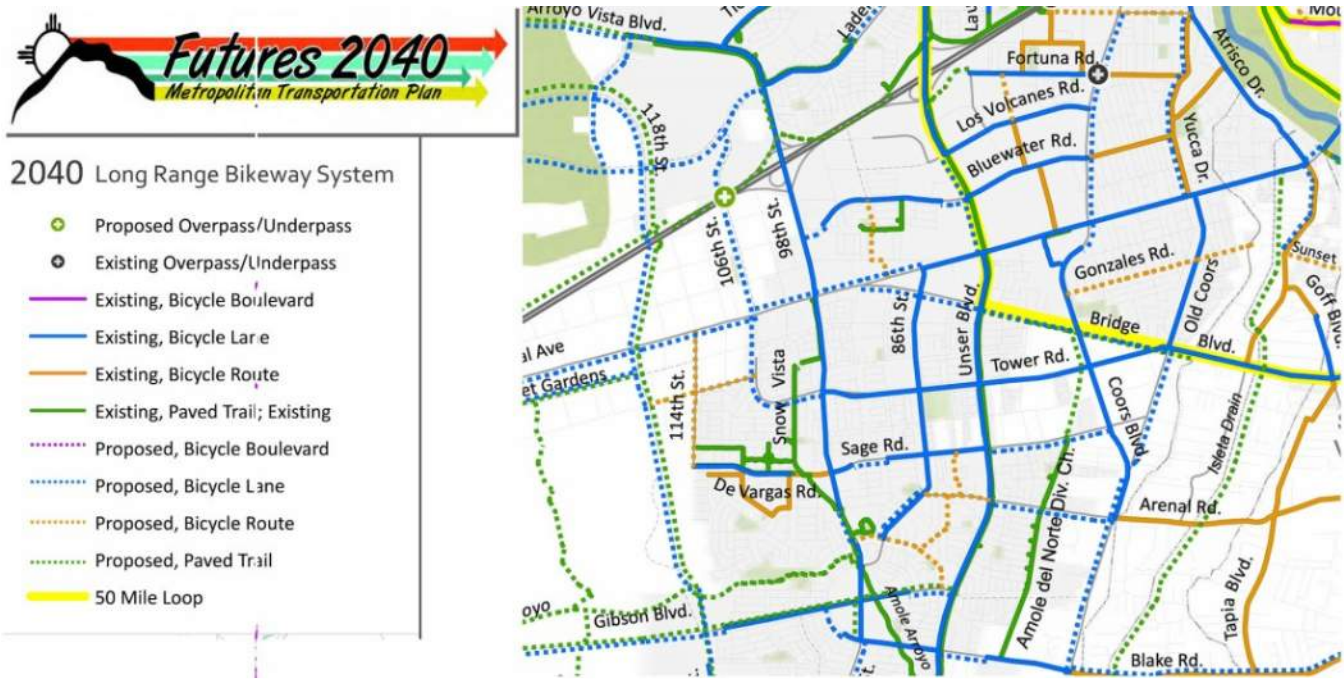
There are other known land development projects in the area which needs to be incorporated into the background traffic model for this study. Those land development projects are listed as follows:

- Maverik Gasoline Station w/Convenience Market (Los Volcanes Rd. / Unser Blvd.)
- BEK Development (Los Volcanes Rd. / Unser Blvd.)
- Mercado el Milagro (southwest corner of Central Ave. / 98th St.)
- Maverik Gasoline Station w/Convenience Market (Bluewater Rd. / 98th St.)

Trips generated by these new land development projects are incorporated into the background traffic in this Study.

There are no known Transportation Improvement Program projects in the area that need to be considered in the Traffic Impact Study.

This project is not served by public transit services in the area along Unser Blvd. or 98th St. between Central Ave. and Interstate 40. There are some existing and proposed designated bicycle routes in the project area on the Futures 2040 Metropolitan Transportation Plan (2040 Long Range Bikeway System) as shown on the following portion of the map and on Appendix Page A-7. 98th St. from Central Ave. to Ladera Dr. is shown to have a bicycle lane.



There are pedestrian facilities in the project area – curb and gutter and sidewalk along the roads, as well as raised medians for pedestrians and bicyclists crossing against traffic.

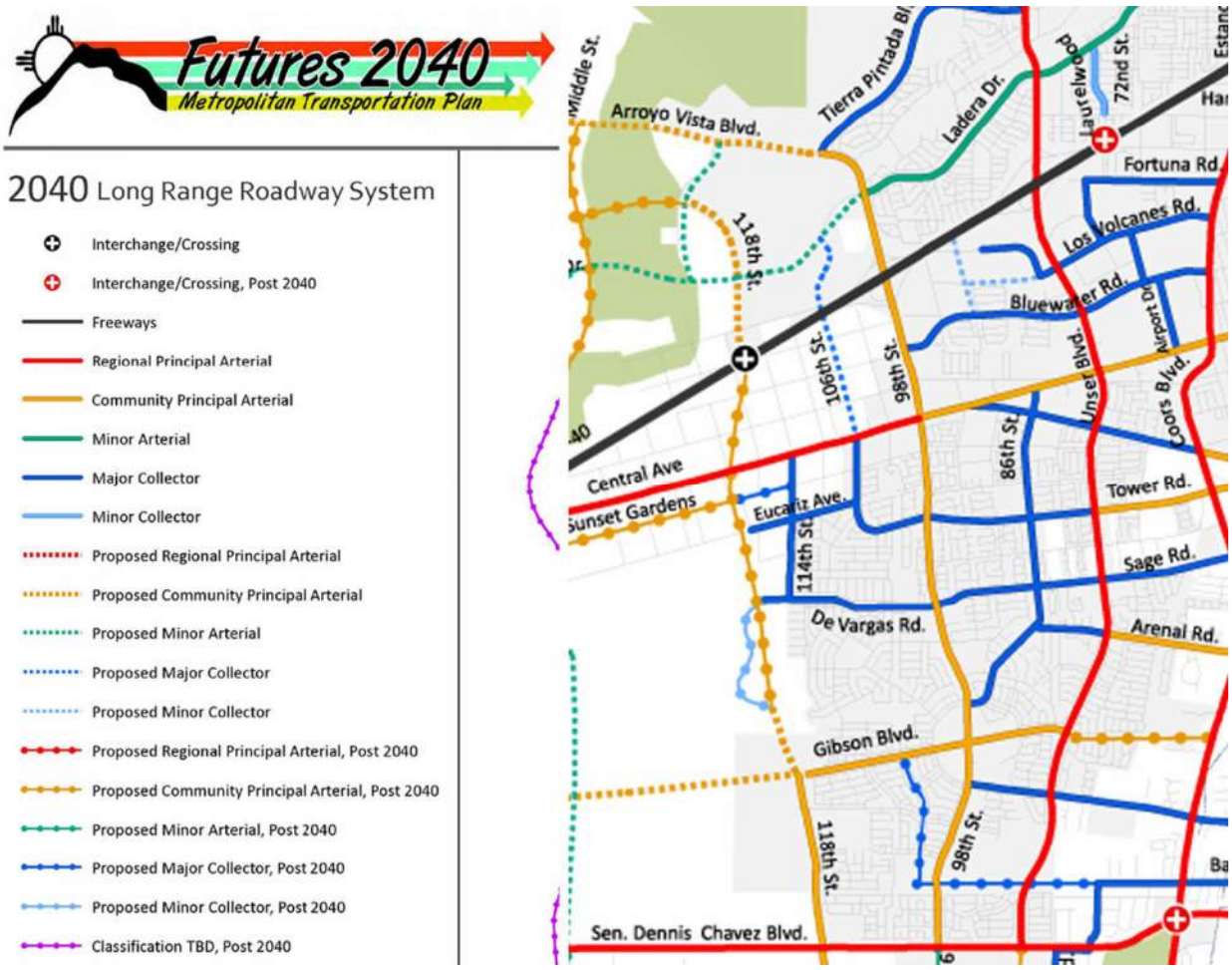
Unser Blvd. is classified as a Regional Principal Arterial Roadway on the Mid-Region Council of Governments' Futures 2040 Long Range Roadway System Map. It is generally a four lane roadway between Central Ave. and Interstate 40 although there are some sections that have three lanes in one direction or the other. The posted speed limit along Unser Blvd. is 45 MPH.

98th St. is classified as a Community Principal Arterial Roadway on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. It is generally, a four-lane urban-type roadway with curb and gutter and sidewalk and some raised medians. 98th St. is a six-lane section from Avalon Rd. to the I-40 S. Ramp. The posted speed limit along 98th St. is 45 MPH.

Central Ave. is classified as Community Principal Arterial Roadway east of 98th St. and a Regional Principal Arterial Roadway west of 98th St. on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. Central Ave. is a four-lane roadway with curb and gutter and sidewalk. The posted speed limit is 55 MPH.

I-40 is an interstate highway (freeway) with a posted speed limit of 75 MPH. The posted speed limit is reduced to 65 MPH east of Unser Blvd.

Following is a Portion of the Long Range Roadway Map of the adjacent roadway system:



Analysis of Existing Conditions

Since the Implementation Year for Phase 1 is only about one year in the future, no existing analysis was performed. Existing traffic volumes (turning movement counts) were collected at the intersections targeted for analysis in this study in February 2019 and are included on Appendix Pages A-60 thru A-72.

Traffic volumes (i.e., turning movements volumes) were collected for the intersections analyzed in this study during the week of February 7, 2019 (98th St) and July 12, 2018 (Unser Blvd.). The intersection of Avalon Rd. / 98th St. was counted on April 24, 2019. It was at the time a signalized tee intersection.

The AM and PM Peak Hour volumes for the intersection of the I-40 N. Ramp / 98th St. were adjusted to account for demand at the intersection rather than just flow rates. The method utilized to adjust for demand is described as follows:

Analysis of Implementation Year Conditions

Traffic Projections

Base traffic count data was grown at the calculated annual background growth rate in order to forecast the 2022 NO BUILD Volumes (Phase 1), 2025 NO BUILD Volumes (Phase 2), 2030 NO BUILD Volumes (Phase 3) and 2040 NO BUILD Volumes (Horizon Year) for this analysis. Trips generated by the recently approved Maverik Store (Los Volcanes / Unser), the recently approved BEK Facility (Los Volcanes / Unser), the recently approved Maverik Store (Bluewater / 98th), and the recently approved Mercado el Milagro Retail Commercial Development (Central / 98th) were also added into the background traffic volume forecasts to include in the 2020, 2022, 2025, 2030, and 2040 NO BUILD Volumes.

Projected trips generated by the proposed Westpointe 40 Industrial Development (Phase 1, Phase 2, and Phase 3) were calculated based on the Institute of Traffic Engineers (ITE) Trip Generation Manual (10th Edition). Trips for the development were determined based on land use defined on the Conceptual Site Development Plan on Page A-3 in the Appendix of this report. The following table summarized the trip generation rate for the project:

Westpointe 40 Development (I-40 / 98th St.)

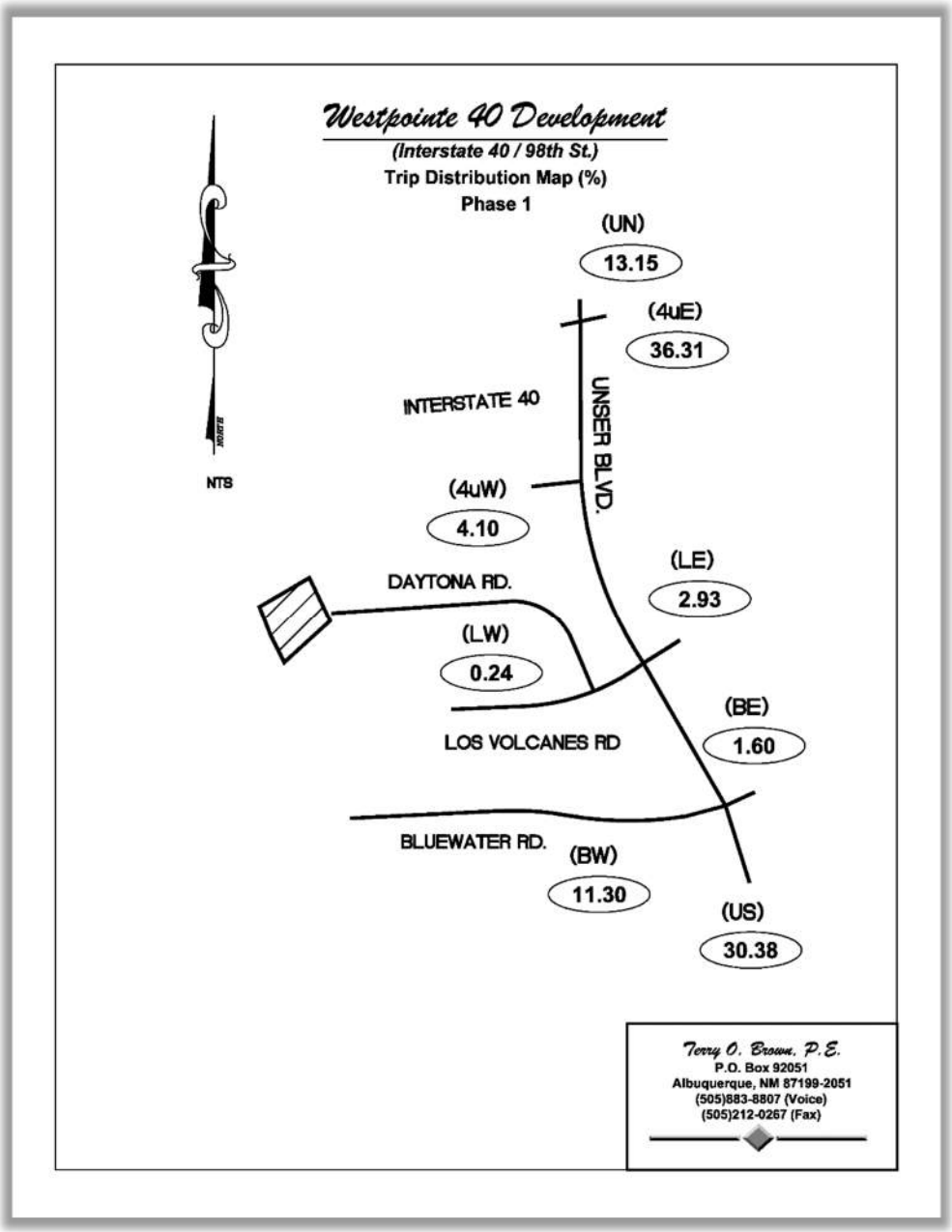
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

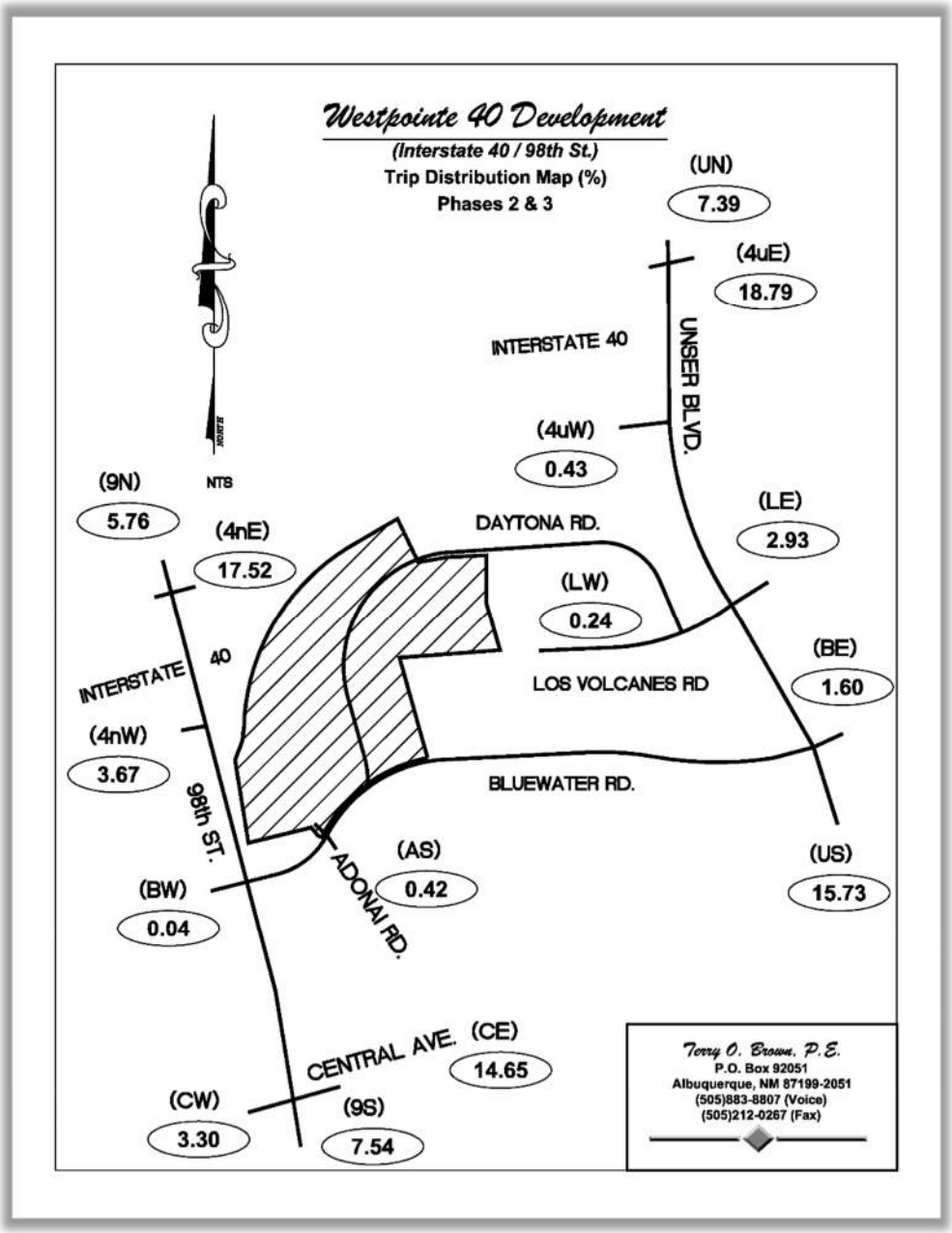
COMMENT	USE (ITE CODE) DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units					
Phase 1	**Tire Superstore (849)**	**20.00**	**407**	**17**	**9**	**20**	**22**
Phase 2	Industrial Park (130)	300.00	1,662	97	23	25	95
	Subtotal (Phases 1 and 2)		**2,069**	**114**	**32**	**45**	**117**
Phase 3	Industrial Park (130)	500.00	2,168	162	38	42	158
	Subotal Trips Generated (All Phases)		**4,237**	**276**	**70**	**87**	**275**

No pass-by trip adjustments were applied to this project. See Appendix Pages A-8 through A-11 for more information regarding the trip generation.

The Gravity Model was used to determine trip distribution where primary trips for the industrial park land use development were distributed proportionally to the 2022 projected population areawide in the Mid-Region Council of Governments' jurisdiction which includes Santa Fe

County, Sandoval County, Bernalillo County, and Valencia County. Population data for the years 2012 and 2040 were taken from the 2040 Socioeconomic Forecasts by Subareas for the Mid-Region of New Mexico supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2012 and 2040 was interpolated linearly to obtain 2022 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of data analysis subzones are shown in the Appendix on Pages A-23 thru A-40. The industrial park Trip Distribution map can be found below and in the Appendix on Pages A-29 (Phase 1) and A-32 (Phases 2 & 3).





Trip assignments are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments for this project change from phase to phase of the project due to new street connections after Phase 1 and differing numbers of driveways serving each phase of the project. Trip Assignments maps, therefore, are shown in the section for each specific phase of the project.

Background traffic growth rates were considered for each individual approach to an intersection that was targeted for analysis based on data from the 2009 through 2018 Traffic Flow maps prepared by the Mid-Region Council of Governments. Most of the Traffic Flow Data for those years taken from the MRCOG Traffic Flow Maps were Standard Data. The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format $y=mx+b$. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the annual growth rate for each approach if that calculated rate appeared feasible. However, in two roadway segments considered in this analysis, I-40 north of 98th St. and 98th St. south of Central Ave., the rate indicated either an inconsistent or a negative growth trend; therefore, the growth rate was considered to be a generic 0.5%. Historical Growth Rate Graphs with linear regression trend lines are shown in the Appendix on Pages A-12 thru A-21. For this analysis, an area-wide annual growth rate of 2% was utilized for all phases. The growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection.

Traffic Analysis

A capacity analysis using existing traffic signal timing was conducted for the Implementation Years associated with each phase of the development (2022, 2025, and 2030) NO BUILD and BUILD Conditions as well as for the horizon year (2040). There are two traffic signal systems in this Study: one on Unser Blvd. from Bluewater Rd. to the I-40 N. Ramp and one on 98th St. from Central Ave. to Bluewater Rd. The traffic signal at the I-40 N. Ramp / 98th St. operates standalone. Additionally, the 95th Percentile Queueing data is based on the Implementation Year volumes and existing signal timing. The calculated 95th Percentile Queuing lengths are determined based on HCM6 methodology and the results are summarized as follows:

Phase 1 (2022)

Phase 1 is comprised of a 20,000 S.F. Southern Tire Mart facility at the extreme northeast corner of the project. It is a relatively minor traffic generator which is expected to generate about 20 entering trips and 22 exiting trips during the PM Peak Hour and less during the AM Peak Hour. It is expected to be implemented in the year 2022. Access will be via two new driveways (Driveway "A" on the east side of the site and Driveway "B" on the west side). Phase 1 will be constructed and implemented without the Daytona Rd. extension to the west and south to connect with Bluewater Rd. The Daytona Rd. extension to connect to Bluewater Rd will be constructed with development of Phase 2 of Westpointe 40 Industrial Development.

Following are the results of the analysis of intersections associated with development of Phase 1:

#1 – Bluewater Rd. / Unser Blvd.

The results of the 2022 analyses of the full access signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

Bluewater Rd. / Unser Blvd. 2022 Conditions	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	2	1	1	2	1
Queue Storage Length (Ft.)	90	130	-	130	280	130	110	500	250	160	500	170
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	33	11	8	13	5	21	6	369	26	33	200	13
V/C Ratio	0.48	0.26	-	0.33	0.15	0.73	0.09	1.19	0.16	0.72	0.71	0.10
Level-of-Service	D	D	-	D	D	E	B	F	B	F	B	A
Control Delay (Seconds)	45.7	41.9	-	54.2	51.8	62.3	19.3	131.4	19.8	98.6	12.6	8.0
Intersection LOS	**E - 67.6**											
Queue Storage Ratio	2.0	0.8	0.0	0.6	0.1	1.1	0.2	2.8	0.4	3.3	0.6	0.3
7:45 AM												
BUILD Conditions Volumes	34	11	8	13	5	22	6	371	26	34	201	14
V/C Ratio	0.49	0.25	-	0.33	0.14	0.74	0.09	1.20	0.16	0.72	0.70	0.11
Level-of-Service	D	D	-	D	D	E	B	F	C	F	B	A
Control Delay (Seconds)	45.5	41.6	-	53.8	51.4	62.2	19.3	134.1	20.1	99.6	12.8	8.2
Intersection LOS	**E - 69.1**											
Queue Storage Ratio	2.1	0.8	0.0	0.6	0.1	1.1	0.2	2.8	0.4	3.4	0.6	0.3
PM Peak 15-minute Period												
5:00 PM												
NO BUILD Conditions Volumes	32	21	9	24	33	58	13	272	9	15	394	29
V/C Ratio	0.41	0.26	-	0.36	0.42	0.87	0.47	0.60	0.05	0.24	0.91	0.15
Level-of-Service	D	D	-	D	D	E	C	C	B	B	D	C
Control Delay (Seconds)	38.1	35.6	-	47.7	47.5	67.9	34.1	20.3	12.8	14.6	44.3	27.0
Intersection LOS	**D - 37**											
Queue Storage Ratio	1.8	1.2	0.0	1.1	0.7	2.9	0.5	0.9	0.1	0.2	1.8	1.2
5:00 PM												
BUILD Conditions Volumes	33	21	9	24	33	59	13	274	9	16	396	30
V/C Ratio	0.42	0.26	-	0.35	0.42	0.88	0.46	0.62	0.05	0.26	0.91	0.15
Level-of-Service	D	D	-	D	D	E	C	C	B	B	D	C
Control Delay (Seconds)	37.7	35.2	-	47.4	47.2	68.6	33.7	20.9	13.1	15.1	43.6	27.4
Intersection LOS	**D - 36.8**											
Queue Storage Ratio	1.9	1.1	0.0	1.1	0.7	2.9	0.5	0.9	0.1	0.3	1.7	1.2

The 2022 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the signalized intersection is at capacity for the 2022 NO BUILD and BUILD Conditions associated with development of Phase 1 of Westpointe Industrial Development. The impact of Phase 1 trips generated are minimal resulting in an increase in delay of approximately 1.5 seconds during the AM Peak period and no measurable increase in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of Bluewater Rd. / Unser Blvd. no recommendation is made associated with Phase 1.

#2 – Los Volcanes Rd. / Unser Blvd.

The results of the 2022 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the following tables:

Los Volcanes Rd. / Unser Blvd. 2022 Conditions	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	3	1	2	2	1
Queue Storage Length (Ft.)	150	250	-	225	225	425	580	900	150	500	900	150
AM Peak 15-minute Period												
7:30 AM												
NO BUILD Conditions Volumes	51	14	1	52	14	57	7	371	69	97	195	28
V/C Ratio	0.25	-	0.52	0.18	0.88	0.88	1.36	0.80	0.80	0.91	0.29	-
Level-of-Service	F	D	-	D	D	E	F	F	D	F	F	B
Control Delay (Seconds)	108.4	46.0	-	36.3	41.7	56.7	82.9	343.4	47.2	331.4	87.1	13.4
Intersection LOS	**F - 191.3**											
Queue Storage Ratio	3.1	0.3	0.0	1.1	0.3	0.8	0.1	1.7	2.0	3.4	1.4	0.6
7:30 AM												
BUILD Conditions Volumes	53	15	2	52	15	57	9	371	69	97	195	31
V/C Ratio	0.59	0.28	-	0.53	0.20	0.87	0.86	1.36	0.81	0.80	0.92	0.33
Level-of-Service	F	D	-	D	D	E	E	F	D	F	F	B
Control Delay (Seconds)	151.1	46.3	-	36.3	41.8	56.6	75.3	336.0	48.2	326.1	105.5	14.1
Intersection LOS	**F - 194.3**											
Queue Storage Ratio	3.9	0.4	0.0	1.1	0.3	0.8	0.1	1.7	2.1	3.4	1.5	0.6
PM Peak 15-minute Period												
5:00 PM												
NO BUILD Conditions Volumes	52	16	17	89	37	105	8	299	70	76	311	24
V/C Ratio	0.47	0.29	-	0.76	0.28	0.94	0.83	0.76	0.57	0.84	1.01	0.18
Level-of-Service	C	D	-	D	C	E	F	D	D	E	F	C
Control Delay (Seconds)	31.2	35.3	-	41.9	33.8	69.1	88.8	44.1	37.5	56.2	68.3	21.7
Intersection LOS	**D - 52.9**											
Queue Storage Ratio	0.3	0.7	0.0	1.2	0.8	1.5	0.1	0.5	2.0	0.5	1.1	0.7
5:00 PM												
BUILD Conditions Volumes	55	17	20	89	38	105	11	299	70	76	311	27
V/C Ratio	0.50	0.32	-	0.78	0.29	0.94	0.81	0.76	0.57	0.84	1.03	0.20
Level-of-Service	C	D	-	D	C	E	E	D	D	E	F	C
Control Delay (Seconds)	32.1	35.8	-	44.0	33.9	68.9	77.9	43.5	36.6	56.3	74.8	22.4
Intersection LOS	**D - 54.6**											
Queue Storage Ratio	0.4	0.7	0.0	1.2	0.8	1.5	0.1	0.5	2.0	0.5	1.2	0.8

The 2022 analysis of the intersection of Los Volcanes Rd. / Unser Blvd. demonstrates that the signalized intersection is over capacity for the 2022 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 1 of Westpointe Industrial Development. The impact of Phase 1 trips generated are minimal resulting in an increase in delay of approximately 3 seconds during the AM Peak period and less than 2 second increase in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of Los Volcanes Rd. / Unser Blvd. no recommendation is made associated with Phase 1.

#3 – I-40 N. Ramp / Unser Blvd.

The results of the 2022 analysis of the full access signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following table:

I-40 N. Ramp / Unser Blvd.	EB (I-40 N. Ramp)			WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
2022 Conditions	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	-	-	-	2	-	1	1	2	-	-	3	-
Queue Storage Length (Ft.)	-	-	-	750	-	-	350	900	-	-	500	-
AM Peak 15-minute Period												
7:15 AM												
NO BUILD Conditions Volumes	-	-	-	97	-	-	11	221	-	-	604	-
V/C Ratio	-	-	-	0.86	-	-	0.53	0.72	-	-	0.67	-
Level-of-Service	-	-	-	D	-	-	B	A	-	-	B	-
Control Delay (Seconds)	-	-	-	51.9	-	-	19.3	6.3	-	-	10.4	-
Intersection LOS	**B - 12.4**											
Queue Storage Ratio	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.3	0.0	0.0	0.9	0.0
7:15 AM												
BUILD Conditions Volumes	-	-	-	99	-	-	12	222	-	-	605	-
V/C Ratio	-	-	-	0.86	-	-	0.57	0.72	-	-	0.68	-
Level-of-Service	-	-	-	D	-	-	C	A	-	-	B	-
Control Delay (Seconds)	-	-	-	51.7	-	-	21.4	6.4	-	-	10.7	-
Intersection LOS	**B - 12.8**											
Queue Storage Ratio	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.3	0.0	0.0	0.9	0.0
PM Peak 15-minute Period												
5:15 PM												
NO BUILD Conditions Volumes	-	-	-	227	-	-	15	179	-	-	282	-
V/C Ratio	-	-	-	0.92	-	-	0.40	0.76	-	-	0.42	-
Level-of-Service	-	-	-	D	-	-	B	C	-	-	B	-
Control Delay (Seconds)	-	-	-	47.2	-	-	14.2	33.8	-	-	18.9	-
Intersection LOS	**C - 31.9**											
Queue Storage Ratio	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.9	0.0	0.0	0.6	0.0
5:15 PM												
BUILD Conditions Volumes	-	-	-	229	-	-	16	180	-	-	283	-
V/C Ratio	-	-	-	0.92	-	-	0.42	0.77	-	-	0.43	-
Level-of-Service	-	-	-	D	-	-	B	C	-	-	B	-
Control Delay (Seconds)	-	-	-	47.2	-	-	14.6	34.3	-	-	19.3	-
Intersection LOS	**C - 32.2**											
Queue Storage Ratio	0.0	0.0	0.0	0.8	0.0	0.0	0.3	0.9	0.0	0.0	0.6	0.0

The 2022 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the signalized intersection is below capacity for the 2022 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 1 of Westpointe Industrial Development. The impact of Phase 1 trips generated are minimal resulting in an increase in delay of approximately 0.4 seconds during the AM Peak period and 0.3 second increase in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of I-40 N. Ramp / Unser Blvd. no recommendation is made associated with Phase 1.

#4 – I-40 S. Ramp / Unser Blvd.

The results of the 2022 analysis of the full access unsignalized ramp intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

I-40 S. Ramp / Unser Blvd. 2022 Conditions	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	130		170						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	144	-	88	-	920	-	-	1,368	-
V/C Ratio	0.45								
Level-of-Service	C								
Control Delay (Seconds)	24.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.2								
7:30 AM									
BUILD Conditions Volumes	144	-	92	-	924	-	-	1,380	-
V/C Ratio	0.41								
Level-of-Service	C								
Control Delay (Seconds)	22.4								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.2								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	88	-	76	-	1,076	-	-	1,404	-
V/C Ratio	0.18								
Level-of-Service	B								
Control Delay (Seconds)	14.1								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.7								
5:15 PM									
BUILD Conditions Volumes	88	-	80	-	1,080	-	-	1,416	-
V/C Ratio	0.18								
Level-of-Service	B								
Control Delay (Seconds)	14.1								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.7								

The 2022 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the unsignalized intersection is below capacity for the 2022 AM and PM Peak Hour BUILD Conditions associated with development of Phase 1 of Westpointe Industrial Development. As a result of the minimal impact of this phase of the development on the signalized intersection of I-40 N. Ramp / Unser Blvd. no recommendation is made associated with Phase 1.

#5 – Los Volcanes Rd. / Daytona Rd.

The results of the 2022 analysis of the full access unsignalized intersection of Los Volcanes Rd. / Daytona Rd. are summarized in the following table:

Los Volcanes Rd. / Daytona Rd. 2022 Conditions	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Daytona Rd.)			SB (Daytona Rd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	>	1	1	>	<	1	>	1	1	>
Queue Storage Length (Ft.)	-	-	-	-	-	-	-	-	-	100	-	-
AM Peak (4 x Peak 15-Minute Period)												
7:15 AM												
NO BUILD Conditions Volumes	1	484	-	8	360	104	-	-	4	96	1	4
V/C Ratio	-									0.33		-
Level-of-Service	A									C		B
Control Delay (Seconds)	8.5									23.3		10.9
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									1.4		0.0
7:15 AM												
BUILD Conditions Volumes	4	484	-	8	360	124	-	-	4	108	1	4
V/C Ratio	-									0.38		0.01
Level-of-Service										C		B
Control Delay (Seconds)	A									24.9		11.0
Intersection LOS	**8.6**											
95th Percentile Queue Length (Veh.)	0.0									1.7		0.0
PM Peak 15-minute Period												
4:00 PM												
NO BUILD Conditions Volumes	4	276	-	-	196	60	-	-	-	44		1
V/C Ratio	-									0.09		-
Level-of-Service	A									B		A
Control Delay (Seconds)	7.9									12.9		9.6
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.3		0.0
4:00 PM												
BUILD Conditions Volumes	8	276	-	-	196	80	-	-	-	68	-	4
V/C Ratio	-									0.14		-
Level-of-Service	A									B		A
Control Delay (Seconds)	8.0									13.6		9.7
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.5		0.0

The 2022 analysis of the intersection of Los Volcanes Rd. / Daytona Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Daytona Rd.

It should be noted that the south leg of the intersection of Los Volcanes Rd. / Daytona Rd. is currently a driveway to a King Hall of Jehovah Witness facility and, therefore, generated minimal traffic except on Sunday mornings and Wednesday evenings at about 7:00 PM to 9:00 PM.

#6 and #7 – Daytona Rd. / Driveway "A" and Daytona Rd. / Driveway "B"

The two unsignalized driveways that serve Phase 1 of the Westpointe Industrial Development are located at the end of the physical paved portion of Daytona Road. Daytona Rd. will be extended with development of Phase 2 of Westpointe 40, but Phase 1 will be a dead-end road for Daytona Rd. with Driveways "A" and "B" located at the dead end. There will be no thru traffic and little or no coflicting movements at the new driveways. Therefore, no analysis is necessary. Analysis of Driveways "A" and "B" will be included with analysis of Phases 2 and 3 as well as the horizon year analysis.

Phase 2 (2025)

Phase 2 is comprised of 300,000 S.F. of Industrial Park Use in addition to the 20,000 S.F. Southern Tire Mart facility. Phase 2 is located immediately west of Phase 1. It is expected to generate an additional 97 entering trips and 23 exiting trips during the AM Peak Hour and 25 entering trips and 95 exiting trips during the PM Peak Hour. It is expected to be implemented in the year 2025. Additional access will include Driveways "C" and "D", both intersecting the extension of Daytona Rd. west and south to connect to Bluewater Rd.. Trip distribution and trip assignments for Phase 2 will be significantly different that that of Phase 1 due primarily to the new connection of Daytona Rd. west and south to Bluewater which will allow Westpointe 40 traffic to access 98th St. to and from the development.

Analysis of Phase 2 trips is inclusive of the trips generated by Phase 1. Following are the results of the analysis of intersections associated with development of Phase 2:

#1 – Bluewater Rd. / Unser Blvd.

The results of the 2025 analyses of the full access signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

Bluewater Rd. / Unser Blvd. 2025 Conditions - Phase 2	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	2	1	1	2	1
Queue Storage Length (Ft.)	90	130	-	130	280	130	110	500	250	160	500	170
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	35	12	8	14	6	21	6	389	27	35	210	14
V/C Ratio	0.52	0.27	-	0.36	0.18	0.73	0.09	1.26	0.17	0.71	0.72	0.11
Level-of-Service	D	D	-	D	D	E	B	F	C	F	B	A
Control Delay (Seconds)	46.3	42.0	-	54.5	52.0	62.1	19.8	159.0	20.7	112.6	12.8	8.2
Intersection LOS	**F - 80.2**											
Queue Storage Ratio	2.2	0.8	0.0	0.7	0.1	1.1	0.2	3.2	0.4	3.4	0.6	0.3
7:45 AM												
BUILD Conditions Volumes	35	13	9	14	7	22	10	391	27	36	211	14
V/C Ratio	0.51	0.29	-	0.35	0.20	0.73	0.15	1.26	0.17	0.71	0.73	0.11
Level-of-Service	D	D	-	D	D	E	B	F	C	F	B	A
Control Delay (Seconds)	45.9	41.9	-	54.1	51.8	61.8	19.8	161.8	20.9	112.6	13.4	8.6
Intersection LOS	**F - 81.6**											
Queue Storage Ratio	2.2	0.9	0.0	0.7	0.2	1.1	0.3	3.3	0.4	3.5	0.6	0.3
PM Peak 15-minute Period												
5:00 PM												
NO BUILD Conditions Volumes	34	22	9	25	35	61	14	286	9	16	414	30
V/C Ratio	0.42	0.26	-	0.36	0.43	0.88	0.53	0.65	0.05	0.27	0.94	0.15
Level-of-Service	D	C	-	D	D	E	D	C	B	B	D	C
Control Delay (Seconds)	37.2	34.6	-	47.0	46.9	69.6	35.4	22.2	13.5	16.2	45.0	27.5
Intersection LOS	**D - 37.8**											
Queue Storage Ratio	1.9	1.2	0.0	1.1	0.7	3.0	0.5	1.0	0.1	0.2	1.7	1.1
5:00 PM												
BUILD Conditions Volumes	34	23	13	25	36	62	16	287	9	17	416	30
V/C Ratio	0.42	0.30	-	0.36	0.43	0.88	0.58	0.66	0.05	0.29	0.95	0.15
Level-of-Service	D	C	-	D	D	E	D	C	B	B	D	C
Control Delay (Seconds)	36.9	34.9	-	46.7	46.7	69.7	36.1	22.7	13.8	16.7	45.5	28.2
Intersection LOS	**D - 38.2**											
Queue Storage Ratio	1.9	1.4	0.0	1.1	0.8	3.1	0.6	1.0	0.1	0.2	1.7	1.1

The 2025 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the signalized intersection is marginally above capacity for the 2025 NO BUILD and BUILD AM Conditions associated with development of Phase 1 of Westpointe Industrial Development. The impact of Phase 2 (including Phase 1) trips generated are minimal resulting in an increase in delay of approximately 1.4 seconds during the AM Peak period and approximately 0.4 seconds in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of Bluewater Rd. / Unser Blvd. no recommendation is made associated with Phase 2.

#2 – Los Volcanes Rd. / Unser Blvd.

The results of the 2025 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the following tables:

Los Volcanes Rd. / Unser Blvd. 2025 Conditions - Phase 2	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	3	1	2	2	1
Queue Storage Length (Ft.)	150	250	-	225	225	425	580	900	150	500	900	150
AM Peak 15-minute Period												
7:30 AM												
NO BUILD Conditions Volumes	58	16	1	53	17	60	8	398	70	97	212	30
V/C Ratio	0.27	-	0.53	0.21	0.88	0.85	1.43	0.81	0.91	1.00	0.32	-
Level-of-Service	F	D	-	D	D	E	E	F	F	D	F	B
Control Delay (Seconds)	236.9	45.4	-	35.5	41.1	56.0	74.4	536.7	142.2	46.3	298.7	14.3
Intersection LOS	**F - 282.2**											
Queue Storage Ratio	5.6	0.4	0.0	1.1	0.4	0.8	0.1	2.4	4.3	0.9	3.0	0.7
7:30 AM												
BUILD Conditions Volumes	61	17	2	53	18	60	10	398	70	97	212	38
V/C Ratio	0.67	0.30	-	0.54	0.22	0.88	0.83	1.43	0.81	0.92	1.00	0.40
Level-of-Service	F	D	-	D	D	E	E	F	F	D	F	B
Control Delay (Seconds)	330.9	45.7	-	35.6	41.2	55.8	69.7	537.5	136.3	45.6	308.3	15.5
Intersection LOS	**F - 285.5**											
Queue Storage Ratio	7.3	0.4	0.0	1.1	0.4	0.8	0.1	2.4	4.2	0.9	3.0	0.9
PM Peak 15-minute Period												
5:15 PM												
NO BUILD Conditions Volumes	46	15	8	56	20	84	6	295	43	63	361	39
V/C Ratio	0.43	0.24	-	0.51	0.19	0.92	0.84	0.61	0.28	0.92	1.03	0.25
Level-of-Service	D	D	-	C	D	E	F	C	C	E	F	B
Control Delay (Seconds)	35.1	39.9	-	34.5	37.8	65.4	100.6	30.6	25.8	64.7	114.3	18.5
Intersection LOS	**E - 67.5**											
Queue Storage Ratio	1.5	0.5	0.0	1.2	0.5	1.2	0.1	0.4	1.2	0.4	1.6	0.9
5:15 PM												
BUILD Conditions Volumes	54	16	10	56	21	84	7	295	43	63	361	42
V/C Ratio	0.51	0.27	-	0.52	0.19	0.92	0.82	0.61	0.29	0.92	1.04	0.27
Level-of-Service	D	D	-	C	D	E	F	C	C	E	F	B
Control Delay (Seconds)	37.0	40.3	-	34.7	37.9	65.2	93.9	30.6	25.8	64.7	170.3	19.0
Intersection LOS	**F - 88**											
Queue Storage Ratio	0.5	0.6	0.0	1.2	0.5	1.2	0.1	0.4	1.2	0.4	2.0	1.0

The 2025 analysis of the intersection of Los Volcanes Rd. / Unser Blvd. demonstrates that the signalized intersection is over capacity for the 2025 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 2 of Westpointe Industrial Development. The impact of Phase 2 trips generated are minimal resulting in an increase in delay of approximately 3.3 seconds during the AM Peak period and less than 20.5 second increase in delay during the PM Peak period. As a result of the minimal to moderate impact of this phase of the development on the signalized intersection of Los Volcanes Rd. / Unser Blvd. no recommendation is made associated with Phase 2.

#3 – I-40 N. Ramp / Unser Blvd.

The results of the 2025 analysis of the full access signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following table:

I-40 N. Ramp / Unser Blvd. 2025 Conditions - Phase 2	EB (I-40 N. Ramp)			WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	-	-	-	2	-	1	1	2	-	-	3	-
Queue Storage Length (Ft.)	-	-	-	750	-	-	350	900	-	-	500	-
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	-	-	-	113	-	-	9	261	-	-	590	-
V/C Ratio	-	-	-	0.87	-	-	0.38	0.72	-	-	0.67	-
Level-of-Service	-	-	-	D	-	-	B	A	-	-	B	-
Control Delay (Seconds)	-	-	-	51.2	-	-	14.1	6.5	-	-	11.1	-
Intersection LOS	**B - 13.4**											
Queue Storage Ratio	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.3	0.0	0.0	0.9	0.0
7:45 AM												
BUILD Conditions Volumes	-	-	-	119	-	-	10	262	-	-	593	-
V/C Ratio	-	-	-	0.88	-	-	0.42	0.73	-	-	0.68	-
Level-of-Service	-	-	-	D	-	-	B	A	-	-	B	-
Control Delay (Seconds)	-	-	-	51.8	-	-	16.5	6.8	-	-	12.0	-
Intersection LOS	**B - 14.2**											
Queue Storage Ratio	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.3	0.0	0.0	0.9	0.0
PM Peak 15-minute Period												
5:15 PM												
NO BUILD Conditions Volumes	-	-	-	237	-	-	15	192	-	-	298	-
V/C Ratio	-	-	-	0.93	-	-	0.42	0.82	-	-	0.46	-
Level-of-Service	-	-	-	D	-	-	B	D	-	-	C	-
Control Delay (Seconds)	-	-	-	47.1	-	-	15.5	37.5	-	-	20.3	-
Intersection LOS	**C - 33.9**											
Queue Storage Ratio	0.0	0.0	0.0	0.8	0.0	0.0	0.2	1.0	0.0	0.0	0.7	0.0
5:15 PM												
BUILD Conditions Volumes	-	-	-	240	-	-	16	195	-	-	299	-
V/C Ratio	-	-	-	0.93	-	-	0.44	0.84	-	-	0.47	-
Level-of-Service	-	-	-	D	-	-	B	D	-	-	C	-
Control Delay (Seconds)	-	-	-	47.1	-	-	16.0	37.9	-	-	21.0	-
Intersection LOS	**C - 34.2**											
Queue Storage Ratio	0.0	0.0	0.0	0.8	0.0	0.0	0.3	1.0	0.0	0.0	0.7	0.0

The 2025 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the signalized intersection is below capacity for the 2025 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 2 of Westpointe Industrial Development. The impact of Phase 2 trips generated are minimal resulting in an increase in delay of approximately 0.8 seconds during the AM Peak period and 0.3 second increase in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of I-40 N. Ramp / Unser Blvd. no recommendation is made associated with Phase 2.

#4 – I-40 S. Ramp / Unser Blvd.

The results of the 2025 analysis of the full access unsignalized ramp intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

I-40 S. Ramp / Unser Blvd. 2025 Conditions	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	130		170						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	152	-	100	-	972	-	-	1,420	-
V/C Ratio	0.49								
Level-of-Service	D								
Control Delay (Seconds)	27.4								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.6								
7:30 AM									
BUILD Conditions Volumes	152	-	100	-	976	-	-	1,452	-
V/C Ratio	0.50								
Level-of-Service	D								
Control Delay (Seconds)	27.7								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.6								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	92	-	82	-	1,124	-	-	1,476	-
V/C Ratio	0.20								
Level-of-Service	B								
Control Delay (Seconds)	14.7								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.7								
5:15 PM									
BUILD Conditions Volumes	92	-	82	-	1,136	-	-	1,488	-
V/C Ratio	0.20								
Level-of-Service	B								
Control Delay (Seconds)	14.1								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.7								

The 2025 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the unsignalized intersection is below capacity for the 2025 AM and PM Peak Hour BUILD Conditions associated with development of Phase 2 of Westpointe Industrial Development. As a result of the minimal impact of this phase of the development on the signalized intersection of I-40 N. Ramp / Unser Blvd. no recommendation is made associated with Phase 2.

#5 – Los Volcanes Rd. / Daytona Rd.

The results of the 2025 analysis of the full access unsignalized intersection of Los Volcanes Rd. / Daytona Rd. are summarized in the following table:

Los Volcanes Rd. / Daytona Rd. 2025 Conditions	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Daytona Rd.)			SB (Daytona Rd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	>	1	1	>	<	1	>	1	1	>
Queue Storage Length (Ft.)	-	-	-	-	-	-	-	-	-	100	-	-
AM Peak (4 x Peak 15-Minute Period)												
7:15 AM												
NO BUILD Conditions Volumes	1	508	-	8	380	108	-	-	4	100	1	4
V/C Ratio	-									0.36		0.01
Level-of-Service	A									D		B
Control Delay (Seconds)	8.6									25.3		11.1
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									1.6		0.0
7:15 AM												
BUILD Conditions Volumes	4	508	-	8	380	148	-	-	4	112	1	8
V/C Ratio	-									0.42		0.01
Level-of-Service	A									D		B
Control Delay (Seconds)	8.7									28.3		11.3
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									2.0		0.0
PM Peak 15-minute Period												
4:00 PM												
NO BUILD Conditions Volumes	4	288	-	-	204	64	-	-	-	44		1
V/C Ratio	-									0.09		-
Level-of-Service	A									B		A
Control Delay (Seconds)	8.0									13.2		9.7
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.3		0.0
4:00 PM												
BUILD Conditions Volumes	8	288	-	-	204	80	-	-	-	84	-	4
V/C Ratio	-									0.18		0.01
Level-of-Service	A									B		A
Control Delay (Seconds)	8.0									14.3		9.7
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.6		0.0

The 2025 analysis of the intersection of Los Volcanes Rd. / Daytona Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Daytona Rd. associated with Phase 2.

It should be noted that the south leg of the intersection of Los Volcanes Rd. / Daytona Rd. is currently a driveway to a King Hall of Jehovah Witness facility and, therefore, generated minimal traffic except on Sunday mornings and Wednesday evenings at about 7:00 PM to 9:00 PM.

#6 – Central Ave. / 98th St.

The results of the 2025 analyses of the full access signalized intersection of Central Ave. / 98th St. are summarized in the following tables:

Central Ave. / 98th St. 2025 Conditions - Phase 2	EB (Central Ave.)			WB (Central Ave.)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2	-	2	2	-	1	2	1	1	2	-
Queue Storage Length (Ft.)	175	999	-	175	625	-	220	430	220	80	500	-
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	111	89	15	65	41	52	15	496	65	27	157	37
V/C Ratio	1.04	0.53	0.54	0.91	0.55	0.76	0.22	1.41	0.41	0.84	0.55	0.55
Level-of-Service	F	D	D	F	F	F	C	F	C	D	C	C
Control Delay (Seconds)	721.5	44.5	44.8	88.9	80.2	126.1	20.7	#####	26.1	45.9	28.0	28.4
Intersection LOS	**F - 623.6**											
Queue Storage Ratio	7.4	0.2	0.2	0.9	0.4	0.6	0.1	17.1	0.7	0.8	0.5	0.5
8:15 AM												
BUILD Conditions Volumes	65	56	10	74	52	58	19	371	42	33	136	22
V/C Ratio	0.61	0.32	0.33	1.03	0.62	0.82	0.23	1.08	0.27	0.97	0.48	0.48
Level-of-Service	F	D	D	F	E	E	C	F	C	F	C	C
Control Delay (Seconds)	454.8	42.2	42.5	121.1	55.8	71.8	20.6	#####	25.0	90.4	26.0	26.2
Intersection LOS	**F - 691.4**											
Queue Storage Ratio	5.6	0.2	0.2	1.9	0.5	0.6	0.3	22.0	0.8	2.8	0.6	0.6
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	121	88	17	59	29	103	11	484	39	35	177	31
V/C Ratio	1.13	0.52	0.52	0.84	0.35	1.40	0.15	0.98	0.21	0.87	0.46	0.14
Level-of-Service	F	D	D	E	D	F	C	F	B	E	C	B
Control Delay (Seconds)	658.2	46.6	47.2	77.5	49.1	293.7	21.1	89.9	17.4	70.9	24.1	11.0
Intersection LOS	**F - 145.2**											
Queue Storage Ratio	7.9	0.3	0.3	1.3	0.3	1.9	0.2	2.5	0.6	2.4	0.7	0.0

PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	28	39	19	48	27	18	25	108	18	17	135	26
V/C Ratio	0.67	0.49	0.52	0.55	0.26	0.28	0.69	0.28	0.10	0.36	1.03	1.02
Level-of-Service	E	D	D	F	D	D	C	B	B	B	F	F
Control Delay (Seconds)	55.8	44.7	45.4	206.3	36.4	36.7	31.4	16.8	15.2	13.9	416.6	426.2
Intersection LOS	**F - 243.9**											
Queue Storage Ratio	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.4	0.2	0.5	6.1	6.1
5:45 PM												
BUILD Conditions Volumes	29	39	19	48	27	20	25	109	18	22	138	27
V/C Ratio	0.68	0.49	0.52	0.55	0.27	0.30	0.69	0.28	0.11	0.45	1.02	1.01
Level-of-Service	E	D	D	F	D	D	C	B	B	B	F	F
Control Delay (Seconds)	55.7	44.7	45.4	206.3	36.7	37.0	31.4	17.4	15.8	13.7	527.8	540.7
Intersection LOS	**F - 296.6**											
Queue Storage Ratio	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.4	0.2	0.6	7.5	7.4
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	29	39	19	48	27	20	25	109	18	22	138	27
V/C Ratio	0.68	0.49	0.52	0.55	0.28	0.30	0.67	0.20	0.08	0.47	0.96	0.37
Level-of-Service	E	D	D	F	D	D	C	B	A	B	F	B
Control Delay (Seconds)	55.7	44.7	45.4	206.3	36.9	37.3	30.7	16.5	9.4	13.7	411.5	14.5
Intersection LOS	**F - 206**											
Queue Storage Ratio	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.2	0.2	0.9	5.9	0.4

The 2025 analysis of the intersection of Central Ave. / 98th St. demonstrates that the signalized intersection is significantly above capacity for the 2025 NO BUILD and BUILD AM Conditions associated with development of Phase 2 of Westpointe Industrial Development. The impact of Phase 2 (including Phase 1) trips generated are significant resulting in an increase in delay of approximately 67.8 seconds during the AM Peak period and approximately 52.7 seconds in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of Bluewater Rd. / Unser Blvd. it is recommended that the following changes be made at the intersection:

- Construct a third northbound thru lane on 98th St. at Central Ave. (beginning about 1,000 feet south of the intersection to at least 1,000 feet north of the intersection.
- Construct a new southbound right turn deceleration lane on 98th St. at Central Ave.
- Reconfigure the northbound and southbound right turn lanes so that the right turn movements are signalized with a new right turn overlap installed on the traffic signal.

Implementation of the above improvements will improve the operation of the intersection significantly more than what is normally required to mitigate the impact of this development.

#7 – Bluewater Rd. (Avalon Rd.) / 98th St.

The results of the 2025 analyses of the full access signalized intersection of Bluewater Rd. (Avalon Rd.) / 98th St. are summarized in the following tables:

Avalon Rd. / 98th St	EB (Avalon Rd.)			WB (Avalon Rd.)			NB (98th St)			SB (98th St)		
2025 Conditions - Phase 2	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	-	1	2	1	1	3	-
Queue Storage Length (Ft.)	140	240	-	280	280	-	150	350	150	200	999	-
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	29	-	8	12	1	14	9	468	16	10	154	26
V/C Ratio	0.08	-	0.09	0.14	-	0.10	1.56	0.12	0.28	0.58	0.58	-
Level-of-Service	C	C	-	C	C	-	B	F	C	C	C	C
Control Delay (Seconds)	27.4	32.9	-	25.5	33.9	-	19.6	#####	26.5	30.7	31.2	33.3
Intersection LOS	**F - 1966.2**											
Queue Storage Ratio	0.5	0.1	0.0	0.1	0.2	0.0	0.1	47.7	0.3	0.1	0.2	0.2
8:30 AM												
BUILD Conditions Volumes	29	1	8	15	2	17	9	468	24	18	154	26
V/C Ratio	0.24	0.08	-	0.11	0.18	-	0.09	1.50	0.17	0.49	0.55	0.56
Level-of-Service	C	C	-	C	C	-	B	F	C	D	C	C
Control Delay (Seconds)	27.6	33.0	-	25.8	34.5	-	19.6	#####	27.2	35.1	31.1	32.9
Intersection LOS	**F - 1755.8**											
Queue Storage Ratio	0.9	0.2	0.0	0.2	0.3	0.0	0.2	45.9	0.5	0.4	0.3	0.3
Mitigated Lane Geometry	1	1	0	1	1	0	1	3	0	1	3	0
BUILD Conditions (Mitigated) Volumes	30	1	13	15	2	17	17	397	24	18	187	20
V/C Ratio	0.56	0.30	-	0.26	0.40	-	0.17	0.64	0.64	0.35	0.27	0.27
Level-of-Service	E	E	-	D	E	-	A	B	B	B	A	A
Control Delay (Seconds)	59.5	55.1	-	48.2	58.1	-	7.0	14.9	16.4	18.2	5.2	6.5
Intersection LOS	**B - 16.6**											
Queue Storage Ratio	0.5	0.4	0.0	0.3	0.5	0.0	0.2	1.2	1.3	0.2	0.1	0.1
PM Peak 15-minute Period												
5:30 PM												
NO BUILD Conditions Volumes	28	-	14	16	-	11	19	281	14	14	527	44
V/C Ratio	0.20	0.11	-	0.11	0.09	-	0.49	1.28	0.14	0.21	1.13	1.10
Level-of-Service	C	C	-	B	C	-	C	F	C	C	F	F
Control Delay (Seconds)	21.2	25.0	-	19.5	24.0	-	33.8	#####	27.8	25.2	979.3	986.1
Intersection LOS	**F - 1169.5**											
Queue Storage Ratio	0.7	0.2	0.0	0.2	0.1	0.0	0.5	22.4	0.4	0.2	4.9	4.9
5:30 PM												
BUILD Conditions Volumes	28	1	14	24	1	19	19	281	17	18	527	44
V/C Ratio	0.21	0.12	-	0.17	0.16	-	0.49	1.28	0.17	0.26	1.13	1.10
Level-of-Service	C	C	-	C	C	-	C	F	C	C	F	F
Control Delay (Seconds)	21.4	25.1	-	20.2	24.9	-	33.6	#####	28.1	25.7	950.0	956.3
Intersection LOS	**F - 1119.4**											
Queue Storage Ratio	0.7	0.2	0.0	0.3	0.3	0.0	0.5	22.2	0.5	0.3	4.8	4.7
Mitigated Lane Geometry	1	1	0	1	1	0	1	3	0	1	3	0
BUILD Conditions (Mitigated) Volumes	27	1	22	24	1	19	16	63	17	18	505	42
V/C Ratio	0.41	0.42	-	0.38	0.36	-	1.19	0.49	0.49	0.25	0.77	0.78
Level-of-Service	D	D	-	D	D	-	F	B	C	B	A	A
Control Delay (Seconds)	41.5	47.7	-	40.9	46.2	-	135.0	18.1	20.8	11.4	3.8	4.8
Intersection LOS	**C - 20.8**											
Queue Storage Ratio	1.0	0.5	0.0	0.4	0.4	0.0	2.9	1.0	1.0	0.2	0.1	0.1

The 2025 analysis of the intersection of Bluewater Rd. (Avalon Rd.) / 98th St. demonstrates that the signalized intersection is significantly above capacity for the 2025 NO BUILD and BUILD AM Conditions associated with development of Phase 2 of Westpointe Industrial Development. The intersection of Avalon Rd. / 98th St. was a signalized tee intersection until about a year or two ago. Concurrent with implementation of the new Maverik Gasoline Station with Convenience

Market, the fourth leg of the intersection was constructed. It appears from the analysis that the signal timing programmed after the fourth leg was added to the intersection was not the optimum timing. Mitigation at the intersection of Bluewater Rd. (Avalon Rd.) / 98th St. consists of the following measures:

- Convert the existing northbound right turn lane to a third northbound thru lane on 98th St. at Bluewater Rd. The third northbound thru lane already exists on 98th St. north of Bluewater Rd.
- Optimize signal timing at Bluewater Rd. (Avalon Rd.) / 98th St. to be consistent with the recommended timings in this analysis for the AM Peak Hour and PM Peak Hour mitigated conditions.

#8 – I-40 N. Ramp / 98th St.

The results of the 2025 analyses of the full access signalized intersection of I-40 N. Ramp (Avalon Rd.) / 98th St. are summarized in the following tables:

I-40 N. Ramp / 98th St 2025 Conditions - Phase 2	WB (I-40 N. Ramp)			NB (98th St)			SB (98th St)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	1	-	1	2	-	-	3	-
Queue Storage Length (Ft.)	600	600	-	100	999	-	-	600	-
AM Peak 15-minute Period									
8:30 AM									
NO BUILD Conditions Volumes	141	1	-	18	103	-	-	205	-
V/C Ratio	0.87	0.01	-	0.47	0.18	-	-	0.26	-
Level-of-Service	D	D	-	A	A	-	-	B	-
Control Delay (Seconds)	53.2	40.6	-	7.9	6.5	-	-	10.9	-
Intersection LOS	**C - 22.6**								
Queue Storage Ratio	0.7	0.0	0.0	0.3	0.1	0.0	0.0	0.3	0.0
8:30 AM									
BUILD Conditions Volumes	166	1	-	20	113	-	-	226	-
V/C Ratio	0.88	-	-	0.21	0.21	-	-	0.30	-
Level-of-Service	D	D	-	A	A	-	-	B	-
Control Delay (Seconds)	52.7	38.6	-	9.9	8.2	-	-	13.4	-
Intersection LOS	**C - 24.6**								
Queue Storage Ratio	0.8	0.0	0.0	0.4	0.1	0.0	0.0	0.4	0.0
PM Peak 15-minute Period									
4:00 PM									
NO BUILD Conditions Volumes	389	1	-	27	91	-	-	180	-
V/C Ratio	0.89	0.01	-	0.35	0.25	-	-	0.44	-
Level-of-Service	C	B	-	C	C	-	-	C	-
Control Delay (Seconds)	28.4	13.8	-	24.9	21.8	-	-	32.9	-
Intersection LOS	**C - 28.6**								
Queue Storage Ratio	1.0	0.0	0.0	0.8	0.1	0.0	0.0	0.4	0.0
4:00 PM									
BUILD Conditions Volumes	391	1	-	29	93	-	-	181	-
V/C Ratio	0.89	0.01	-	0.38	0.26	-	-	0.45	-
Level-of-Service	C	B	-	C	C	-	-	C	-
Control Delay (Seconds)	28.3	13.7	-	25.2	22.0	-	-	33.5	-
Intersection LOS	**C - 27.7**								
Queue Storage Ratio	1.0	0.0	0.0	0.9	0.1	0.0	0.0	0.4	0.0

The 2025 analysis of the intersection of I-40 N. Ramp / 98th St. demonstrates that the signalized intersection will operate at a satisfactory level-of-service with acceptable delays for all conditions analyzed in this Study associated with Phase 2 of Westpointe 40 Industrial Development. Therefore, no recommendation is made.

#9 – I-40 S. Ramp / 98th St.

The results of the 2025 analyses of the full access unsignalized intersection of I-40 S. Ramp / 98th St. are summarized in the following tables:

I-40 S. Ramp / 98th St. 2025 Conditions	EB (I-40 S. Ramp)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	150		200						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	12	-	-	-	880	-	-	876	-
V/C Ratio	0.09								
Level-of-Service	D								
Control Delay (Seconds)	34.7								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.3								
7:30 AM									
BUILD Conditions Volumes	12	-	-	-	884	-	-	904	-
V/C Ratio	0.09								
Level-of-Service	E								
Control Delay (Seconds)	36.3								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.3								

PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	12	-	-	-	440	-	-	2,304	-
V/C Ratio	0.63								
Level-of-Service	F								
Control Delay (Seconds)	358.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	1.7								
5:15 PM									
BUILD Conditions Volumes	12	-	-	-	452	-	-	2,316	-
V/C Ratio	0.52								
Level-of-Service	F								
Control Delay (Seconds)	274.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	1.5								

The 2025 analysis of the intersection of I-40 S. Ramp / 98th St. demonstrates that the signalized intersection will operate at less than satisfactory levels-of-service with long delays for the 2025 PM Peak Hour NO BUILD and BUILD Conditions analyzed in this Study associated with Phase 2 of Westpointe 40 Industrial Development. The proposed Westpointe 40 Industrial

Development does not contribute any traffic to the eastbound left turn movement on the I-40 off-ramp. Therefore, no recommendation is made.

#10 through #14 – Access Intersections / Driveways

There are 4 proposed driveways and one local unsignalized intersection (Bluewater Rd. / Dayton Rd.) that will be utilized to access the new Westpointe 40 Industrial Development, Phases 1 and 2. The unsignalized intersection analysis of the local unsignalized access is summarized in the following table:

Executive Summary Results Table

			Phase 2	
			2025 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak
10. Bluewater Rd. / Daytona Rd.	Unsignalized	NO BUILD	N/A	N/A
		BUILD	B - 12.7	B - 10.6
11. Driveway "F" (Adonai Rd.) / Bluewater Rd.	Unsignalized	NO BUILD	N/A	N/A
		BUILD	A - 9.9	A - 9.8
12. Daytona Rd. / Driveway "A"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	A - 9.6	A - 9.9
13. Daytona Rd. / Driveway "B"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	A - 9.8	A - 9.4
14. Daytona Rd. / Driveway "C"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	A - 9.4	A - 9.5

N/A - No Analysis
DNE - Does Not Exist

All of the local unsignalized access intersections / driveways are projected to operate at level-of-service "C" or better. Therefore, no recommendation is made. All of the local access unsignalized intersections / driveways were assumed to be designed and constructed with one approach lane for the 2025 Conditions (Phase 2).

Phase 3 (2030)

Phase 3 is comprised of 500,000 S.F. of Industrial Park Use in addition to the 300,000 S.F. of Industrial Park Use in Phase 2 and the 20,000 S.F. Southern Tire Mart facility in Phase 1. Phase 3 is located immediately southwest of Phase 2. It is expected to generate an additional 162 entering trips and 38 exiting trips during the AM Peak Hour and 42 entering trips and 158 exiting trips during the PM Peak Hour. It is expected to be implemented in the year 2030. Additional access will include Driveways "E" and "F", both intersecting the extension of Daytona Rd. west and south to connect to Bluewater Rd. Trip distribution and trip assignments for Phase 3 will be significantly different that that of Phase 1 due primarily to the new connection of Daytona Rd. west and south to Bluewater which will allow Westpointe 40 traffic to access 98th St. to and from the development.

Analysis of Phase 3 trips is inclusive of the trips generated by Phase 1 and Phase 2. Following are the results of the analysis of intersections associated with development of Phase 3:

#1 – Bluewater Rd. / Unser Blvd.

The results of the 2030 analyses of the full access signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

Bluewater Rd. / Unser Blvd. 2030 Conditions - Phase 3	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	2	1	1	2	1
Queue Storage Length (Ft.)	90	130	-	130	280	130	110	500	250	160	500	170
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	38	13	9	14	6	22	7	427	31	37	228	15
V/C Ratio	0.55	0.29	-	0.35	0.17	0.73	0.11	1.38	0.19	0.73	0.71	0.10
Level-of-Service	D	D	-	D	D	E	B	F	C	F	B	A
Control Delay (Seconds)	47.3	41.9	-	54.1	51.6	61.9	19.6	347.1	20.9	99.7	13.6	8.6
Intersection LOS	**F - 161**											
Queue Storage Ratio	2.4	0.9	0.0	0.7	0.1	1.1	0.2	5.4	0.4	2.8	0.6	0.3
7:45 AM												
BUILD Conditions Volumes	39	14	12	14	7	23	17	429	31	38	229	15
V/C Ratio	0.56	0.34	-	0.35	0.19	0.74	0.24	1.39	0.20	0.74	0.73	0.11
Level-of-Service	D	D	-	D	D	E	B	F	C	F	B	A
Control Delay (Seconds)	47.4	42.2	-	53.7	51.4	61.4	19.7	378.7	21.2	99.5	15.4	9.8
Intersection LOS	**F - 173.5**											
Queue Storage Ratio	2.4	1.1	0.0	0.6	0.1	1.2	0.5	5.7	0.4	2.8	0.7	0.3
Mitigated Lane Geometry	1	1	0	1	1	1	1	3	1	1	2	1
BUILD Conditions (Mitigated) Volumes	31	14	17	4	2	17	18	497	26	40	191	19
V/C Ratio	0.47	0.46	-	0.12	0.07	0.23	0.31	0.78	0.13	0.89	0.65	0.15
Level-of-Service	D	D	-	D	D	D	B	C	B	D	B	B
Control Delay (Seconds)	46.9	45.7	-	53.4	52.8	40.1	14.9	22.9	12.8	39.5	19.2	12.2
Intersection LOS	**C - 23.9**											
Queue Storage Ratio	1.9	1.3	0.0	0.2	0.0	0.7	0.4	1.1	0.3	1.9	0.9	0.7
PM Peak 15-minute Period												
5:00 PM												
NO BUILD Conditions Volumes	36	24	10	27	38	66	15	310	10	17	449	33
V/C Ratio	0.44	0.27	-	0.37	0.44	0.89	0.55	0.72	0.05	0.31	0.95	0.16
Level-of-Service	D	C	-	D	D	E	D	C	B	B	D	C
Control Delay (Seconds)	36.2	33.6	-	45.9	45.7	71.7	35.7	25.2	14.3	18.9	45.4	29.2
Intersection LOS	**D - 38.8**											
Queue Storage Ratio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM												
BUILD Conditions Volumes	39	25	20	27	39	67	19	311	10	18	451	33
V/C Ratio	0.48	0.36	-	0.38	0.44	0.89	0.64	0.73	0.05	0.34	0.97	0.16
Level-of-Service	D	C	-	D	D	E	D	C	B	C	D	C
Control Delay (Seconds)	36.3	34.6	-	45.8	45.5	71.6	36.5	25.9	14.6	20.0	47.1	30.1
Intersection LOS	**D - 39.7**											
Queue Storage Ratio	2.2	1.7	0.0	1.2	0.8	3.3	0.6	1.2	0.1	0.2	1.7	1.1
Mitigated Lane Geometry	1	1	0	1	1	1	1	3	1	1	2	1
BUILD Conditions (Mitigated) Volumes	39	25	20	27	39	67	19	311	10	18	451	33
V/C Ratio	0.49	0.37	-	0.39	0.45	0.79	0.68	0.51	0.05	0.28	1.01	0.15
Level-of-Service	D	D	-	D	D	E	D	B	B	B	F	B
Control Delay (Seconds)	36.9	35.1	-	46.4	46.1	55.4	38.2	19.8	14.4	15.2	54.4	19.4
Intersection LOS	**D - 39.7**											
Queue Storage Ratio	2.2	1.7	0.0	1.2	0.8	3.0	0.7	0.7	0.1	0.2	1.9	0.9

The 2030 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the signalized intersection is significantly above capacity for the 2030 NO BUILD and BUILD AM Conditions associated with development of Phase 2 of Westpointe Industrial Development. The impact of Phase 3 (including Phase 1 and Phase 2) trips generated are significant resulting in an increase in delay of approximately 12.5 seconds during the AM Peak period and approximately 0.9 seconds in delay during the PM Peak period. As a result of the impact of this phase of the development on the signalized intersection of Bluewater Rd. / Unser Blvd. it is recommended that a third northbound thru lane on Unser Blvd. through Bluewater Rd. be designed and constructed. Implementation of the third northbound thru lane on Unser will more than mitigate the impact of this development on the intersection.

#2 – Los Volcanes Rd. / Unser Blvd.

The results of the 2030 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the following tables:

Los Volcanes Rd. / Unser Blvd. 2030 Conditions - Phase 3	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	3	1	2	2	1
Queue Storage Length (Ft.)	150	250	-	225	225	425	580	900	150	500	900	150
AM Peak 15-minute Period												
8:00 AM												
NO BUILD Conditions Volumes	105	19	11	33	14	56	11	377	56	87	230	39
V/C Ratio	0.41	-	0.43	0.18	0.87	0.79	1.28	0.56	0.83	0.89	0.34	-
Level-of-Service	F	D	-	D	D	E	E	F	D	E	F	B
Control Delay (Seconds)	189.0	44.0	-	36.6	41.8	56.1	71.8	#####	38.0	55.8	747.5	14.7
Intersection LOS	**F - 609.1**											
Queue Storage Ratio	5.5	0.6	0.0	0.7	0.3	0.8	0.1	4.6	1.6	0.8	6.4	0.8
7:45 AM												
BUILD Conditions Volumes	88	19	8	37	20	70	8	400	63	88	228	50
V/C Ratio	0.90	0.31	-	0.38	0.22	0.89	0.69	1.09	0.50	0.86	1.18	0.58
Level-of-Service	F	D	-	C	D	E	E	F	C	F	F	B
Control Delay (Seconds)	498.4	39.6	-	32.4	38.5	55.9	60.7	#####	26.2	94.9	751.6	18.3
Intersection LOS	**F - 549.1**											
Queue Storage Ratio	11.6	0.5	0.0	0.7	0.4	0.9	0.1	3.8	0.8	1.3	6.3	1.3
Mitigated Lane Geometry	1	1	0	1	1	1	1	4	1	2	2	1
BUILD Conditions (Mitigated) Volumes	88	19	8	37	20	70	8	400	63	88	228	50
V/C Ratio	0.90	0.31	-	0.38	0.22	0.89	0.85	1.08	0.71	0.86	1.18	0.58
Level-of-Service	F	D	-	C	D	E	F	F	F	F	F	B
Control Delay (Seconds)	498.4	39.6	-	32.4	38.5	55.9	88.7	305.8	98.5	94.7	751.5	18.3
Intersection LOS	**F - 377.2**											
Queue Storage Ratio	11.6	0.5	0.0	0.7	0.4	0.9	0.1	1.4	3.5	1.3	6.3	1.1

PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	40	14	8	56	15	73	6	300	57	71	437	44
V/C Ratio	0.40	0.26	-	0.56	0.16	0.90	0.85	0.60	0.37	0.84	1.07	0.24
Level-of-Service	D	D	-	D	D	E	F	C	C	E	F	B
Control Delay (Seconds)	37.1	43.2	-	38.5	40.5	63.5	99.4	28.6	25.5	59.9	992.1	16.5
Intersection LOS	**F - 417.5**											
Queue Storage Ratio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:45 PM												
BUILD Conditions Volumes	57	16	10	57	16	73	7	303	58	71	438	50
V/C Ratio	0.57	0.31	-	0.59	0.17	0.90	0.83	0.60	0.37	0.84	1.08	0.28
Level-of-Service	D	D	-	D	D	E	F	C	C	E	F	B
Control Delay (Seconds)	41.6	43.7	-	39.5	40.5	63.3	92.3	28.7	25.6	59.8	#####	17.1
Intersection LOS	**F - 432.2**											
Queue Storage Ratio	0.7	0.6	0.0	0.3	0.4	1.0	0.1	0.4	1.5	0.4	8.7	1.1
Mitigated Lane Geometry	1	1	0	1	1	1	1	4	1	2	2	1
BUILD Conditions (Mitigated) Volumes	57	16	10	57	16	73	7	303	58	71	438	50
V/C Ratio	0.62	0.35	-	0.63	0.19	0.65	0.83	0.43	0.29	0.84	1.03	0.23
Level-of-Service	D	D	-	D	D	D	F	C	B	E	F	B
Control Delay (Seconds)	45.4	46.5	-	43.6	43.0	39.5	97.3	23.9	16.0	59.7	675.1	10.6
Intersection LOS	**F - 281.4**											
Queue Storage Ratio	0.8	0.6	0.0	0.3	0.4	0.8	0.1	0.3	1.3	0.4	6.0	0.8

The 2030 analysis of the intersection of Los Volcanes Rd. / Unser Blvd. demonstrates that the signalized intersection is over capacity for the 2030 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 3 of Westpointe Industrial Development. The impact of Phase 3 trips generated are minimal during the AM Peak Hour resulting in an decrease in delay of approximately 60 seconds during the AM Peak period, but a significant increase in delay of 14.7 seconds during the PM Peak period. As a result of the high overall delay during the 2030 AM Peak Hour and the significant increase in delay during the 2030 PM Peak Hour, this report recommends that a fourth northbound thru lane on Unser Blvd. at Los Volcanes be constructed to mitigate the impact of this development on the intersection. Construction of the additional northbound thru lane on Unser Blvd. more than mitigates the impact of this development on the intersection.

#3 – I-40 N. Ramp / Unser Blvd.

The results of the 2030 analysis of the full access signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following table:

I-40 N. Ramp / Unser Blvd.	EB (I-40 N. Ramp)			WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
2030 Conditions - Phase 3	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	-	-	-	2	-	1	1	2	-	-	3	-
Queue Storage Length (Ft.)	-	-	-	750	-	350	900	500	-	-	-	-
AM Peak 15-minute Period												
7:45 AM												
NO BUILD Conditions Volumes	-	-	-	122	-	-	9	283	-	-	641	-
V/C Ratio	-	-	-	0.88	-	-	0.40	0.73	-	-	0.74	-
Level-of-Service	-	-	-	D	-	-	B	A	-	-	B	-
Control Delay (Seconds)	-	-	-	52.0	-	-	19.1	6.8	-	-	13.2	-
Intersection LOS	**B - 14.9**											
Queue Storage Ratio	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
7:45 AM												
BUILD Conditions Volumes	-	-	-	135	-	-	10	285	-	-	647	-
V/C Ratio	-	-	-	0.89	-	-	0.45	0.75	-	-	0.77	-
Level-of-Service	-	-	-	D	-	-	C	A	-	-	B	-
Control Delay (Seconds)	-	-	-	53.2	-	-	23.5	7.5	-	-	15.1	-
Intersection LOS	**B - 16.7**											
Queue Storage Ratio	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.3	0.0	0.0	1.2	0.0
PM Peak 15-minute Period												
5:15 PM												
NO BUILD Conditions Volumes	-	-	-	257	-	-	16	217	-	-	327	-
V/C Ratio	-	-	-	0.93	-	-	0.49	0.94	-	-	0.53	-
Level-of-Service	-	-	-	D	-	-	B	D	-	-	C	-
Control Delay (Seconds)	-	-	-	46.8	-	-	18.7	46.4	-	-	23.8	-
Intersection LOS	**D - 38.6**											
Queue Storage Ratio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:15 PM												
BUILD Conditions Volumes	-	-	-	262	-	-	17	223	-	-	329	-
V/C Ratio	-	-	-	0.93	-	-	0.52	0.99	-	-	0.55	-
Level-of-Service	-	-	-	D	-	-	B	D	-	-	C	-
Control Delay (Seconds)	-	-	-	46.7	-	-	19.9	54.0	-	-	24.9	-
Intersection LOS	**D - 42.2**											
Queue Storage Ratio	0.0	0.0	0.0	0.9	0.0	0.0	0.3	1.2	0.0	0.0	0.8	0.0

The 2030 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the signalized intersection is below capacity for the 2030 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 3 of Westpointe Industrial Development. The impact of Phase 3 trips generated are minimal resulting in an increase in delay of approximately 1.8 seconds during the AM Peak period and 3.6 second increase in delay during the PM Peak period. As a result of the minimal impact of this phase of the development on the signalized intersection of I-40 N. Ramp / Unser Blvd. no recommendation is made associated with Phase 3.

#4 – I-40 S. Ramp / Unser Blvd.

The results of the 2030 analysis of the full access unsignalized ramp intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

I-40 S. Ramp / Unser Blvd. 2030 Conditions	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	130		170						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	164	-	110	-	1,052	-	-	1,536	-
V/C Ratio	0.57								
Level-of-Service	D								
Control Delay (Seconds)	33.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	3.3								
7:30 AM									
BUILD Conditions Volumes	164	-	120	-	1,060	-	-	1,610	-
V/C Ratio	0.59								
Level-of-Service	D								
Control Delay (Seconds)	34.5								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	3.4								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	100	-	92	-	1,220	-	-	1,600	-
V/C Ratio	0.23								
Level-of-Service	C								
Control Delay (Seconds)	15.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.9								
5:15 PM									
BUILD Conditions Volumes	100	-	102	-	1,244	-	-	1,624	-
V/C Ratio	0.23								
Level-of-Service	C								
Control Delay (Seconds)	15.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.9								

The 2030 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the unsignalized intersection is below capacity for the 2030 AM and PM Peak Hour BUILD Conditions associated with development of Phase 3 of Westpointe Industrial Development. The unsignalized analysis of this intersection assumed that the eastbound to northbound left turn movement would execute a staged left turn during the AM and PM Peak Hour periods. As a result of the minimal impact of this phase of the development on the unsignalized intersection of I-40 S. Ramp / Unser Blvd. no recommendation is made associated with Phase 3.

#5 – Los Volcanes Rd. / Daytona Rd.

The results of the 2030 analysis of the full access unsignalized intersection of Los Volcanes Rd. / Daytona Rd. are summarized in the following table:

Los Volcanes Rd. / Daytona Rd. 2030 Conditions	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Daytona Rd.)			SB (Daytona Rd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	>	1	1	>	<	1	>	1	1	>
Queue Storage Length (Ft.)	-	-	-	-	-	-	-	-	-	100	-	-
AM Peak (4 x Peak 15-Minute Period)												
7:15 AM												
NO BUILD Conditions Volumes	1	548	-	8	408	116	-	-	4	108	1	4
V/C Ratio	-									0.43		0.01
Level-of-Service	A									D		B
Control Delay (Seconds)	8.7									30.1		11.3
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									2.1		0.0
7:15 AM												
BUILD Conditions Volumes	4	547	-	8	408	196	-	-	4	128	1	8
V/C Ratio	-									0.53		0.02
Level-of-Service	A									E		B
Control Delay (Seconds)	9.0									35.2		11.8
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									2.8		0.0
PM Peak 15-minute Period												
4:00 PM												
NO BUILD Conditions Volumes	4	312	-	-	220	64	-	-	-	48		1
V/C Ratio	-									0.11		-
Level-of-Service	A									B		A
Control Delay (Seconds)	8.0									13.8		9.8
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.3		0.0
4:00 PM												
BUILD Conditions Volumes	8	312	-	-	220	96	-	-	-	128	-	4
V/C Ratio	-									0.29		0.01
Level-of-Service	A									C		A
Control Delay (Seconds)	8.1									16.4		9.9
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									1.2		0.0

The 2030 analysis of the intersection of Los Volcanes Rd. / Daytona Rd. demonstrates that the delays will be marginally acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Daytona Rd.

It should be noted that the south leg of the intersection of Los Volcanes Rd. / Daytona Rd. is currently a driveway to a King Hall of Jehovah Witness facility and, therefore, generated minimal traffic except on Sunday mornings and Wednesday evenings at about 7:00 PM to 9:00 PM.

#6 – Central Ave. / 98th St.

The results of the 2030 analyses of the full access signalized intersection of Central Ave. / 98th St. are summarized in the following tables:

Central Ave. / 98th St. 2030 Conditions - Phase 3	EB (Central Ave.)			WB (Central Ave.)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2	-	2	2	-	1	2	1	1	2	-
Queue Storage Length (Ft.)	175	999	-	175	625	-	220	430	220	80	500	-
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	81	58	9	64	20	64	23	418	51	27	153	29
V/C Ratio	0.76	0.34	0.35	0.89	0.24	0.92	0.32	1.22	0.33	0.88	0.64	0.64
Level-of-Service	F	D	D	F	D	F	C	F	C	E	C	C
Control Delay (Seconds)	832.3	41.8	41.9	102.5	44.5	81.2	21.9	#####	25.6	56.0	30.9	31.3
Intersection LOS	**F - 1053.1**											
Queue Storage Ratio	9.2	0.2	0.2	1.6	0.2	0.7	0.4	32.6	1.0	2.2	0.8	0.8
8:30 AM												
BUILD Conditions Volumes	84	58	9	64	20	75	23	424	51	30	155	30
V/C Ratio	0.79	0.33	0.34	0.89	0.24	1.06	0.31	1.23	0.33	0.98	0.64	0.64
Level-of-Service	F	D	D	F	D	F	C	F	C	F	C	C
Control Delay (Seconds)	998.3	40.6	40.8	102.5	43.9	120.1	21.7	#####	26.1	234.3	29.8	30.1
Intersection LOS	**F - 1141.1**											
Queue Storage Ratio	10.8	0.2	0.2	1.6	0.2	1.0	0.4	34.7	1.0	5.2	0.8	0.8
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	128	96	16	67	45	69	18	550	70	33	174	41
V/C Ratio	1.20	0.55	0.56	0.94	0.54	0.91	0.24	1.12	0.38	0.92	0.51	0.21
Level-of-Service	F	D	D	F	F	F	C	F	B	F	C	B
Control Delay (Seconds)	#####	44.3	44.7	95.0	141.0	347.4	21.2	358.1	19.9	349.2	26.1	12.9
Intersection LOS	**F - 311.8**											
Queue Storage Ratio	13.3	0.3	0.3	1.6	1.0	1.8	0.3	5.9	1.1	6.9	0.7	0.0

PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	33	45	20	56	33	23	26	134	22	20	170	36
V/C Ratio	0.70	0.55	0.58	0.57	0.33	0.35	0.71	0.35	0.13	0.38	1.04	1.04
Level-of-Service	E	D	D	F	D	D	C	B	B	B	F	F
Control Delay (Seconds)	55.3	45.5	46.3	665.4	37.3	37.7	31.8	18.1	15.9	14.3	694.8	714.0
Intersection LOS	**F - 400**											
Queue Storage Ratio	0.5	0.2	0.2	6.9	0.2	0.2	0.4	0.5	0.3	0.5	9.6	9.5
5:45 PM												
BUILD Conditions Volumes	34	45	20	56	33	27	26	136	22	31	176	39
V/C Ratio	0.70	0.55	0.58	0.57	0.35	0.39	0.71	0.36	0.13	0.54	1.04	1.04
Level-of-Service	E	D	D	F	D	D	C	B	B	B	F	F
Control Delay (Seconds)	55.2	45.5	46.3	665.4	37.7	38.2	31.7	19.4	17.0	14.2	967.8	996.6
Intersection LOS	**F - 519.2**											
Queue Storage Ratio	0.6	0.2	0.2	6.9	0.2	0.2	0.4	0.5	0.3	0.8	13.0	12.9
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	65	89	25	118	66	58	23	248	38	56	412	49
V/C Ratio	0.82	0.78	0.80	1.20	0.78	0.81	0.63	0.55	0.21	0.60	1.05	0.23
Level-of-Service	E	D	D	F	D	D	C	C	B	B	F	B
Control Delay (Seconds)	58.8	50.4	52.2	881.4	48.2	51.7	31.0	27.0	14.8	18.8	236.6	13.2
Intersection LOS	**F - 181.6**											
Queue Storage Ratio	1.1	0.3	0.3	9.3	0.5	0.5	0.4	0.7	0.5	1.4	3.5	0.0

The 2030 analysis of the intersection of Central Ave. / 98th St. yield similar results as the 2025 (Phase 2) analysis except that the calculated delays are higher. The proposed measures to mitigate the increased delay, though, are the same as that for the 2025 (Phase 2) analysis.

#7 – Bluewater Rd. (Avalon Rd.) / 98th St.

The results of the 2030 analyses of the full access signalized intersection of Bluewater Rd. (Avalon Rd.) / 98th St. are summarized in the following tables:

Avalon Rd. / 98th St	EB (Avalon Rd.)			WB (Avalon Rd.)			NB (98th St)			SB (98th St)		
2030 Conditions - Phase 3	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	-	1	2	1	1	3	-
Queue Storage Length (Ft.)	140	240	-	280	280	-	150	350	150	200	999	-
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	32	-	9	12	1	14	10	517	16	10	166	28
V/C Ratio	0.08	-	0.09	0.14	-	0.10	1.55	0.11	0.29	0.64	0.64	-
Level-of-Service	C	C	-	C	C	-	B	F	C	C	C	C
Control Delay (Seconds)	27.8	33.1	-	25.5	33.9	-	19.8	#####	26.5	30.8	32.1	34.6
Intersection LOS	**F - 1899.1**											
Queue Storage Ratio	1.0	0.2	0.0	0.2	0.3	0.0	0.2	49.8	0.4	0.2	0.3	0.3
8:30 AM												
BUILD Conditions Volumes	32	1	9	17	2	19	10	517	34	29	166	28
V/C Ratio	0.27	0.09	-	0.13	0.19	-	0.10	1.53	0.23	0.81	0.62	0.62
Level-of-Service	C	C	-	C	C	-	B	F	C	D	C	C
Control Delay (Seconds)	28.0	33.2	-	26.0	34.8	-	19.8	#####	28.0	53.3	31.8	34.1
Intersection LOS	**F - 1593.2**											
Queue Storage Ratio	1.0	0.2	0.0	0.3	0.4	0.0	0.2	44.3	0.7	0.9	0.3	0.3
Mitigated Lane Geometry	1	1	0	1	1	0	1	**3**	0	1	3	0
BUILD Conditions (Mitigated) Volumes	32	1	9	17	2	19	10	517	34	29	166	28
V/C Ratio	0.27	0.09	-	0.13	0.19	-	0.12	1.21	1.19	0.81	0.62	0.62
Level-of-Service	C	C	-	C	C	-	B	F	F	D	C	C
Control Delay (Seconds)	28.0	33.2	-	26.0	34.8	-	20.0	#####	#####	54.0	31.9	34.3
Intersection LOS	**F - 1010.2**											
Queue Storage Ratio	1.0	0.2	0.0	0.3	0.4	0.0	0.2	26.2	26.0	0.9	0.3	0.3
PM Peak 15-minute Period												
5:30 PM												
NO BUILD Conditions Volumes	30	-	15	16	-	11	19	308	14	14	575	48
V/C Ratio	0.21	0.12	-	0.11	0.09	-	0.50	1.42	0.15	0.21	1.24	1.22
Level-of-Service	C	C	-	B	C	-	C	F	C	C	F	F
Control Delay (Seconds)	21.4	25.1	-	19.5	24.0	-	32.7	#####	27.7	25.0	#####	#####
Intersection LOS	**F - 1820.6**											
Queue Storage Ratio	0.7	0.2	0.0	0.2	0.1	0.0	0.5	32.8	0.4	0.2	7.7	7.6
5:30 PM												
BUILD Conditions Volumes	30	1	15	34	1	30	19	308	20	20	575	48
V/C Ratio	0.25	0.13	-	0.24	0.25	-	0.50	1.42	0.21	0.30	1.24	1.22
Level-of-Service	C	C	-	C	C	-	C	F	C	C	F	F
Control Delay (Seconds)	22.0	25.2	-	21.1	26.2	-	32.0	#####	28.3	25.9	#####	#####
Intersection LOS	**F - 1711**											
Queue Storage Ratio	0.8	0.3	0.0	0.4	0.4	0.0	0.5	31.9	0.5	0.3	7.7	7.7
Mitigated Lane Geometry	1	1	0	1	1	0	1	**3**	0	1	3	0
BUILD Conditions (Mitigated) Volumes	35	1	15	34	1	30	13	276	20	20	550	63
V/C Ratio	0.29	0.13	-	0.24	0.25	-	0.19	0.49	0.49	0.27	1.31	1.28
Level-of-Service	C	C	-	C	C	-	C	D	D	C	F	F
Control Delay (Seconds)	22.5	25.2	-	21.1	26.2	-	29.9	48.6	52.1	24.4	#####	#####
Intersection LOS	**F - 1202.4**											
Queue Storage Ratio	0.9	0.3	0.0	0.4	0.4	0.0	0.3	1.1	1.2	0.3	9.2	9.1

The 2030 analysis of the intersection of Bluewater Rd. (Avalon Rd.) / 98th St. yield similar results as the 2025 (Phase 2) analysis except that the calculated delays are higher. The proposed measures to mitigate the increased delay, though, are the same as that for the 2025 (Phase 2) analysis.

#8 – I-40 N. Ramp / 98th St.

The results of the 2030 analyses of the full access signalized intersection of I-40 N. Ramp / 98th St. are summarized in the following tables:

I-40 N. Ramp / 98th St	WB (I-40 N. Ramp)			NB (98th St)			SB (98th St)		
2030 Conditions - Phase 3	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	1	-	1	2	-	-	3	-
Queue Storage Length (Ft.)	600	600	-	100	999	-	-	600	-
AM Peak Hour									
NO BUILD Conditions Volumes	612	1	-	76	444	-	-	888	-
V/C Ratio	0.87	0.01	-	0.19	0.20	-	-	0.29	-
Level-of-Service	D	D	-	A	A	-	-	B	-
Control Delay (Seconds)	52.9	52.9	-	8.9	7.3	-	-	12.1	-
Intersection LOS	**C - 23.3**								
Queue Storage Ratio	0.7	0.7	0.0	0.4	0.1	0.0	0.0	0.3	0.0
BUILD Conditions Volumes	664	1	-	80	452	-	-	904	-
V/C Ratio	0.88	0.01	-	0.21	0.21	-	-	0.30	-
Level-of-Service	D	D	-	A	A	-	-	B	-
Control Delay (Seconds)	52.7	52.7	-	9.9	8.2	-	-	13.4	-
Intersection LOS	**C - 24.6**								
Queue Storage Ratio	0.8	0.8	0.0	0.4	0.1	0.0	0.0	0.4	0.0
PM Peak Hour									
NO BUILD Conditions Volumes	1,696	1	-	116	392	-	-	776	-
V/C Ratio	0.90	0.90	-	0.43	0.30	-	-	0.56	-
Level-of-Service	C	C	-	C	C	-	-	D	-
Control Delay (Seconds)	27.2	27.2	-	28.4	25.0	-	-	38.2	-
Intersection LOS	**C - 29.8**								
Queue Storage Ratio	1.1	1.1	0.0	0.9	0.1	0.0	0.0	0.4	0.0
BUILD Conditions Volumes	1,712	1	-	128	408	-	-	784	-
V/C Ratio	0.90	0.90	-	0.47	0.31	-	-	0.59	-
Level-of-Service	C	C	-	C	C	-	-	D	-
Control Delay (Seconds)	27.1	27.1	-	29.0	25.4	-	-	39.6	-
Intersection LOS	**C - 30.1**								
Queue Storage Ratio	1.1	1.1	0.0	1.0	0.1	0.0	0.0	0.4	0.0

The 2030 analysis of the intersection of I-40 N. Ramp / 98th St. demonstrates that the signalized intersection will operate at a satisfactory level-of-service with acceptable delays for all conditions analyzed in this Study associated with Phase 3 of Westpointe 40 Industrial Development. Therefore, no recommendation is made.

#9 – I-40 S. Ramp / 98th St.

The results of the 2030 analyses of the full access unsignalized intersection of I-40 S. Ramp (Avalon Rd.) / 98th St. are summarized in the following tables:

I-40 S. Ramp / 98th St. 2030 Conditions	EB (I-40 S. Ramp)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	150		200						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	16	-	-	-	952	-	-	948	-
V/C Ratio	0.14								
Level-of-Service	E								
Control Delay (Seconds)	42.4								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.5								
7:30 AM									
BUILD Conditions Volumes	16	-	-	-	960	-	-	1,016	-
V/C Ratio	0.16								
Level-of-Service	E								
Control Delay (Seconds)	47.7								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.5								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	16	-	-	-	472	-	-	2,500	-
V/C Ratio	1.23								
Level-of-Service	F								
Control Delay (Seconds)	728.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.6								
5:15 PM									
BUILD Conditions Volumes	16	-	-	-	500	-	-	2,524	-
V/C Ratio	1.33								
Level-of-Service	F								
Control Delay (Seconds)	811.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	2.7								

The 2030 analysis of the intersection of I-40 S. Ramp / 98th St. demonstrates that the signalized intersection will operate at less than satisfactory levels-of-service with long delays for the 2030 PM Peak Hour NO BUILD and BUILD Conditions analyzed in this Study associated with Phase 3 of Westpointe 40 Industrial Development. The proposed Westpointe 40 Industrial Development does not contribute any traffic to the eastbound left turn movement on the I-40 off-ramp. Therefore, no recommendation is made.

#10 through #17 – Access Intersections / Driveways

There are 7 proposed driveways and one local unsignalized intersection (Bluewater Rd. / Dayton Rd.) that will be utilized to access the new Westpointe 40 Industrial Development, Phases 1, 2, and 3. The unsignalized intersection analysis of the local unsignalized access is summarized in the following table:

Executive Summary Results Table

			Phase 3	
			2030 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak
10. Bluewater Rd. / Daytona Rd.	Unsignalized	NO BUILD	N/A	N/A
		BUILD	C- 17.1	C - 16.2
11. Driveway "F" (Adonai Rd.) / Bluewater Rd.	Unsignalized	NO BUILD	N/A	N/A
		BUILD	B - 11.5	B - 11.9
12. Daytona Rd. / Driveway "A"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	B - 10.8	B - 10.5
13. Daytona Rd. / Driveway "B"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	B - 10.3	A - 9.6
14. Daytona Rd. / Driveway "C"	Unsignalized	NO BUILD	DNE	DNE
		BUILD	B - 10.3	B - 10.1
15. Driveway "D" / Daytona Rd.	Unsignalized	NO BUILD	DNE	DNE
		BUILD	B - 13.0	B - 12.6
16. Driveway "E" / Daytona Rd.	Unsignalized	NO BUILD	DNE	DNE
		BUILD	B - 11.3	B - 11.4

N/A - No Analysis
DNE - Does Not Exist

All of the local unsignalized access intersections / driveways are projected to operate at level-of-service “C” or better. Therefore, no recommendation is made. All of the local access unsignalized intersections / driveways were assumed to be designed and constructed with one approach lane for the 2030 Conditions (Phase 3).

Analysis of Horizon Year Conditions

Traffic Analysis – Horizon Year (2040)

A capacity analysis using existing traffic signal timing (see Appendix Pages A-367 thru A-401) was conducted for the Horizon Year (2040) NO BUILD and BUILD Conditions. The results are summarized as follows:

#1 – Bluewater Rd. / Unser Blvd.

The results of the 2040 analyses of the full access signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

Bluewater Rd. / Unser Blvd.	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
2040 Conditions - Horizon Year Analysis	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	2	1	1	2	1
Queue Storage Length (Ft.)	90	130	-	130	280	130	110	500	250	160	500	170
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	33	12	13	6	10	9	6	441	24	36	225	16
V/C Ratio	0.55	0.37	-	0.18	0.36	0.38	0.10	1.42	0.14	0.77	0.67	0.11
Level-of-Service	D	D	-	D	E	E	B	F	B	E	B	A
Control Delay (Seconds)	48.6	44.6	-	54.0	55.5	56.1	18.4	#####	19.0	72.8	12.7	8.1
Intersection LOS	**F - 754.1**											
Queue Storage Ratio	2.1	1.0	0.0	0.3	0.2	0.4	0.2	18.4	0.3	2.2	0.6	0.3
8:30 AM												
BUILD Conditions Volumes	34	13	16	6	11	10	16	443	24	37	226	16
V/C Ratio	0.57	0.43	-	0.18	0.39	0.42	0.23	1.43	0.14	0.78	0.68	0.11
Level-of-Service	D	D	-	D	E	E	B	F	B	E	B	A
Control Delay (Seconds)	49.4	45.3	-	54.0	55.9	56.7	18.4	#####	19.1	71.5	14.0	9.0
Intersection LOS	**F - 784.2**											
Queue Storage Ratio	2.2	1.2	0.0	0.3	0.2	0.5	0.4	19.3	0.3	2.2	0.6	0.3
Mitigated Lane Geometry	1	1	0	1	1	1	1	3	1	1	2	1
BUILD Conditions (Mitigated) Volumes	36	17	19	6	4	18	18	574	32	45	226	22
V/C Ratio	0.56	0.54	-	0.18	0.14	0.25	0.29	0.89	0.16	0.88	0.61	0.13
Level-of-Service	D	D	-	D	D	D	B	C	B	D	B	B
Control Delay (Seconds)	49.0	46.7	-	54.0	53.3	40.8	14.1	27.8	12.9	43.2	20.0	13.2
Intersection LOS	**C - 27.1**											
Queue Storage Ratio	2.3	1.6	0.0	0.3	0.1	0.7	0.4	1.4	0.3	1.7	0.9	0.7
PM Peak 15-minute Period												
5:00 PM												
NO BUILD Conditions Volumes	41	27	12	32	45	77	17	358	12	19	519	37
V/C Ratio	0.49	0.29	-	0.41	0.46	0.93	0.63	0.87	0.07	0.44	1.01	0.16
Level-of-Service	C	C	-	D	D	E	D	C	B	C	F	C
Control Delay (Seconds)	34.5	31.5	-	44.0	43.6	77.9	36.9	34.8	16.1	27.9	55.2	31.3
Intersection LOS	**D - 45.8**											
Queue Storage Ratio	2.2	1.4	0.0	1.4	0.9	3.9	0.6	1.6	0.2	0.2	1.8	1.0
5:00 PM												
BUILD Conditions Volumes	44	28	22	32	46	78	21	359	12	20	521	37
V/C Ratio	0.52	0.37	-	0.42	0.46	0.93	0.71	0.88	0.07	0.46	1.03	0.16
Level-of-Service	D	C	-	D	D	E	D	D	B	C	F	C
Control Delay (Seconds)	35.2	32.5	-	44.0	43.4	78.5	38.3	35.8	16.4	28.7	61.7	32.1
Intersection LOS	**D - 48.5**											
Queue Storage Ratio	2.4	1.8	0.0	1.4	0.9	4.0	0.7	1.6	0.2	0.2	1.9	1.0

The 2040 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the signalized intersection is significantly above capacity for the 2040 NO BUILD and BUILD AM Conditions associated with development of Westpointe 40 Industrial Development. The impact of Phase 3 (including Phase 1 and Phase 2) trips generated are significant resulting in an increase in delay of approximately 30.1 seconds during the AM Peak period and approximately 2.7 seconds in delay during the PM Peak period. As a result of the impact of this phase of the development on the signalized intersection of Bluewater Rd. / Unser Blvd. it is recommended that a third northbound thru lane on Unser Blvd. through Bluewater Rd. be designed and constructed. Implementation of the third northbound thru lane on Unser will more than mitigate the impact of this development on the intersection. The recommended mitigation measure of

adding a third northbound thru lane will mitigate the AM Peak Hour Condition, but will not have an effect on the PM Peak Hour since the northbound thru movement is not a critical lane volume during the PM Peak period.

#2 – Los Volcanes Rd. / Unser Blvd.

The results of the 2040 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the following tables:

Los Volcanes Rd. / Unser Blvd.	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
2040 Conditions - Horizon Year Analysis	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	1	1	3	1	2	2	1
Queue Storage Length (Ft.)	150	250	-	225	225	425	580	900	150	500	900	150
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	88	21	9	31	29	63	15	439	69	106	281	34
V/C Ratio	0.35	-	0.37	0.34	0.87	0.53	1.02	0.51	0.74	1.14	0.31	-
Level-of-Service	F	D	-	C	D	D	E	F	D	F	F	B
Control Delay (Seconds)	#####	40.8	-	34.7	41.5	54.4	57.1	#####	42.3	419.5	#####	16.5
Intersection LOS	**F - 1416.7**											
Queue Storage Ratio	27.2	0.6	0.0	0.6	0.7	0.8	0.1	6.9	1.7	3.8	16.6	0.7
8:30 AM												
BUILD Conditions Volumes	93	22	10	32	31	63	17	440	70	106	284	51
V/C Ratio	1.05	0.38	-	0.39	0.36	0.87	0.53	1.02	0.52	0.73	1.14	0.46
Level-of-Service	F	D	-	C	D	D	E	F	D	F	F	B
Control Delay (Seconds)	#####	41.3	-	34.7	41.7	54.2	56.6	#####	42.5	323.6	#####	18.5
Intersection LOS	**F - 1408.4**											
Queue Storage Ratio	36.0	0.7	0.0	0.7	0.7	0.8	0.1	6.8	1.7	3.1	16.6	1.1
Mitigated Lane Geometry	1	1	0	1	1	1	1	4	1	2	2	1
BUILD Conditions (Mitigated) Volumes	93	22	10	32	31	63	17	440	70	106	284	51
V/C Ratio	1.05	0.38	-	0.39	0.36	0.87	0.73	1.05	0.72	0.73	1.14	0.46
Level-of-Service	F	D	-	C	D	D	E	F	D	F	F	B
Control Delay (Seconds)	#####	41.3	-	34.7	41.7	54.2	64.8	#####	51.0	323.6	#####	18.4
Intersection LOS	**F - 1228.4**											
Queue Storage Ratio	36.0	0.7	0.0	0.7	0.7	0.8	0.2	4.5	2.4	3.1	16.6	1.1
PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	49	17	11	68	22	88	7	356	65	82	495	49
V/C Ratio	0.45	0.28	-	0.63	0.20	0.92	0.83	0.81	0.48	0.89	1.36	0.30
Level-of-Service	C	D	-	D	D	E	F	F	C	E	F	C
Control Delay (Seconds)	34.6	39.4	-	37.9	36.8	65.9	87.0	444.5	31.9	59.1	#####	20.2
Intersection LOS	**F - 1303.4**											
Queue Storage Ratio	0.2	0.6	0.0	0.5	0.5	1.2	0.1	2.8	1.8	0.5	21.5	1.1
5:45 PM												
BUILD Conditions Volumes	66	19	13	69	23	88	8	359	66	82	496	55
V/C Ratio	0.62	0.32	-	0.66	0.20	0.92	0.82	0.82	0.48	0.88	1.37	0.34
Level-of-Service	D	D	-	D	D	E	F	F	C	E	F	C
Control Delay (Seconds)	39.8	39.8	-	39.3	36.9	65.6	82.3	474.2	32.0	59.0	#####	21.0
Intersection LOS	**F - 1310**											
Queue Storage Ratio	1.1	0.7	0.0	0.6	0.5	1.2	0.1	2.9	1.8	0.5	21.9	1.2
Mitigated Lane Geometry	1	1	0	1	1	1	1	4	1	2	2	1
BUILD Conditions (Mitigated) Volumes	66	19	13	69	23	88	8	359	66	82	496	55
V/C Ratio	0.68	0.37	-	0.72	0.23	0.67	0.82	0.58	0.37	0.85	1.29	0.28
Level-of-Service	D	D	-	D	D	D	F	C	B	E	F	B
Control Delay (Seconds)	45.7	43.5	-	46.2	40.2	35.7	90.4	25.9	16.9	60.4	#####	14.2
Intersection LOS	**F - 874**											
Queue Storage Ratio	1.3	0.7	0.0	0.8	0.5	1.0	0.1	0.4	1.3	0.5	17.1	1.2

The 2040 analysis of the intersection of Los Volcanes Rd. / Unser Blvd. demonstrates that the signalized intersection is over capacity for the 2040 NO BUILD and BUILD AM Peak period Conditions associated with development of Westpointe 40 Industrial Development. The impact of Phase 3 trips generated are minimal during the AM Peak Hour resulting in an decrease in delay of approximately 8 seconds during the AM Peak period, but a slight increase in delay of 16.6 seconds during the PM Peak period. As a result of the high overall delay during the 2040 AM Peak Hour and the slight increase in delay during the 2040 PM Peak Hour, this report recommends that a fourth northbound thru lane on Unser Blvd. at Los Volcanes be constructed to mitigate the impact of this development on the intersection. Construction of the additional northbound thru lane on Unser Blvd. more than mitigates the impact of this development on the intersection. Due to the fact that a) the recommended mitigation measure more than compensates for the impact of this development on the intersection and b) the high delay exists for the 2040 NO BUILD Condition as well as the BUILD Condition, this report recommends that the fourth northbound thru lane on Unser Blvd. at Los Volcanes Rd.

#3 – I-40 N. Ramp / Unser Blvd.

The results of the 2040 analysis of the full access signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following table:

I-40 N. Ramp / Unser Blvd.	EB (I-40 N. Ramp)			WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
2040 Conditions - Horizon Year Analysis	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	-	-	-	2	-	1	1	2	-	-	3	-
Queue Storage Length (Ft.)	-	-	-	750	-	-	350	900	-	-	500	-
AM Peak 15-minute Period												
7:15 AM												
NO BUILD Conditions Volumes	-	-	-	127	-	-	12	301	-	-	786	-
V/C Ratio	-	-	-	0.88	-	-	0.64	0.78	-	-	0.92	-
Level-of-Service	-	-	-	D	-	-	C	A	-	-	C	-
Control Delay (Seconds)	-	-	-	52.5	-	-	34.2	9.9	-	-	21.9	-
Intersection LOS	**C - 20.9**											
Queue Storage Ratio	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.4	0.0	0.0	1.7	0.0
7:15 AM												
BUILD Conditions Volumes	-	-	-	140	-	-	13	303	-	-	792	-
V/C Ratio	-	-	-	0.89	-	-	0.69	0.79	-	-	0.96	-
Level-of-Service	-	-	-	D	-	-	C	B	-	-	C	-
Control Delay (Seconds)	-	-	-	53.6	-	-	34.2	10.3	-	-	27.0	-
Intersection LOS	**C - 24.3**											
Queue Storage Ratio	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.4	0.0	0.0	1.9	0.0
PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	-	-	-	260	-	-	23	221	-	-	413	-
V/C Ratio	-	-	-	0.93	-	-	0.97	0.99	-	-	0.66	-
Level-of-Service	-	-	-	D	-	-	D	F	-	-	C	-
Control Delay (Seconds)	-	-	-	46.7	-	-	35.2	223.6	-	-	25.9	-
Intersection LOS	**F - 106.5**											
Queue Storage Ratio	0.0	0.0	0.0	0.9	0.0	0.0	0.3	2.5	0.0	0.0	1.0	0.0
5:45 PM												
BUILD Conditions Volumes	-	-	-	265	-	-	24	227	-	-	415	-
V/C Ratio	-	-	-	0.93	-	-	1.03	1.04	-	-	0.68	-
Level-of-Service	-	-	-	D	-	-	F	F	-	-	C	-
Control Delay (Seconds)	-	-	-	46.6	-	-	49.6	555.3	-	-	26.9	-
Intersection LOS	**F - 237.5**											
Queue Storage Ratio	0.0	0.0	0.0	0.9	0.0	0.0	0.4	5.1	0.0	0.0	1.1	0.0
Mitigated Lane Geometry	0	0	0	2	0	1	1	3	0	0	3	0
BUILD Conditions (Mitigated) Volumes	-	-	-	295	-	-	17	370	-	-	425	-
V/C Ratio				0.94			0.52	0.80			0.75	
Level-of-Service				D			C	D			C	
Control Delay (Seconds)				46.0			27.9	41.2			31.8	
Intersection LOS	**D - 38.9**											
Queue Storage Ratio	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.8	0.0	0.0	1.2	0.0

The 2040 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the signalized intersection is below capacity for the 2040 NO BUILD and BUILD AM Peak period Conditions associated with development of Phase 3 of Westpointe 40 Industrial Development. The impact of Westpointe 40 trips generated are minimal resulting in an increase in delay of approximately 3.4 seconds during the AM Peak period and 131 second increase in delay during the PM Peak period. The 2040 PM Peak Hour NO BUILD Condition requires mitigation in that the average intersection delays exceed 100 seconds. Recommended mitigation is implementation of a third northbound thru lane on Unser Blvd. at the I-40 N. Ramp. This can probably be achieved with re-striping the intersection.

#4 – I-40 S. Ramp / Unser Blvd.

The results of the 2040 analysis of the full access unsignalized ramp intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

I-40 S. Ramp / Unser Blvd. 2040 Conditions	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	130		170						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	192	-	110	-	1,216	-	-	1,776	-
V/C Ratio	0.76								
Level-of-Service	F								
Control Delay (Seconds)	53.3								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	5.5								
7:30 AM									
BUILD Conditions Volumes	192	-	120	-	1,224	-	-	1,852	-
V/C Ratio	0.78								
Level-of-Service	F								
Control Delay (Seconds)	56.7								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	5.7								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	116	-	100	-	1,408	-	-	1,848	-
V/C Ratio	0.31								
Level-of-Service	C								
Control Delay (Seconds)	18.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	1.3								
5:15 PM									
BUILD Conditions Volumes	116	-	110	-	1,432	-	-	1,872	-
V/C Ratio	0.33								
Level-of-Service	C								
Control Delay (Seconds)	19.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	1.4								

The 2040 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the unsignalized intersection is marginally above capacity for the 2040 AM and below capacity for the PM Peak Hour BUILD Conditions associated with development of Westpointe 40 Industrial Development. The unsignalized analysis of this intersection assumed that the eastbound to northbound left turn movement would execute a staged left turn during the AM and PM Peak Hour periods. As a result of the minimal impact of this phase of the development on the unsignalized intersection of I-40 S. Ramp / Unser Blvd. no recommendation is made associated with development of Westpointe 40 Industrial Development.

#5 – Los Volcanes Rd. / Daytona Rd.

The results of the 2040 analysis of the full access unsignalized intersection of Los Volcanes Rd. / Daytona Rd. are summarized in the following table:

Los Volcanes Rd. / Daytona Rd. 2040 Conditions	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Daytona Rd.)			SB (Daytona Rd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	>	1	1	>	<	1	>	1	1	>
Queue Storage Length (Ft.)	-	-	-	-	-	-	-	-	-	100	-	-
AM Peak (4 x Peak 15-Minute Period)												
7:15 AM												
NO BUILD Conditions Volumes	1	624	-	8	464	136	-	-	4	124	1	8
V/C Ratio	-									0.61		0.02
Level-of-Service	A									E		B
Control Delay (Seconds)	8.9									46.7		12.0
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									3.5		0.0
7:15 AM												
BUILD Conditions Volumes	4	624	-	8	464	216	-	-	4	144	1	12
V/C Ratio	-									0.75		0.02
Level-of-Service	A									F		B
Control Delay (Seconds)	9.0									64.1		12.4
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									4.9		0.1
PM Peak 15-minute Period												
4:00 PM												
NO BUILD Conditions Volumes	8	356	-	-	252	80	-	-	-	56		1
V/C Ratio	-									0.14		-
Level-of-Service	A									C		B
Control Delay (Seconds)	8.1									15.4		10.0
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									0.5		0.0
4:00 PM												
BUILD Conditions Volumes	8	356	-	-	252	108	-	-	-	136	-	4
V/C Ratio	-									0.35		0.01
Level-of-Service	A									C		B
Control Delay (Seconds)	8.2									18.9		10.1
Intersection LOS	**TWSC**											
95th Percentile Queue Length (Veh.)	0.0									1.5		0.0

The 2040 analysis of the intersection of Los Volcanes Rd. / Daytona Rd. demonstrates that the delays will be marginally acceptable for all conditions analyzed in this report. The southbound left turn movement encroaches a small amount into LOS F for the horizon year AM Peak Hour period. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Daytona Rd.

It should be noted that the south leg of the intersection of Los Volcanes Rd. / Daytona Rd. is currently a driveway to a King Hall of Jehovah Witness facility and, therefore, generated minimal traffic except on Sunday mornings and Wednesday evenings at about 7:00 PM to 9:00 PM.

#6 – Central Ave. / 98th St.

The results of the 2030 analyses of the full access signalized intersection of Central Ave. / 98th St. are summarized in the following tables:

Central Ave. / 98th St.	EB (Central Ave.)			WB (Central Ave.)			NB (98th St.)			SB (98th St.)		
2040 Conditions - Horizon Year	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2	-	2	2	-	1	2	1	1	2	-
Queue Storage Length (Ft.)	175	999	-	175	625	-	220	430	220	80	500	-
AM Peak 15-minute Period												
8:30 AM												
NO BUILD Conditions Volumes	109	74	12	70	27	77	30	513	59	31	184	35
V/C Ratio	1.02	0.42	0.43	0.98	0.32	1.04	0.47	1.49	0.39	1.05	0.80	0.80
Level-of-Service	F	D	D	F	D	F	C	F	C	F	D	D
Control Delay (Seconds)	#####	41.9	42.1	274.0	45.3	130.2	25.8	#####	27.1	688.5	36.0	36.5
Intersection LOS	**F - 1891.7**											
Queue Storage Ratio	24.2	0.2	0.2	2.8	0.3	1.0	0.5	54.5	1.1	11.8	1.0	1.0
8:30 AM												
BUILD Conditions Volumes	112	74	12	70	27	88	30	519	59	34	186	36
V/C Ratio	1.05	0.42	0.43	0.98	0.32	1.19	0.47	1.51	0.39	1.11	0.78	0.78
Level-of-Service	F	D	D	F	E	F	C	F	C	F	D	D
Control Delay (Seconds)	#####	41.9	42.1	274.0	62.0	322.9	25.4	#####	27.1	#####	35.4	35.8
Intersection LOS	**F - 1974**											
Queue Storage Ratio	25.8	0.2	0.2	2.8	0.4	1.9	0.5	55.8	1.1	16.7	1.0	0.9
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	112	74	12	70	27	88	30	519	59	34	186	36
V/C Ratio	1.05	0.42	0.43	0.98	0.32	1.19	0.40	1.06	0.32	1.11	0.67	0.22
Level-of-Service	F	D	D	F	E	F	C	F	B	F	C	B
Control Delay (Seconds)	#####	41.9	42.1	274.0	62.0	322.9	22.4	#####	18.8	#####	29.7	14.1
Intersection LOS	**F - 779.1**											
Queue Storage Ratio	25.8	0.2	0.2	2.8	0.4	1.9	0.5	15.9	1.0	16.7	0.8	0.0
PM Peak 15-minute Period												
5:30 PM												
NO BUILD Conditions Volumes	63	71	34	106	82	71	27	325	55	41	537	94
V/C Ratio	0.81	0.64	0.66	1.07	0.85	0.87	0.69	1.05	0.40	0.58	1.25	1.26
Level-of-Service	E	D	D	F	D	E	C	F	C	C	F	F
Control Delay (Seconds)	58.2	42.7	43.9	#####	53.8	58.3	31.7	670.0	26.4	25.8	#####	#####
Intersection LOS	**F - 790**											
Queue Storage Ratio	1.1	0.3	0.3	18.3	0.7	0.6	0.4	8.8	1.0	1.1	15.5	15.5
5:30 PM												
BUILD Conditions Volumes	64	71	34	106	82	75	27	327	55	52	543	97
V/C Ratio	0.81	0.61	0.63	1.07	0.82	0.89	0.67	1.16	0.44	0.61	1.32	1.33
Level-of-Service	E	D	D	F	D	E	C	F	C	C	F	F
Control Delay (Seconds)	58.5	41.4	42.4	#####	50.7	61.0	32.0	#####	29.9	29.2	#####	#####
Intersection LOS	**F - 1014.8**											
Queue Storage Ratio	1.1	0.3	0.3	18.3	0.7	0.7	0.4	12.9	1.1	1.6	18.8	18.8
Mitigated Lane Geometry	2	2	0	2	2	0	1	**3**	1	1	2	**1**
BUILD Conditions (Mitigated) Volumes	64	71	34	106	82	75	27	327	55	52	543	97
V/C Ratio	0.81	0.61	0.63	1.07	0.82	0.89	0.68	0.79	0.32	0.55	1.16	0.37
Level-of-Service	E	D	D	F	D	E	C	D	B	C	F	B
Control Delay (Seconds)	58.5	41.4	42.4	#####	50.7	61.0	31.9	35.2	18.2	24.3	749.7	18.9
Intersection LOS	**F - 393.1**											
Queue Storage Ratio	1.1	0.3	0.3	18.3	0.7	0.7	0.4	1.0	0.8	1.4	8.4	0.0

The 2040 analysis of the intersection of Central Ave. / 98th St. yield similar results as the 2025 (Phase 2) and 2030 (Phase 3) analysis except that the calculated delays are higher. The proposed measures to mitigate the increased delay, though, are the same as that for the 2025 (Phase 2) analysis.

#7 – Bluewater Rd. (Avalon Rd.) / 98th St.

The results of the 2040 analyses of the full access signalized intersection of Bluewater Rd. (Avalon Rd.) / 98th St. are summarized in the following tables:

Avalon Rd. / 98th St	EB (Avalon Rd.)			WB (Avalon Rd.)			NB (98th St)			SB (98th St)		
2040 Conditions - Horizon Year	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1	-	1	1	-	1	2	1	1	3	-
Queue Storage Length (Ft.)	140	240	-	280	280	-	150	350	150	200	999	-
AM Peak 15-minute Period												
8:45 AM												
NO BUILD Conditions Volumes	31	-	3	12	1	14	21	479	16	10	239	31
V/C Ratio	0.03	-	0.09	0.14	-	0.26	1.47	0.11	0.25	0.76	0.76	-
Level-of-Service	C	C	-	C	C	-	C	F	C	C	D	D
Control Delay (Seconds)	27.7	32.2	-	25.4	33.9	-	22.4	#####	26.5	30.0	35.8	39.6
Intersection LOS	**F - 1970.7**											
Queue Storage Ratio	1.0	0.1	0.0	0.2	0.3	0.0	0.4	56.1	0.4	0.2	0.4	0.4
8:45 AM												
BUILD Conditions Volumes	31	1	3	17	2	19	21	479	34	29	239	31
V/C Ratio	0.26	0.04	-	0.13	0.19	-	0.25	1.42	0.23	0.72	0.75	0.75
Level-of-Service	C	C	-	C	C	-	C	F	C	D	D	D
Control Delay (Seconds)	27.9	32.4	-	25.9	34.8	-	22.1	#####	28.0	43.7	35.5	39.0
Intersection LOS	**F - 1697.1**											
Queue Storage Ratio	1.0	0.1	0.0	0.3	0.4	0.0	0.4	51.4	0.7	0.7	0.4	0.4
Mitigated Lane Geometry	1	1	0	1	1	0	1	**3**	0	1	3	0
BUILD Conditions (Mitigated) Volumes	37	1	10	17	2	19	13	615	34	29	190	31
V/C Ratio	0.31	0.10	-	0.13	0.19	-	0.15	1.36	1.36	0.86	0.74	0.74
Level-of-Service	C	C	-	C	C	-	C	F	F	E	C	D
Control Delay (Seconds)	28.7	33.3	-	26.0	34.8	-	20.4	#####	#####	58.6	34.1	37.7
Intersection LOS	**F - 1192.6**											
Queue Storage Ratio	1.2	0.2	0.0	0.3	0.4	0.0	0.3	31.2	31.1	0.9	0.3	0.3
PM Peak 15-minute Period												
5:45 PM												
NO BUILD Conditions Volumes	39	-	17	16	-	11	15	330	14	14	647	71
V/C Ratio	0.28	0.14	-	0.11	0.09	-	0.25	0.97	0.09	0.21	1.47	1.45
Level-of-Service	C	C	-	B	C	-	C	F	C	C	F	F
Control Delay (Seconds)	22.2	25.3	-	19.6	24.0	-	30.3	#####	27.7	24.5	#####	#####
Intersection LOS	**F - 2982.3**											
Queue Storage Ratio	1.0	0.3	0.0	0.2	0.1	0.0	0.4	45.9	0.4	0.2	14.7	14.6
5:45 PM												
BUILD Conditions Volumes	39	1	17	34	1	30	15	330	20	20	647	71
V/C Ratio	0.32	0.15	-	0.24	0.25	-	0.25	0.98	0.13	0.30	1.46	1.45
Level-of-Service	C	C	-	C	C	-	C	F	C	C	F	F
Control Delay (Seconds)	23.0	25.4	-	21.1	26.2	-	30.2	#####	28.3	24.9	#####	#####
Intersection LOS	**F - 2720.4**											
Queue Storage Ratio	1.0	0.3	0.0	0.4	0.4	0.0	0.4	40.7	0.5	0.3	14.6	14.5
Mitigated Lane Geometry	1	1	0	1	1	0	1	**3**	0	1	3	0
BUILD Conditions (Mitigated) Volumes	39	1	17	34	1	30	15	330	20	20	647	71
V/C Ratio	0.32	0.15	-	0.24	0.25	-	0.25	0.67	0.66	0.32	1.53	1.52
Level-of-Service	C	C	-	C	C	-	C	F	F	C	F	F
Control Delay (Seconds)	23.0	25.4	-	21.1	26.2	-	30.5	#####	#####	26.2	#####	#####
Intersection LOS	**F - 2296.3**											
Queue Storage Ratio	1.0	0.3	0.0	0.4	0.4	0.0	0.4	13.8	13.8	0.3	15.7	15.7

The 2040 analysis of the intersection of Bluewater Rd. (Avalon Rd.) / 98th St. yield similar results as the 2025 (Phase 2) and 2030 (Phase 3) analysis except that the calculated delays are higher. The proposed measures to mitigate the increased delay, though, are the same as that for the 2025 (Phase 2) analysis.

#8 – I-40 N. Ramp / 98th St.

The results of the 2040 analyses of the full access signalized intersection of I-40 N. Ramp / 98th St. are summarized in the following tables:

I-40 N. Ramp / 98th St 2040 Conditions - Horizon Year	WB (I-40 N. Ramp)			NB (98th St)			SB (98th St)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	1	-	1	2	-	-	3	-
Queue Storage Length (Ft.)	600	600	-	100	999	-	-	600	-
AM Peak Hour									
NO BUILD Conditions Volumes	712	1	-	88	508	-	-	1,024	-
V/C Ratio	0.89	0.89	-	0.26	0.24	-	-	0.36	-
Level-of-Service	D	D	-	B	A	-	-	B	-
Control Delay (Seconds)	52.6	52.6	-	11.3	9.2	-	-	15.2	-
Intersection LOS	**C - 25.2**								
Queue Storage Ratio	0.8	0.8	0.0	0.5	0.1	0.0	0.0	0.4	0.0
BUILD Conditions Volumes	764	1	-	92	516	-	-	1,040	-
V/C Ratio	0.89	0.89	-	0.28	0.25	-	-	0.37	-
Level-of-Service	D	D	-	B	B	-	-	B	-
Control Delay (Seconds)	52.4	52.4	-	12.4	10.2	-	-	16.7	-
Intersection LOS	**C - 26.4**								
Queue Storage Ratio	0.9	0.9	0.0	0.6	0.2	0.0	0.0	0.5	0.0
PM Peak Hour									
NO BUILD Conditions Volumes	1,972	1	-	132	444	-	-	892	-
V/C Ratio	0.93	0.93	-	0.63	0.41	-	-	0.95	-
Level-of-Service	C	C		D	C	-	-	E	-
Control Delay (Seconds)	26.8	26.8	-	35.4	31.1	-	-	64.6	-
Intersection LOS	**D - 37.4**								
Queue Storage Ratio	1.3	1.3	0.0	1.1	0.2	0.0	0.0	0.6	0.0
BUILD Conditions Volumes	1,988	1	-	144	460	-	-	900	-
V/C Ratio	0.93	0.93	-	0.67	0.43	-	-	1.02	-
Level-of-Service	C	C	-	D	C	-	-	F	-
Control Delay (Seconds)	26.9	26.9	-	36.5	31.6	-	-	80.4	-
Intersection LOS	**D - 41.7**								
Queue Storage Ratio	1.3	1.3	0.0	1.2	0.2	0.0	0.0	0.7	0.0

The 2040 analysis of the intersection of I-40 N. Ramp / 98th St. demonstrates that the signalized intersection will operate at a satisfactory level-of-service with acceptable delays for all conditions analyzed in this Study associated development of Westpointe 40 Industrial Development. Therefore, no recommendation is made.

#9 – I-40 S. Ramp / 98th St.

The results of the 2040 analyses of the full access unsignalized intersection of I-40 S. Ramp / 98th St. are summarized in the following tables:

I-40 S. Ramp / 98th St. 2040 Conditions	EB (I-40 S. Ramp)			NB (98th St.)			SB (98th St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	-	1*	-	2	1	-	2	1
Queue Storage Length (Ft.)	150		200						
AM Peak (4 x Peak 15-Minute Period)									
7:30 AM									
NO BUILD Conditions Volumes	16	-	-	-	1,100	-	-	1,092	-
V/C Ratio	0.20								
Level-of-Service	F								
Control Delay (Seconds)	61.8								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.7								
7:30 AM									
BUILD Conditions Volumes	16	-	-	-	1,108	-	-	1,160	-
V/C Ratio	0.23								
Level-of-Service	F								
Control Delay (Seconds)	69.9								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	0.8								
PM Peak 15-minute Period									
5:15 PM									
NO BUILD Conditions Volumes	16	-	-	-	540	-	-	2,900	-
V/C Ratio	2.67								
Level-of-Service	F								
Control Delay (Seconds)	999.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	3.2								
5:15 PM									
BUILD Conditions Volumes	16	-	-	-	568	-	-	2,924	-
V/C Ratio	2.67								
Level-of-Service	F								
Control Delay (Seconds)	999.0								
Intersection LOS	**TWSC**								
95th Percentile Queue Length (Veh.)	3.2								

The 2040 analysis of the intersection of I-40 S. Ramp / 98th St. demonstrates that the unsignalized intersection will operate at less than satisfactory levels-of-service with long delays especially for the 2040 PM Peak Hour NO BUILD and BUILD Conditions analyzed in this Study associated implementation of Westpointe 40 Industrial Development in the horizon year. The proposed Westpointe 40 Industrial Development does not contribute any traffic to the eastbound left turn movement on the I-40 off-ramp. Therefore, no recommendation is made.

#10 through #17 – Access Intersections / Driveways

There are 7 proposed driveways and one local unsignalized intersection (Bluewater Rd. / Dayton Rd.) that will be utilized to access the new Westpointe 40 Industrial Development, Phases 1, 2, and 3. The driveway volumes are all based on locally generated traffic, mostly within the Westpointe 40 Industrial Park development. Since the driveway volumes are derived from locally generated traffic, then no growth factor is applied, so the horizon year volumes (2040) will be the same as the 2030 volumes analyses.

All of the local unsignalized access intersections / driveways are projected to operate at level-of-service "C" or better. Therefore, no recommendation is made. All of the local access unsignalized intersections / driveways were assumed to be designed and constructed with one approach lane for the 2030 Conditions (Phase 3) as well as for the horizon year (2040).

Freeway Segment Analysis

One of the New Mexico Department of Transportation's requirements for this Traffic Impact Study is to provide a Multiple Period Freeway Segment Analysis for Interstate 40 beginning just west of Atrisco Vista Blvd. to just east of Unser Blvd. Base volumes for the Freeway Segment Analysis are the NO BUILD volumes in the Upper Petroglyphs, Phases 1-7 Traffic Impact Study (April 24, 2018) Initial Submittal. The NO BUILD volumes were utilized since the Upper Petroglyphs project is not approved.

The purpose of the Freeway Segment Analysis is to provide an initial analysis of Interstate 40 to evaluate its operational levels and to determine the effects of the proposed development on the interstate.

This Traffic Impact Study will be insufficient to determine necessary improvements due to NMDOT and FHWA study procedures requirements, however it will provide an initial indication of the current operations and a study of the future conditions for the scenarios included in this report.

A freeway analysis was performed to determine the freeway LOS at segments along I-40. The analysis looked at ramp diverging segments, merging segments, basic freeway segments, and weaving segments as present along the analysis area. The analysis considered the following conditions:

- Phase 1 of Westpointe 40 Industrial Development – 2002 AM / PM Peak Hour NO BUILD and BUILD Conditions
- Phase 2 of Westpointe 40 Industrial Development – 2025 AM / PM Peak Hour BUILD Conditions
- Phase 3 of Westpointe 40 Industrial Development – 2030 AM / PM Peak Hour BUILD Conditions
- Horizon Year of Westpointe 40 Industrial Development – 2040 AM / PM Peak Hour NO BUILD and BUILD Conditions.

The predominant traffic flow on this section of Interstate 40 during the AM Peak period is easterly while the predominant traffic flow on this section of Interstate 40 during the PM Peak period is westerly. Therefore, the AM analyses will focus on eastbound traffic on Interstate 40 while the PM analysis will focus on westbound traffic in Interstate 40. The following table summarizes the results of the Freeway Segment Analysis:

Summary of Freeway Segment Analyses
(I-40 - West of Atrisco Vista to East of Unser Blvd.)

Worst Case LOS

Segment No. --->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2022 AM NO BUILD	A - 8.6	A - 8.0	A - 8.1	B - 12.0	B - 12.5	B - 11.2	B - 12.1	B - 18.2	B - 16.6	C - 23.8	D - 34.2	C - 22.6	C - 22.8	D - 30.5	D - 28.8	EB Lanes
2022 AM BUILD	A - 8.8	A - 8.2	A - 8.3	B - 12.3	B - 12.8	B - 11.4	B - 12.3	B - 18.4	B - 16.8	C - 24.0	D - 34.6	C - 22.8	C - 23.0	D - 30.7	D - 31.7	EB Lanes
2022 PM NO BUILD	D - 31.3	B - 19.7	D - 27.7	B - 19.8	B - 12.5	A - 9.0	A - 9.3	A - 9.7	A - 7.7	A - 7.9	A - 8.8					WB Lanes
2022 PM BUILD	D - 31.5	B - 19.8	D - 27.9	B - 19.9	B - 12.7	A - 9.1	A - 9.3	A - 9.9	A - 7.9	A - 8.0	A - 8.9					WB Lanes

LOS Values are expressed as pc/mi/ln (freeway for basic freeway segment and ramps only for ramps.

Westpointe 40, Phase 2

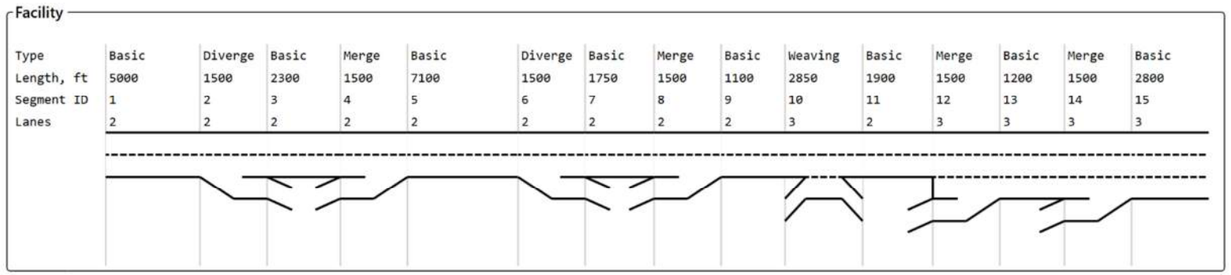
2025 AM BUILD	A - 11.0	B - 10.3	A - 10.0	B - 16.2	B - 14.5	B - 13.6	B - 14.1	C - 20.6	C - 18.4	D - 28.6	E - 37.3	C - 22.7	C - 24.5	D - 32.3	D - 34.3	EB Lanes
2025 PM BUILD	D - 34.7	C - 21.5	D - 30.3	C - 21.2	B - 13.4	A - 9.6	A - 10.0	B - 10.6	A - 8.3	B - 11.5	A - 9.4					WB Lanes

Westpointe 40, Phase 3

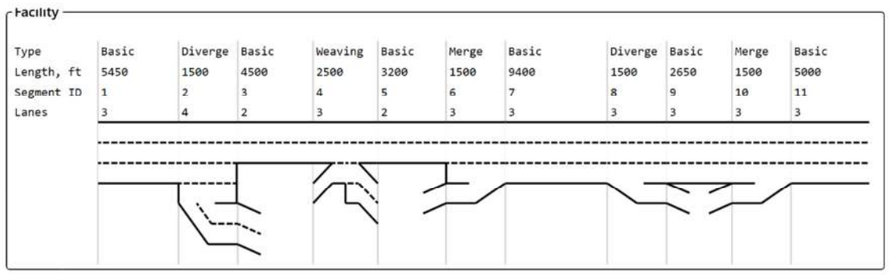
2030 AM BUILD	B - 13.8	B - 13.8	B - 12.7	B - 19.6	B - 17.0	B - 16.6	B - 16.5	C - 23.7	C - 21.4	D - 31.4	E - 42.4	D - 27.6	D - 28.1	E - 35.5	E - 37.21	EB Lanes
2030 PM BUILD	E - 41.3	C - 24.3	D - 35	C - 23.3	B - 14.6	A - 10.6	A - 11.0	B - 11.8	A - 9.2	B - 12.2	A - 10.4					WB Lanes

Westpointe 40, Horizon Year

2040 AM NO BUILD	B - 12.0	B - 11.6	A - 10.9	B - 17.5	B - 15.4	B - 14.7	B - 14.9	C - 21.9	C - 19.7	D - 29.9	E - 39.3	C - 25.2	C - 25.8	D - 33.8	E - 37.3	EB Lanes
2040 AM BUILD	B - 15.8	B - 16.2	B - 14.7	C - 21.7	C - 19.8	B - 19.6	C - 19.2	C - 26.4	C - 25.3	F - 29.6	F - 43.7	D - 30.0	D - 28.9	E - 36.0	E - 42.9	EB Lanes
2040 PM NO BUILD	F - 45.0	C - 28.4	E - 40.0	C - 25.5	B - 160	B - 12.6	B - 11.9	B - 13.0	A - 9.8	B - 13.3	B - 11.1					WB Lanes
2040 PM BUILD	F - 45.0	C - 27.3	E - 40.0	C - 25.8	B - 16.0	B - 12.6	B - 11.9	B - 12.9	A - 9.8	B - 13.3	B - 11.1					WB Lanes



Interstate 40 EASTBOUND



Interstate 40 WESTBOUND

The horizon year analysis reveals some minor capacity issues primarily due to the d/c ratio being slightly more than 1.0.

The volume-to-capacity (v/c) ratio, or more correctly, demand-to-capacity (d/c) ratio, is a special-case service measure. It cannot easily be measured in the field, nor is it a measure of traveler perceptions. Until capacity is reached (i.e., when flow breaks down on uninterrupted-flow facilities and when queues build on interrupted- or uninterrupted-flow facilities), these ratios are not perceivable by travelers. Therefore, the HCM often uses a v/c (d/c) ratio of greater than 1.0 (i.e., capacity) as an additional test for defining when LOS F occurs but does not use these ratios to define other LOS ranges.

In the performance of a facility-level analysis, LOS F in a component segment can be identified (a) when the segment d/c is greater than 1.00 and (b) when a queue resulting from a downstream breakdown extends into an upstream segment. The latter cannot be estimated by using the individual segment analysis procedures of Chapters 12–14 of HCM6.

Thus, when a facility-level analysis is performed, LOS F for a component segment will be identified in two complementary ways: when d/c is greater than 1.00 for one or more critical segments, or when the segment density is greater than 45 pc/mi/ln for basic freeway segments or 43 pc/mi/ln for weaving segments. The latter condition identifies segments in which queues have formed as a result of downstream breakdowns.

Due to these considerations, no recommendation is made as a result of the Freeway Segment Analysis.

Impact Assessment

The proposed development will have moderate to significant adverse impact on the adjacent transportation system, especially Phases 2 and 3. Signalized intersections along Unser Blvd. and along 98th St. in this Study were demonstrated to operate beyond capacity for the NO BUILD Conditions as well as the BUILD Conditions. Efforts were made to mitigate the impact of the proposed Westpointe 40 Industrial Park Development (each phase) to the extent reasonable and possible. But there are apparent operational issues at some of the signalized intersections even after the mitigation measures are taken.

Access Design Specifications

Sight distance at the driveways should be adequate. There are no significant vertical curves along the main internal public roadway (Daytona Rd.) and no structures should be permitted that restrict sight distance into and out of the driveways. There will be a horizontal curve along Daytona Rd. with the extension to Bluewater Rd. The City of Albuquerque should consider this with future development and enforce that site distances be maintained into and out of all driveways in the area.

98th St. is designated on the Futures 2040 Metropolitan Transportation Plan (2040 Long Range Bikeway System) as an Existing Bicycle Lane.

Improvements to the intersection of Daytona Rd. / Bluewater Rd. and the new driveways should be designed and constructed to provide adequate curb return radii and ADA pedestrian facilities.

Driveways "A" through "G" should be located approximately as shown on the site plan on Page A-3 in the Appendix of this report. Driveway "G" should be required to align with existing Adonai Dr. on the south side of Bluewater Rd. or it should be offset from Adonai Dr. at least 150 feet.

Summary of Deficiencies, Anticipated Impacts, and Recommendations

There are significant deficiencies in the Study area at signalized intersections along Unser Blvd. and along 98th St. that were highlighted. Phase 1 of the Westpointe 40 Industrial Park generates such a low volume of traffic that no recommendations were made since the impact was minimal even though there were operational issues at multiple signalized intersections.

Development of Phase 2 of Westpointe 40 Industrial Park is accompanied by the extension of Daytona Rd. to connect to Bluewater Rd., thus opening up the avenue for Westpointe 40 generate traffic to access 98th St. Therefore, Phase 2 recommended mitigation improvements focused on improvements to the 98th St. corridor. Development of Phase 3 contributed to the overall trip generation of the project and traffic on both 98th St. and Unser Blvd. Phase 3 recommended mitigation improvements focused on improvements to the Unser Blvd. corridor.

Recommendations

2022 Conditions (Phase 1):

Phase 1 is a relatively minor traffic generator on Daytona Rd. north of Bluewater Rd. and west of Unser Blvd. Therefore, no recommendations are made associated with Phase 1 other than to recommend that any development related to Phase 1 be designed and constructed to maintain adequate sight distances at driveways and intersections to the extent possible.

2025 Conditions (Phase 2):

Phase 2 is a moderate traffic generator on Daytona Rd. west of Phase 1 and north of Bluewater Rd. The following recommendations are made associated with the approval and development of Phase 2:

- **Construct the extension of Daytona Rd.** to the west and to the south to connect to Bluewater Rd. approximately 1,600 feet east of 98th St. The new intersection of Bluewater Rd. / Daytona Rd. should be designed and constructed as an at-grade unsignalized intersection. This new connection will distribute some of the traffic generated by the proposed Westpointe 40 development towards 98th St. and relieve Unser Blvd. to some degree.
- **Central Ave. / 98th St.** – the signalized intersection of Central Ave. / 98th St. is congested based on the 2025 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2025 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Central Ave. / 98th St. to improve the operation of the intersection. The recommended improvements are:
    - Add a third northbound thru lane on 98th St. through the intersection of Central Ave.
    - Add a southbound right turn lane on 98th St. at Central Ave.
    - Add a northbound and southbound right turn overlap phase to the signal operation at Central Ave. / 98th St.
- **Avalon (Bluewater Rd.) / 98th St.** – convert the existing northbound right turn lane to a thru / right turn lane.

2030 Conditions (Phase 3):

Phase 3 is a significant traffic generator on Daytona Rd. north of Bluewater Rd., west of Unser Blvd., and east of 98th St. The following recommendations are made associated with the approval and development of Phase 3:

- **Bluewater Rd. / Unser Blvd**. – the signalized intersection of Bluewater Rd. / Unser Blvd. is congested based on the 2030 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2030 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Bluewater Rd. / Unser Blvd. to improve the operation of the intersection. The recommended improvements are:
    - Add a third northbound thru lane on Unser Blvd. through the intersection of Bluewater Rd.
- **Los Volcanes Rd. / Unser Blvd.** - the signalized intersection of Los Volcanes Rd. / Unser Blvd. is congested based on the 2030 NO BUILD volumes associated with this project. The Westpointe 40 development will contribute to the 2030 NO BUILD congestion. It is recommended that the development contribute a fair share to improvements at Los Volcanes Rd. / Unser Blvd. to improve the operation of the intersection. The recommended improvements are:
    - Add a fourth northbound thru lane on Unser Blvd. through the intersection of Los Volcanes Rd.

The fair share contribution from the developer shall be established based on the percentage of traffic that the project (Phases 1 through 3) contribute to the total 2030 intersection BUILD volumes. On that basis the following percentages for the developer should be:

- Bluewater / Unser – 2.3%
- Los Volcanes Rd. / Unser Blvd. – 2.7%
- Central Ave. / 98th St. – 2.0%
- Bluewater Rd. / 98th St. – 5.3%

2040 Conditions (Horizon Year):

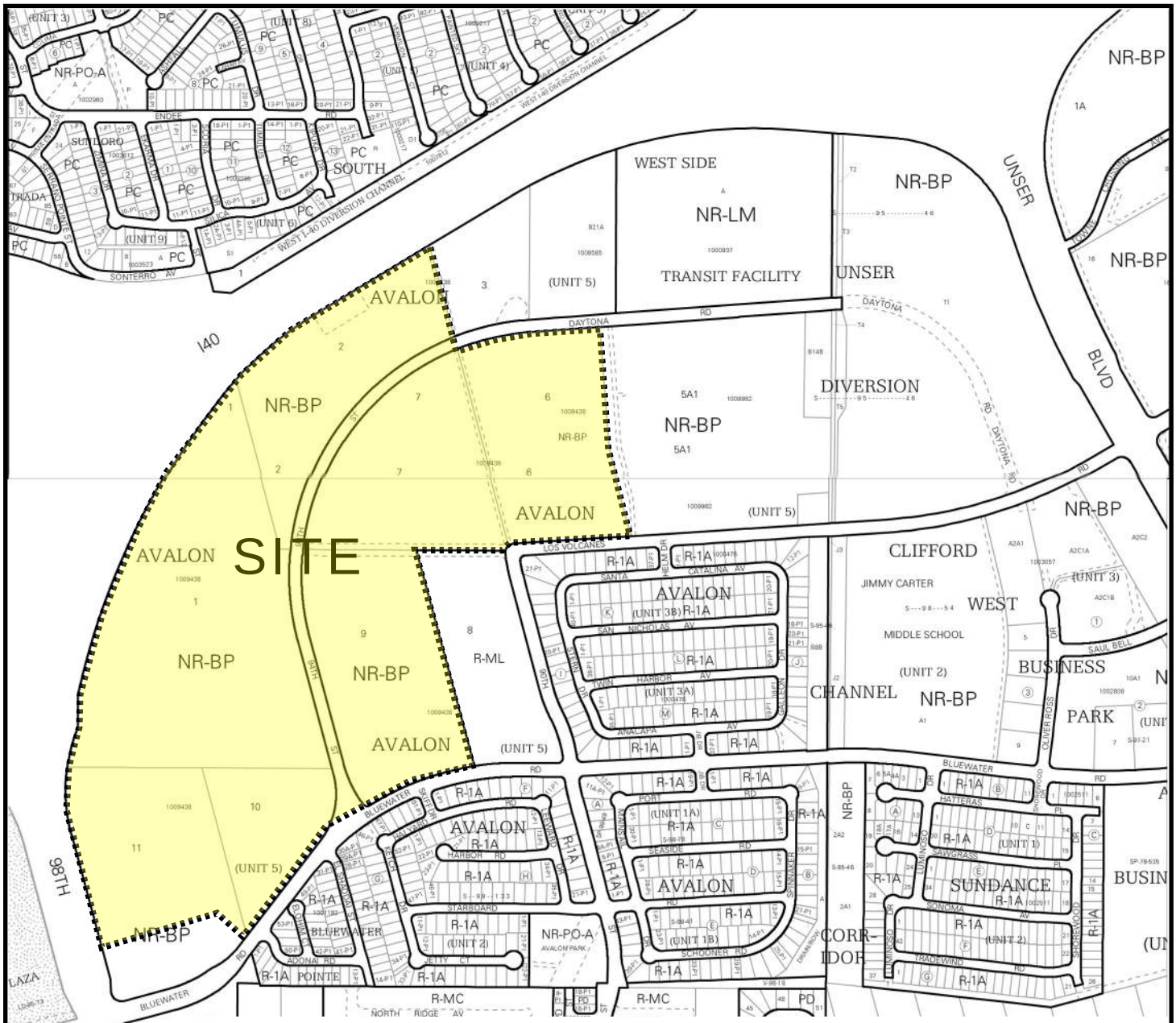
Same recommendations as listed in Phases 1, 2, and 3. Also, implement a third northbound thru lane on 98th St. at the I-40 North Ramp. This can be accomplished by re-striping the approach.

Appendix

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APPENDIX



Westpointe 40 Development

(Interstate 40 / 98th St.)

Vicinity Map

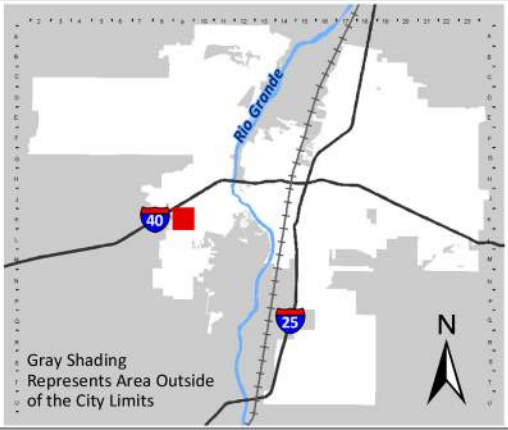
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

IDO Zone Atlas
May 2018

Albuquerque Geographic Information System

IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).



Zone Atlas Page:

J & K-09-Z

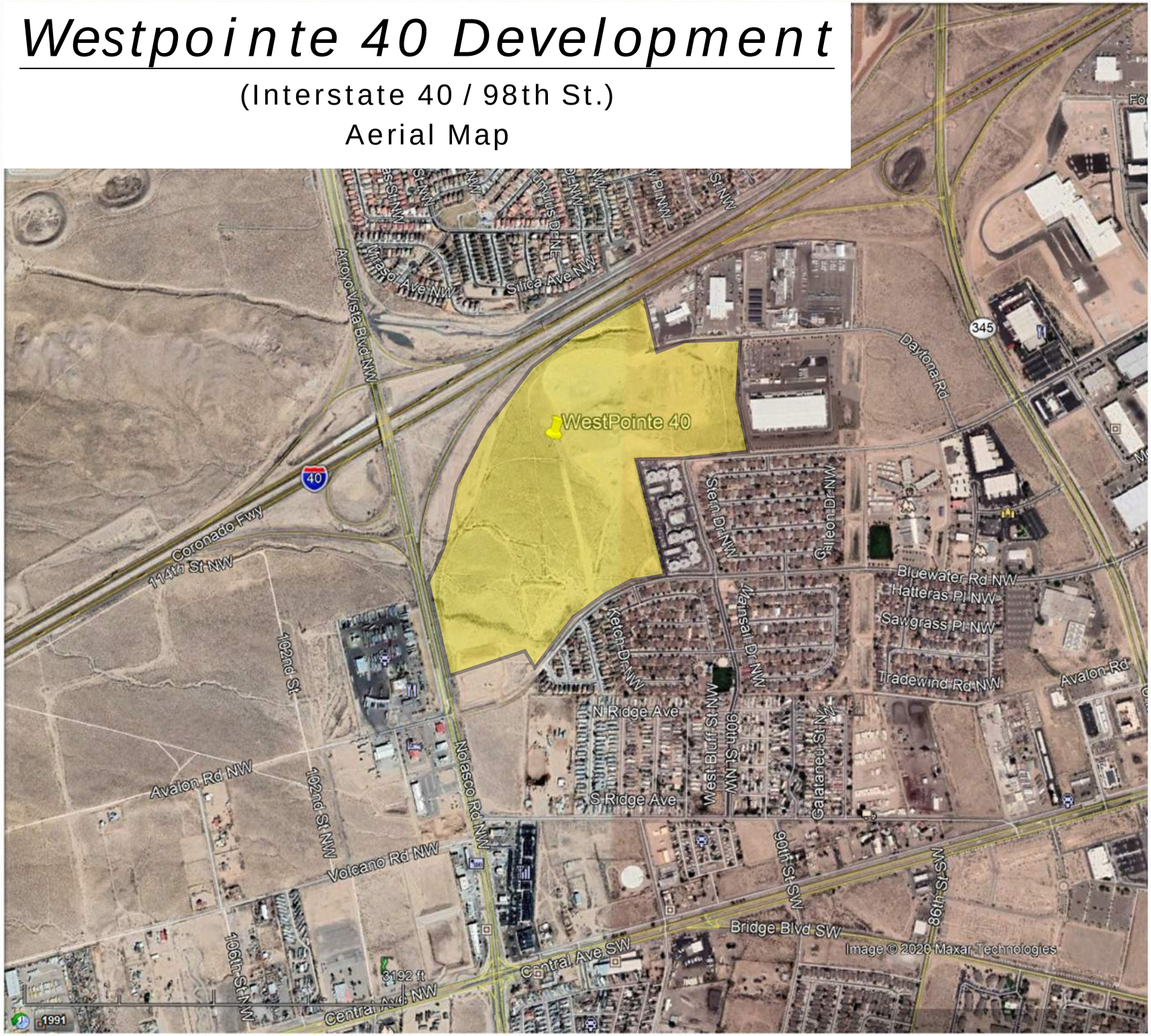
- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500 1,000

Westpointe 40 Development

(Interstate 40 / 98th St.)

Aerial Map

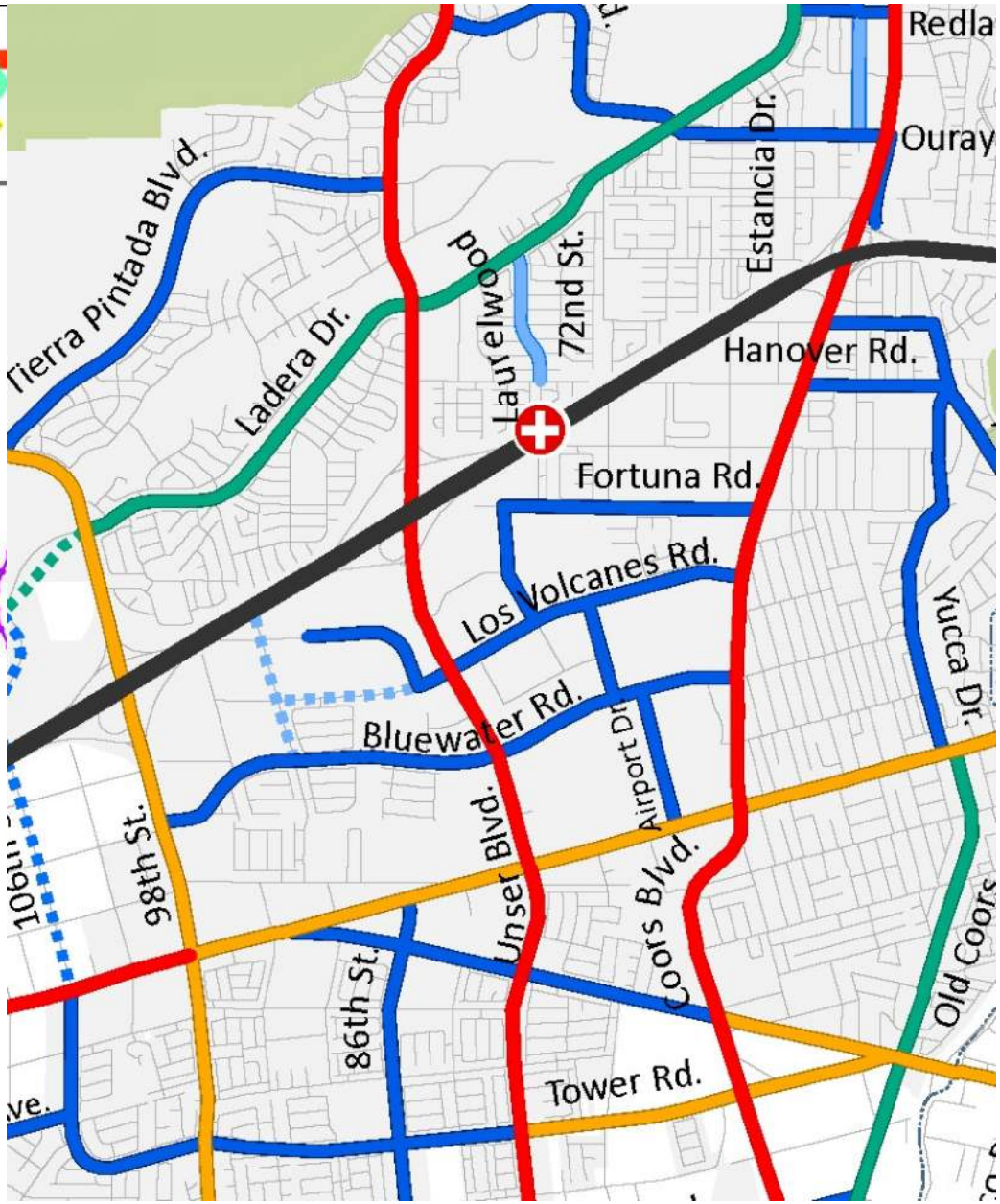



Westpointe 40
Conceptual Site Plan
11/09/20
PHASE 1
SOUTHERN
TIRE MART
20,000 SF
"A"
"B"
"C"
Daytona RD NW
INTERSTATE
40
POND
PROPOSED
DISTRIBUTION
CENTER 5
100,000 SF
PROPOSED
DISTRIBUTION
CENTER 1
200,000 SF
PHASE 2
"D"
POND
POND
"E"
PROPOSED
DISTRIBUTION
CENTER 2
200,000 SF
PROPOSED
DISTRIBUTION
CENTER 3
200,000 SF
90TH ST. NW
POND
PHASE 3
"F"
Bluewater RD. NW
POND
PROPOSED
DISTRIBUTION
CENTER 4
100,000 SF
98TH Street N.W.
"G"
MAVERIK
GAS
STATION
N
Avalon RD. N.W.
A-3

Futures 2040
Metropolitan Transportation Plan

2040 Long Range Roadway System

- Interchange/Crossing
- Interchange/Crossing, Post 2040
- Freeways
- Regional Principal Arterial
- Community Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Proposed Regional Principal Arterial
- Proposed Community Principal Arterial
- Proposed Minor Arterial
- Proposed Major Collector
- Proposed Minor Collector
- Proposed Regional Principal Arterial, Post 2040
- Proposed Community Principal Arterial, Post 2040
- Proposed Minor Arterial, Post 2040
- Proposed Major Collector, Post 2040
- Proposed Minor Collector, Post 2040
- Classification TBD, Post 2040



2019 Traffic Flows

for the Greater Albuquerque Area

Map prepared by the Mid-Region Council of Governments (MRCOG) in cooperation with the New Mexico Department of Transportation, the local governments in the Albuquerque Metropolitan Planning Area,and the U.S. Department of Transportation, Federal Highway Administration. Map prepared September 2020.

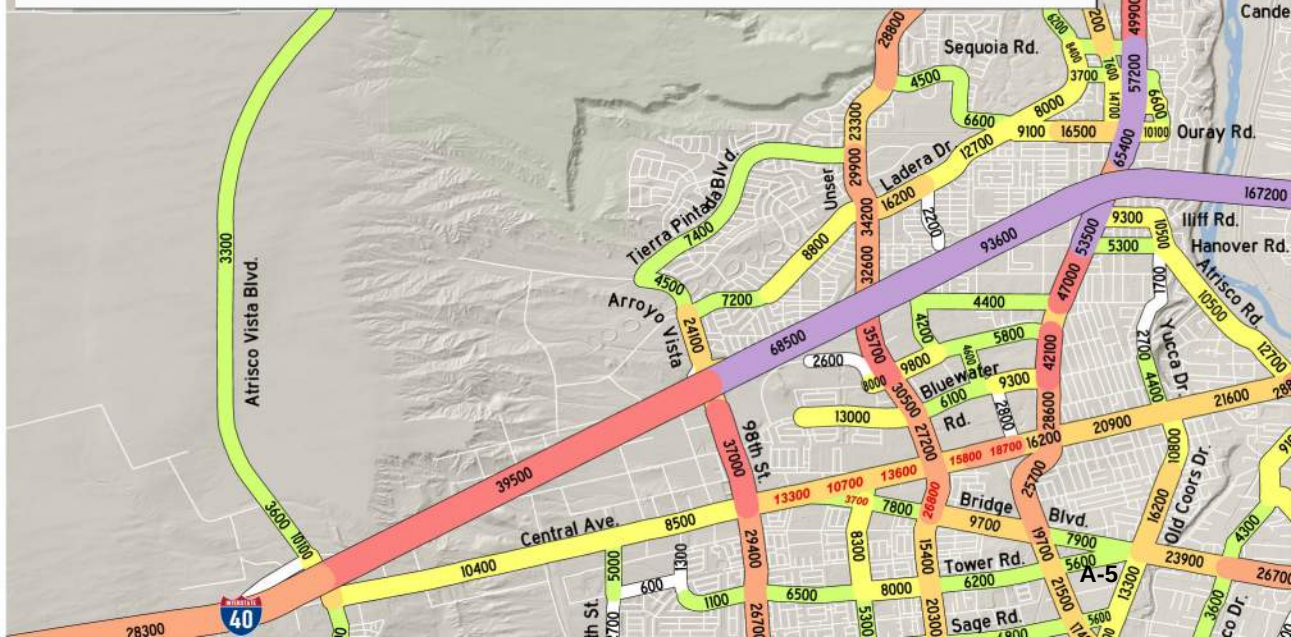
Average Annual Weekday Traffic

MRMPO
Mid-Region Metropolitan Planning Organization

MR COG

Standard Data
9500 Link Volume is based on traffic count data accepted by the NM Department of Transportation Traffic Monitoring System (TMS) as standard in accordance with the New Mexico State Traffic Monitoring Standards (NMSTMS).

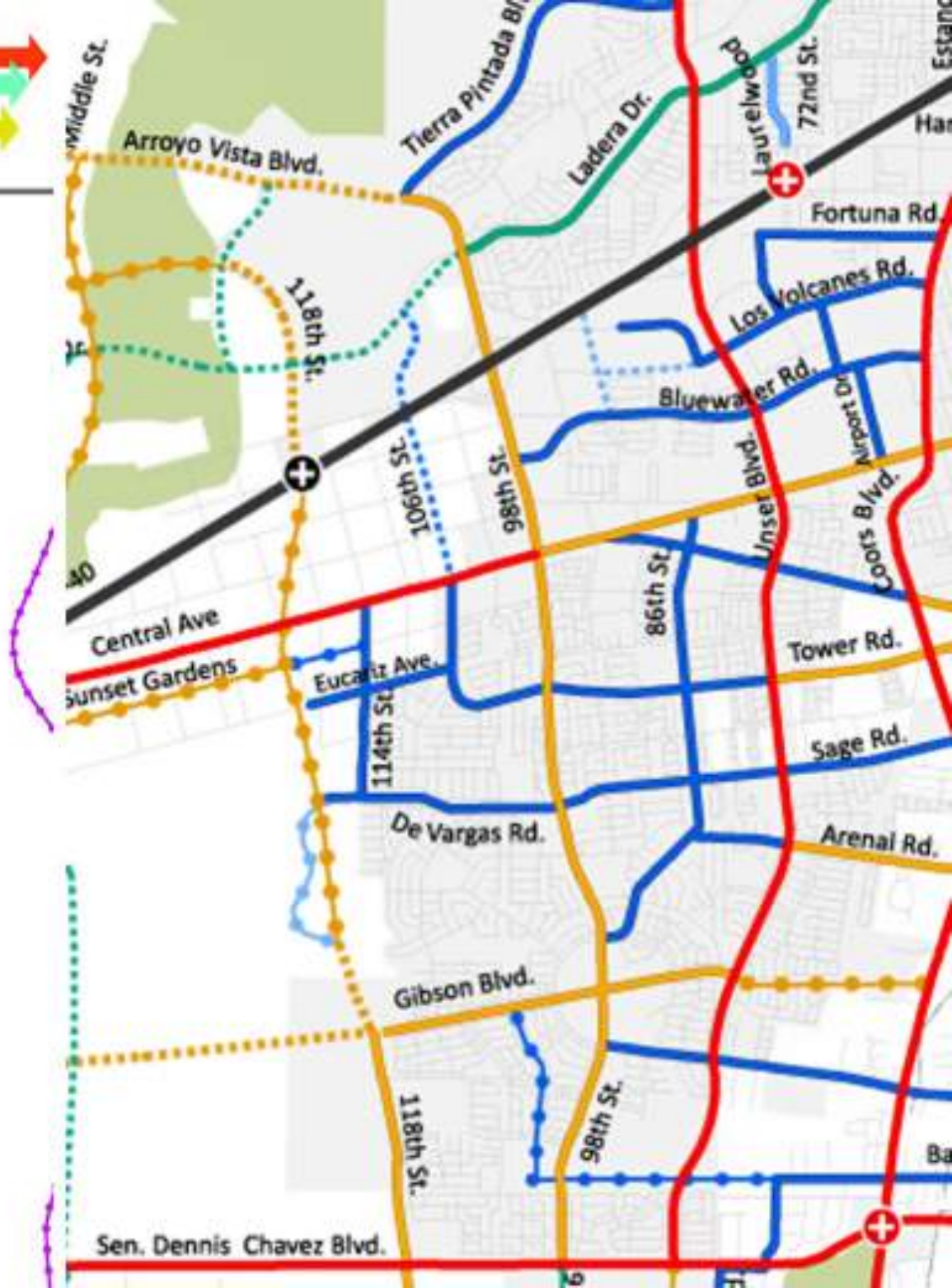
Non-Standard Data
9500 Link Volume is based either on traffic count data not in compliance with the NMSTMS or on professional judgement. NMDOT recommends that nonstandard data be used with caution Link volumes have been rounded to the nearest 10th, with some count volumes being the average of two shorter segments.



Futures 2040
Metropolitan Transportation Plan

2040 Long Range Roadway System

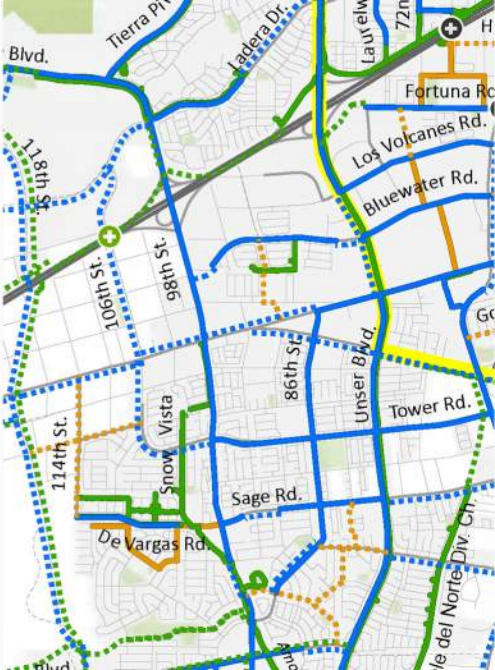
- Interchange/Crossing
- Interchange/Crossing, Post 2040
- Freeways
- Regional Principal Arterial
- Community Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Proposed Regional Principal Arterial
- Proposed Community Principal Arterial
- Proposed Minor Arterial
- Proposed Major Collector
- Proposed Minor Collector
- Proposed Regional Principal Arterial, Post 2040
- Proposed Community Principal Arterial, Post 2040
- Proposed Minor Arterial, Post 2040
- Proposed Major Collector, Post 2040
- Proposed Minor Collector, Post 2040
- Classification TBD, Post 2040



Futures 2040
Metropolitan Transportation Plan

2040 Long Range Bikeway System

- Proposed Overpass/Underpass
- Existing Overpass/Underpass
- Existing, Bicycle Boulevard
- Existing, Bicycle Lane
- Existing, Bicycle Route
- Existing, Paved Trail; Existing
- Proposed, Bicycle Boulevard
- Proposed, Bicycle Lane
- Proposed, Bicycle Route
- Proposed, Paved Trail
- 50 Mile Loop



Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE) DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units					
Phase 1	**Tire Superstore (849)**	**20.00**	**407**	**17**	**9**	**20**	**22**
Phase 2	Industrial Park (130)	300.00	1,662	97	23	25	95
	Subtotal (Phases 1 and 2)		**2,069**	**114**	**32**	**45**	**117**
Phase 3	Industrial Park (130)	500.00	2,168	162	38	42	158
	Subotal Trips Generated (All Phases)		**4,237**	**276**	**70**	**87**	**275**

Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Tire Superstore (849)	*20.00*	407	17	9	20	22
	1,000 S.F.					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = ***20.37*** **(X) +** ***0***

50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = ***1.34*** **(X) +** ***0***

65% Enter, ***35%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = ***2.11*** **(X) +** ***0***

47% Enter, ***53%*** Exit

Comments:

Phase 1

Based on ITE Trip Generation Manual - 10th Edition

Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Industrial Park (130)	*300.00*	1,662	97	23	25	95
	1,000 S.F.					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

Ln(T) = ***0.52*** **Ln(X) +** ***4.45***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = ***0.4*** **(X) +** ***0***
81% Enter, ***19%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = ***0.4*** **(X) +** ***0***
21% Enter, ***79%*** Exit

Comments:
Phase 2

Based on ITE Trip Generation Manual - 10th Edition

Westpointe 40 Development (I-40 / 98th St.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Industrial Park (130)	*500.00*	2,168	162	38	42	158
	1,000 S.F.					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

Ln(T) = ***0.52*** **Ln(X) +** ***4.45***
50% Enter, ***50%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = ***0.4*** **(X) +** ***0***
81% Enter, ***19%*** Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = ***0.4*** **(X) +** ***0***
21% Enter, ***79%*** Exit

Comments:
Phase 3

Based on ITE Trip Generation Manual - 10th Edition

Historic Growth Data Table

Westpointe 40 Development

(Interstate 40 / 98th St.)

Traffic Flows (AWDT) from Mid-Region Council of Governments

COG ID	Location											
Intersection #1:	**BLUEWATER / UNSER BLVD.**											
	Street:	**From:**	**To:**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
24714	BLUEWATER	END OF ROAD	WEST OF UNSER	3,187	4,660	4,599	4,521	4,406	4,406	4,516	7,333	7,725	8,059
24712	BLUEWATER	EAST OF UNSER	WEST OF AIRPORT	4,786	4,714	4,653	5,496	5,408	5,408	4,581	4,755	5,009	6,057
25050	UNSER BLVD.	NORTH OF CENTRAL	SOUTH OF BLUEWATER	31,785	21,255	20,979	26,048	25,781	25,781	26,426	29,184	25,676	26,785
25048	UNSER BLVD.	NORTH OF BLUEWATER	SOUTH OF LOS VOLCANES	23,268	22,919	22,621	27,057	26,625	26,840	30,819	31,990	35,270	30,106
	Total Intersection Traffic Flows			**63,026**	**53,548**	**52,852**	**63,122**	**62,220**	**62,435**	**66,342**	**73,262**	**73,680**	**71,007**

COG ID	Location											
Intersection #2:	**LOS VOLCANES / UNSER BLVD.**											
	Street:	**From:**	**To:**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
25236	LOS VOLCANES	EAST OF DAYTONA RD.	WEST OF UNSER	-	-	4,096	4,026	3,962	6,206	6,361	6,603	7,582	7,910
25238	LOS VOLCANES	EAST OF UNSER	WEST OF GALLATIN PL.	-	-	6,498	6,388	6,286	6,168	6,322	6,562	9,300	9,702
25048	UNSER BLVD.	NORTH OF BLUEWATER	SOUTH OF LOS VOLCANES	23,268	22,919	22,621	27,057	26,625	26,840	30,819	31,990	35,270	30,106
25047	UNSER BLVD.	NORTH OF LOS VOLCANES	SOUTH OF I-40 S. RAMPS	27,186	31,647	31,236	30,636	30,146	30,146	32,874	34,123	35,949	35,249
	Total Intersection Traffic Flows			**50,454**	**54,566**	**64,451**	**68,107**	**67,019**	**69,360**	**76,376**	**79,278**	**88,101**	**82,967**

COG ID	Location											
Intersection #3:	**I-40 WBD / UNSER BLVD.**											
	Street:	**From:**	**To:**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
24104	I-40 WBD	UNSER ON RAMP	UNSER OFF RAMP	26,187	27,178	23,558	20,535	21,463	26,289	26,466	27,024	29,866	31,751
23733	UNSER BLVD.	NORTH OF I-40 ON RAMP	SOUTH OF I-40 NOTH RAMPS	25,818	25,792	27,472	27,197	26,979	33,438	33,973	34,551	31,174	31,699
23720	UNSER BLVD.	NORTH OF I-40 N. RAMPS	SOUTH OF LADERA DRIVE	28,230	30,735	30,213	33,123	34,995	35,135	35,697	29,115	29,768	30,270
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**80,235**	**83,705**	**81,243**	**80,855**	**83,437**	**94,862**	**96,136**	**90,690**	**90,808**	**93,720**

COG ID	Location											
Intersection #4:	**I-40 EBD / UNSER BLVD.**											
	Street:	**From:**	**To:**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
24132	I-40 EBD	UNSER OFF RAMP	UNSER ON RAMP 1	35,643	29,646	22,394	22,564	25,200	25,301	24,468	24,962	28,908	30,721
25047	UNSER BLVD.	NORTH OF LOS VOLCANES	SOUTH OF I-40 S. RAMPS	27,186	31,647	31,236	30,636	30,146	30,146	32,874	34,123	35,949	35,249
23733	UNSER BLVD.	NORTH OF I-40 ON RAMP	SOUTH OF I-40 NOTH RAMPS	25,818	25,792	27,472	27,197	26,979	33,438	33,973	34,551	31,174	31,699
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**88,647**	**87,085**	**81,102**	**80,397**	**82,325**	**88,885**	**91,315**	**93,636**	**96,031**	**97,669**

Historic Growth Data Table

Westpointe 40 Development

(Interstate 40 / 98th St.)

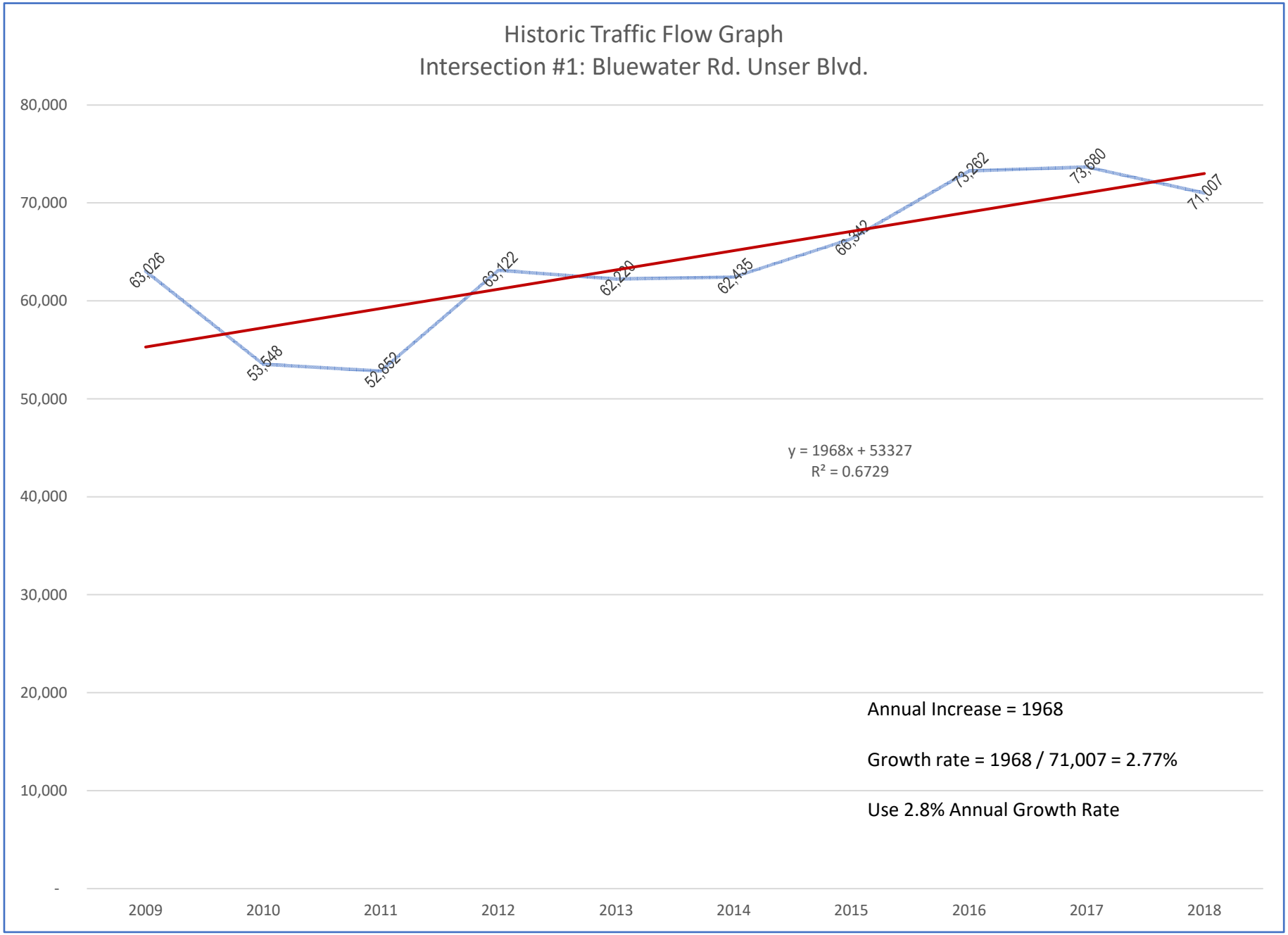
Traffic Flows (AWDT) from Mid-Region Council of Governments

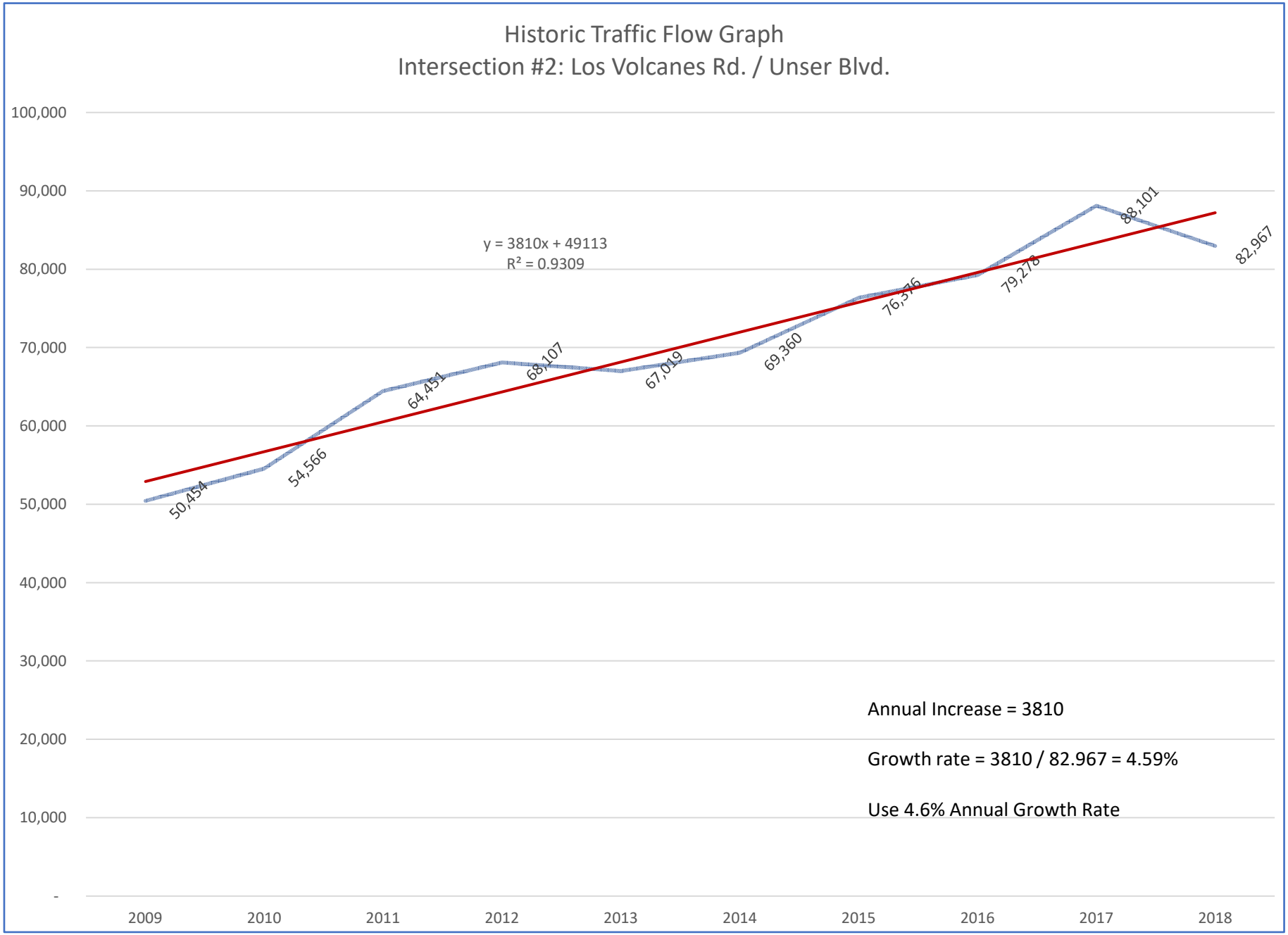
COG ID	Location												
Intersection #5:	LOS VOLCANES / Not Found												
	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
25236	LOS VOLCANES	EAST OF DAYTONA RD.	WEST OF UNSER	-	-	4,096	4,026	3,962	6,206	6,361	6,603	7,582	7,910
25673	DAYTONA	EAST OF TRANSIT FACILITY	NORTH OF LOS VOLCANES	-	-	1,247	1,226	1,206	1,564	1,603	1,664	2,486	2,593
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**-**	**-**	**5,343**	**5,252**	**5,168**	**7,770**	**7,964**	**8,267**	**10,068**	**10,503**

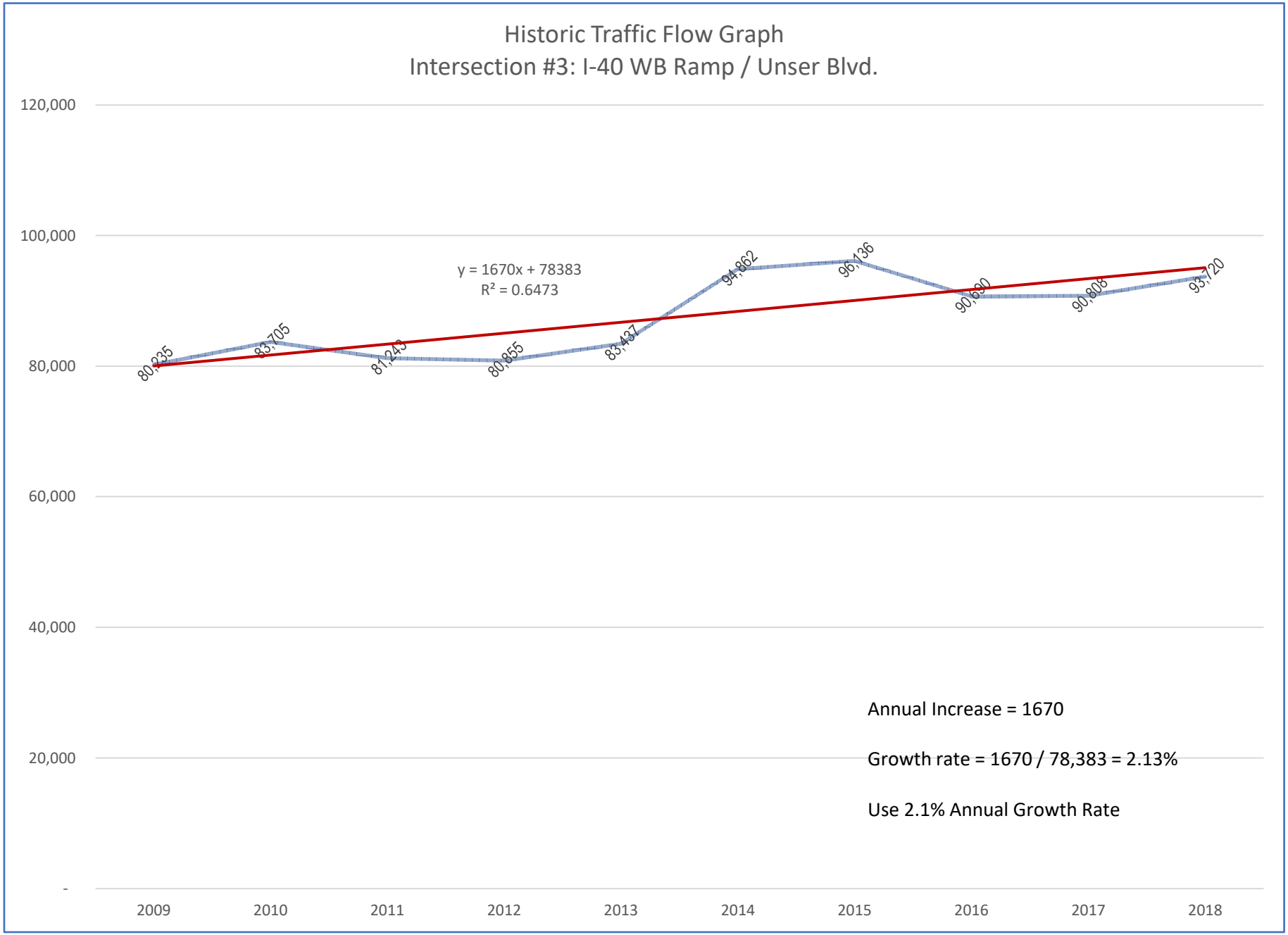
COG ID	Location												
Intersection #6:	CENTRAL / 98TH STREET												
	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
26293	CENTRAL	EAST OF 114TH ST.	WEST OF 98TH ST.	7,915	7,796	7,606	7,477	10,702	10,702	10,970	8,121	8,556	8,926
24668	TOWER	EAST OF 98TH ST.	WEST OF 86TH ST.	5,634	5,549	5,932	5,831	5,738	5,687	5,829	6,051	6,111	6,375
26532	98TH STREET	NORTH OF TOWER	SOUTH OF CENTRAL	37,440	36,878	29,263	28,766	28,306	28,466	29,178	30,287	27,780	28,980
25764	98TH STREET	NORTH OF CENTRAL	SOUTH OF I-40 S. RAMPS	26,621	26,222	25,881	30,989	30,493	30,493	34,670	35,987	37,913	39,942
	Total Intersection Traffic Flows			**77,610**	**76,445**	**68,682**	**73,063**	**75,239**	**75,348**	**80,647**	**80,446**	**80,360**	**84,223**

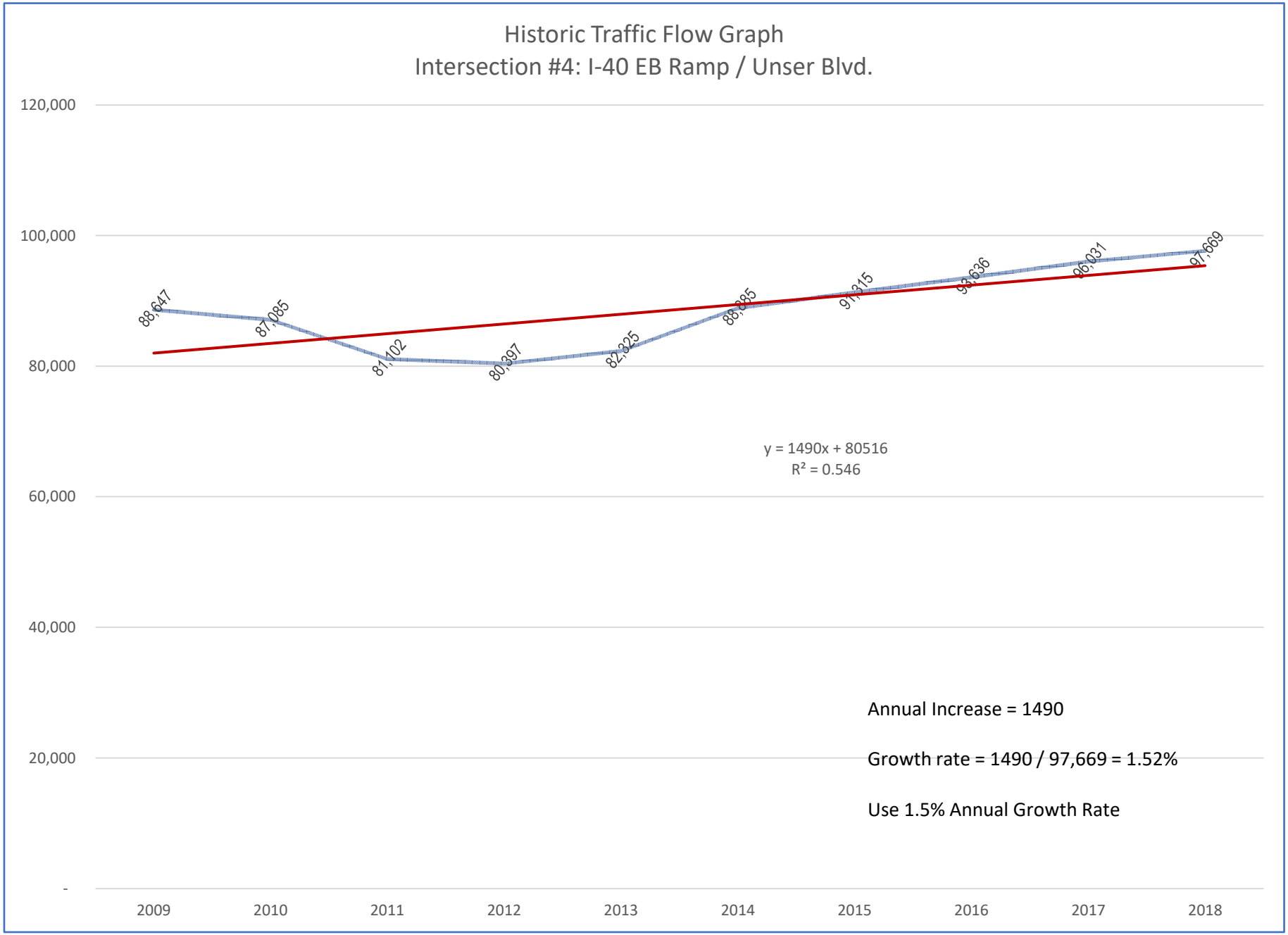
COG ID	Location												
Intersection #8:	I-40 WBD / ARROYO VISTA												
	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
24676	I-40 WBD	98TH ON RAMP	98TH OFF RAMP	14,891	14,547	12,113	12,272	12,006	13,350	13,903	14,296	10,862	15,916
24446	98TH STREET	NORTH OF I-40 EBD ON RAM	SOUTH OF I-40 WBD OFF RAI	14,606	14,591	14,343	16,272	18,196	18,269	9,034	9,188	9,394	23,564
24442	ARROYO VISTA	NORTH OF I-40 NORTH RAMF	SOUTH OF LADERA	6,324	6,318	6,989	6,919	6,864	6,891	8,981	9,134	9,339	23,436
99999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**35,821**	**35,456**	**33,445**	**35,463**	**37,066**	**38,510**	**31,918**	**32,618**	**29,595**	**62,916**

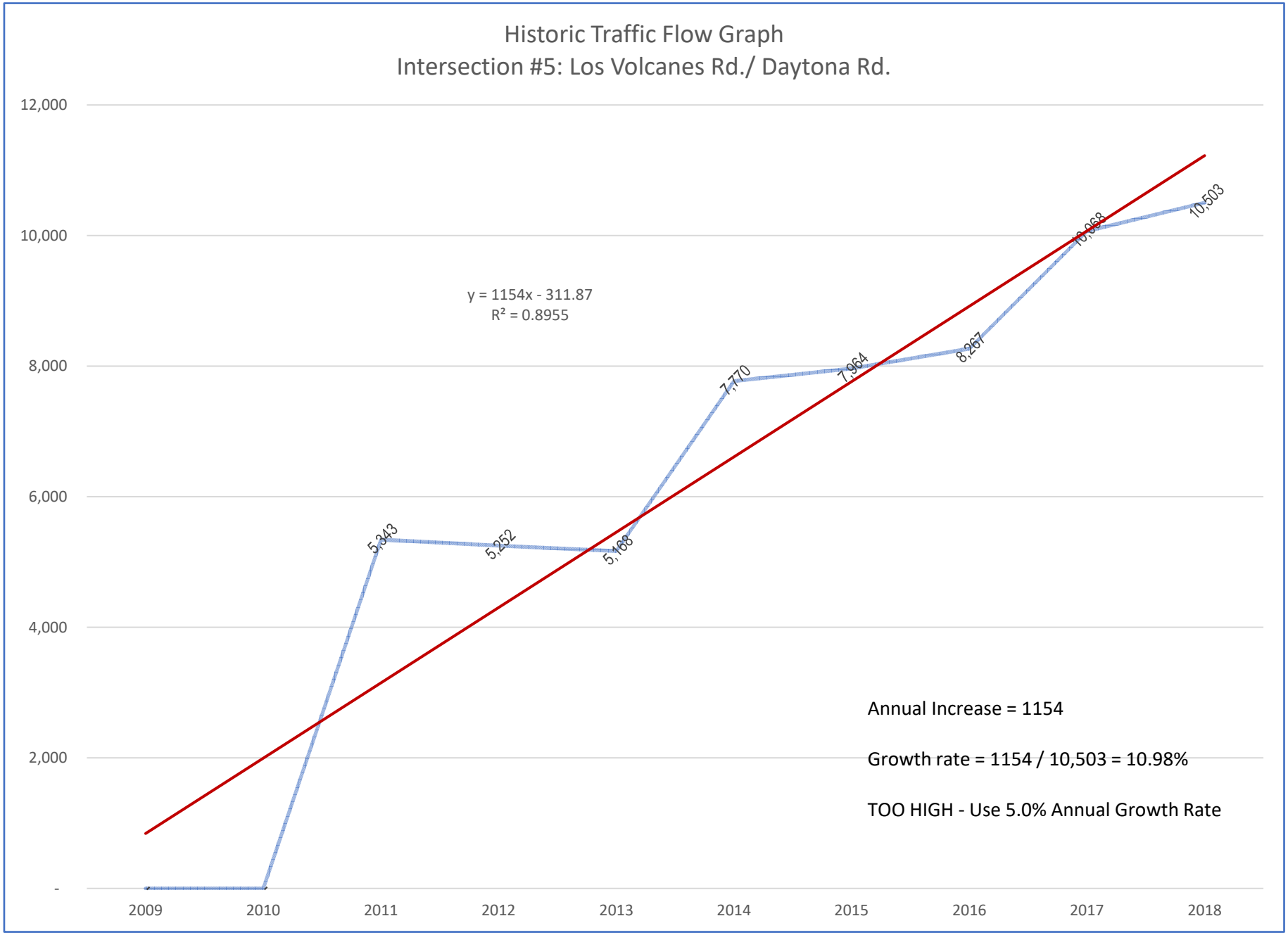
COG ID	Location												
Intersection 9:	I-40 EBD / 98TH STREET												
	Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
24992	I-40 EBD	98TH OFF RAMP	98TH ON RAMP 1	16,942	17,288	11,056	11,965	12,063	12,373	14,111	13,364	16,255	17,598
24444	98TH STREET	NORTH OF I-40 S. RAMPS	SOUTH OF I-40 EBD ON RAMI	17,945	17,676	16,168	15,893	15,639	20,902	21,425	22,239	23,084	23,961
24446	98TH STREET	NORTH OF I-40 EBD ON RAM	SOUTH OF I-40 WBD OFF RAI	14,606	14,591	14,343	16,272	18,196	18,269	9,034	9,188	9,394	23,564
9999	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found	Not Found
	Total Intersection Traffic Flows			**49,493**	**49,555**	**41,567**	**44,130**	**45,898**	**51,544**	**44,570**	**44,791**	**48,733**	**65,123**

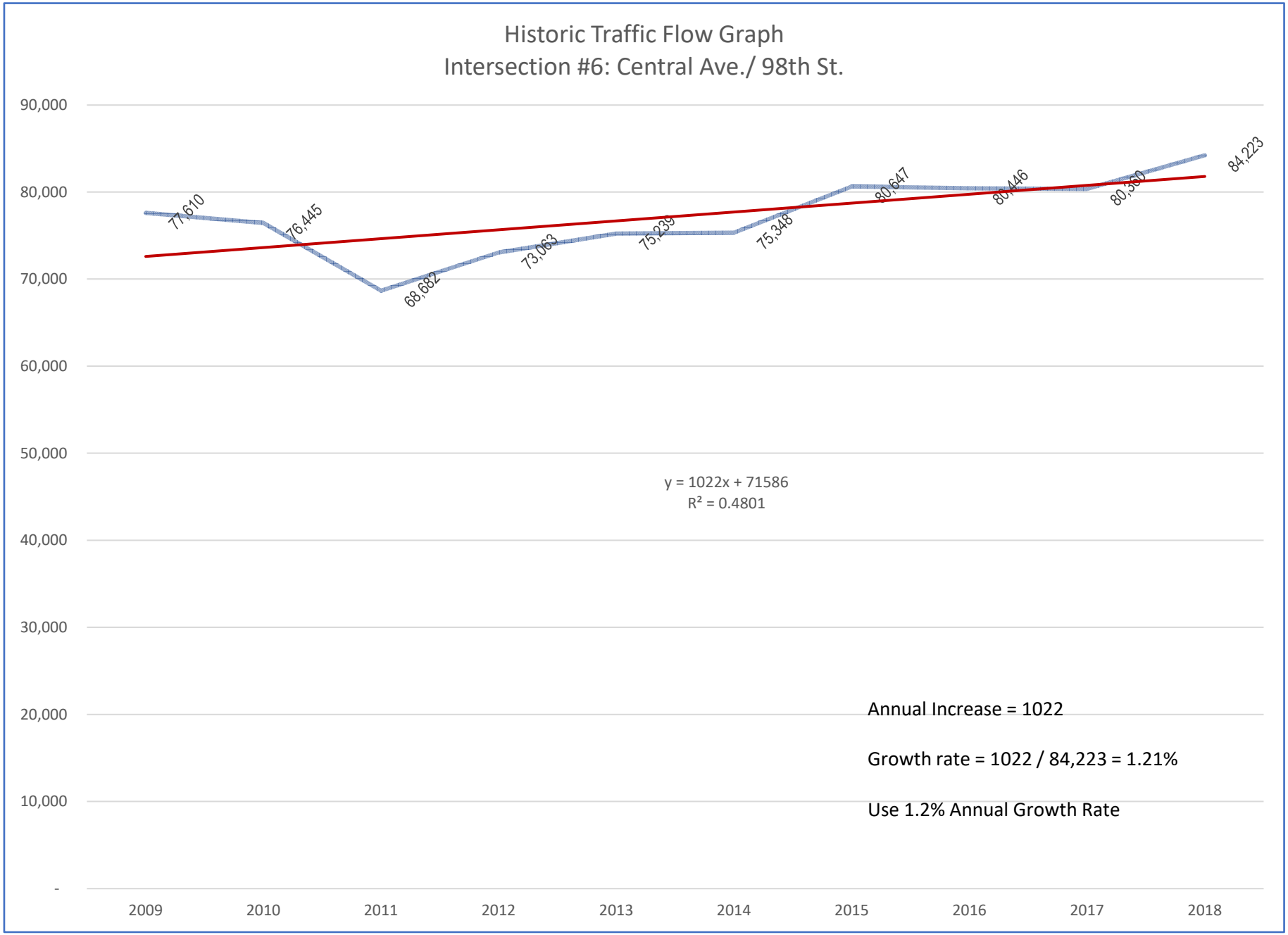

Historic Traffic Flow Graph
Intersection #1: Bluewater Rd. Unser Blvd.
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
63,026
53,548
52,852
63,122
62,220
62,435
66,342
73,262
73,680
71,007
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1968x + 53327
R² = 0.6729
Annual Increase = 1968
Growth rate = 1968 / 71,007 = 2.77%
Use 2.8% Annual Growth Rate

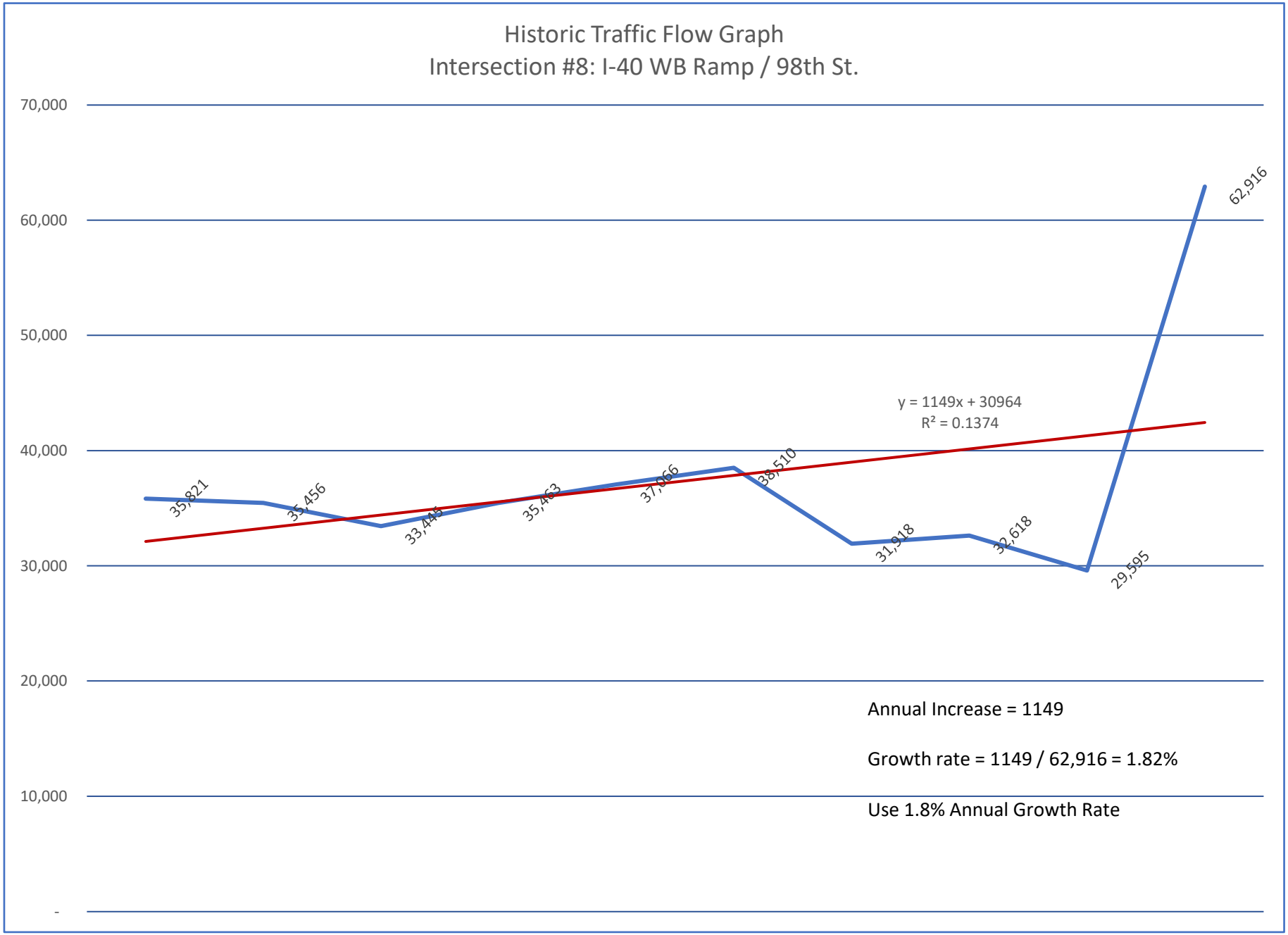

Historic Traffic Flow Graph
Intersection #2: Los Volcanes Rd. / Unser Blvd.
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 3810x + 49113
R² = 0.9309
50,454
54,566
64,451
68,107
67,019
69,360
76,376
79,278
88,101
82,967
Annual Increase = 3810
Growth rate = 3810 / 82.967 = 4.59%
Use 4.6% Annual Growth Rate

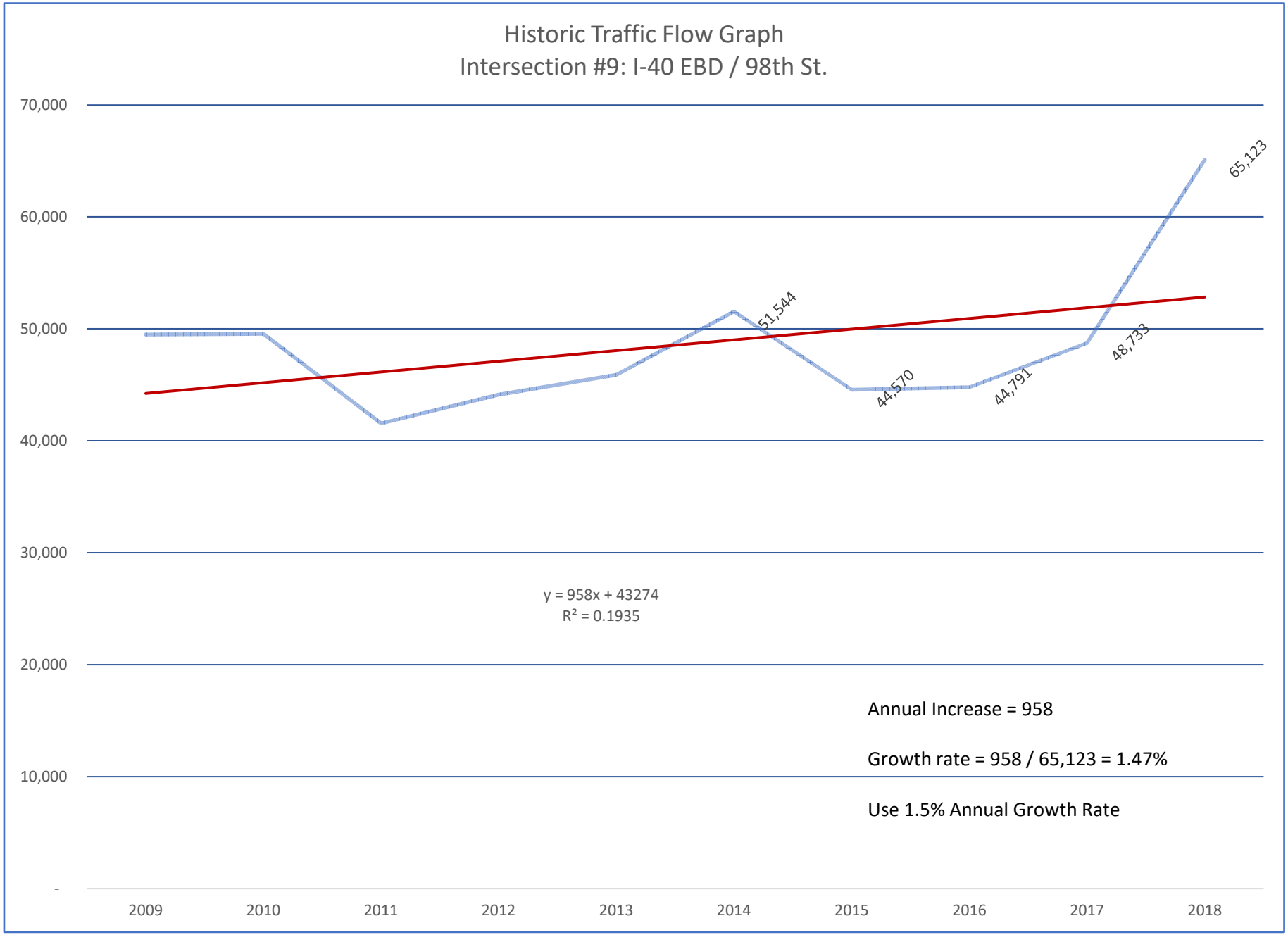

Historic Traffic Flow Graph
Intersection #3: I-40 WB Ramp / Unser Blvd.
120,000
100,000
80,000
60,000
40,000
20,000
-
y = 1670x + 78383
R² = 0.6473
80,235
83,705
81,243
80,855
83,437
94,862
96,136
90,690
90,808
93,720
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Annual Increase = 1670
Growth rate = 1670 / 78,383 = 2.13%
Use 2.1% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #4: I-40 EB Ramp / Unser Blvd.
120,000
100,000
80,000
60,000
40,000
20,000
-
88,647
87,085
81,102
80,397
82,325
88,385
91,315
93,636
96,031
97,669
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1490x + 80516
R² = 0.546
Annual Increase = 1490
Growth rate = 1490 / 97,669 = 1.52%
Use 1.5% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #5: Los Volcanes Rd./ Daytona Rd.
12,000
10,000
8,000
6,000
4,000
2,000
-
y = 1154x - 311.87
R² = 0.8955
5,343
5,252
5,168
7,770
7,964
8,267
10,068
10,503
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Annual Increase = 1154
Growth rate = 1154 / 10,503 = 10.98%
TOO HIGH - Use 5.0% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #6: Central Ave./ 98th St.
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
77,610
76,445
68,682
73,063
75,239
75,348
80,647
80,446
80,360
84,223
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
y = 1022x + 71586
R² = 0.4801
Annual Increase = 1022
Growth rate = 1022 / 84,223 = 1.21%
Use 1.2% Annual Growth Rate

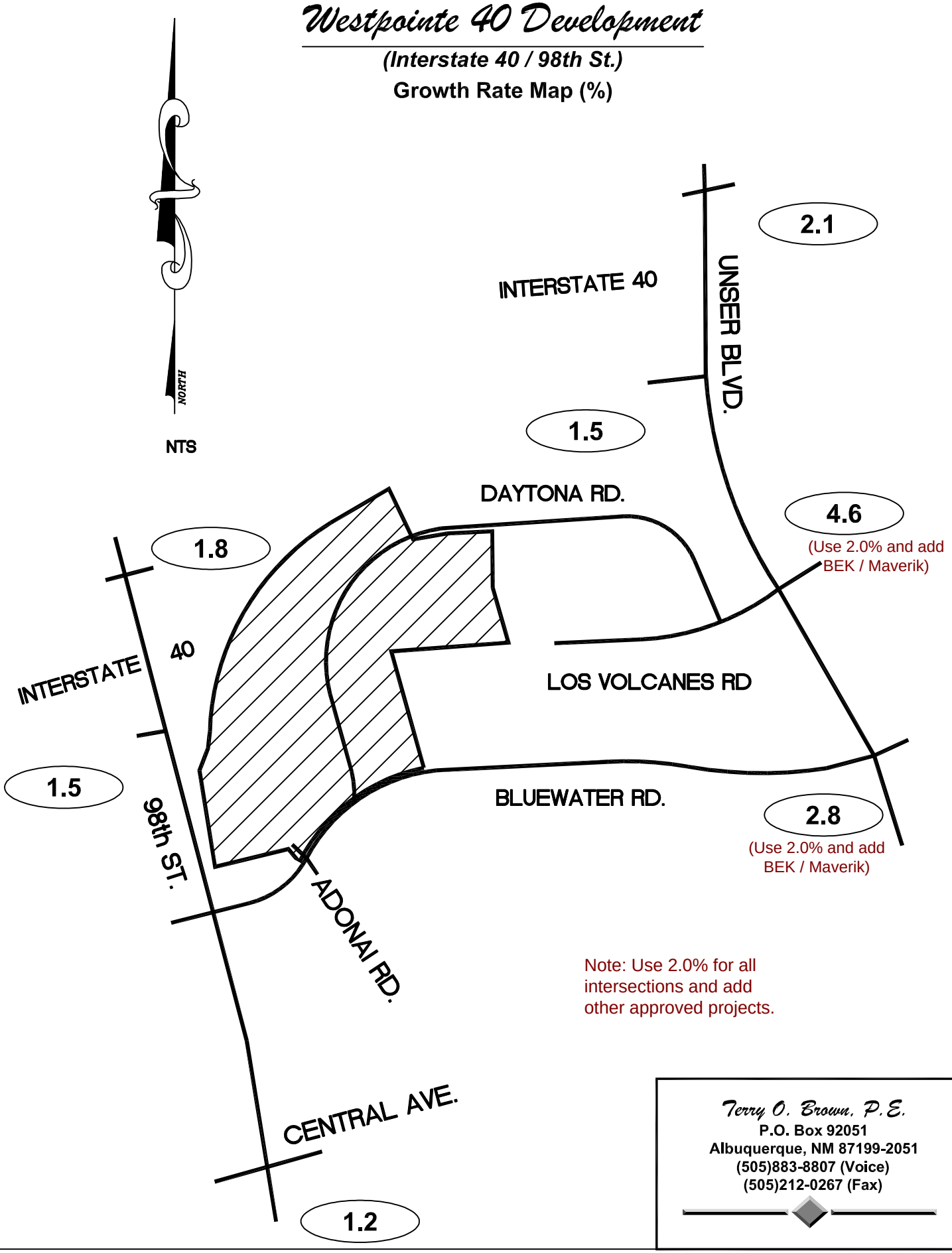

Historic Traffic Flow Graph
Intersection #8: I-40 WB Ramp / 98th St.
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
y = 1149x + 30964
R² = 0.1374
35,821
35,456
33,445
35,463
37,966
38,510
31,918
32,618
29,595
62,916
Annual Increase = 1149
Growth rate = 1149 / 62,916 = 1.82%
Use 1.8% Annual Growth Rate


Historic Traffic Flow Graph
Intersection #9: I-40 EBD / 98th St.
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
51,544
44,570
44,791
48,733
65,123
y = 958x + 43274
R² = 0.1935
Annual Increase = 958
Growth rate = 958 / 65,123 = 1.47%
Use 1.5% Annual Growth Rate

Westpointe 40 Development

(Interstate 40 / 98th St.)

Growth Rate Map (%)



Note: Use 2.0% for all intersections and add other approved projects.

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(505)212-0267 (Fax)

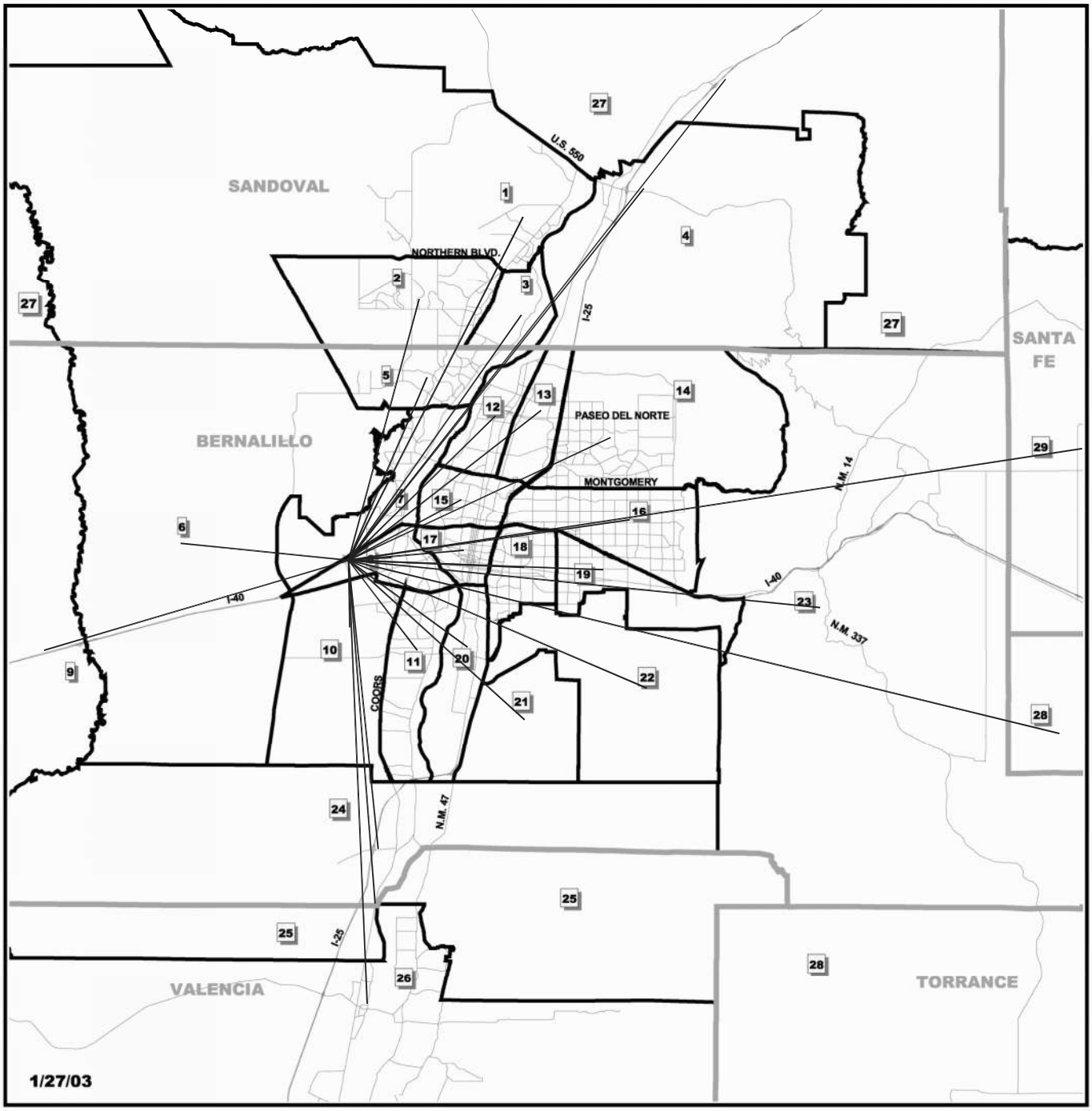


Figure 6

22 Subarea Identification Number

Subareas of the MRCOG Region

Mid-Region
Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

Westpointe 40 Development
(Interstate 40 / 98th St.)
Trip Distribution Subarea Map

Trip Distribution Table

Westpointe 40 Center (Interstate 40 / 98th St.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2012 and 2040 Data Taken from Mid-Region Council of Governments' 2040
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(UN) Unser Blvd. North			(4uE) I-40 WB / Unser East			(LE) Los Volcanes Rd. East		
Sub Area I.D.#	**% Sub Area in Study**	**2012 Employment**	**2040 Employment**	**Interpolated Employment for the Year**	Employment in Study	Dist. (Mi.)	**Employment / Distance**	**% Employment / Distance**	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	**2040**	**2025**													
1	100%	41,785	90,699	64,495	64,495	16.4	**3,933**	**2.58%**	25%	0.64%	983	25%	0.64%	983	0%	0.00%	0
2	100%	52,210	76,330	63,409	63,409	11.5	**5,514**	**3.62%**	25%	0.90%	1,378	25%	0.90%	1,378	0%	0.00%	0
3	100%	8,435	9,663	9,005	9,005	12.8	**704**	**0.46%**	0%	0.00%	0	50%	0.23%	352	0%	0.00%	0
4	100%	13,455	18,633	15,859	15,859	20.3	**781**	**0.51%**	0%	0.00%	0	50%	0.26%	391	0%	0.00%	0
5	100%	54,610	76,585	64,813	64,813	8.5	**7,625**	**5.00%**	25%	1.25%	1,906	25%	1.25%	1,906	0%	0.00%	0
6	100%	6,893	25,941	15,737	15,737	7.2	**2,186**	**1.43%**	25%	0.36%	546	0%	0.00%	0	0%	0.00%	0
7	100%	58,237	88,165	72,132	72,132	3.8	**18,982**	**12.45%**	30%	3.73%	5,695	30%	3.73%	5,695	0%	0.00%	0
8*	100%	31,958	37,515	34,538	34,538	1.8	**19,188**	**12.58%**	0%	0.00%	0	0%	0.00%	0	23%	2.93%	4,461
9	100%	2,204	3,708	2,902	2,902	13.5	**215**	**0.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	61,778	81,503	70,936	70,936	2.9	**24,461**	**16.04%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	33,442	33,861	33,637	33,637	4.8	**7,008**	**4.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	16,148	18,410	17,198	17,198	8.8	**1,954**	**1.28%**	30%	0.38%	586	35%	0.45%	684	0%	0.00%	0
13	100%	9,753	15,594	12,465	12,465	10.4	**1,199**	**0.79%**	0%	0.00%	0	50%	0.39%	599	0%	0.00%	0
14	100%	98,446	115,425	106,329	106,329	12.3	**8,645**	**5.67%**	0%	0.00%	0	50%	2.83%	4,322	0%	0.00%	0
15	100%	24,994	28,460	26,603	26,603	5.5	**4,837**	**3.17%**	0%	0.00%	0	20%	0.63%	967	0%	0.00%	0
16	100%	110,074	134,252	121,300	121,300	12.1	**10,025**	**6.57%**	0%	0.00%	0	50%	3.29%	5,012	0%	0.00%	0
17	100%	21,562	42,074	31,085	31,085	4.9	**6,344**	**4.16%**	0%	0.00%	0	25%	1.04%	1,586	0%	0.00%	0
18	100%	44,105	63,905	53,298	53,298	7.5	**7,106**	**4.66%**	0%	0.00%	0	25%	1.17%	1,777	0%	0.00%	0
19	100%	65,521	85,453	74,775	74,775	10.9	**6,860**	**4.50%**	0%	0.00%	0	25%	1.12%	1,715	0%	0.00%	0
20	100%	9,623	22,190	15,458	15,458	6.3	**2,454**	**1.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	2	80,695	37,467	37,467	10.1	**3,710**	**2.43%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	3,562	3,697	3,625	3,625	13.8	**263**	**0.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	19,369	26,046	22,469	22,469	20.2	**1,112**	**0.73%**	0%	0.00%	0	50%	0.36%	556	0%	0.00%	0
24	100%	2,512	3,373	2,912	2,912	12.4	**235**	**0.15%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	913	1,207	1,050	1,050	14.7	**71**	**0.05%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	75,135	124,471	98,041	98,041	18.9	**5,187**	**3.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	19,816	24,526	22,003	22,003	26.1	**843**	**0.55%**	20%	0.11%	169	25%	0.14%	211	0%	0.00%	0
28	100%	16,269	22,258	19,050	19,050	31.2	**611**	**0.40%**	0%	0.00%	0	50%	0.20%	305	0%	0.00%	0
29	100%	10,268	17,661	13,700	13,700	31.6	**434**	**0.28%**	0%	0.00%	0	50%	0.14%	217	0%	0.00%	0
		913,079	1,372,300	1,126,289	1,126,289		**152,484**	**100.00%**		7.39%	**11,264**		18.79%	**28,657**		2.93%	**4,461**
											7.39%			18.79%			2.93%

Trip Distribution Table

Westpointe 40 Center (Interstate 40 / 98th St.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2012 and 2040 Data Taken from Mid-Region Council of Governments' 2040
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(BE) Bluewater Rd. East			(US) Unser Blvd. South			(AS) Adonai Rd. South		
Sub Area I.D.#	**% Sub Area in Study**	**2012 Employment**	**2040 Employment**	**Interpolated Employment for the Year**	Employment in Study	Dist. (Mi.)	**Employment / Distance**	**% Employment / Distance**	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	**2040**	**2025**													
1	100%	41,785	90,699	64,495	64,495	16.4	**3,933**	**2.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	52,210	76,330	63,409	63,409	11.5	**5,514**	**3.62%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	8,435	9,663	9,005	9,005	12.8	**704**	**0.46%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,455	18,633	15,859	15,859	20.3	**781**	**0.51%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	54,610	76,585	64,813	64,813	8.5	**7,625**	**5.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	6,893	25,941	15,737	15,737	7.2	**2,186**	**1.43%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7	100%	58,237	88,165	72,132	72,132	3.8	**18,982**	**12.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8*	100%	31,958	37,515	34,538	34,538	1.8	**19,188**	**12.58%**	13%	1.60%	2,437	30%	3.76%	5,733	3%	0.42%	643
9	100%	2,204	3,708	2,902	2,902	13.5	**215**	**0.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	61,778	81,503	70,936	70,936	2.9	**24,461**	**16.04%**	0%	0.00%	0	20%	3.21%	4,892	0%	0.00%	0
11	100%	33,442	33,861	33,637	33,637	4.8	**7,008**	**4.60%**	0%	0.00%	0	35%	1.61%	2,453	0%	0.00%	0
12	100%	16,148	18,410	17,198	17,198	8.8	**1,954**	**1.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	9,753	15,594	12,465	12,465	10.4	**1,199**	**0.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	98,446	115,425	106,329	106,329	12.3	**8,645**	**5.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,994	28,460	26,603	26,603	5.5	**4,837**	**3.17%**	0%	0.00%	0	20%	0.63%	967	0%	0.00%	0
16	100%	110,074	134,252	121,300	121,300	12.1	**10,025**	**6.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	21,562	42,074	31,085	31,085	4.9	**6,344**	**4.16%**	0%	0.00%	0	25%	1.04%	1,586	0%	0.00%	0
18	100%	44,105	63,905	53,298	53,298	7.5	**7,106**	**4.66%**	0%	0.00%	0	25%	1.17%	1,777	0%	0.00%	0
19	100%	65,521	85,453	74,775	74,775	10.9	**6,860**	**4.50%**	0%	0.00%	0	25%	1.12%	1,715	0%	0.00%	0
20	100%	9,623	22,190	15,458	15,458	6.3	**2,454**	**1.61%**	0%	0.00%	0	50%	0.80%	1,227	0%	0.00%	0
21	100%	2	80,695	37,467	37,467	10.1	**3,710**	**2.43%**	0%	0.00%	0	50%	1.22%	1,855	0%	0.00%	0
22	100%	3,562	3,697	3,625	3,625	13.8	**263**	**0.17%**	0%	0.00%	0	50%	0.09%	131	0%	0.00%	0
23	100%	19,369	26,046	22,469	22,469	20.2	**1,112**	**0.73%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,512	3,373	2,912	2,912	12.4	**235**	**0.15%**	0%	0.00%	0	30%	0.05%	70	0%	0.00%	0
25	100%	913	1,207	1,050	1,050	14.7	**71**	**0.05%**	0%	0.00%	0	30%	0.01%	21	0%	0.00%	0
26	100%	75,135	124,471	98,041	98,041	18.9	**5,187**	**3.40%**	0%	0.00%	0	30%	1.02%	1,556	0%	0.00%	0
27	100%	19,816	24,526	22,003	22,003	26.1	**843**	**0.55%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	16,269	22,258	19,050	19,050	31.2	**611**	**0.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	10,268	17,661	13,700	13,700	31.6	**434**	**0.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		913,079	1,372,300	1,126,289	1,126,289		**152,484**	**100.00%**		1.60%	**2,437**		15.73%	**23,984**		0.42%	**643**
											1.60%			15.73%			0.42%

Trip Distribution Table

Westpointe 40 Center (Interstate 40 / 98th St.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2012 and 2040 Data Taken from Mid-Region Council of Governments' 2040
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(CE) Central Ave. East			(9S) 98th St. South			(CW) Central Ave. West		
Sub Area I.D.#	**% Sub Area in Study**	**2012 Employment**	**2040 Employment**	**Interpolated Employment for the Year**	Employment in Study	Dist. (Mi.)	**Employment / Distance**	**% Employment / Distance**	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	**2040**	**2025**													
1	100%	41,785	90,699	64,495	64,495	16.4	**3,933**	**2.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	52,210	76,330	63,409	63,409	11.5	**5,514**	**3.62%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	8,435	9,663	9,005	9,005	12.8	**704**	**0.46%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,455	18,633	15,859	15,859	20.3	**781**	**0.51%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	54,610	76,585	64,813	64,813	8.5	**7,625**	**5.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	6,893	25,941	15,737	15,737	7.2	**2,186**	**1.43%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7	100%	58,237	88,165	72,132	72,132	3.8	**18,982**	**12.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8*	100%	31,958	37,515	34,538	34,538	1.8	**19,188**	**12.58%**	28%	3.56%	5,426	0%	0.00%	0	0%	0.04%	59
9	100%	2,204	3,708	2,902	2,902	13.5	**215**	**0.14%**	0%	0.00%	0	0%	0.00%	0	35%	0.05%	75
10	100%	61,778	81,503	70,936	70,936	2.9	**24,461**	**16.04%**	20%	3.21%	4,892	20%	3.21%	4,892	20%	3.21%	4,892
11	100%	33,442	33,861	33,637	33,637	4.8	**7,008**	**4.60%**	35%	1.61%	2,453	30%	1.38%	2,102	0%	0.00%	0
12	100%	16,148	18,410	17,198	17,198	8.8	**1,954**	**1.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	9,753	15,594	12,465	12,465	10.4	**1,199**	**0.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	98,446	115,425	106,329	106,329	12.3	**8,645**	**5.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,994	28,460	26,603	26,603	5.5	**4,837**	**3.17%**	20%	0.63%	967	20%	0.63%	967	0%	0.00%	0
16	100%	110,074	134,252	121,300	121,300	12.1	**10,025**	**6.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	21,562	42,074	31,085	31,085	4.9	**6,344**	**4.16%**	25%	1.04%	1,586	0%	0.00%	0	0%	0.00%	0
18	100%	44,105	63,905	53,298	53,298	7.5	**7,106**	**4.66%**	25%	1.17%	1,777	0%	0.00%	0	0%	0.00%	0
19	100%	65,521	85,453	74,775	74,775	10.9	**6,860**	**4.50%**	25%	1.12%	1,715	0%	0.00%	0	0%	0.00%	0
20	100%	9,623	22,190	15,458	15,458	6.3	**2,454**	**1.61%**	25%	0.40%	613	25%	0.40%	613	0%	0.00%	0
21	100%	2	80,695	37,467	37,467	10.1	**3,710**	**2.43%**	25%	0.61%	927	25%	0.61%	927	0%	0.00%	0
22	100%	3,562	3,697	3,625	3,625	13.8	**263**	**0.17%**	25%	0.04%	66	25%	0.04%	66	0%	0.00%	0
23	100%	19,369	26,046	22,469	22,469	20.2	**1,112**	**0.73%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,512	3,373	2,912	2,912	12.4	**235**	**0.15%**	35%	0.05%	82	35%	0.05%	82	0%	0.00%	0
25	100%	913	1,207	1,050	1,050	14.7	**71**	**0.05%**	35%	0.02%	25	35%	0.02%	25	0%	0.00%	0
26	100%	75,135	124,471	98,041	98,041	18.9	**5,187**	**3.40%**	35%	1.19%	1,816	35%	1.19%	1,816	0%	0.00%	0
27	100%	19,816	24,526	22,003	22,003	26.1	**843**	**0.55%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	16,269	22,258	19,050	19,050	31.2	**611**	**0.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	10,268	17,661	13,700	13,700	31.6	**434**	**0.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		913,079	1,372,300	1,126,289	1,126,289		**152,484**	**100.00%**		14.65%	**22,345**		7.54%	**11,491**		3.30%	**5,027**
											14.65%			7.54%			3.30%

Trip Distribution Table

Westpointe 40 Center (Interstate 40 / 98th St.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2012 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(BW) Bluewater Rd. West			(4nW) I-40 EB / 98th West			(9N) 98th St. North		
Sub Area I.D.#	**% Sub Area in Study**	**2012 Employment**	**2040 Employment**	**Interpolated Employment for the Year**	Employment in Study	Dist. (Mi.)	**Employment / Distance**	**% Employment / Distance**	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	**2040**	**2025**													
1	100%	41,785	90,699	64,495	64,495	16.4	**3,933**	**2.58%**	0%	0.00%	0	0%	0.00%	0	25%	0.64%	983
2	100%	52,210	76,330	63,409	63,409	11.5	**5,514**	**3.62%**	0%	0.00%	0	0%	0.00%	0	25%	0.90%	1,378
3	100%	8,435	9,663	9,005	9,005	12.8	**704**	**0.46%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,455	18,633	15,859	15,859	20.3	**781**	**0.51%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	54,610	76,585	64,813	64,813	8.5	**7,625**	**5.00%**	0%	0.00%	0	0%	0.00%	0	25%	1.25%	1,906
6	100%	6,893	25,941	15,737	15,737	7.2	**2,186**	**1.43%**	0%	0.00%	0	25%	0.36%	546	25%	0.36%	546
7	100%	58,237	88,165	72,132	72,132	3.8	**18,982**	**12.45%**	0%	0.00%	0	0%	0.00%	0	20%	2.49%	3,796
8*	100%	31,958	37,515	34,538	34,538	1.8	**19,188**	**12.58%**	0%	0.04%	59	0%	0.00%	0	0%	0.00%	0
9	100%	2,204	3,708	2,902	2,902	13.5	**215**	**0.14%**	0%	0.00%	0	35%	0.05%	75	0%	0.00%	0
10	100%	61,778	81,503	70,936	70,936	2.9	**24,461**	**16.04%**	0%	0.00%	0	20%	3.21%	4,892	0%	0.00%	0
11	100%	33,442	33,861	33,637	33,637	4.8	**7,008**	**4.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	16,148	18,410	17,198	17,198	8.8	**1,954**	**1.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	9,753	15,594	12,465	12,465	10.4	**1,199**	**0.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	98,446	115,425	106,329	106,329	12.3	**8,645**	**5.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,994	28,460	26,603	26,603	5.5	**4,837**	**3.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	110,074	134,252	121,300	121,300	12.1	**10,025**	**6.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	21,562	42,074	31,085	31,085	4.9	**6,344**	**4.16%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	44,105	63,905	53,298	53,298	7.5	**7,106**	**4.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	65,521	85,453	74,775	74,775	10.9	**6,860**	**4.50%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20	100%	9,623	22,190	15,458	15,458	6.3	**2,454**	**1.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	2	80,695	37,467	37,467	10.1	**3,710**	**2.43%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	3,562	3,697	3,625	3,625	13.8	**263**	**0.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	19,369	26,046	22,469	22,469	20.2	**1,112**	**0.73%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,512	3,373	2,912	2,912	12.4	**235**	**0.15%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	913	1,207	1,050	1,050	14.7	**71**	**0.05%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	75,135	124,471	98,041	98,041	18.9	**5,187**	**3.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	19,816	24,526	22,003	22,003	26.1	**843**	**0.55%**	0%	0.00%	0	10%	0.06%	84	20%	0.11%	169
28	100%	16,269	22,258	19,050	19,050	31.2	**611**	**0.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	10,268	17,661	13,700	13,700	31.6	**434**	**0.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		913,079	1,372,300	1,126,289	1,126,289		**152,484**	**100.00%**		0.04%	**59**		3.67%	**5,598**		5.76%	**8,779**
											0.04%			3.67%			5.76%

Trip Distribution Table

Westpointe 40 Center (Interstate 40 / 98th St.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2012 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

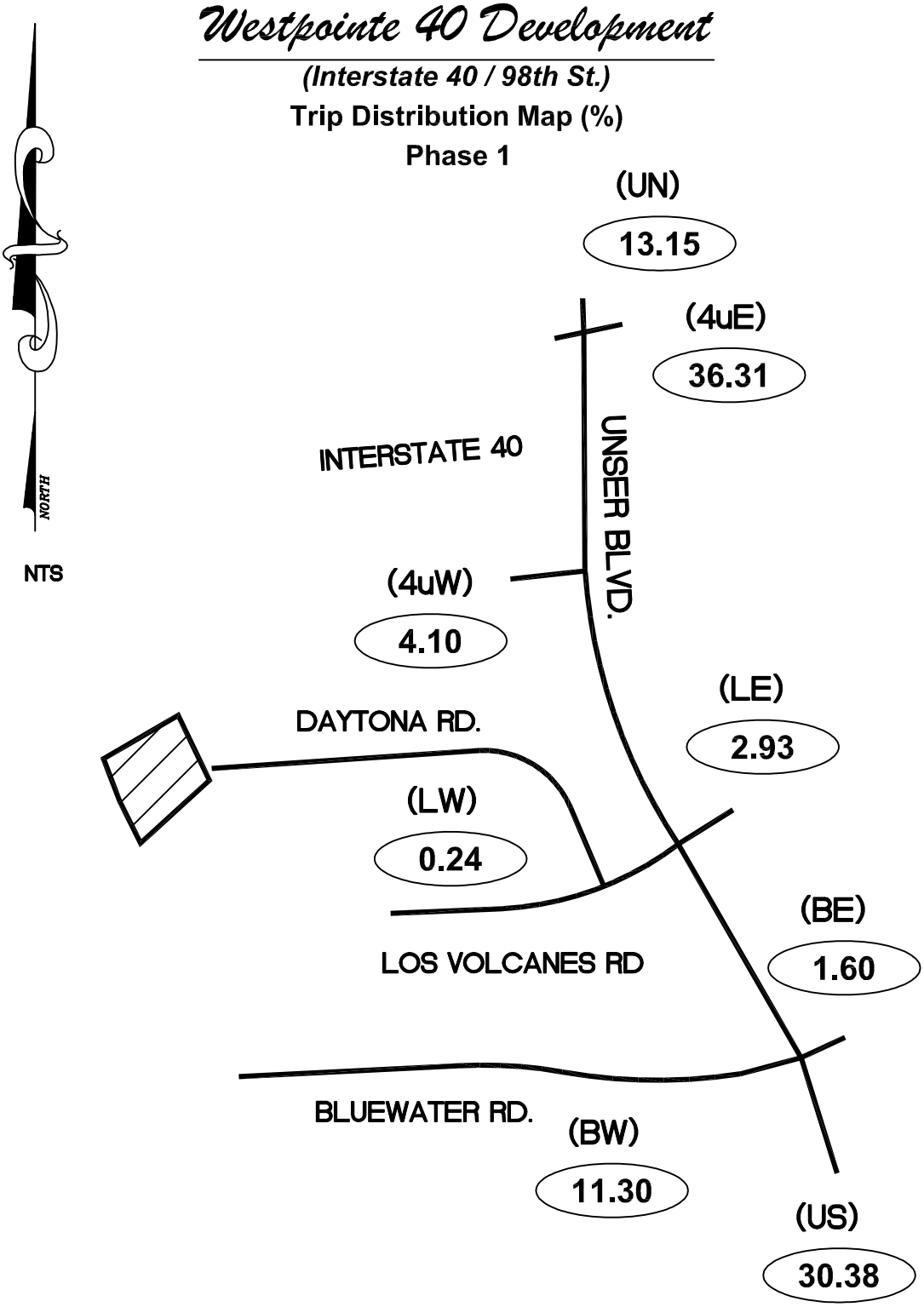
									(4nE) I-40 WB / 98th East			(4uW) I-40 EB / Unser West			(LW) Los Volcanes Rd. West		
Sub Area I.D.#	**% Sub Area in Study**	**2012 Employment**	**2040 Employment**	**Interpolated Employment for the Year**	Employment in Study	Dist. (Mi.)	**Employment / Distance**	**% Employment / Distance**	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	**2040**	**2025**													
1	100%	41,785	90,699	64,495	64,495	16.4	**3,933**	**2.58%**	25%	0.64%	983	0%	0.00%	0	0%	0.00%	0
2	100%	52,210	76,330	63,409	63,409	11.5	**5,514**	**3.62%**	25%	0.90%	1,378	0%	0.00%	0	0%	0.00%	0
3	100%	8,435	9,663	9,005	9,005	12.8	**704**	**0.46%**	50%	0.23%	352	0%	0.00%	0	0%	0.00%	0
4	100%	13,455	18,633	15,859	15,859	20.3	**781**	**0.51%**	50%	0.26%	391	0%	0.00%	0	0%	0.00%	0
5	100%	54,610	76,585	64,813	64,813	8.5	**7,625**	**5.00%**	25%	1.25%	1,906	0%	0.00%	0	0%	0.00%	0
6	100%	6,893	25,941	15,737	15,737	7.2	**2,186**	**1.43%**	0%	0.00%	0	25%	0.36%	546	0%	0.00%	0
7	100%	58,237	88,165	72,132	72,132	3.8	**18,982**	**12.45%**	20%	2.49%	3,796	0%	0.00%	0	0%	0.00%	0
8*	100%	31,958	37,515	34,538	34,538	1.8	**19,188**	**12.58%**	0%	0.00%	0	0%	0.00%	0	2%	0.24%	372
9	100%	2,204	3,708	2,902	2,902	13.5	**215**	**0.14%**	0%	0.00%	0	30%	0.04%	64	0%	0.00%	0
10	100%	61,778	81,503	70,936	70,936	2.9	**24,461**	**16.04%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	33,442	33,861	33,637	33,637	4.8	**7,008**	**4.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	16,148	18,410	17,198	17,198	8.8	**1,954**	**1.28%**	35%	0.45%	684	0%	0.00%	0	0%	0.00%	0
13	100%	9,753	15,594	12,465	12,465	10.4	**1,199**	**0.79%**	50%	0.39%	599	0%	0.00%	0	0%	0.00%	0
14	100%	98,446	115,425	106,329	106,329	12.3	**8,645**	**5.67%**	50%	2.83%	4,322	0%	0.00%	0	0%	0.00%	0
15	100%	24,994	28,460	26,603	26,603	5.5	**4,837**	**3.17%**	20%	0.63%	967	0%	0.00%	0	0%	0.00%	0
16	100%	110,074	134,252	121,300	121,300	12.1	**10,025**	**6.57%**	50%	3.29%	5,012	0%	0.00%	0	0%	0.00%	0
17	100%	21,562	42,074	31,085	31,085	4.9	**6,344**	**4.16%**	25%	1.04%	1,586	0%	0.00%	0	0%	0.00%	0
18	100%	44,105	63,905	53,298	53,298	7.5	**7,106**	**4.66%**	25%	1.17%	1,777	0%	0.00%	0	0%	0.00%	0
19	100%	65,521	85,453	74,775	74,775	10.9	**6,860**	**4.50%**	25%	1.12%	1,715	0%	0.00%	0	0%	0.00%	0
20	100%	9,623	22,190	15,458	15,458	6.3	**2,454**	**1.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	2	80,695	37,467	37,467	10.1	**3,710**	**2.43%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	3,562	3,697	3,625	3,625	13.8	**263**	**0.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	19,369	26,046	22,469	22,469	20.2	**1,112**	**0.73%**	50%	0.36%	556	0%	0.00%	0	0%	0.00%	0
24	100%	2,512	3,373	2,912	2,912	12.4	**235**	**0.15%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	913	1,207	1,050	1,050	14.7	**71**	**0.05%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	75,135	124,471	98,041	98,041	18.9	**5,187**	**3.40%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	19,816	24,526	22,003	22,003	26.1	**843**	**0.55%**	20%	0.11%	169	5%	0.03%	42	0%	0.00%	0
28	100%	16,269	22,258	19,050	19,050	31.2	**611**	**0.40%**	50%	0.20%	305	0%	0.00%	0	0%	0.00%	0
29	100%	10,268	17,661	13,700	13,700	31.6	**434**	**0.28%**	50%	0.14%	217	0%	0.00%	0	0%	0.00%	0
		913,079	1,372,300	1,126,289	1,126,289		**152,484**	**100.00%**		17.52%	**26,716**		0.43%	**653**		0.24%	**372**
											17.52%			0.43%			0.24%

Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Distribution Map (%)

Phase 1



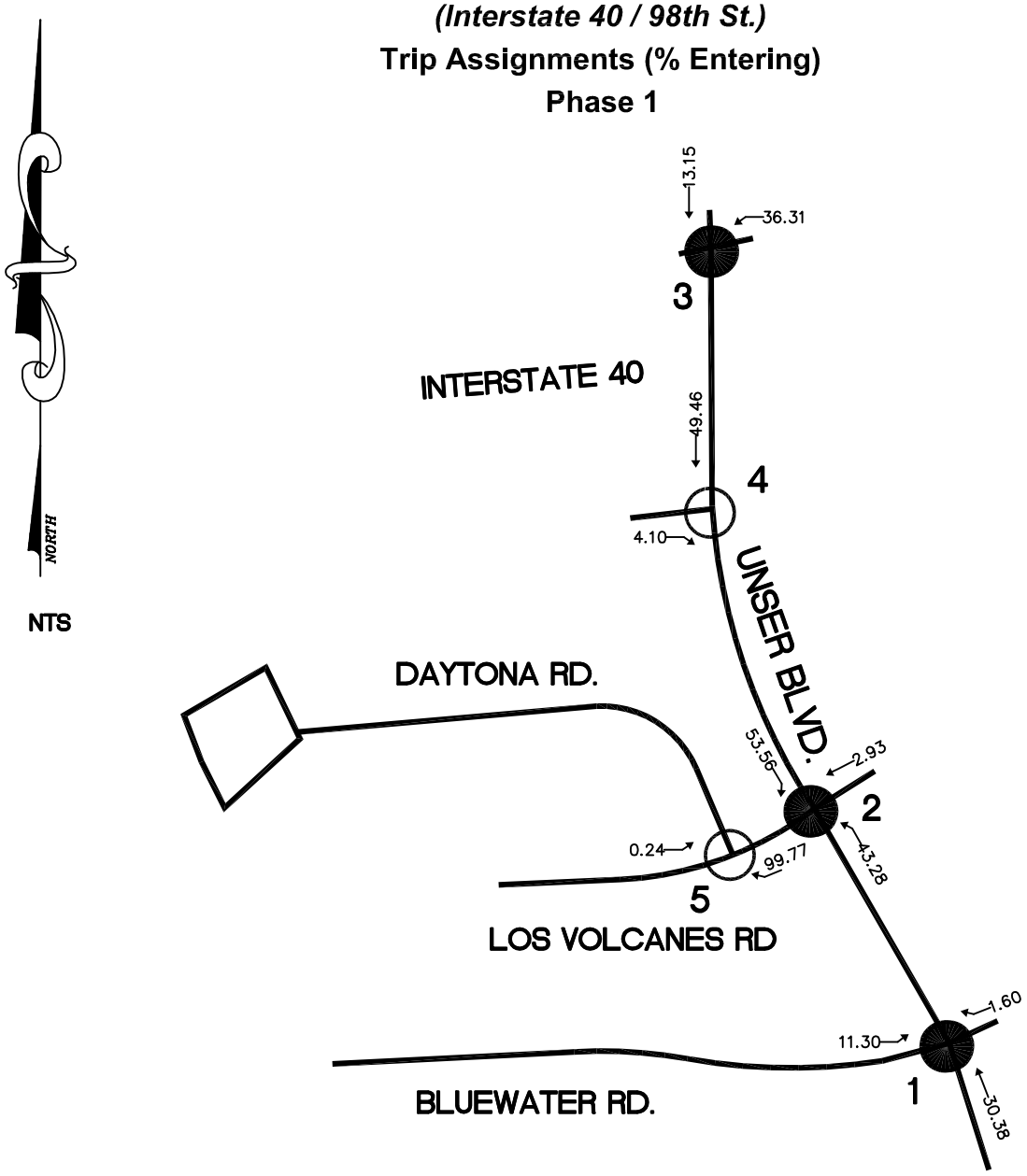
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering)

Phase 1



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

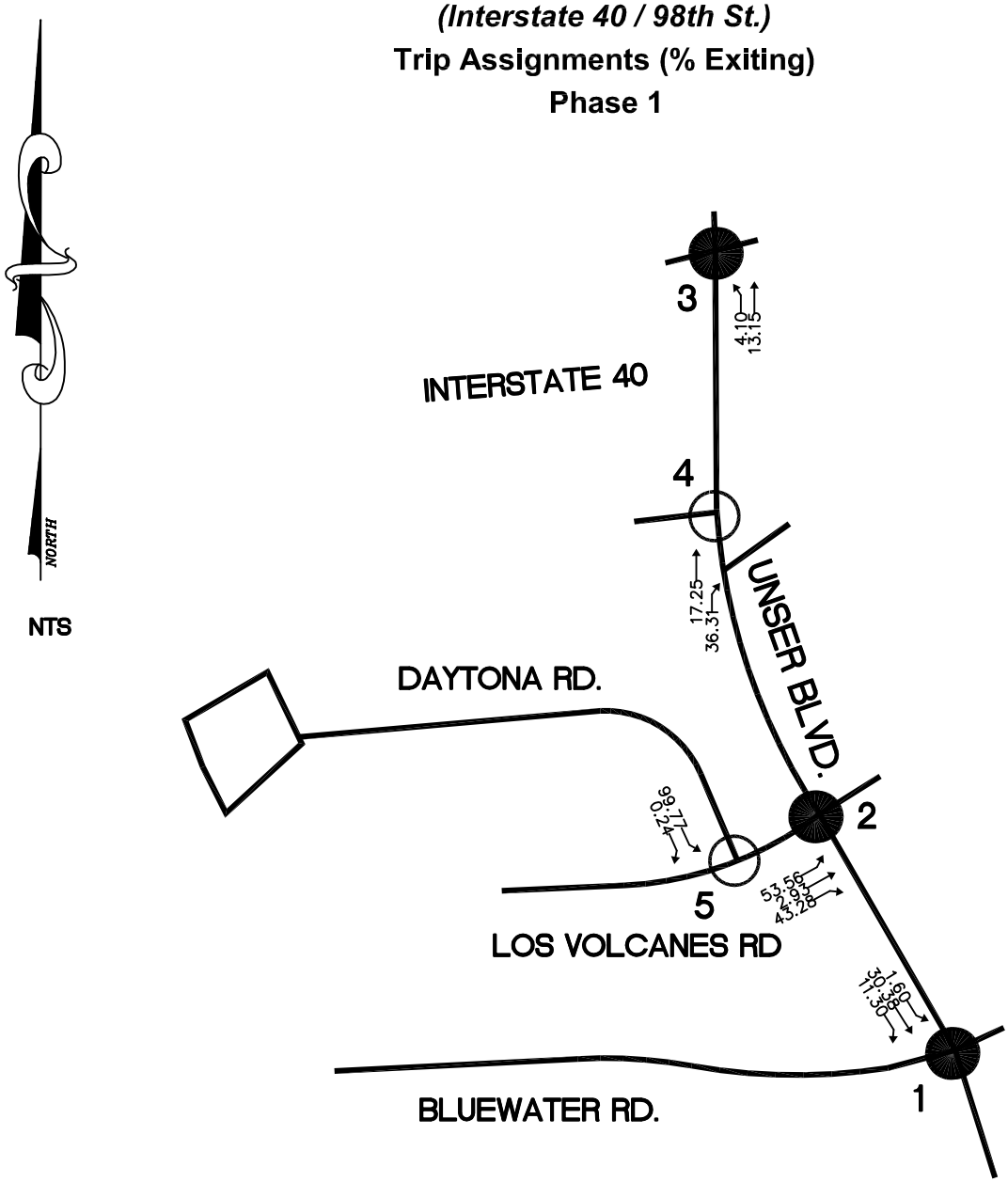
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 1



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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Distribution Map (%)

Phases 2 & 3



NTS

(UN) 7.39

(4uE) 18.79

INTERSTATE 40

UNSER BLVD.

(4uW) 0.43

(9N) 5.76

(4nE) 17.52

DAYTONA RD.

(LE) 2.93

(LW) 0.24

INTERSTATE 40

LOS VOLCANES RD

(BE) 1.60

(4nW) 3.67

BLUEWATER RD.

98th ST.

ADONAI RD.

(AS) 0.42

(US) 15.73

(BW) 0.04

CENTRAL AVE.

(CE) 14.65

(CW) 3.30

(9S) 7.54

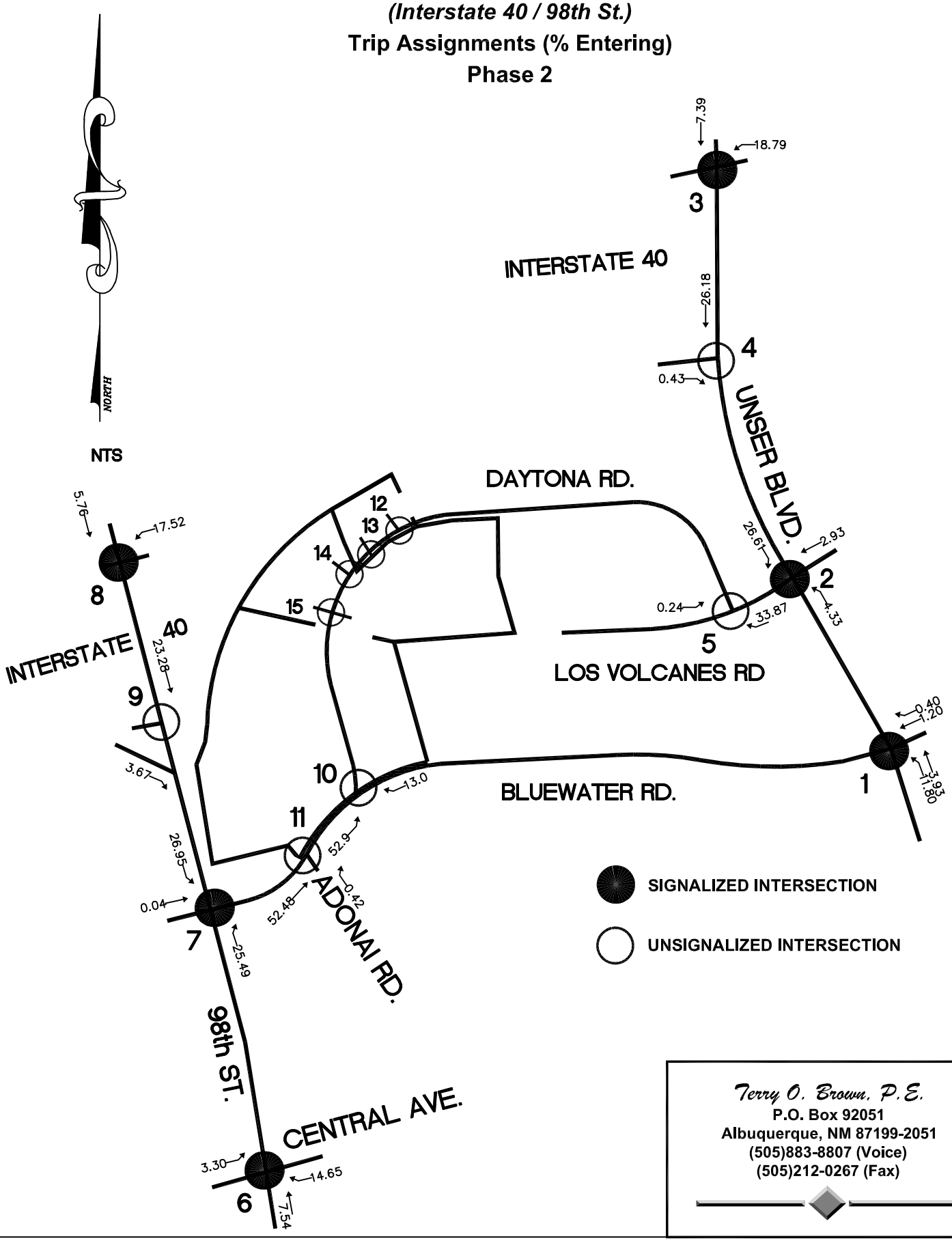
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering)

Phase 2



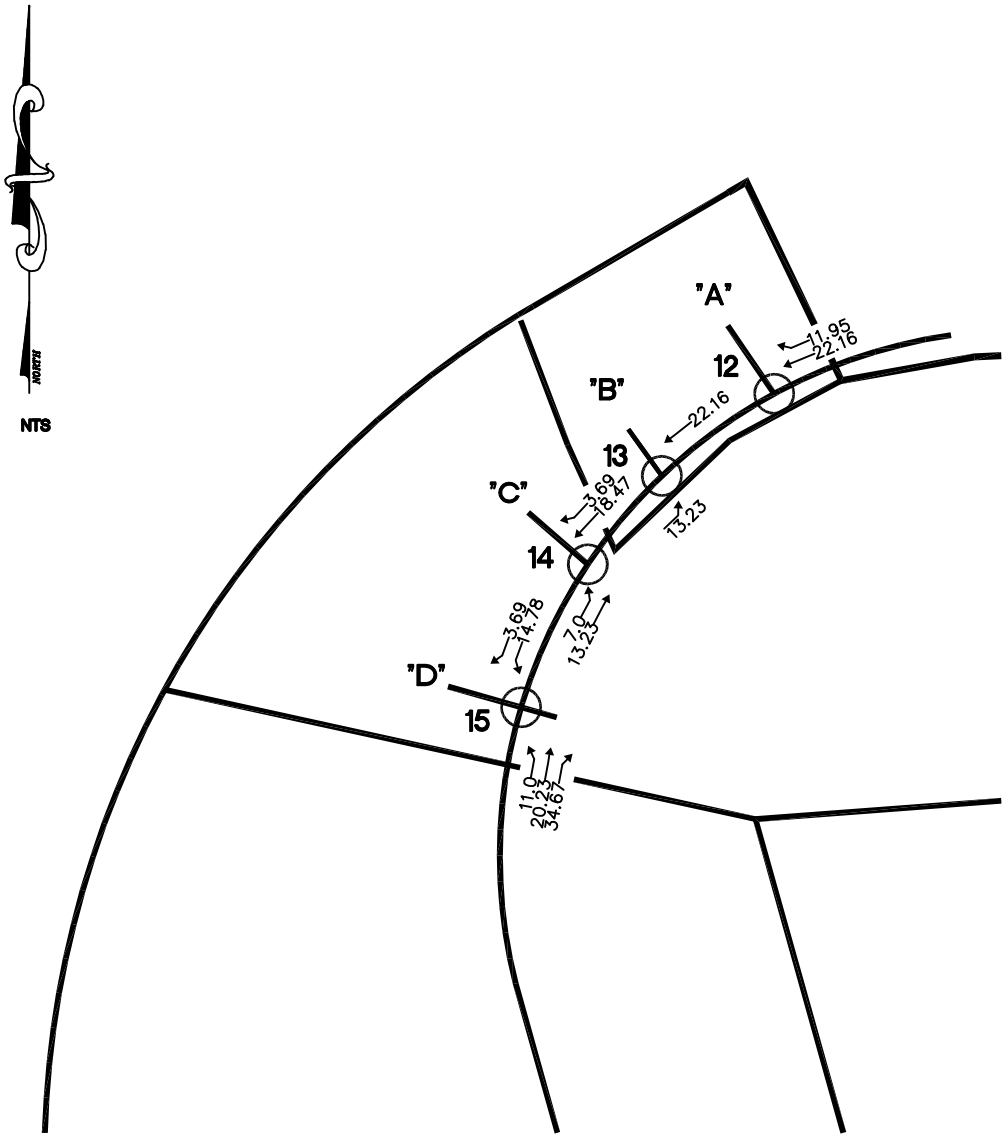
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering)

Phase 2 - Driveways



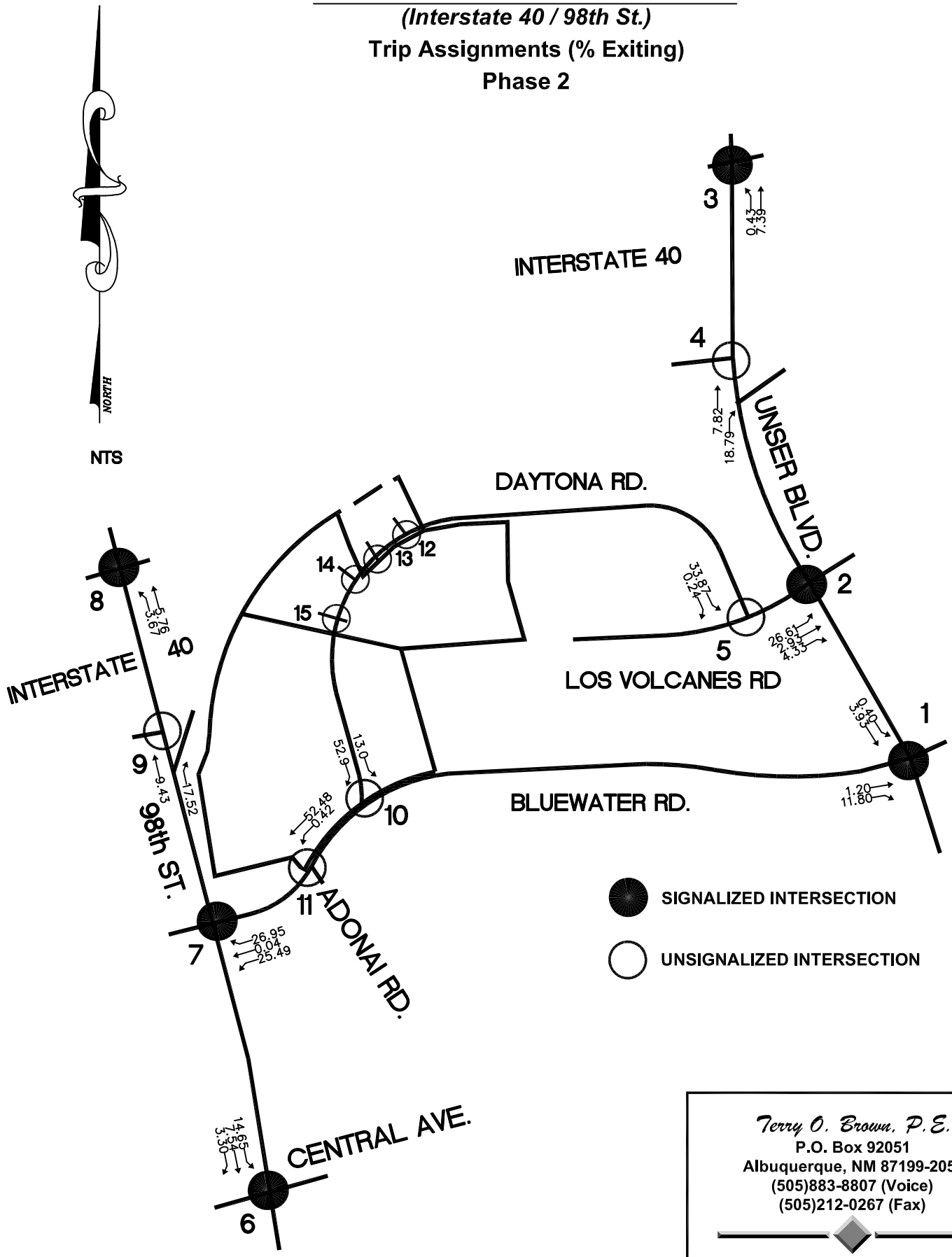
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 2



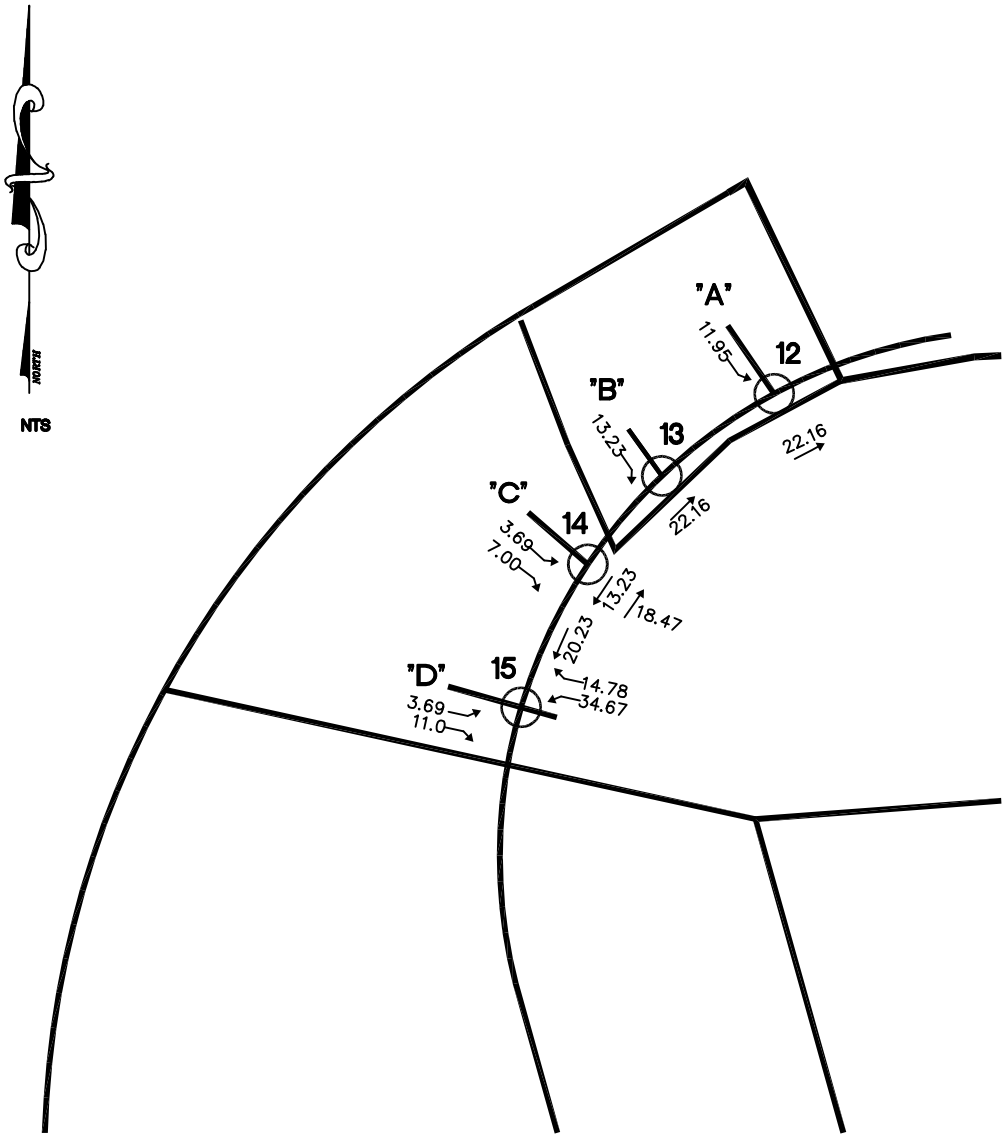
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 2 - Driveways



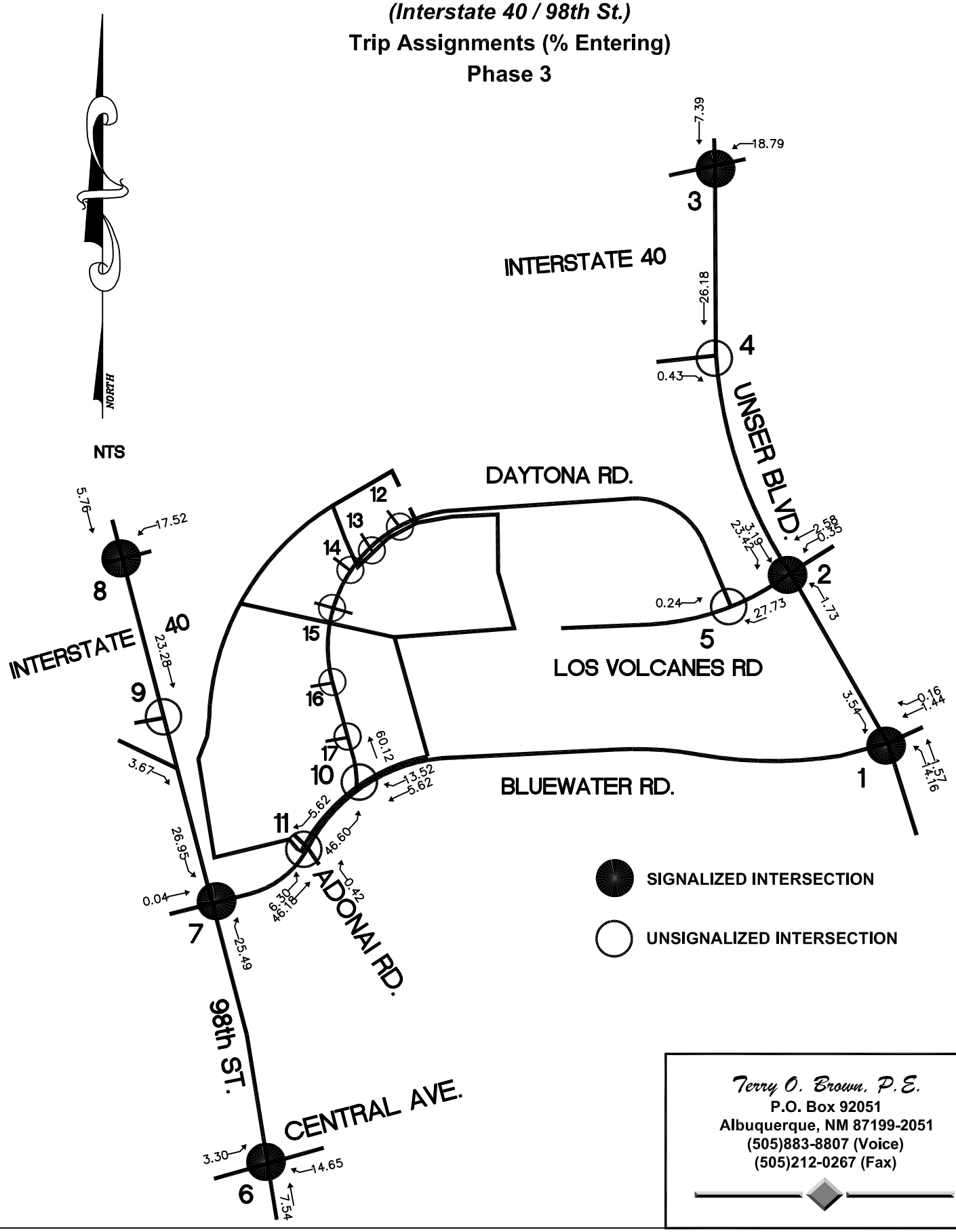
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering)

Phase 3



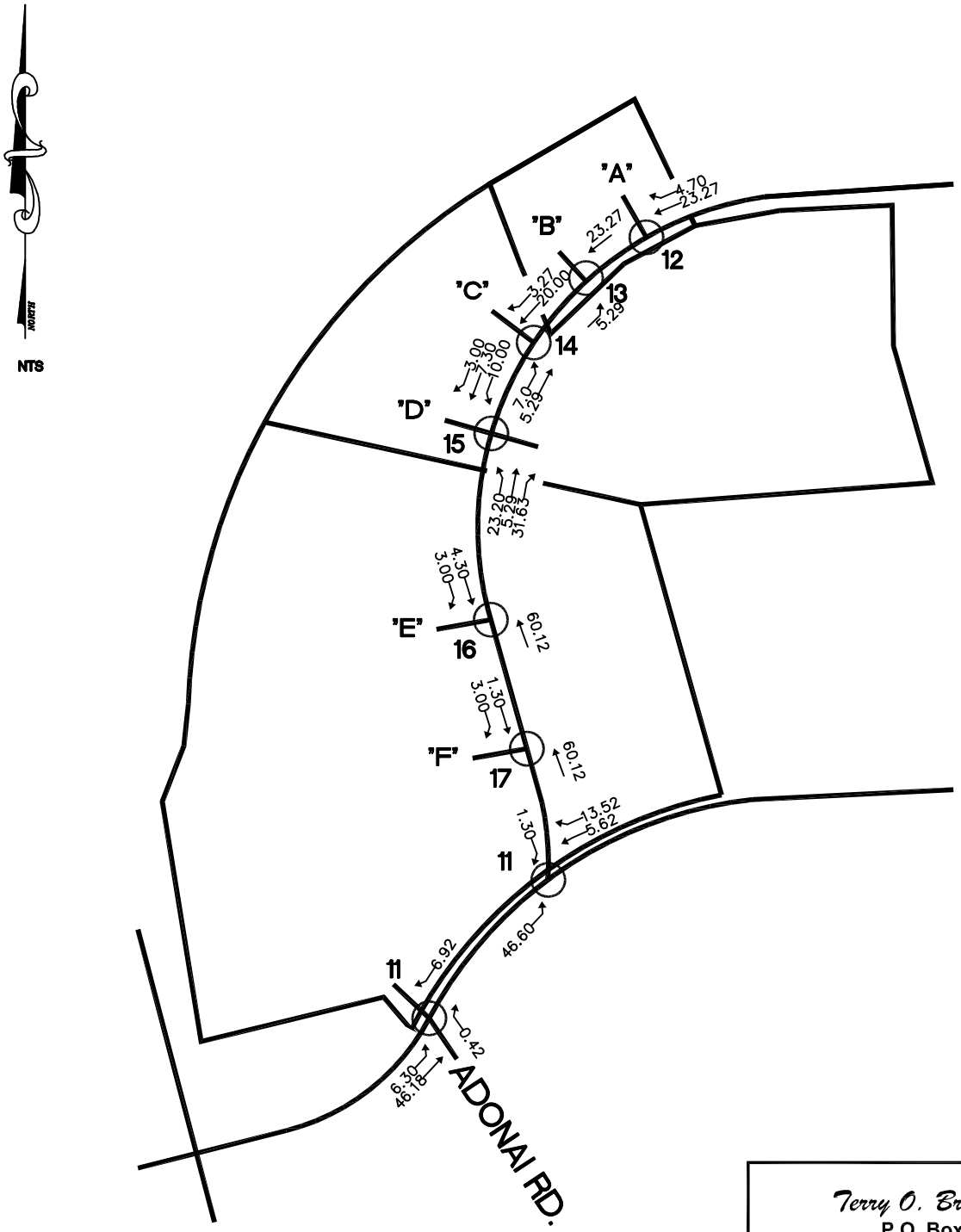
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering)

Phase 3 - Driveways



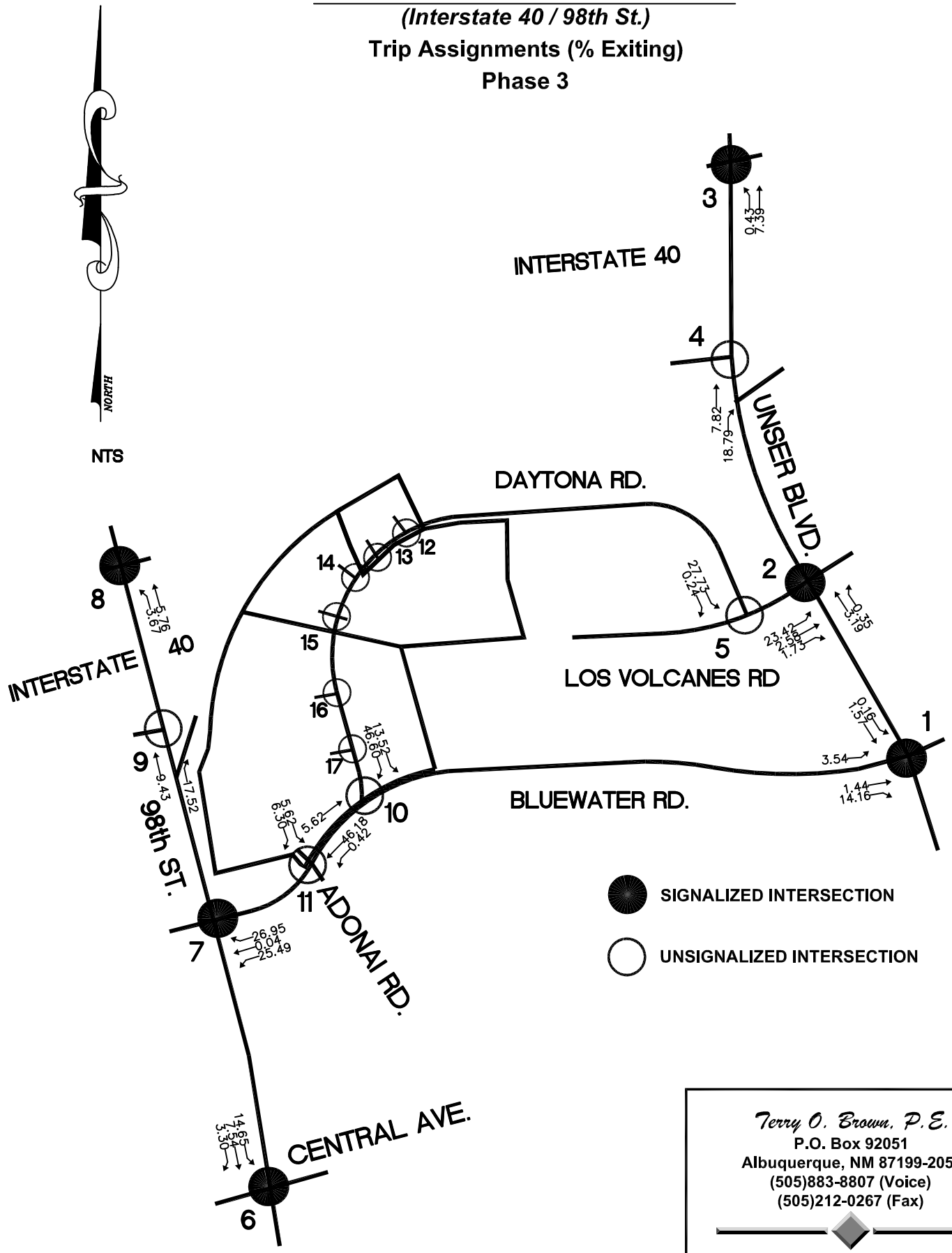
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 3



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Westpointe 40 Development

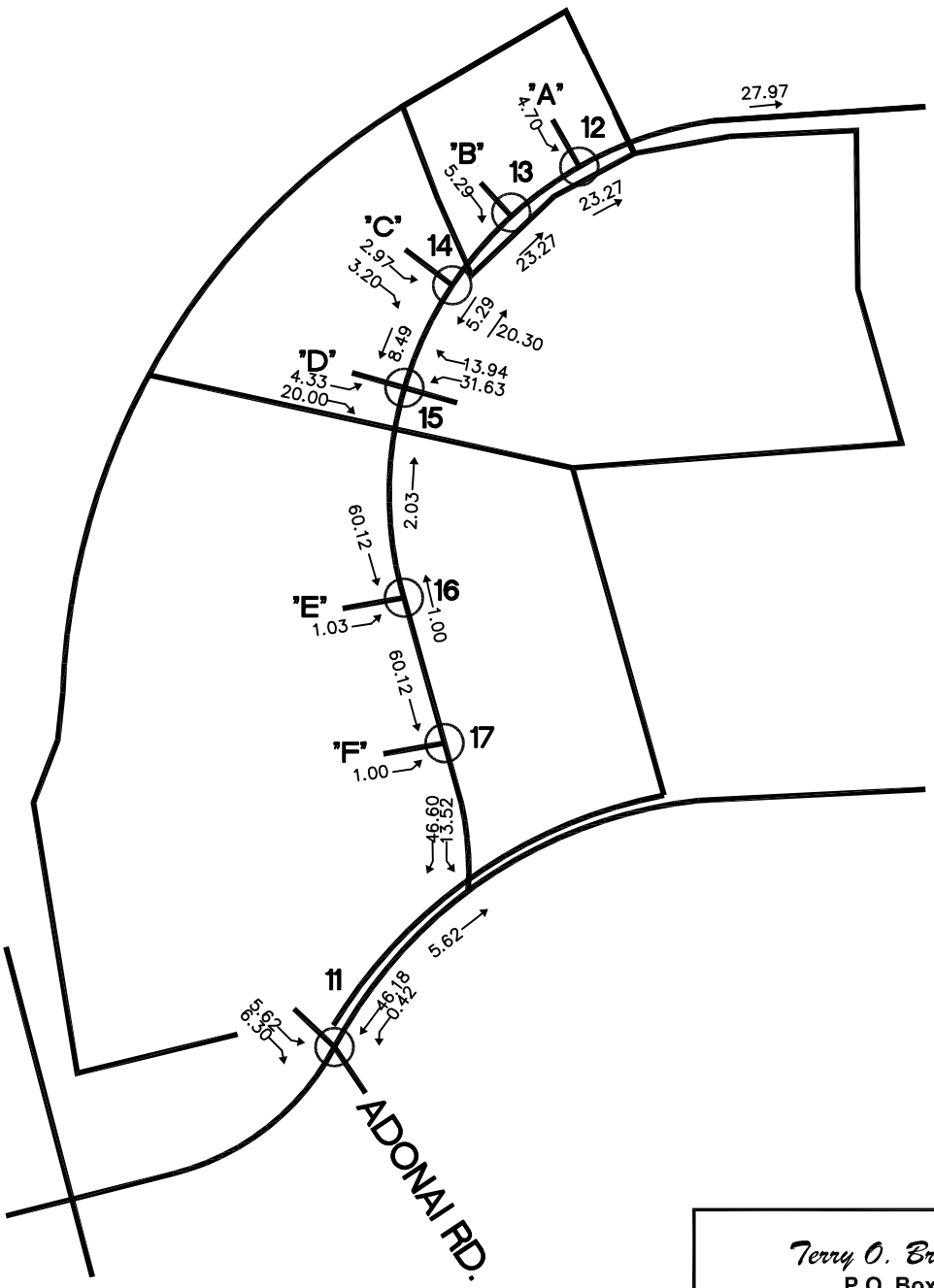
(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 3 - Driveways

NORTH

NTS



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Phase 1 Analysis

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (1)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2022** **(Phase 1)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	17	**9**	A.M. 100% IP Development
	20	**22**	P.M.

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	15	7	6	4	2	7	10	291	27	19	87	19
Existing Volumes (Demand) - Period 2- 7:15 AM	18	10	12	3	0	12	7	388	18	31	135	12
Existing Volumes (Demand) - Period 3- 7:30 AM	28	13	10	6	6	7	3	381	32	25	174	13
Existing Volumes (Demand) - Period 4- 7:45 AM	26	10	7	13	5	18	6	320	23	29	173	8
Existing Volumes (Demand) - Period 5- 8:00 AM	18	7	8	7	8	11	5	286	6	20	140	19
Existing Volumes (Demand) - Period 6- 8:15 AM	14	4	2	6	5	13	4	275	8	24	156	10
Existing Volumes (Demand) - Period 7- 8:30 AM	16	6	9	3	7	4	5	257	10	23	135	6
Existing Volumes (Demand) - Period 8- 8:45 AM	23	12	5	6	3	9	2	236	14	22	138	11
Maximum Existing AM Volumes	**28**	**13**	**10**	**6**	**6**	**7**	**3**	**381**	**32**	**25**	**174**	**13**
Background Traffic Growth	2	1	1	0	0	1	0	30	3	2	14	1
BEK	0	0	0	0	0	0	0	6	0	0	1	0
Maverik C-Store	5	0	0	0	0	2	0	13	0	2	12	4
AM Pk Hr. NO BUILD Volumes - Preiod 1	**22**	**8**	**7**	**4**	**2**	**10**	**10**	**340**	**30**	**23**	**114**	**24**
AM Pk Hr. NO BUILD Volumes - Period 2	**25**	**11**	**13**	**3**	**0**	**15**	**7**	**437**	**21**	**35**	**162**	**17**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**35**	**14**	**11**	**6**	**6**	**10**	**3**	**430**	**35**	**29**	**201**	**18**
AM Pk Hr. NO BUILD Volumes - Period 4	**33**	**11**	**8**	**13**	**5**	**21**	**6**	**369**	**26**	**33**	**200**	**13**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**25**	**8**	**9**	**7**	**8**	**14**	**5**	**335**	**9**	**24**	**167**	**24**
AM Pk Hr. NO BUILD Volumes - Period 6	**21**	**5**	**3**	**6**	**5**	**16**	**4**	**324**	**11**	**28**	**183**	**15**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**23**	**7**	**10**	**3**	**7**	**7**	**5**	**306**	**13**	**27**	**162**	**11**
AM Pk Hr. NO BUILD Volumes - Period 8	**30**	**13**	**6**	**6**	**3**	**12**	**2**	**285**	**17**	**26**	**165**	**16**
Maximum AM NO BUILD Volumes	**35**	**14**	**11**	**6**	**6**	**10**	**3**	**430**	**35**	**29**	**201**	**18**
Percent IP Trips Generated(Entering)	***11.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.60%***	*0.00%*	***30.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.60%***	***30.38%***	***11.30%***
Total Primary Trips Generated	1	0	0	0	0	1	0	2	0	1	1	1
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**23**	**8**	**7**	**4**	**2**	**11**	**10**	**342**	**30**	**24**	**115**	**25**
AM Pk Hr. BUILD Volumes - Period 2	**26**	**11**	**13**	**3**	**0**	**16**	**7**	**439**	**21**	**36**	**163**	**18**
AM Pk Hr. BUILD Volumes - Preiod 3	**36**	**14**	**11**	**6**	**6**	**11**	**3**	**432**	**35**	**30**	**202**	**19**
AM Pk Hr. BUILD Volumes - Preiod 4	**34**	**11**	**8**	**13**	**5**	**22**	**6**	**371**	**26**	**34**	**201**	**14**
AM Pk Hr. BUILD Volumes - Preiod 5	**26**	**8**	**9**	**7**	**8**	**15**	**5**	**337**	**9**	**25**	**168**	**25**
AM Pk Hr. BUILD Volumes - Preiod 6	**22**	**5**	**3**	**6**	**5**	**17**	**4**	**326**	**11**	**29**	**184**	**16**
AM Pk Hr. BUILD Volumes - Preiod 7	**24**	**7**	**10**	**3**	**7**	**8**	**5**	**308**	**13**	**28**	**163**	**12**
AM Pk Hr. BUILD Volumes - Period 8	**31**	**13**	**6**	**6**	**3**	**13**	**2**	**287**	**17**	**27**	**166**	**17**
Maximum AM BUILD Volumes (Demand)	**36**	**14**	**11**	**6**	**6**	**11**	**3**	**432**	**35**	**30**	**202**	**19**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	9	8	25	26	40	7	180	10	19	318	14
Existing Volumes (Demand) - Period 2- 4:15 PM	15	6	8	15	16	39	10	191	13	12	331	34
Existing Volumes (Demand) - Period 3- 4:30 PM	14	4	9	12	27	46	7	215	15	23	288	32
Existing Volumes (Demand) - Period 4- 4:45 PM	26	9	16	22	15	36	7	211	55	12	303	27
Existing Volumes (Demand) - Period 5- 5:00 PM	26	19	8	22	31	52	12	238	8	11	349	23
Existing Volumes (Demand) - Period 6- 5:15 PM	16	11	8	23	24	35	7	224	13	16	301	38
Existing Volumes (Demand) - Period 7- 5:30 PM	24	11	7	20	22	33	9	245	13	22	318	16
Existing Volumes (Demand) - Period 8- 5:45 PM	16	6	9	25	26	43	5	208	10	23	335	28
Maximum Existing PM Volumes	**26**	**19**	**8**	**22**	**31**	**52**	**12**	**238**	**8**	**11**	**349**	**23**
Background Traffic Growth	2	2	1	2	2	4	1	19	1	1	28	2
BEK	0	0	0	0	0	0	0	2	0	1	5	0
Maverik C-Store	4	0	0	0	0	2	0	13	0	2	12	4
PM Pk Hr. NO BUILD Volumes - Preiod 1	**29**	**11**	**9**	**27**	**28**	**46**	**8**	**214**	**11**	**23**	**363**	**20**
PM Pk Hr. NO BUILD Volumes - Period 2	**21**	**8**	**9**	**17**	**18**	**45**	**11**	**225**	**14**	**16**	**376**	**40**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**20**	**6**	**10**	**14**	**29**	**52**	**8**	**249**	**16**	**27**	**333**	**38**
PM Pk Hr. NO BUILD Volumes - Period 4	**32**	**11**	**17**	**24**	**17**	**42**	**8**	**245**	**56**	**16**	**348**	**33**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**32**	**21**	**9**	**24**	**33**	**58**	**13**	**272**	**9**	**15**	**394**	**29**
PM Pk Hr. NO BUILD Volumes - Period 6	**22**	**13**	**9**	**25**	**26**	**41**	**8**	**258**	**14**	**20**	**346**	**44**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**30**	**13**	**8**	**22**	**24**	**39**	**10**	**279**	**14**	**26**	**363**	**22**
PM Pk Hr. NO BUILD Volumes - Period 8	**22**	**8**	**10**	**27**	**28**	**49**	**6**	**242**	**11**	**27**	**380**	**34**
Maximum PM NO BUILD Volumes	**32**	**21**	**9**	**24**	**33**	**58**	**13**	**272**	**9**	**15**	**394**	**29**
Percent IP Trips Generated(Entering)	***11.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.60%***	*0.00%*	***30.38%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.60%***	***30.38%***	***11.30%***
Total Primary Trips Generated	1	0	0	0	0	1	0	2	0	1	2	1
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**30**	**11**	**9**	**27**	**28**	**47**	**8**	**216**	**11**	**24**	**365**	**21**
PM Pk Hr. BUILD Volumes - Period 2	**22**	**8**	**9**	**17**	**18**	**46**	**11**	**227**	**14**	**17**	**378**	**41**
PM Pk Hr. BUILD Volumes - Preiod 3	**21**	**6**	**10**	**14**	**29**	**53**	**8**	**251**	**16**	**28**	**335**	**39**
PM Pk Hr. BUILD Volumes - Preiod 4	**33**	**11**	**17**	**24**	**17**	**43**	**8**	**247**	**56**	**17**	**350**	**34**
PM Pk Hr. BUILD Volumes - Period 5	**33**	**21**	**9**	**24**	**33**	**59**	**13**	**274**	**9**	**16**	**396**	**30**
PM Pk Hr. BUILD Volumes - Preiod 6	**23**	**13**	**9**	**25**	**26**	**42**	**8**	**260**	**14**	**21**	**348**	**45**
PM Pk Hr. BUILD Volumes - Preiod 7	**31**	**13**	**8**	**22**	**24**	**40**	**10**	**281**	**14**	**27**	**365**	**23**
PM Pk Hr. BUILD Volumes - Period 8	**23**	**8**	**10**	**27**	**28**	**50**	**6**	**244**	**11**	**28**	**382**	**35**
Maximum PM BUILD Volumes	**33**	**21**	**9**	**24**	**33**	**59**	**13**	**274**	**9**	**16**	**396**	**30**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Los Volcanes Rd.** (2)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2022**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	17	**9**	A.M. 100% IP Development
	20	**22**	P.M.

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	111	27	3	15	47	61	19	459	52	103	275	45
Existing Volumes (Demand) - Period 2- 7:15 AM	74	32	3	28	14	48	4	324	90	72	169	18
Existing Volumes (Demand) - Period 3- 7:30 AM	42	11	1	32	9	40	5	334	40	65	173	24
Existing Volumes (Demand) - Period 4- 7:45 AM	56	11	6	13	6	44	1	289	27	45	159	22
Existing Volumes (Demand) - Period 5- 8:00 AM	78	12	10	10	2	30	6	267	21	44	164	28
Existing Volumes (Demand) - Period 6- 8:15 AM	63	13	10	8	2	35	4	258	23	32	143	18
Existing Volumes (Demand) - Period 7- 8:30 AM	39	8	8	5	7	25	7	237	23	43	160	14
Existing Volumes (Demand) - Period 8- 8:45 AM	17	3	2	8	6	18	7	93	13	26	66	6
Maximum Existing AM Volumes	**111**	**27**	**3**	**15**	**47**	**61**	**19**	**459**	**52**	**103**	**275**	**45**
Background Traffic Growth	9	2	0	1	4	5	2	37	4	8	22	4
BEK	0	0	0	1	0	2	0	0	6	13	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**120**	**30**	**3**	**35**	**52**	**78**	**21**	**496**	**81**	**135**	**297**	**49**
AM Pk Hr. NO BUILD Volumes - Period 2	**83**	**35**	**3**	**48**	**19**	**65**	**6**	**361**	**119**	**104**	**191**	**22**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**51**	**14**	**1**	**52**	**14**	**57**	**7**	**371**	**69**	**97**	**195**	**28**
AM Pk Hr. NO BUILD Volumes - Period 4	**65**	**14**	**6**	**33**	**11**	**61**	**3**	**326**	**56**	**77**	**181**	**26**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**87**	**15**	**10**	**30**	**7**	**47**	**8**	**304**	**50**	**76**	**186**	**32**
AM Pk Hr. NO BUILD Volumes - Period 6	**72**	**16**	**10**	**28**	**7**	**52**	**6**	**295**	**52**	**64**	**165**	**22**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**48**	**11**	**8**	**25**	**12**	**42**	**9**	**274**	**52**	**75**	**182**	**18**
AM Pk Hr. NO BUILD Volumes - Period 8	**26**	**6**	**2**	**28**	**11**	**35**	**9**	**130**	**42**	**58**	**88**	**10**
Maximum AM NO BUILD Volumes	**120**	**30**	**3**	**35**	**52**	**78**	**21**	**496**	**81**	**135**	**297**	**49**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.93%***	*0.00%*	***43.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***53.56%***
Percent IP Trips Generated(Exiting)	***53.56%***	***2.93%***	***43.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	2	1	1	0	1	0	2	0	0	0	0	3
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**122**	**31**	**4**	**35**	**53**	**78**	**23**	**496**	**81**	**135**	**297**	**52**
AM Pk Hr. BUILD Volumes - Period 2	**85**	**36**	**4**	**48**	**20**	**65**	**8**	**361**	**119**	**104**	**191**	**25**
AM Pk Hr. BUILD Volumes - Preiod 3	**53**	**15**	**2**	**52**	**15**	**57**	**9**	**371**	**69**	**97**	**195**	**31**
AM Pk Hr. BUILD Volumes - Preiod 4	**67**	**15**	**7**	**33**	**12**	**61**	**5**	**326**	**56**	**77**	**181**	**29**
AM Pk Hr. BUILD Volumes - Period 5	**89**	**16**	**11**	**30**	**8**	**47**	**10**	**304**	**50**	**76**	**186**	**35**
AM Pk Hr. BUILD Volumes - Preiod 6	**74**	**17**	**11**	**28**	**8**	**52**	**8**	**295**	**52**	**64**	**165**	**25**
AM Pk Hr. BUILD Volumes - Preiod 7	**50**	**12**	**9**	**25**	**13**	**42**	**11**	**274**	**52**	**75**	**182**	**21**
AM Pk Hr. BUILD Volumes - Period 8	**28**	**7**	**3**	**28**	**12**	**35**	**11**	**130**	**42**	**58**	**88**	**13**
Maximum AM BUILD Volumes (Demand)	**122**	**31**	**4**	**35**	**53**	**78**	**23**	**496**	**81**	**135**	**297**	**52**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	10	7	30	11	53	3	221	21	33	305	27
Existing Volumes (Demand) - Period 2- 4:15 PM	19	6	6	21	10	44	4	218	17	47	349	22
Existing Volumes (Demand) - Period 3- 4:30 PM	48	5	7	34	10	64	5	234	31	43	286	20
Existing Volumes (Demand) - Period 4- 4:45 PM	40	14	4	23	6	45	4	275	25	61	313	24
Existing Volumes (Demand) - Period 5- 5:00 PM	48	14	16	59	33	74	7	277	44	55	288	22
Existing Volumes (Demand) - Period 6- 5:15 PM	39	12	6	26	14	55	5	256	16	40	321	36
Existing Volumes (Demand) - Period 7- 5:30 PM	32	11	4	24	18	47	5	264	29	36	309	26
Existing Volumes (Demand) - Period 8- 5:45 PM	28	10	4	20	6	36	4	234	25	43	368	39
Maximum Existing PM Volumes	**48**	**14**	**16**	**59**	**33**	**74**	**7**	**277**	**44**	**55**	**288**	**22**
Background Traffic Growth	4	1	1	5	3	6	1	22	4	4	23	2
BEK	0	0	0	7	0	15	0	0	3	6	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**27**	**12**	**8**	**60**	**15**	**84**	**4**	**243**	**47**	**54**	**328**	**29**
PM Pk Hr. NO BUILD Volumes - Period 2	**23**	**8**	**7**	**51**	**14**	**75**	**5**	**240**	**43**	**68**	**372**	**24**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**52**	**7**	**8**	**64**	**14**	**95**	**6**	**256**	**57**	**64**	**309**	**22**
PM Pk Hr. NO BUILD Volumes - Period 4	**44**	**16**	**5**	**53**	**10**	**76**	**5**	**297**	**51**	**82**	**336**	**26**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**52**	**16**	**17**	**89**	**37**	**105**	**8**	**299**	**70**	**76**	**311**	**24**
PM Pk Hr. NO BUILD Volumes - Period 6	**43**	**14**	**7**	**56**	**18**	**86**	**6**	**278**	**42**	**61**	**344**	**38**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**36**	**13**	**5**	**54**	**22**	**78**	**6**	**286**	**55**	**57**	**332**	**28**
PM Pk Hr. NO BUILD Volumes - Period 8	**32**	**12**	**5**	**50**	**10**	**67**	**5**	**256**	**51**	**64**	**391**	**41**
Maximum PM NO BUILD Volumes	**52**	**16**	**17**	**89**	**37**	**105**	**8**	**299**	**70**	**76**	**311**	**24**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.93%***	*0.00%*	***43.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***53.56%***
Percent IP Trips Generated(Exiting)	***53.56%***	***2.93%***	***43.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	3	1	3	0	1	0	3	0	0	0	0	3
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**30**	**13**	**11**	**60**	**16**	**84**	**7**	**243**	**47**	**54**	**328**	**32**
PM Pk Hr. BUILD Volumes - Period 2	**26**	**9**	**10**	**51**	**15**	**75**	**8**	**240**	**43**	**68**	**372**	**27**
PM Pk Hr. BUILD Volumes - Preiod 3	**55**	**8**	**11**	**64**	**15**	**95**	**9**	**256**	**57**	**64**	**309**	**25**
PM Pk Hr. BUILD Volumes - Preiod 4	**47**	**17**	**8**	**53**	**11**	**76**	**8**	**297**	**51**	**82**	**336**	**29**
PM Pk Hr. BUILD Volumes - Period 5	**55**	**17**	**20**	**89**	**38**	**105**	**11**	**299**	**70**	**76**	**311**	**27**
PM Pk Hr. BUILD Volumes - Preiod 6	**46**	**15**	**10**	**56**	**19**	**86**	**9**	**278**	**42**	**61**	**344**	**41**
PM Pk Hr. BUILD Volumes - Preiod 7	**39**	**14**	**8**	**54**	**23**	**78**	**9**	**286**	**55**	**57**	**332**	**31**
PM Pk Hr. BUILD Volumes - Period 8	**35**	**13**	**8**	**50**	**11**	**67**	**8**	**256**	**51**	**64**	**391**	**44**
Maximum PM BUILD Volumes	**55**	**17**	**20**	**89**	**38**	**105**	**11**	**299**	**70**	**76**	**311**	**27**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (3)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2022**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	17	**9**	A.M. 100% IP Development
	20	**22**	P.M.

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	0	0	0	70	0	35	7	166	0	0	559	37
Existing Volumes (Demand) - Period 2- 7:15 AM	0	0	0	79	0	39	7	195	0	0	553	44
Existing Volumes (Demand) - Period 3- 7:30 AM	0	0	0	80	0	33	6	242	0	0	518	38
Existing Volumes (Demand) - Period 4- 7:45 AM	0	0	0	93	1	45	5	222	0	0	510	42
Existing Volumes (Demand) - Period 5- 8:00 AM	0	0	0	81	1	38	13	229	0	0	358	37
Existing Volumes (Demand) - Period 6- 8:15 AM	0	0	0	84	0	73	16	157	0	0	335	35
Existing Volumes (Demand) - Period 7- 8:30 AM	0	0	0	86	0	50	5	158	0	0	330	25
Existing Volumes (Demand) - Period 8- 8:45 AM	0	0	0	85	0	60	11	138	0	0	351	25
Maximum Existing AM Volumes	**0**	**0**	**0**	**93**	**1**	**45**	**5**	**222**	**0**	**0**	**510**	**42**
Background Traffic Growth	0	0	0	7	0	4	0	18	0	0	41	3
BEK	0	0	0	9	0	0	1	1	0	0	3	0
Maverik C-Store	0	0	0	2	0	0	3	7	0	0	7	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**88**	**0**	**39**	**11**	**192**	**0**	**0**	**610**	**40**
AM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**97**	**0**	**43**	**11**	**221**	**0**	**0**	**604**	**47**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**98**	**0**	**37**	**10**	**268**	**0**	**0**	**569**	**41**
AM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**111**	**1**	**49**	**9**	**248**	**0**	**0**	**561**	**45**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**99**	**1**	**42**	**17**	**255**	**0**	**0**	**409**	**40**
AM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**102**	**0**	**77**	**20**	**183**	**0**	**0**	**386**	**38**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**104**	**0**	**54**	**9**	**184**	**0**	**0**	**381**	**28**
AM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**103**	**0**	**64**	**15**	**164**	**0**	**0**	**402**	**28**
Maximum AM NO BUILD Volumes	**0**	**0**	**0**	**111**	**1**	**49**	**9**	**248**	**0**	**0**	**561**	**45**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***36.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.15%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.10%***	***13.15%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	2	0	0	1	1	0	0	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**90**	**0**	**39**	**12**	**193**	**0**	**0**	**611**	**40**
AM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**99**	**0**	**43**	**12**	**222**	**0**	**0**	**605**	**47**
AM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**100**	**0**	**37**	**11**	**269**	**0**	**0**	**570**	**41**
AM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**113**	**1**	**49**	**10**	**249**	**0**	**0**	**562**	**45**
AM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**101**	**1**	**42**	**18**	**256**	**0**	**0**	**410**	**40**
AM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**104**	**0**	**77**	**21**	**184**	**0**	**0**	**387**	**38**
AM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**106**	**0**	**54**	**10**	**185**	**0**	**0**	**382**	**28**
AM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**105**	**0**	**64**	**16**	**165**	**0**	**0**	**403**	**28**
Maximum AM BUILD Volumes (Demand)	**0**	**0**	**0**	**113**	**1**	**49**	**10**	**249**	**0**	**0**	**562**	**45**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	0	0	0	164	0	272	8	250	0	0	264	41
Existing Volumes (Demand) - Period 2- 4:15 PM	0	0	0	198	2	303	9	246	0	0	288	59
Existing Volumes (Demand) - Period 3- 4:30 PM	0	0	0	166	1	321	17	219	0	0	261	47
Existing Volumes (Demand) - Period 4- 4:45 PM	0	0	0	172	1	357	10	192	0	0	274	52
Existing Volumes (Demand) - Period 5- 5:00 PM	0	0	0	144	3	359	8	204	0	0	274	48
Existing Volumes (Demand) - Period 6- 5:15 PM	0	0	0	204	0	355	11	148	0	0	250	52
Existing Volumes (Demand) - Period 7- 5:30 PM	0	0	0	156	1	330	9	154	0	0	273	41
Existing Volumes (Demand) - Period 8- 5:45 PM	0	0	0	168	2	1	16	103	0	0	278	55
Maximum Existing PM Volumes	**0**	**0**	**0**	**198**	**2**	**303**	**9**	**246**	**0**	**0**	**288**	**59**
Background Traffic Growth	0	0	0	16	0	24	1	20	0	0	23	5
BEK	0	0	0	5	0	0	1	4	0	0	2	0
Maverik C-Store	0	0	0	2	0	0	2	7	0	0	7	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**187**	**0**	**296**	**12**	**281**	**0**	**0**	**296**	**46**
PM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**221**	**2**	**327**	**13**	**277**	**0**	**0**	**320**	**64**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**189**	**1**	**345**	**21**	**250**	**0**	**0**	**293**	**52**
PM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**195**	**1**	**381**	**14**	**223**	**0**	**0**	**306**	**57**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**167**	**3**	**383**	**12**	**235**	**0**	**0**	**306**	**53**
PM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**227**	**0**	**379**	**15**	**179**	**0**	**0**	**282**	**57**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**179**	**1**	**354**	**13**	**185**	**0**	**0**	**305**	**46**
PM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**191**	**2**	**25**	**20**	**134**	**0**	**0**	**310**	**60**
Maximum PM NO BUILD Volumes	**0**	**0**	**0**	**221**	**2**	**327**	**13**	**277**	**0**	**0**	**320**	**64**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***36.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.15%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.10%***	***13.15%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	2	0	0	1	1	0	0	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**189**	**0**	**296**	**13**	**282**	**0**	**0**	**297**	**46**
PM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**223**	**2**	**327**	**14**	**278**	**0**	**0**	**321**	**64**
PM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**191**	**1**	**345**	**22**	**251**	**0**	**0**	**294**	**52**
PM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**197**	**1**	**381**	**15**	**224**	**0**	**0**	**307**	**57**
PM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**169**	**3**	**383**	**13**	**236**	**0**	**0**	**307**	**53**
PM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**229**	**0**	**379**	**16**	**180**	**0**	**0**	**283**	**57**
PM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**181**	**1**	**354**	**14**	**186**	**0**	**0**	**306**	**46**
PM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**193**	**2**	**25**	**21**	**135**	**0**	**0**	**311**	**60**
Maximum PM BUILD Volumes	**0**	**0**	**0**	**223**	**2**	**327**	**14**	**278**	**0**	**0**	**321**	**64**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (4)
N-S Street: **Unser Blvd.**

Year of Existing Counts 2018
Implementation Year **2022 (Phase 1)**

AM Peak

Growth Rates	Eastbound (I-40 S. Ramp) 2.00%			Westbound (I-40 S. Ramp) 2.00%			Northbound (Unser Blvd.) 2.00%			Southbound (Unser Blvd.) 2.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***132***	***0***	***64***	***0***	***0***	***0***	***0***	***816***	***948***	***0***	***1,188***	***976***
Background Traffic Growth	12	0	4	0	0	0	0	64	76	0	96	80
Subtotal	144	0	68	0	0	0	0	880	1,024	0	1,284	1,056
BEK	0	0	8	0	0	0	0	4	8	0	48	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	36	0
Subtotal (NO BUILD - A.M.)	***144***	***0***	***88***	***0***	***0***	***0***	***0***	***920***	***1,040***	***0***	***1,368***	***1,056***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***4.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***49.46%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***17.25%***	***36.31%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	4	4	0	12	0
Total AM Peak Hour BUILD Volumes	**144**	**0**	**92**	**0**	**0**	**0**	**0**	**924**	**1,044**	**0**	**1,380**	**1,056**

PM Peak

Growth Rates	Eastbound (I-40 S. Ramp) 2.00%			Westbound (I-40 S. Ramp) 2.00%			Northbound (Unser Blvd.) 2.00%			Southbound (Unser Blvd.) 2.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***80***	***0***	***56***	***0***	***0***	***0***	***0***	***944***	***696***	***0***	***1,248***	***464***
Background Traffic Growth	8	0	4	0	0	0	0	76	56	0	100	36
Subtotal	88	0	60	0	0	0	0	1,020	752	0	1,348	500
BEK	0	0	4	0	0	0	0	20	40	0	24	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	32	0
Subtotal (NO BUILD - A.M.)	***88***	***0***	***76***	***0***	***0***	***0***	***0***	***1,076***	***800***	***0***	***1,404***	***500***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***4.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***49.46%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***17.25%***	***36.31%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	4	8	0	12	0
Total PM Peak Hour BUILD Volumes	**88**	**0**	**80**	**0**	**0**	**0**	**0**	**1,080**	**808**	**0**	**1,416**	**500**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Daytona Rd

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **Los Volcanes Rd.** (5)
N-S Street: **Daytona Rd**

Year of Existing Counts 2013
Implementation Year **2022 (Phase 1)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***0***	***396***	***0***	***8***	***292***	***88***	***0***	***0***	***4***	***80***	***0***	***4***
Background Traffic Growth	0	72	0	0	52	16	0	0	0	16	0	0
Subtotal	0	468	0	8	344	104	0	0	4	96	0	4
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***484***	***0***	***8***	***360***	***104***	***0***	***0***	***4***	***96***	***0***	***4***
Percent Office Trips Generated(Entering)	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***99.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***99.00%***	*0.00%*	***1.00%***
Total Trips Generated	4	0	0	0	0	20	0	0	0	12	0	4
Total AM Peak Hour BUILD Volumes	**4**	**484**	**0**	**8**	**360**	**124**	**0**	**0**	**4**	**108**	**0**	**8**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***4***	***220***	***0***	***0***	***152***	***52***	***0***	***0***	***0***	***36***	***0***	***0***
Background Traffic Growth	0	40	0	0	28	8	0	0	0	8	0	0
Subtotal	4	260	0	0	180	60	0	0	0	44	0	0
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***4***	***276***	***0***	***0***	***196***	***60***	***0***	***0***	***0***	***44***	***0***	***0***
Percent Office Trips Generated(Entering)	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***99.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***99.00%***	*0.00%*	***1.00%***
Total Trips Generated	4	0	0	0	0	20	0	0	0	24	0	4
Total PM Peak Hour BUILD Volumes	**8**	**276**	**0**	**0**	**196**	**80**	**0**	**0**	**0**	**68**	**0**	**4**

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	22	8	7	4	2	10	10	340	30	23	114	24
7:15 AM	25	11	13	3	-	15	7	437	21	35	162	17
7:30 AM	35	14	11	6	6	10	3	430	35	29	201	18
7:45 AM	33	11	8	13	5	21	6	369	26	33	200	13
8:00 AM	25	8	9	7	8	14	5	335	9	24	167	24
8:15 AM	21	5	3	6	5	16	4	324	11	28	183	15
8:30 AM	23	7	10	3	7	7	5	306	13	27	162	11
8:45 AM	30	13	6	6	3	12	2	285	17	26	165	16
7:45 AM	33	11	8	13	5	21	6	369	26	33	200	13

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.37	0.25	-	0.12	0.07	0.43	0.15	0.66	0.13	0.77	0.53	0.25
7:15 AM	0.39	0.38	-	0.09	-	0.64	0.14	**1.04**	0.11	0.89	0.65	0.15
7:30 AM	0.55	0.37	-	0.18	0.22	0.42	0.04	0.88	0.16	**1.50**	0.67	0.14
7:45 AM	0.48	0.26	-	0.33	0.15	0.73	0.09	**1.19**	0.16	0.72	0.71	0.10
8:00 AM	0.43	0.27	-	0.20	0.29	0.59	0.05	0.63	0.04	**1.32**	0.51	0.16
8:15 AM	0.37	0.13	-	0.17	0.18	0.68	0.05	**1.05**	0.06	0.53	0.51	0.10
8:30 AM	0.41	0.28	-	0.09	0.25	0.30	0.05	0.58	0.06	**1.42**	0.51	0.08
8:45 AM	0.46	0.27	-	0.17	0.11	0.51	0.02	0.58	0.08	0.42	0.45	0.10
7:45 AM	0.48	0.26	-	0.33	0.15	0.73	0.09	1.19	0.16	0.72	0.71	0.10

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.4	44.8	-	53.5	52.9	57.0	10.3	14.6	8.4	19.0	16.9	13.3
7:15 AM	46.8	45.4	-	53.1	-	61.5	14.7	59.7	14.5	49.6	16.4	10.2
7:30 AM	48.9	44.5	-	54.0	54.0	56.8	9.7	30.4	9.6	**263.8**	11.0	7.2
7:45 AM	45.7	41.9	-	54.2	51.8	62.3	19.3	**131.4**	19.8	**98.6**	12.6	8.0
8:00 AM	47.2	44.2	-	54.2	54.7	60.2	7.0	31.5	7.0	**187.5**	7.9	6.3
8:15 AM	47.6	43.9	-	53.9	53.7	63.2	15.5	75.4	16.0	27.6	7.6	5.6
8:30 AM	47.4	44.9	-	53.1	54.4	55.2	7.1	14.0	7.2	**230.6**	7.8	5.7
8:45 AM	46.8	43.5	-	54.0	53.1	58.3	9.8	15.8	10.0	31.1	8.1	6.2
7:45 AM	45.7	41.9	-	54.2	51.8	62.3	19.3	131.4	19.8	98.6	12.6	8.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	B	B	B
7:15 AM	D	D	-	D	-	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	C	A	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	B	F	B	A
8:00 AM	D	D	-	D	D	E	A	C	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	C	A	A
8:30 AM	D	D	-	D	D	E	A	B	A	F	A	A
8:45 AM	D	D	-	D	D	E	A	B	B	C	A	A
7:45 AM	D	D	-	D	D	E	B	F	B	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.4**	0.6	-	0.2	0.0	0.5	0.2	0.9	0.2	1.0	0.8	0.9
7:15 AM	**1.5**	**1.0**	-	0.1	-	0.8	0.2	**2.2**	0.2	**2.2**	0.9	0.8
7:30 AM	**2.2**	**1.0**	-	0.3	0.1	0.5	0.1	**1.7**	0.3	**3.2**	0.6	0.3
7:45 AM	**2.0**	0.8	-	0.6	0.1	**1.1**	0.2	**2.8**	0.4	**3.3**	0.6	0.3
8:00 AM	**1.5**	0.7	-	0.3	0.2	0.7	0.1	**1.4**	0.1	**2.0**	0.4	0.3
8:15 AM	**1.3**	0.3	-	0.3	0.1	0.8	0.1	**1.9**	0.1	**1.2**	0.4	0.2
8:30 AM	**1.4**	0.7	-	0.1	0.2	0.3	0.1	0.8	0.1	**2.9**	0.4	0.1
8:45 AM	**1.9**	0.8	-	0.3	0.1	0.6	0.0	0.8	0.2	**1.3**	0.4	0.2
7:45 AM	2.0	0.8	-	0.6	0.1	1.1	0.2	2.8	0.4	3.3	0.6	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	17.5	B
7:15 AM	39.7	D
7:30 AM	35.6	D
7:45 AM	**67.6**	E **X**
8:00 AM	31	C
8:15 AM	41.4	D
8:30 AM	28	C
8:45 AM	16.8	B
7:45 AM	67.6	E

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	120	30	3	35	52	78	21	496	81	135	297	49
7:15 AM	83	35	3	48	19	65	6	361	119	104	191	22
7:30 AM	51	14	1	52	14	57	7	371	69	97	195	28
7:45 AM	65	14	6	33	11	61	3	326	56	77	181	26
8:00 AM	87	15	10	30	7	47	8	304	50	76	186	32
8:15 AM	72	16	10	28	7	52	6	295	52	64	165	22
8:30 AM	48	11	8	25	12	42	9	274	52	75	182	18
8:45 AM	26	6	2	28	11	35	9	130	42	58	88	10
7:30 AM	51	14	1	52	14	57	7	371	69	97	195	28

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.40**	0.32	-	0.36	0.50	0.89	0.79	**1.06**	0.56	0.97	**1.14**	0.42
7:15 AM	0.88	0.50	-	0.55	0.22	0.88	0.82	**1.08**	0.87	**1.85**	0.99	0.26
7:30 AM	0.56	0.25	-	0.52	0.18	0.88	0.88	**1.36**	0.80	0.80	0.91	0.29
7:45 AM	0.64	0.25	-	0.37	0.14	0.88	0.87	**1.06**	0.56	0.76	0.96	0.31
8:00 AM	0.94	0.39	-	0.41	0.11	0.85	0.84	0.60	0.31	**1.38**	0.69	0.27
8:15 AM	0.74	0.36	-	0.37	0.10	0.86	0.85	0.69	0.39	0.71	0.70	0.21
8:30 AM	0.57	0.31	-	0.35	0.20	0.84	0.81	0.57	0.35	0.86	0.68	0.15
8:45 AM	0.38	0.17	-	0.37	0.22	0.82	0.78	0.54	0.56	0.89	0.59	0.15
7:30 AM	0.56	0.25	-	0.52	0.18	0.88	0.88	1.36	0.80	0.80	0.91	0.29

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**237.3**	36.9	-	30.5	39.7	55.9	73.5	79.3	36.1	57.9	**96.9**	21.9
7:15 AM	**332.7**	45.4	-	34.5	39.7	54.4	66.0	**124.5**	34.5	**435.8**	**146.7**	14.3
7:30 AM	**108.4**	46.0	-	36.3	41.7	56.7	**82.9**	**343.4**	47.2	**331.4**	**87.1**	13.4
7:45 AM	41.8	40.9	-	35.0	40.1	55.9	73.9	**531.0**	35.2	**144.7**	35.7	13.3
8:00 AM	78.1	45.8	-	39.3	43.7	58.3	**86.9**	**136.3**	18.4	**225.8**	15.2	12.0
8:15 AM	49.5	43.6	-	38.0	42.2	57.4	67.2	25.0	20.4	**109.0**	14.7	11.2
8:30 AM	43.5	45.2	-	40.9	46.0	59.3	**82.4**	16.0	12.8	46.3	13.4	9.8
8:45 AM	43.4	48.3	-	42.8	48.3	61.2	70.7	19.9	19.3	42.1	11.0	9.0
7:30 AM	108.4	46.0	-	36.3	41.7	56.7	82.9	343.4	47.2	331.4	87.1	13.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	D	E	F	C
7:15 AM	F	D	-	C	D	D	E	F	C	F	F	B
7:30 AM	F	D	-	D	D	E	F	F	D	F	F	B
7:45 AM	D	D	-	C	D	E	E	F	D	F	D	B
8:00 AM	E	D	-	D	D	E	F	F	B	F	B	B
8:15 AM	D	D	-	D	D	E	E	C	C	F	B	B
8:30 AM	D	D	-	D	D	E	F	B	B	D	B	A
8:45 AM	D	D	-	D	D	E	E	B	B	D	B	A
7:30 AM	F	D	-	D	D	E	F	F	D	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**6.8**	0.6	-	0.7	**1.1**	1.0	0.2	0.7	**1.2**	1.0	**1.4**	**1.6**
7:15 AM	**7.9**	0.8	-	1.0	0.4	0.8	0.1	0.8	**2.4**	**2.9**	**1.8**	0.5
7:30 AM	**3.1**	0.3	-	**1.1**	0.3	0.8	0.1	**1.7**	**2.0**	**3.4**	**1.4**	0.6
7:45 AM	0.9	0.4	-	0.7	0.2	0.8	0.0	**2.1**	**1.1**	**1.8**	0.9	0.6
8:00 AM	**2.7**	0.6	-	0.7	0.2	0.7	0.1	**1.3**	**1.1**	**1.2**	0.3	0.6
8:15 AM	**1.4**	0.6	-	0.6	0.2	0.7	0.1	0.3	0.7	**1.1**	0.4	0.6
8:30 AM	**1.7**	0.4	-	0.6	0.3	0.6	0.1	0.2	0.7	0.6	0.4	0.4
8:45 AM	0.9	0.2	-	0.7	0.3	0.5	0.2	0.2	**1.2**	0.8	0.3	0.4
7:30 AM	3.1	0.3	-	1.1	0.3	0.8	0.1	1.7	2.0	3.4	1.4	0.6

Intersection Delay and LOS

Time-Period		
7:00 AM	85.8	F
7:15 AM	173.1	F
7:30 AM	**191.3**	F **X**
7:45 AM	176.7	F
8:00 AM	85.2	F
8:15 AM	35.8	D
8:30 AM	24.4	C
8:45 AM	25.6	C
7:30 AM	191.3	F

Intersection # 3

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	88	-	-	11	192	-	-	610	-
7:15 AM	-	-	-	97	-	-	11	221	-	-	604	-
7:30 AM	-	-	-	98	-	-	10	268	-	-	569	-
7:45 AM	-	-	-	111	-	-	9	248	-	-	561	-
8:00 AM	-	-	-	99	-	-	17	255	-	-	409	-
8:15 AM	-	-	-	102	-	-	20	183	-	-	386	-
8:30 AM	-	-	-	104	-	-	9	184	-	-	381	-
8:45 AM	-	-	-	103	-	-	15	164	-	-	402	-
7:15 AM	-	-	-	97	-	-	11	221	-	-	604	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.85	-	-	0.58	0.69	-	-	0.67	-
7:15 AM	-	-	-	0.86	-	-	0.53	0.72	-	-	0.67	-
7:30 AM	-	-	-	0.86	-	-	0.34	0.62	-	-	0.63	-
7:45 AM	-	-	-	0.87	-	-	0.35	0.67	-	-	0.63	-
8:00 AM	-	-	-	0.86	-	-	0.41	0.68	-	-	0.46	-
8:15 AM	-	-	-	0.86	-	-	0.54	0.61	-	-	0.44	-
8:30 AM	-	-	-	0.86	-	-	0.24	0.57	-	-	0.43	-
8:45 AM	-	-	-	0.86	-	-	0.36	0.44	-	-	0.45	-
7:15 AM	-	-	-	0.86	-	-	0.53	0.72	-	-	0.67	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.6	-	-	21.1	6.0	-	-	9.8	-
7:15 AM	-	-	-	51.9	-	-	19.3	6.3	-	-	10.4	-
7:30 AM	-	-	-	51.8	-	-	9.9	2.7	-	-	9.3	-
7:45 AM	-	-	-	51.0	-	-	11.0	4.2	-	-	10.4	-
8:00 AM	-	-	-	51.7	-	-	7.2	4.8	-	-	8.1	-
8:15 AM	-	-	-	51.5	-	-	8.5	4.4	-	-	8.6	-
8:30 AM	-	-	-	51.3	-	-	5.9	2.6	-	-	7.6	-
8:45 AM	-	-	-	51.4	-	-	7.0	1.3	-	-	8.1	-
7:15 AM	-	-	-	51.9	-	-	19.3	6.3	-	-	10.4	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	A	-
7:15 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:15 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.3	-	-	0.2	0.3	-	-	0.8	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.9	-
7:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.8	-
8:00 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.5	-
8:15 AM	-	-	-	0.4	-	-	0.2	0.2	-	-	0.5	-
8:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.5	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.0	-	-	0.5	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.9	-

Intersection Delay and LOS

Time-Period		
7:00 AM	11.9	B
7:15 AM	12.4	B
7:30 AM	10.8	B
7:45 AM	12.3	B
8:00 AM	11.1	B
8:15 AM	11.7	B
8:30 AM	10.9	B
8:45 AM	11.3	B
7:15 AM	12.4	B

X

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	23	8	7	4	2	11	10	342	30	24	115	25
7:15 AM	26	11	13	3	-	16	7	439	21	36	163	18
7:30 AM	36	14	11	6	6	11	3	432	35	30	202	19
7:45 AM	34	11	8	13	5	22	6	371	26	34	201	14
8:00 AM	26	8	9	7	8	15	5	337	9	25	168	25
8:15 AM	22	5	3	6	5	17	4	326	11	29	184	16
8:30 AM	24	7	10	3	7	8	5	308	13	28	163	12
8:45 AM	31	13	6	6	3	13	2	287	17	27	166	17
7:45 AM	34	11	8	13	5	22	6	371	26	34	201	14

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.38	0.24	-	0.12	0.07	0.47	0.14	0.67	0.13	0.79	0.52	0.26
7:15 AM	0.40	0.37	-	0.09	-	0.68	0.13	**1.05**	0.11	0.89	0.64	0.16
7:30 AM	0.57	0.37	-	0.18	0.22	0.47	0.04	0.89	0.16	**1.48**	0.67	0.14
7:45 AM	0.49	0.25	-	0.33	0.14	0.74	0.09	**1.20**	0.16	0.72	0.70	0.11
8:00 AM	0.44	0.26	-	0.20	0.29	0.63	0.05	0.64	0.04	**1.31**	0.50	0.17
8:15 AM	0.38	0.13	-	0.17	0.18	0.71	0.05	**1.05**	0.06	0.54	0.51	0.10
8:30 AM	0.42	0.27	-	0.09	0.25	0.34	0.05	0.59	0.06	**1.40**	0.51	0.08
8:45 AM	0.47	0.27	-	0.17	0.11	0.55	0.02	0.59	0.08	0.43	0.45	0.10
7:45 AM	0.49	0.25	-	0.33	0.14	0.74	0.09	1.20	0.16	0.72	0.70	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.2	44.5	-	53.4	52.9	57.7	10.2	15.0	8.6	19.7	16.8	13.5
7:15 AM	46.7	45.1	-	53.1	-	62.9	14.9	64.6	14.7	49.4	17.0	10.7
7:30 AM	49.5	44.5	-	54.0	54.0	57.5	9.6	35.0	9.7	**257.8**	10.9	7.3
7:45 AM	45.5	41.6	-	53.8	51.4	62.2	19.3	**134.1**	20.1	**99.6**	12.8	8.2
8:00 AM	47.0	43.9	-	54.2	54.7	61.4	7.1	33.6	7.2	**183.0**	8.0	6.4
8:15 AM	47.3	43.5	-	53.8	53.6	64.4	15.6	77.5	16.1	28.9	7.8	5.8
8:30 AM	47.3	44.6	-	53.1	54.4	55.7	7.3	14.7	7.4	**223.8**	8.0	5.9
8:45 AM	47.0	43.4	-	54.0	53.1	59.2	9.8	16.0	10.1	31.5	8.0	6.2
7:45 AM	45.5	41.6	-	53.8	51.4	62.2	19.3	134.1	20.1	99.6	12.8	8.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	B	B	B
7:15 AM	D	D	-	D	-	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	C	A	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	D	E	A	C	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	C	A	A
8:30 AM	D	D	-	D	D	E	A	B	A	F	A	A
8:45 AM	D	D	-	D	D	E	A	B	B	C	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.4**	0.6	-	0.2	0.0	0.5	0.2	0.9	0.3	**1.0**	0.7	0.9
7:15 AM	**1.6**	1.0	-	0.1	-	0.8	0.2	**2.3**	0.2	**2.2**	0.9	0.8
7:30 AM	**2.3**	**1.0**	-	0.3	0.1	0.5	0.1	**1.8**	0.3	**3.3**	0.6	0.4
7:45 AM	**2.1**	0.8	-	0.6	0.1	**1.1**	0.2	**2.8**	0.4	**3.4**	0.6	0.3
8:00 AM	**1.6**	0.7	-	0.3	0.2	0.8	0.1	**1.5**	0.1	**2.0**	0.4	0.3
8:15 AM	**1.4**	0.3	-	0.3	0.1	0.9	0.1	**1.9**	0.1	**1.3**	0.4	0.2
8:30 AM	**1.5**	0.7	-	0.1	0.2	0.4	0.1	0.9	0.1	**2.9**	0.4	0.2
8:45 AM	**1.9**	0.8	-	0.3	0.1	0.6	0.0	0.8	0.2	**1.4**	0.4	0.2
7:45 AM	2.1	0.8	-	0.6	0.1	1.1	0.2	2.8	0.4	3.4	0.6	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	17.8	B
7:15 AM	42.2	D
7:30 AM	37.6	D
7:45 AM	**69.1**	E
8:00 AM	32.1	C
8:15 AM	42.7	D
8:30 AM	28.2	C
8:45 AM	17	B
7:45 AM	69.1	E

X

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	122	31	4	35	53	78	23	496	81	135	297	52
7:15 AM	85	36	4	48	20	65	8	361	119	104	191	25
7:30 AM	53	15	2	52	15	57	9	371	69	97	195	31
7:45 AM	67	15	7	33	12	61	5	326	56	77	181	29
8:00 AM	89	16	11	30	8	47	10	304	50	76	186	35
8:15 AM	74	17	11	28	8	52	8	295	52	64	165	25
8:30 AM	50	12	9	25	13	42	11	274	52	75	182	21
8:45 AM	28	7	3	28	12	35	11	130	42	58	88	13
7:30 AM	53	15	2	52	15	57	9	371	69	97	195	31

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.43**	0.34	-	0.37	0.51	0.89	0.79	**1.07**	0.56	0.97	**1.15**	0.45
7:15 AM	0.90	0.53	-	0.56	0.23	0.88	0.79	**1.06**	0.87	**1.84**	**0.99**	0.29
7:30 AM	0.59	0.28	-	0.53	0.20	0.87	0.86	**1.36**	0.81	0.80	0.92	0.33
7:45 AM	0.66	0.28	-	0.38	0.15	0.88	0.83	**1.06**	0.58	0.76	0.96	0.35
8:00 AM	0.97	0.42	-	0.42	0.12	0.85	0.82	0.60	0.32	**1.38**	0.70	0.30
8:15 AM	0.77	0.39	-	0.38	0.11	0.86	0.82	0.69	0.39	0.71	0.70	0.24
8:30 AM	0.60	0.34	-	0.36	0.22	0.84	0.79	0.57	0.35	0.86	0.68	0.18
8:45 AM	0.38	0.21	-	0.40	0.24	0.82	0.79	0.54	0.56	0.89	0.60	0.20
7:30 AM	0.59	0.28	-	0.53	0.20	0.87	0.86	1.36	0.81	0.80	0.92	0.33

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**252.0**	37.1	-	30.6	39.8	55.8	71.9	**81.8**	35.9	57.5	**100.3**	22.3
7:15 AM	**377.4**	45.8	-	34.7	39.8	54.3	61.8	**122.5**	33.7	**431.6**	**160.1**	15.0
7:30 AM	**151.1**	46.3	-	36.3	41.8	56.6	75.3	**336.0**	48.2	**326.1**	**105.5**	14.1
7:45 AM	42.9	41.1	-	35.0	40.2	55.7	65.9	**526.2**	39.5	**140.4**	56.7	13.9
8:00 AM	**85.3**	46.1	-	39.3	43.8	58.1	78.7	**135.2**	16.7	**223.2**	15.2	12.5
8:15 AM	51.6	43.9	-	38.0	42.3	57.2	63.2	25.0	20.3	**108.1**	15.0	11.7
8:30 AM	44.6	45.5	-	40.9	46.1	59.1	77.0	15.7	12.7	46.1	13.7	10.2
8:45 AM	42.6	48.1	-	42.6	48.5	61.0	68.5	20.9	20.3	42.7	12.0	10.2
7:30 AM	151.1	46.3	-	36.3	41.8	56.6	75.3	336.0	48.2	326.1	105.5	14.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	D	E	F	C
7:15 AM	F	D	-	C	D	D	E	F	C	F	F	B
7:30 AM	F	D	-	D	D	E	E	F	D	F	F	B
7:45 AM	D	D	-	D	D	E	E	F	D	F	E	B
8:00 AM	F	D	-	D	D	E	E	F	B	F	B	B
8:15 AM	D	D	-	D	D	E	E	C	C	F	B	B
8:30 AM	D	D	-	D	D	E	E	B	B	D	B	B
8:45 AM	D	D	-	D	D	E	E	C	C	D	B	B
7:30 AM	F	D	-	D	D	E	E	F	D	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**7.2**	0.7	-	0.7	**1.2**	1.0	0.2	0.7	**1.1**	1.0	**1.5**	**1.7**
7:15 AM	**8.7**	0.9	-	1.0	0.4	0.8	0.1	0.7	**2.3**	**2.9**	**1.9**	0.6
7:30 AM	**3.9**	0.4	-	**1.1**	0.3	0.8	0.1	**1.7**	**2.1**	**3.4**	**1.5**	0.6
7:45 AM	**1.0**	0.5	-	0.7	0.3	0.8	0.1	**2.0**	**1.3**	**1.8**	**1.2**	0.6
8:00 AM	**2.9**	0.6	-	0.7	0.2	0.7	0.1	**1.3**	1.0	**1.2**	0.4	0.7
8:15 AM	**1.6**	0.6	-	0.6	0.2	0.7	0.1	0.3	0.7	**1.1**	0.4	0.7
8:30 AM	0.4	0.5	-	0.6	0.3	0.6	0.1	0.2	0.7	0.6	0.4	0.5
8:45 AM	1.0	0.2	-	0.7	0.3	0.5	0.2	0.3	**1.3**	0.8	0.3	0.6
7:30 AM	3.9	0.4	-	1.1	0.3	0.8	0.1	1.7	2.1	3.4	1.5	0.6

Intersection Delay and LOS

Time-Period		
7:00 AM	88.5	F
7:15 AM	177.6	F
7:30 AM	**194.3**	F X
7:45 AM	181.1	F
8:00 AM	84.7	F
8:15 AM	35.9	D
8:30 AM	24.5	C
8:45 AM	26.4	C
7:30 AM	194.3	F

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	90	-	-	12	193	-	-	611	-
7:15 AM	-	-	-	99	-	-	12	222	-	-	605	-
7:30 AM	-	-	-	100	-	-	11	269	-	-	570	-
7:45 AM	-	-	-	113	-	-	10	249	-	-	562	-
8:00 AM	-	-	-	101	-	-	18	256	-	-	410	-
8:15 AM	-	-	-	104	-	-	21	184	-	-	387	-
8:30 AM	-	-	-	106	-	-	10	185	-	-	382	-
8:45 AM	-	-	-	105	-	-	16	165	-	-	403	-
7:15 AM	-	-	-	99	-	-	12	222	-	-	605	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.85	-	-	0.62	0.68	-	-	0.67	-
7:15 AM	-	-	-	0.86	-	-	0.57	0.72	-	-	0.68	-
7:30 AM	-	-	-	0.86	-	-	0.37	0.63	-	-	0.63	-
7:45 AM	-	-	-	0.87	-	-	0.38	0.67	-	-	0.64	-
8:00 AM	-	-	-	0.86	-	-	0.43	0.69	-	-	0.46	-
8:15 AM	-	-	-	0.86	-	-	0.56	0.61	-	-	0.45	-
8:30 AM	-	-	-	0.87	-	-	0.27	0.57	-	-	0.43	-
8:45 AM	-	-	-	0.87	-	-	0.39	0.45	-	-	0.46	-
7:15 AM	-	-	-	0.86	-	-	0.57	0.72	-	-	0.68	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.5	-	-	22.8	6.0	-	-	10.1	-
7:15 AM	-	-	-	51.7	-	-	21.4	6.4	-	-	10.7	-
7:30 AM	-	-	-	51.6	-	-	10.8	2.7	-	-	9.6	-
7:45 AM	-	-	-	51.2	-	-	11.9	4.4	-	-	10.7	-
8:00 AM	-	-	-	51.6	-	-	7.6	4.9	-	-	8.3	-
8:15 AM	-	-	-	51.3	-	-	9.1	4.7	-	-	8.9	-
8:30 AM	-	-	-	51.1	-	-	6.2	2.7	-	-	7.8	-
8:45 AM	-	-	-	51.2	-	-	7.3	1.3	-	-	8.4	-
7:15 AM	-	-	-	51.7	-	-	21.4	6.4	-	-	10.7	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.3	-	-	0.3	0.3	-	-	0.9	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.9	-
7:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.8	-
8:00 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.5	-
8:15 AM	-	-	-	0.4	-	-	0.2	0.2	-	-	0.5	-
8:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.5	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.0	-	-	0.5	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.9	-

Intersection Delay and LOS
Time-Period

7:00 AM	12.2	B	
7:15 AM	12.8	B	X
7:30 AM	11.1	B	
7:45 AM	12.6	B	
8:00 AM	11.3	B	
8:15 AM	12	B	
8:30 AM	11.1	B	
8:45 AM	11.5	B	
7:15 AM	B	12.8	

Intersection # 1

Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	29	11	9	27	28	46	8	214	11	23	363	20
4:15 PM	21	8	9	17	18	45	11	225	14	16	376	40
4:30 PM	20	6	10	14	29	52	8	249	16	27	333	38
4:45 PM	32	11	17	24	17	42	8	245	56	16	348	33
5:00 PM	32	21	9	24	33	58	13	272	9	15	394	29
5:15 PM	22	13	9	25	26	41	8	258	14	20	346	44
5:30 PM	30	13	8	22	24	39	10	279	14	26	363	22
5:45 PM	22	8	10	27	28	49	6	242	11	27	380	34
5:00 PM	32	21	9	24	33	58	13	272	9	15	394	29

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.41	0.20	-	0.46	0.43	0.84	0.27	0.46	0.05	0.27	0.83	0.10
4:15 PM	0.30	0.19	-	0.29	0.29	0.85	0.36	0.45	0.06	0.20	0.85	0.20
4:30 PM	0.30	0.17	-	0.22	0.41	0.86	0.23	0.53	0.08	0.36	0.76	0.20
4:45 PM	0.41	0.30	-	0.44	0.29	0.83	0.24	0.51	0.26	0.22	0.78	0.17
5:00 PM	0.41	0.26	-	0.36	0.42	0.87	0.47	0.60	0.05	0.24	0.91	0.15
5:15 PM	0.36	0.25	-	0.46	0.44	0.82	0.22	0.52	0.06	0.27	0.75	0.22
5:30 PM	0.44	0.23	-	0.41	0.43	0.82	0.29	0.58	0.07	0.37	0.78	0.11
5:45 PM	0.33	0.19	-	0.43	0.41	0.85	0.18	0.51	0.05	0.32	0.78	0.16
5:00 PM	0.41	0.26	-	0.36	0.42	0.87	0.47	0.60	0.05	0.24	0.91	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	41.6	38.4	-	52.6	51.0	62.5	26.5	15.8	11.4	10.9	36.7	19.9
4:15 PM	42.5	40.4	-	50.6	49.8	63.0	29.0	13.7	9.8	9.7	33.2	18.7
4:30 PM	40.8	38.5	-	47.5	49.1	63.4	22.8	17.1	11.7	11.4	34.2	22.4
4:45 PM	42.1	39.9	-	53.6	50.5	62.8	23.7	15.7	12.8	11.3	35.2	21.0
5:00 PM	38.1	35.6	-	47.7	47.5	67.9	34.1	20.3	12.8	14.6	44.3	27.0
5:15 PM	43.7	41.6	-	54.0	52.5	62.6	21.6	14.6	9.8	10.2	30.3	19.4
5:30 PM	43.5	40.2	-	54.0	53.1	63.4	24.5	17.0	10.8	12.2	35.2	19.4
5:45 PM	41.3	38.9	-	51.3	49.9	62.0	22.7	16.3	11.1	11.6	33.1	19.3
5:00 PM	38.1	35.6	-	47.7	47.5	67.9	34.1	20.3	12.8	14.6	44.3	27.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	B	B	B	D	B
4:15 PM	D	D	-	D	D	E	C	B	A	A	C	B
4:30 PM	D	D	-	D	D	E	C	B	B	B	C	C
4:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:15 PM	D	D	-	D	D	E	C	B	A	B	C	B
5:30 PM	D	D	-	D	D	E	C	B	B	B	D	B
5:45 PM	D	D	-	D	D	E	C	B	B	B	C	B
5:00 PM	D	D	-	D	D	E	C	C	B	B	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.7**	0.8	-	**1.3**	0.6	**2.3**	0.2	0.6	0.1	0.3	**1.7**	0.9
4:15 PM	**1.3**	0.7	-	0.8	0.4	**2.2**	0.4	0.6	0.1	0.2	**1.7**	**1.3**
4:30 PM	**1.2**	0.6	-	0.6	0.6	**2.5**	0.2	0.8	0.2	0.4	**1.5**	**1.1**
4:45 PM	**1.9**	**1.1**	-	**1.2**	0.4	**2.1**	0.2	0.7	0.6	0.2	**1.6**	**1.3**
5:00 PM	**1.8**	**1.2**	-	**1.1**	0.7	**2.9**	0.5	0.9	0.1	0.2	**1.8**	**1.2**
5:15 PM	**1.4**	0.9	-	**1.2**	0.6	**2.1**	0.2	0.7	0.1	0.3	**1.5**	**1.1**
5:30 PM	**1.9**	0.9	-	**1.1**	0.5	**2.0**	0.3	0.9	0.1	0.3	**1.6**	0.9
5:45 PM	**1.3**	0.7	-	**1.3**	0.6	**2.4**	0.2	0.7	0.1	0.4	**1.6**	**1.2**
5:00 PM	1.8	1.2	-	1.1	0.7	2.9	0.5	0.9	0.1	0.2	1.8	1.2

Intersection Delay and LOS

Time-Period		
4:00 PM	32.3	C
4:15 PM	29	C
4:30 PM	30	C
4:45 PM	29.8	C
5:00 PM	**37.0**	D **X**
5:15 PM	27.6	C
5:30 PM	30.4	C
5:45 PM	29.9	C
5:00 PM	37	D

Intersection # 2

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	27	12	8	60	15	84	4	243	47	54	328	29
4:15 PM	23	8	7	51	14	75	5	240	43	68	372	24
4:30 PM	52	7	8	64	14	95	6	256	57	64	309	22
4:45 PM	44	16	5	53	10	76	5	297	51	82	336	26
5:00 PM	52	16	17	89	37	105	8	299	70	76	311	24
5:15 PM	43	14	7	56	18	86	6	278	42	61	344	38
5:30 PM	36	13	5	54	22	78	6	286	55	57	332	28
5:45 PM	32	12	5	50	10	67	5	256	51	64	391	41
5:00 PM	52	16	17	89	37	105	8	299	70	76	311	24

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.26	0.22	-	0.56	0.14	0.92	0.90	0.48	0.30	0.79	0.92	0.18
4:15 PM	0.24	0.20	-	0.50	0.14	0.91	0.87	0.48	0.28	0.81	0.98	0.14
4:30 PM	0.44	0.15	-	0.51	0.12	0.93	0.85	0.61	0.43	0.82	**0.99**	0.16
4:45 PM	0.41	0.24	-	0.51	0.10	0.91	0.88	0.59	0.32	0.83	0.89	0.16
5:00 PM	0.47	0.29	-	0.76	0.28	0.94	0.83	0.76	0.57	0.84	**1.01**	0.18
5:15 PM	0.39	0.21	-	0.50	0.16	0.92	0.84	0.58	0.28	0.89	0.99	0.25
5:30 PM	0.36	0.20	-	0.50	0.22	0.91	0.85	0.58	0.36	0.79	0.93	0.18
5:45 PM	0.33	0.22	-	0.50	0.11	0.90	0.87	0.48	0.31	0.78	0.89	0.21
5:00 PM	0.47	0.29	-	0.76	0.28	0.94	0.83	0.76	0.57	0.84	1.01	0.18

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	35.0	41.0	-	36.2	37.3	64.4	**129.9**	30.8	23.6	61.9	46.7	16.5
4:15 PM	38.5	43.9	-	37.0	39.8	62.5	**113.1**	30.7	23.7	63.5	56.5	16.1
4:30 PM	32.8	36.1	-	32.4	34.4	68.2	**101.3**	38.5	32.3	59.0	62.1	19.4
4:45 PM	36.9	42.1	-	36.3	39.1	64.5	**119.0**	36.0	28.1	60.5	45.6	17.0
5:00 PM	31.2	35.3	-	41.9	33.8	69.1	**88.8**	44.1	37.5	56.2	68.3	21.7
5:15 PM	33.9	39.1	-	33.7	37.1	66.0	**101.4**	30.6	26.0	64.2	54.4	19.1
5:30 PM	35.3	41.1	-	35.6	39.8	64.4	**100.7**	27.6	20.9	62.4	47.3	16.5
5:45 PM	38.0	44.5	-	38.4	41.8	62.6	**112.9**	24.1	17.2	65.6	43.6	16.3
5:00 PM	31.2	35.3	-	41.9	33.8	69.1	88.8	44.1	37.5	56.2	68.3	21.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	F	C	C	E	D	B
4:15 PM	D	D	-	D	D	E	F	C	C	E	E	B
4:30 PM	C	D	-	C	C	E	F	D	C	E	E	B
4:45 PM	D	D	-	D	D	E	F	D	C	E	D	B
5:00 PM	C	D	-	D	C	E	F	D	D	E	F	C
5:15 PM	C	D	-	C	D	E	F	C	C	E	D	B
5:30 PM	D	D	-	D	D	E	F	C	C	E	D	B
5:45 PM	D	D	-	D	D	E	F	C	B	E	D	B
5:00 PM	C	D	-	D	C	E	F	D	D	E	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.9	0.4	-	0.3	0.3	**1.2**	0.1	0.4	**1.1**	0.4	**1.0**	0.7
4:15 PM	0.8	0.3	-	**1.1**	0.3	**1.1**	0.1	0.4	**1.2**	0.5	**1.2**	0.6
4:30 PM	**1.7**	0.3	-	0.2	0.3	**1.4**	0.1	0.5	**1.7**	0.5	**1.1**	0.6
4:45 PM	**1.5**	0.5	-	**1.1**	0.2	**1.1**	0.1	0.5	**1.3**	0.6	**1.0**	0.7
5:00 PM	0.3	0.7	-	**1.2**	0.8	**1.5**	0.1	0.5	**2.0**	0.5	**1.1**	0.7
5:15 PM	**1.4**	0.4	-	**1.2**	0.4	**1.2**	0.1	0.4	**1.2**	0.4	**1.1**	0.9
5:30 PM	**1.2**	0.4	-	**1.2**	0.5	**1.1**	0.1	0.4	0.9	0.4	**1.0**	0.7
5:45 PM	**1.1**	0.4	-	**1.1**	0.2	1.0	0.1	0.4	1.0	0.4	**1.0**	**1.0**
5:00 PM	0.3	0.7	-	1.2	0.8	1.5	0.1	0.5	2.0	0.5	1.1	0.7

Intersection Delay and LOS

Time-Period		
4:00 PM	42.3	D
4:15 PM	47.2	D
4:30 PM	50.1	D
4:45 PM	43.5	D
5:00 PM	**52.9**	D X
5:15 PM	45	D
5:30 PM	40.7	D
5:45 PM	38.7	D
5:00 PM	52.9	D

Intersection # 3

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	187	-	-	12	281	-	-	296	-
4:15 PM	-	-	-	221	-	-	13	277	-	-	320	-
4:30 PM	-	-	-	189	-	-	21	250	-	-	293	-
4:45 PM	-	-	-	195	-	-	14	223	-	-	306	-
5:00 PM	-	-	-	167	-	-	12	235	-	-	306	-
5:15 PM	-	-	-	227	-	-	15	179	-	-	282	-
5:30 PM	-	-	-	179	-	-	13	185	-	-	305	-
5:45 PM	-	-	-	191	-	-	20	134	-	-	310	-
5:15 PM	-	-	-	227	-	-	15	179	-	-	282	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.91	-	-	0.19	0.63	-	-	0.39	-
4:15 PM	-	-	-	0.92	-	-	0.23	0.66	-	-	0.45	-
4:30 PM	-	-	-	0.91	-	-	0.38	0.71	-	-	0.40	-
4:45 PM	-	-	-	0.92	-	-	0.30	0.70	-	-	0.41	-
5:00 PM	-	-	-	0.91	-	-	0.27	0.77	-	-	0.39	-
5:15 PM	-	-	-	0.92	-	-	0.40	0.76	-	-	0.42	-
5:30 PM	-	-	-	0.91	-	-	0.33	0.70	-	-	0.40	-
5:45 PM	-	-	-	0.91	-	-	0.56	0.59	-	-	0.44	-
5:15 PM	-	-	-	0.92	-	-	0.40	0.76	-	-	0.42	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	48.1	-	-	9.8	26.7	-	-	13.3	-
4:15 PM	-	-	-	47.3	-	-	13.0	30.8	-	-	17.2	-
4:30 PM	-	-	-	48.0	-	-	11.1	26.7	-	-	15.0	-
4:45 PM	-	-	-	47.4	-	-	11.2	30.6	-	-	15.1	-
5:00 PM	-	-	-	49.9	-	-	8.4	22.1	-	-	12.3	-
5:15 PM	-	-	-	47.2	-	-	14.2	33.8	-	-	18.9	-
5:30 PM	-	-	-	48.9	-	-	10.2	28.6	-	-	13.7	-
5:45 PM	-	-	-	47.8	-	-	13.5	24.1	-	-	16.9	-
5:15 PM	-	-	-	47.2	-	-	14.2	33.8	-	-	18.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	A	C	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:00 PM	-	-	-	D	-	-	A	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	C	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.7	-	-	0.1	0.8	-	-	0.5	-
4:15 PM	-	-	-	0.8	-	-	0.1	0.8	-	-	0.7	-
4:30 PM	-	-	-	0.7	-	-	0.2	0.8	-	-	0.6	-
4:45 PM	-	-	-	0.7	-	-	0.1	0.9	-	-	0.6	-
5:00 PM	-	-	-	0.6	-	-	0.1	0.8	-	-	0.5	-
5:15 PM	-	-	-	0.8	-	-	0.2	0.9	-	-	0.6	-
5:30 PM	-	-	-	0.6	-	-	0.2	0.8	-	-	0.6	-
5:45 PM	-	-	-	0.7	-	-	0.3	0.7	-	-	0.6	-
5:15 PM	-	-	-	0.8	-	-	0.2	0.9	-	-	0.6	-

Intersection Delay and LOS

Time-Period		
4:00 PM	26.5	C
4:15 PM	29.7	C
4:30 PM	26.8	C
4:45 PM	28.4	C
5:00 PM	23.6	C
5:15 PM	31.9	C
5:30 PM	27	C
5:45 PM	26.2	C
5:15 PM	C	31.9

X

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	30	11	9	27	28	47	8	216	11	24	365	21
4:15 PM	22	8	9	17	18	46	11	227	14	17	378	41
4:30 PM	21	6	10	14	29	53	8	251	16	28	335	39
4:45 PM	33	11	17	24	17	43	8	247	56	17	350	34
5:00 PM	33	21	9	24	33	59	13	274	9	16	396	30
5:15 PM	23	13	9	25	26	42	8	260	14	21	348	45
5:30 PM	31	13	8	22	24	40	10	281	14	27	365	23
5:45 PM	23	8	10	27	28	50	6	244	11	28	382	35
5:00 PM	33	21	9	24	33	59	13	274	9	16	396	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.42	0.20	-	0.45	0.43	0.85	0.27	0.46	0.05	0.29	0.83	0.11
4:15 PM	0.31	0.19	-	0.29	0.28	0.85	0.36	0.46	0.06	0.21	0.85	0.21
4:30 PM	0.31	0.17	-	0.21	0.40	0.87	0.23	0.54	0.08	0.38	0.76	0.20
4:45 PM	0.42	0.29	-	0.43	0.28	0.84	0.24	0.52	0.26	0.23	0.78	0.17
5:00 PM	0.42	0.26	-	0.35	0.42	0.88	0.46	0.62	0.05	0.26	0.91	0.15
5:15 PM	0.36	0.24	-	0.45	0.43	0.83	0.22	0.53	0.06	0.29	0.75	0.22
5:30 PM	0.44	0.22	-	0.41	0.42	0.83	0.30	0.59	0.07	0.39	0.79	0.11
5:45 PM	0.34	0.19	-	0.43	0.41	0.85	0.19	0.52	0.05	0.34	0.79	0.16
5:00 PM	0.42	0.26	-	0.35	0.42	0.88	0.46	0.62	0.05	0.26	0.91	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	41.2	37.9	-	52.2	50.7	63.3	27.1	16.3	11.8	11.2	37.7	20.7
4:15 PM	42.1	39.8	-	50.2	49.5	62.8	29.0	14.2	10.2	10.1	34.0	19.7
4:30 PM	40.5	38.0	-	47.2	48.8	64.1	23.0	17.7	12.1	12.1	35.0	23.4
4:45 PM	41.9	39.6	-	53.2	50.2	62.7	24.0	16.1	13.1	11.6	35.1	21.3
5:00 PM	37.7	35.2	-	47.4	47.2	68.6	33.7	20.9	13.1	15.1	43.6	27.4
5:15 PM	43.3	41.1	-	53.6	52.2	62.5	22.0	15.2	10.1	10.5	31.8	20.8
5:30 PM	43.1	39.7	-	53.7	52.7	63.3	25.1	17.6	11.1	12.7	36.0	20.2
5:45 PM	40.9	38.4	-	51.0	49.5	62.7	23.4	16.9	11.5	12.1	34.4	20.4
5:00 PM	37.7	35.2	-	47.4	47.2	68.6	33.7	20.9	13.1	15.1	43.6	27.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:15 PM	D	D	-	D	D	E	C	B	B	B	C	B
4:30 PM	D	D	-	D	D	E	C	B	B	B	C	C
4:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:15 PM	D	D	-	D	D	E	C	B	B	B	C	C
5:30 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:45 PM	D	D	-	D	D	E	C	B	B	B	C	C
5:00 PM	D	D	-	D	D	E	C	C	B	B	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.8**	0.8	-	**1.3**	0.6	**2.3**	0.2	0.7	0.1	0.4	**1.7**	0.9
4:15 PM	**1.3**	0.7	-	0.8	0.4	**2.3**	0.4	0.6	0.1	0.2	**1.6**	**1.3**
4:30 PM	**1.2**	0.6	-	0.6	0.6	**2.6**	0.2	0.8	0.2	0.4	**1.5**	**1.1**
4:45 PM	**2.0**	**1.1**	-	**1.2**	0.4	**2.1**	0.2	0.7	0.6	0.3	**1.6**	**1.3**
5:00 PM	**1.9**	**1.1**	-	**1.1**	0.7	**2.9**	0.5	0.9	0.1	0.3	**1.7**	**1.2**
5:15 PM	**1.4**	0.9	-	**1.2**	0.6	**2.1**	0.2	0.8	0.1	0.3	**1.5**	**1.1**
5:30 PM	**1.9**	0.9	-	**1.1**	0.5	**2.0**	0.3	0.9	0.1	0.4	**1.6**	0.9
5:45 PM	**1.4**	0.7	-	**1.3**	0.6	**2.4**	0.2	0.8	0.1	0.4	**1.6**	**1.2**
5:00 PM	1.9	1.1	-	1.1	0.7	2.9	0.5	0.9	0.1	0.3	1.7	1.2

Intersection Delay and LOS

Time-Period		
4:00 PM	32.9	C
4:15 PM	29.5	C
4:30 PM	30.6	C
4:45 PM	29.8	C
5:00 PM	**36.8**	D **X**
5:15 PM	28.5	C
5:30 PM	30.9	C
5:45 PM	30.7	C
5:00 PM	36.8	D

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	30	13	11	60	16	84	7	243	47	54	328	32
4:15 PM	26	9	10	51	15	75	8	240	43	68	372	27
4:30 PM	55	8	11	64	15	95	9	256	57	64	309	25
4:45 PM	47	17	8	53	11	76	8	297	51	82	336	29
5:00 PM	55	17	20	89	38	105	11	299	70	76	311	27
5:15 PM	46	15	10	56	19	86	9	278	42	61	344	41
5:30 PM	39	14	8	54	23	78	9	286	55	57	332	31
5:45 PM	35	13	8	50	11	67	8	256	51	64	391	44
5:00 PM	55	17	20	89	38	105	11	299	70	76	311	27

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.28	0.26	-	0.57	0.15	0.92	0.83	0.49	0.31	0.79	0.95	0.21
4:15 PM	0.27	0.24	-	0.51	0.15	0.91	0.82	0.49	0.28	0.81	**1.01**	0.17
4:30 PM	0.46	0.18	-	0.53	0.13	0.93	0.82	0.58	0.42	0.97	**1.01**	0.18
4:45 PM	0.44	0.29	-	0.53	0.11	0.91	0.81	0.58	0.32	0.85	0.91	0.18
5:00 PM	0.50	0.32	-	0.78	0.29	0.94	0.81	0.76	0.57	0.84	**1.03**	0.20
5:15 PM	0.42	0.26	-	0.51	0.17	0.92	0.80	0.58	0.28	0.91	**1.01**	0.27
5:30 PM	0.40	0.25	-	0.51	0.23	0.91	0.81	0.57	0.35	0.86	0.94	0.20
5:45 PM	0.36	0.28	-	0.52	0.13	0.90	0.82	0.49	0.31	0.78	0.91	0.23
5:00 PM	0.50	0.32	-	0.78	0.29	0.94	0.81	0.76	0.57	0.84	1.03	0.20

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	34.2	40.9	-	36.3	37.4	64.7	**95.9**	31.1	23.7	61.9	51.2	17.8
4:15 PM	37.5	43.7	-	36.5	39.9	62.8	**89.7**	31.4	24.2	63.5	64.7	17.2
4:30 PM	33.4	36.5	-	32.8	34.4	67.9	**87.1**	32.2	30.5	71.4	69.4	20.4
4:45 PM	37.4	42.7	-	36.6	39.2	64.2	**90.1**	34.2	27.1	60.8	47.1	17.2
5:00 PM	32.1	35.8	-	44.0	33.9	68.9	77.9	43.5	36.6	56.3	74.8	22.4
5:15 PM	34.5	39.6	-	34.0	37.1	65.8	**85.7**	30.2	25.9	64.5	**80.4**	19.8
5:30 PM	35.6	41.6	-	35.9	39.8	64.2	**85.1**	27.4	23.1	63.6	55.4	17.4
5:45 PM	38.2	45.0	-	38.7	41.8	62.4	**90.6**	23.4	16.2	65.7	45.7	17.1
5:00 PM	32.1	35.8	-	44.0	33.9	68.9	77.9	43.5	36.6	56.3	74.8	22.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	D	E	F	C	C	E	D	B
4:15 PM	D	D	-	D	D	E	F	C	C	E	F	B
4:30 PM	C	D	-	C	C	E	F	C	C	E	F	C
4:45 PM	D	D	-	D	D	E	F	C	C	E	D	B
5:00 PM	C	D	-	D	C	E	E	D	D	E	F	C
5:15 PM	C	D	-	C	D	E	F	C	C	E	F	B
5:30 PM	D	D	-	D	D	E	F	C	C	E	E	B
5:45 PM	D	D	-	D	D	E	F	C	B	E	D	B
5:00 PM	C	D	-	D	C	E	E	D	D	E	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	1.0	0.5	-	0.3	0.4	**1.2**	0.1	0.4	**1.1**	0.4	**1.1**	0.8
4:15 PM	0.9	0.4	-	**1.1**	0.4	**1.1**	0.1	0.4	**1.2**	0.5	**1.3**	0.8
4:30 PM	0.4	0.4	-	0.2	0.3	**1.4**	0.1	0.4	**1.6**	0.4	**1.2**	0.6
4:45 PM	**1.6**	0.6	-	**1.1**	0.3	**1.1**	0.1	0.5	**1.3**	0.6	**1.0**	0.2
5:00 PM	0.4	0.7	-	**1.2**	0.8	**1.5**	0.1	0.5	**2.0**	0.5	**1.2**	0.8
5:15 PM	**1.5**	0.5	-	**1.2**	0.4	**1.2**	0.1	0.4	**1.2**	0.4	**1.3**	1.0
5:30 PM	**1.3**	0.5	-	**1.2**	0.5	**1.1**	0.1	0.4	**1.2**	0.4	**1.1**	0.7
5:45 PM	**1.2**	0.5	-	**1.1**	0.3	1.0	0.1	0.3	0.9	0.4	**1.1**	**1.1**
5:00 PM	0.4	0.7	-	1.2	0.8	1.5	0.1	0.5	2.0	0.5	1.2	0.8

Intersection Delay and LOS
Time-Period

4:00 PM	44.1	D
4:15 PM	50.7	D
4:30 PM	51.8	D
4:45 PM	43.5	D
5:00 PM	**54.6**	D X
5:15 PM	54.4	D
5:30 PM	43.8	D
5:45 PM	39.3	D
5:00 PM	54.6	D

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	189	-	-	13	282	-	-	297	-
4:15 PM	-	-	-	223	-	-	14	278	-	-	321	-
4:30 PM	-	-	-	191	-	-	22	251	-	-	294	-
4:45 PM	-	-	-	197	-	-	15	224	-	-	307	-
5:00 PM	-	-	-	169	-	-	13	236	-	-	307	-
5:15 PM	-	-	-	229	-	-	16	180	-	-	283	-
5:30 PM	-	-	-	181	-	-	14	186	-	-	306	-
5:45 PM	-	-	-	193	-	-	21	135	-	-	311	-
5:15 PM	-	-	-	229	-	-	16	180	-	-	283	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.91	-	-	0.21	0.64	-	-	0.39	-
4:15 PM	-	-	-	0.92	-	-	0.25	0.67	-	-	0.46	-
4:30 PM	-	-	-	0.91	-	-	0.40	0.72	-	-	0.40	-
4:45 PM	-	-	-	0.92	-	-	0.33	0.71	-	-	0.42	-
5:00 PM	-	-	-	0.91	-	-	0.29	0.77	-	-	0.39	-
5:15 PM	-	-	-	0.92	-	-	0.42	0.77	-	-	0.43	-
5:30 PM	-	-	-	0.91	-	-	0.36	0.70	-	-	0.41	-
5:45 PM	-	-	-	0.91	-	-	0.58	0.60	-	-	0.44	-
5:15 PM	-	-	-	0.92	-	-	0.42	0.77	-	-	0.43	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	48.0	-	-	10.2	27.4	-	-	13.6	-
4:15 PM	-	-	-	47.2	-	-	13.4	31.9	-	-	17.6	-
4:30 PM	-	-	-	47.8	-	-	11.4	26.5	-	-	15.3	-
4:45 PM	-	-	-	47.2	-	-	11.6	30.5	-	-	15.4	-
5:00 PM	-	-	-	49.8	-	-	8.5	22.1	-	-	12.7	-
5:15 PM	-	-	-	47.2	-	-	14.6	34.3	-	-	19.3	-
5:30 PM	-	-	-	48.7	-	-	10.5	28.5	-	-	14.1	-
5:45 PM	-	-	-	47.6	-	-	14.1	24.1	-	-	17.3	-
5:15 PM	-	-	-	47.2	-	-	14.6	34.3	-	-	19.3	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:00 PM	-	-	-	D	-	-	A	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	C	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.7	-	-	0.1	0.8	-	-	0.6	-
4:15 PM	-	-	-	0.8	-	-	0.1	0.8	-	-	0.7	-
4:30 PM	-	-	-	0.7	-	-	0.2	0.8	-	-	0.6	-
4:45 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.6	-
5:00 PM	-	-	-	0.6	-	-	0.1	0.8	-	-	0.6	-
5:15 PM	-	-	-	0.8	-	-	0.3	0.9	-	-	0.6	-
5:30 PM	-	-	-	0.6	-	-	0.2	0.9	-	-	0.6	-
5:45 PM	-	-	-	0.7	-	-	0.3	0.7	-	-	0.7	-
5:15 PM	-	-	-	0.8	-	-	0.3	0.9	-	-	0.6	-

Intersection Delay and LOS
Time-Period

4:00 PM	26.8	C	
4:15 PM	30.2	C	
4:30 PM	26.8	C	
4:45 PM	28.5	C	
5:00 PM	23.7	C	
5:15 PM	32.2	C	X
5:30 PM	27.1	C	
5:45 PM	26.3	C	
5:15 PM	C	32.2	

Phase 2 Analysis

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (1)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2025** **(Phase 2)**

	Entering	Exiting		
IP Trip Generation Rate (Hourly)	**114**	**32**	A.M.	100% IP Development
	45	**117**	P.M.	

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	15	7	6	4	2	7	10	291	27	19	87	19
Existing Volumes (Demand) - Period 2- 7:15 AM	18	10	12	3	0	12	7	388	18	31	135	12
Existing Volumes (Demand) - Period 3- 7:30 AM	28	13	10	6	6	7	3	381	32	25	174	13
Existing Volumes (Demand) - Period 4- 7:45 AM	26	10	7	13	5	18	6	320	23	29	173	8
Existing Volumes (Demand) - Period 5- 8:00 AM	18	7	8	7	8	11	5	286	6	20	140	19
Existing Volumes (Demand) - Period 6- 8:15 AM	14	4	2	6	5	13	4	275	8	24	156	10
Existing Volumes (Demand) - Period 7- 8:30 AM	16	6	9	3	7	4	5	257	10	23	135	6
Existing Volumes (Demand) - Period 8- 8:45 AM	23	12	5	6	3	9	2	236	14	22	138	11
Maximum Existing AM Volumes	**28**	**13**	**10**	**6**	**6**	**7**	**3**	**381**	**32**	**25**	**174**	**13**
Background Traffic Growth	4	2	1	1	1	1	0	53	4	4	24	2
BEK	0	0	0	0	0	0	0	3	0	0	1	0
Maverik C-Store	5	0	0	0	0	2	0	13	0	2	12	4
AM Pk Hr. NO BUILD Volumes - Preiod 1	**24**	**9**	**7**	**5**	**3**	**10**	**10**	**360**	**31**	**25**	**124**	**25**
AM Pk Hr. NO BUILD Volumes - Period 2	**27**	**12**	**13**	**4**	**1**	**15**	**7**	**457**	**22**	**37**	**172**	**18**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**37**	**15**	**11**	**7**	**7**	**10**	**3**	**450**	**36**	**31**	**211**	**19**
AM Pk Hr. NO BUILD Volumes - Period 4	**35**	**12**	**8**	**14**	**6**	**21**	**6**	**389**	**27**	**35**	**210**	**14**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**27**	**9**	**9**	**8**	**9**	**14**	**5**	**355**	**10**	**26**	**177**	**25**
AM Pk Hr. NO BUILD Volumes - Period 6	**23**	**6**	**3**	**7**	**6**	**16**	**4**	**344**	**12**	**30**	**193**	**16**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**25**	**8**	**10**	**4**	**8**	**7**	**5**	**326**	**14**	**29**	**172**	**12**
AM Pk Hr. NO BUILD Volumes - Period 8	**32**	**14**	**6**	**7**	**4**	**12**	**2**	**305**	**18**	**28**	**175**	**17**
Maximum AM NO BUILD Volumes	**37**	**15**	**11**	**7**	**7**	**10**	**3**	**450**	**36**	**31**	**211**	**19**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.20%***	***0.40%***	***11.80%***	***3.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	***1.20%***	***11.80%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.40%***	***3.93%***	*0.00%*
Total Primary Trips Generated	0	1	1	0	1	1	4	2	0	1	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**24**	**10**	**8**	**5**	**4**	**11**	**14**	**362**	**31**	**26**	**125**	**25**
AM Pk Hr. BUILD Volumes - Period 2	**27**	**13**	**14**	**4**	**2**	**16**	**11**	**459**	**22**	**38**	**173**	**18**
AM Pk Hr. BUILD Volumes - Preiod 3	**37**	**16**	**12**	**7**	**8**	**11**	**7**	**452**	**36**	**32**	**212**	**19**
AM Pk Hr. BUILD Volumes - Preiod 4	**35**	**13**	**9**	**14**	**7**	**22**	**10**	**391**	**27**	**36**	**211**	**14**
AM Pk Hr. BUILD Volumes - Period 5	**27**	**10**	**10**	**8**	**10**	**15**	**9**	**357**	**10**	**27**	**178**	**25**
AM Pk Hr. BUILD Volumes - Preiod 6	**23**	**7**	**4**	**7**	**7**	**17**	**8**	**346**	**12**	**31**	**194**	**16**
AM Pk Hr. BUILD Volumes - Preiod 7	**25**	**9**	**11**	**4**	**9**	**8**	**9**	**328**	**14**	**30**	**173**	**12**
AM Pk Hr. BUILD Volumes - Period 8	**32**	**15**	**7**	**7**	**5**	**13**	**6**	**307**	**18**	**29**	**176**	**17**
Maximum AM BUILD Volumes (Demand)	**37**	**16**	**12**	**7**	**8**	**11**	**7**	**452**	**36**	**32**	**212**	**19**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	9	8	25	26	40	7	180	10	19	318	14
Existing Volumes (Demand) - Period 2- 4:15 PM	15	6	8	15	16	39	10	191	13	12	331	34
Existing Volumes (Demand) - Period 3- 4:30 PM	14	4	9	12	27	46	7	215	15	23	288	32
Existing Volumes (Demand) - Period 4- 4:45 PM	26	9	16	22	15	36	7	211	55	12	303	27
Existing Volumes (Demand) - Period 5- 5:00 PM	26	19	8	22	31	52	12	238	8	11	349	23
Existing Volumes (Demand) - Period 6- 5:15 PM	16	11	8	23	24	35	7	224	13	16	301	38
Existing Volumes (Demand) - Period 7- 5:30 PM	24	11	7	20	22	33	9	245	13	22	318	16
Existing Volumes (Demand) - Period 8- 5:45 PM	16	6	9	25	26	43	5	208	10	23	335	28
Maximum Existing PM Volumes	**26**	**19**	**8**	**22**	**31**	**52**	**12**	**238**	**8**	**11**	**349**	**23**
Background Traffic Growth	4	3	1	3	4	7	2	33	1	2	49	3
BEK	0	0	0	0	0	0	0	2	0	1	4	0
Maverik C-Store	4	0	0	0	0	2	0	13	0	2	12	4
PM Pk Hr. NO BUILD Volumes - Preiod 1	**31**	**12**	**9**	**28**	**30**	**49**	**9**	**228**	**11**	**24**	**383**	**21**
PM Pk Hr. NO BUILD Volumes - Period 2	**23**	**9**	**9**	**18**	**20**	**48**	**12**	**239**	**14**	**17**	**396**	**41**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**22**	**7**	**10**	**15**	**31**	**55**	**9**	**263**	**16**	**28**	**353**	**39**
PM Pk Hr. NO BUILD Volumes - Period 4	**34**	**12**	**17**	**25**	**19**	**45**	**9**	**259**	**56**	**17**	**368**	**34**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**34**	**22**	**9**	**25**	**35**	**61**	**14**	**286**	**9**	**16**	**414**	**30**
PM Pk Hr. NO BUILD Volumes - Period 6	**24**	**14**	**9**	**26**	**28**	**44**	**9**	**272**	**14**	**21**	**366**	**45**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**32**	**14**	**8**	**23**	**26**	**42**	**11**	**293**	**14**	**27**	**383**	**23**
PM Pk Hr. NO BUILD Volumes - Period 8	**24**	**9**	**10**	**28**	**30**	**52**	**7**	**256**	**11**	**28**	**400**	**35**
Maximum PM NO BUILD Volumes	**34**	**22**	**9**	**25**	**35**	**61**	**14**	**286**	**9**	**16**	**414**	**30**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.20%***	***0.40%***	***11.80%***	***3.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	***1.20%***	***11.80%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.40%***	***3.93%***	*0.00%*
Total Primary Trips Generated	0	1	4	0	1	1	2	1	0	1	2	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**31**	**13**	**13**	**28**	**31**	**50**	**11**	**229**	**11**	**25**	**385**	**21**
PM Pk Hr. BUILD Volumes - Period 2	**23**	**10**	**13**	**18**	**21**	**49**	**14**	**240**	**14**	**18**	**398**	**41**
PM Pk Hr. BUILD Volumes - Preiod 3	**22**	**8**	**14**	**15**	**32**	**56**	**11**	**264**	**16**	**29**	**355**	**39**
PM Pk Hr. BUILD Volumes - Preiod 4	**34**	**13**	**21**	**25**	**20**	**46**	**11**	**260**	**56**	**18**	**370**	**34**
PM Pk Hr. BUILD Volumes - Period 5	**34**	**23**	**13**	**25**	**36**	**62**	**16**	**287**	**9**	**17**	**416**	**30**
PM Pk Hr. BUILD Volumes - Preiod 6	**24**	**15**	**13**	**26**	**29**	**45**	**11**	**273**	**14**	**22**	**368**	**45**
PM Pk Hr. BUILD Volumes - Preiod 7	**32**	**15**	**12**	**23**	**27**	**43**	**13**	**294**	**14**	**28**	**385**	**23**
PM Pk Hr. BUILD Volumes - Period 8	**24**	**10**	**14**	**28**	**31**	**53**	**9**	**257**	**11**	**29**	**402**	**35**
Maximum PM BUILD Volumes	**34**	**23**	**13**	**25**	**36**	**62**	**16**	**287**	**9**	**17**	**416**	**30**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Los Volcanes Rd.** (2)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2025** **(Phase 2)**

	Entering	Exiting		
IP Trip Generation Rate (Hourly)	**114**	**32**	A.M.	100% IP Development
	45	**117**	P.M.	

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	111	27	3	15	47	61	19	459	52	103	275	45
Existing Volumes (Demand) - Period 2- 7:15 AM	74	32	3	28	14	48	4	324	90	72	169	18
Existing Volumes (Demand) - Period 3- 7:30 AM	42	11	1	32	9	40	5	334	40	65	173	24
Existing Volumes (Demand) - Period 4- 7:45 AM	56	11	6	13	6	44	1	289	27	45	159	22
Existing Volumes (Demand) - Period 5- 8:00 AM	78	12	10	10	2	30	6	267	21	44	164	28
Existing Volumes (Demand) - Period 6- 8:15 AM	63	13	10	8	2	35	4	258	23	32	143	18
Existing Volumes (Demand) - Period 7- 8:30 AM	39	8	8	5	7	25	7	237	23	43	160	14
Existing Volumes (Demand) - Period 8- 8:45 AM	17	3	2	8	6	18	7	93	13	26	66	6
Maximum Existing AM Volumes	**111**	**27**	**3**	**15**	**47**	**61**	**19**	**459**	**52**	**103**	**275**	**45**
Background Traffic Growth	16	4	0	2	7	9	3	64	7	14	39	6
BEK	0	0	0	1	0	1	0	0	4	7	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**127**	**32**	**3**	**36**	**55**	**81**	**22**	**523**	**82**	**135**	**314**	**51**
AM Pk Hr. NO BUILD Volumes - Period 2	**90**	**37**	**3**	**49**	**22**	**68**	**7**	**388**	**120**	**104**	**208**	**24**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**58**	**16**	**1**	**53**	**17**	**60**	**8**	**398**	**70**	**97**	**212**	**30**
AM Pk Hr. NO BUILD Volumes - Period 4	**72**	**16**	**6**	**34**	**14**	**64**	**4**	**353**	**57**	**77**	**198**	**28**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**94**	**17**	**10**	**31**	**10**	**50**	**9**	**331**	**51**	**76**	**203**	**34**
AM Pk Hr. NO BUILD Volumes - Period 6	**79**	**18**	**10**	**29**	**10**	**55**	**7**	**322**	**53**	**64**	**182**	**24**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**55**	**13**	**8**	**26**	**15**	**45**	**10**	**301**	**53**	**75**	**199**	**20**
AM Pk Hr. NO BUILD Volumes - Period 8	**33**	**8**	**2**	**29**	**14**	**38**	**10**	**157**	**43**	**58**	**105**	**12**
Maximum AM NO BUILD Volumes	**127**	**32**	**3**	**36**	**55**	**81**	**22**	**523**	**82**	**135**	**314**	**51**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.93%***	*0.00%*	***4.33%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.61%***
Percent IP Trips Generated(Exiting)	***26.61%***	***2.93%***	***4.33%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	3	1	1	0	1	0	2	0	0	0	0	8
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**130**	**33**	**4**	**36**	**56**	**81**	**24**	**523**	**82**	**135**	**314**	**59**
AM Pk Hr. BUILD Volumes - Period 2	**93**	**38**	**4**	**49**	**23**	**68**	**9**	**388**	**120**	**104**	**208**	**32**
AM Pk Hr. BUILD Volumes - Preiod 3	**61**	**17**	**2**	**53**	**18**	**60**	**10**	**398**	**70**	**97**	**212**	**38**
AM Pk Hr. BUILD Volumes - Preiod 4	**75**	**17**	**7**	**34**	**15**	**64**	**6**	**353**	**57**	**77**	**198**	**36**
AM Pk Hr. BUILD Volumes - Period 5	**97**	**18**	**11**	**31**	**11**	**50**	**11**	**331**	**51**	**76**	**203**	**42**
AM Pk Hr. BUILD Volumes - Preiod 6	**82**	**19**	**11**	**29**	**11**	**55**	**9**	**322**	**53**	**64**	**182**	**32**
AM Pk Hr. BUILD Volumes - Preiod 7	**58**	**14**	**9**	**26**	**16**	**45**	**12**	**301**	**53**	**75**	**199**	**28**
AM Pk Hr. BUILD Volumes - Period 8	**36**	**9**	**3**	**29**	**15**	**38**	**12**	**157**	**43**	**58**	**105**	**20**
Maximum AM BUILD Volumes (Demand)	**130**	**33**	**4**	**36**	**56**	**81**	**24**	**523**	**82**	**135**	**314**	**59**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	10	7	30	11	53	3	221	21	33	305	27
Existing Volumes (Demand) - Period 2- 4:15 PM	19	6	6	21	10	44	4	218	17	47	349	22
Existing Volumes (Demand) - Period 3- 4:30 PM	48	5	7	34	10	64	5	234	31	43	286	20
Existing Volumes (Demand) - Period 4- 4:45 PM	40	14	4	23	6	45	4	275	25	61	313	24
Existing Volumes (Demand) - Period 5- 5:00 PM	48	14	16	59	33	74	7	277	44	55	288	22
Existing Volumes (Demand) - Period 6- 5:15 PM	39	12	6	26	14	55	5	256	16	40	321	36
Existing Volumes (Demand) - Period 7- 5:30 PM	32	11	4	24	18	47	5	264	29	36	309	26
Existing Volumes (Demand) - Period 8- 5:45 PM	28	10	4	20	6	36	4	234	25	43	368	39
Maximum Existing PM Volumes	**48**	**14**	**16**	**59**	**33**	**74**	**7**	**277**	**44**	**55**	**288**	**22**
Background Traffic Growth	7	2	2	8	5	10	1	39	6	8	40	3
BEK	0	0	0	4	0	9	0	0	2	4	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**30**	**13**	**9**	**60**	**17**	**82**	**4**	**260**	**48**	**56**	**345**	**30**
PM Pk Hr. NO BUILD Volumes - Period 2	**26**	**9**	**8**	**51**	**16**	**73**	**5**	**257**	**44**	**70**	**389**	**25**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**55**	**8**	**9**	**64**	**16**	**93**	**6**	**273**	**58**	**66**	**326**	**23**
PM Pk Hr. NO BUILD Volumes - Period 4	**47**	**17**	**6**	**53**	**12**	**74**	**5**	**314**	**52**	**84**	**353**	**27**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**55**	**17**	**18**	**89**	**39**	**103**	**8**	**316**	**71**	**78**	**328**	**25**
PM Pk Hr. NO BUILD Volumes - Period 6	**46**	**15**	**8**	**56**	**20**	**84**	**6**	**295**	**43**	**63**	**361**	**39**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**39**	**14**	**6**	**54**	**24**	**76**	**6**	**303**	**56**	**59**	**349**	**29**
PM Pk Hr. NO BUILD Volumes - Period 8	**35**	**13**	**6**	**50**	**12**	**65**	**5**	**273**	**52**	**66**	**408**	**42**
Maximum PM NO BUILD Volumes	**55**	**17**	**18**	**89**	**39**	**103**	**8**	**316**	**71**	**78**	**328**	**25**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.93%***	*0.00%*	***4.33%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.61%***
Percent IP Trips Generated(Exiting)	***26.61%***	***2.93%***	***4.33%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	8	1	2	0	1	0	1	0	0	0	0	3
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**38**	**14**	**11**	**60**	**18**	**82**	**5**	**260**	**48**	**56**	**345**	**33**
PM Pk Hr. BUILD Volumes - Period 2	**34**	**10**	**10**	**51**	**17**	**73**	**6**	**257**	**44**	**70**	**389**	**28**
PM Pk Hr. BUILD Volumes - Preiod 3	**63**	**9**	**11**	**64**	**17**	**93**	**7**	**273**	**58**	**66**	**326**	**26**
PM Pk Hr. BUILD Volumes - Preiod 4	**55**	**18**	**8**	**53**	**13**	**74**	**6**	**314**	**52**	**84**	**353**	**30**
PM Pk Hr. BUILD Volumes - Period 5	**63**	**18**	**20**	**89**	**40**	**103**	**9**	**316**	**71**	**78**	**328**	**28**
PM Pk Hr. BUILD Volumes - Preiod 6	**54**	**16**	**10**	**56**	**21**	**84**	**7**	**295**	**43**	**63**	**361**	**42**
PM Pk Hr. BUILD Volumes - Preiod 7	**47**	**15**	**8**	**54**	**25**	**76**	**7**	**303**	**56**	**59**	**349**	**32**
PM Pk Hr. BUILD Volumes - Period 8	**43**	**14**	**8**	**50**	**13**	**65**	**6**	**273**	**52**	**66**	**408**	**45**
Maximum PM BUILD Volumes	**63**	**18**	**20**	**89**	**40**	**103**	**9**	**316**	**71**	**78**	**328**	**28**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (3)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Implementation Year **2025** **(Phase 2)**

	Entering	Exiting		
IP Trip Generation Rate (Hourly)	**114**	**32**	A.M.	100% IP Development
	45	**117**	P.M.	

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	0	0	0	70	0	35	7	166	0	0	559	37
Existing Volumes (Demand) - Period 2- 7:15 AM	0	0	0	79	0	39	7	195	0	0	553	44
Existing Volumes (Demand) - Period 3- 7:30 AM	0	0	0	80	0	33	6	242	0	0	518	38
Existing Volumes (Demand) - Period 4- 7:45 AM	0	0	0	93	1	45	5	222	0	0	510	42
Existing Volumes (Demand) - Period 5- 8:00 AM	0	0	0	81	1	38	13	229	0	0	358	37
Existing Volumes (Demand) - Period 6- 8:15 AM	0	0	0	84	0	73	16	157	0	0	335	35
Existing Volumes (Demand) - Period 7- 8:30 AM	0	0	0	86	0	50	5	158	0	0	330	25
Existing Volumes (Demand) - Period 8- 8:45 AM	0	0	0	85	0	60	11	138	0	0	351	25
Maximum Existing AM Volumes	**0**	**0**	**0**	**93**	**1**	**45**	**5**	**222**	**0**	**0**	**510**	**42**
Background Traffic Growth	0	0	0	13	0	6	1	31	0	0	71	6
BEK	0	0	0	5	0	0	0	1	0	0	2	0
Maverik C-Store	0	0	0	2	0	0	3	7	0	0	7	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**90**	**0**	**41**	**11**	**205**	**0**	**0**	**639**	**43**
AM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**99**	**0**	**45**	**11**	**234**	**0**	**0**	**633**	**50**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**100**	**0**	**39**	**10**	**281**	**0**	**0**	**598**	**44**
AM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**113**	**1**	**51**	**9**	**261**	**0**	**0**	**590**	**48**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**101**	**1**	**44**	**17**	**268**	**0**	**0**	**438**	**43**
AM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**104**	**0**	**79**	**20**	**196**	**0**	**0**	**415**	**41**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**106**	**0**	**56**	**9**	**197**	**0**	**0**	**410**	**31**
AM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**105**	**0**	**66**	**15**	**177**	**0**	**0**	**431**	**31**
Maximum AM NO BUILD Volumes	**0**	**0**	**0**	**113**	**1**	**51**	**9**	**261**	**0**	**0**	**590**	**48**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	6	0	0	1	1	0	0	3	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**96**	**0**	**41**	**12**	**206**	**0**	**0**	**642**	**43**
AM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**105**	**0**	**45**	**12**	**235**	**0**	**0**	**636**	**50**
AM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**106**	**0**	**39**	**11**	**282**	**0**	**0**	**601**	**44**
AM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**119**	**1**	**51**	**10**	**262**	**0**	**0**	**593**	**48**
AM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**107**	**1**	**44**	**18**	**269**	**0**	**0**	**441**	**43**
AM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**110**	**0**	**79**	**21**	**197**	**0**	**0**	**418**	**41**
AM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**112**	**0**	**56**	**10**	**198**	**0**	**0**	**413**	**31**
AM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**111**	**0**	**66**	**16**	**178**	**0**	**0**	**434**	**31**
Maximum AM BUILD Volumes (Demand)	**0**	**0**	**0**	**119**	**1**	**51**	**10**	**262**	**0**	**0**	**593**	**48**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	0	0	0	164	0	272	8	250	0	0	264	41
Existing Volumes (Demand) - Period 2- 4:15 PM	0	0	0	198	2	303	9	246	0	0	288	59
Existing Volumes (Demand) - Period 3- 4:30 PM	0	0	0	166	1	321	17	219	0	0	261	47
Existing Volumes (Demand) - Period 4- 4:45 PM	0	0	0	172	1	357	10	192	0	0	274	52
Existing Volumes (Demand) - Period 5- 5:00 PM	0	0	0	144	3	359	8	204	0	0	274	48
Existing Volumes (Demand) - Period 6- 5:15 PM	0	0	0	204	0	355	11	148	0	0	250	52
Existing Volumes (Demand) - Period 7- 5:30 PM	0	0	0	156	1	330	9	154	0	0	273	41
Existing Volumes (Demand) - Period 8- 5:45 PM	0	0	0	168	2	1	16	103	0	0	278	55
Maximum Existing PM Volumes	**0**	**0**	**0**	**198**	**2**	**303**	**9**	**246**	**0**	**0**	**288**	**59**
Background Traffic Growth	0	0	0	28	0	42	1	34	0	0	40	8
BEK	0	0	0	3	0	0	1	3	0	0	1	0
Maverik C-Store	0	0	0	2	0	0	2	7	0	0	7	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**197**	**0**	**314**	**12**	**294**	**0**	**0**	**312**	**49**
PM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**231**	**2**	**345**	**13**	**290**	**0**	**0**	**336**	**67**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**199**	**1**	**363**	**21**	**263**	**0**	**0**	**309**	**55**
PM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**205**	**1**	**399**	**14**	**236**	**0**	**0**	**322**	**60**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**177**	**3**	**401**	**12**	**248**	**0**	**0**	**322**	**56**
PM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**237**	**0**	**397**	**15**	**192**	**0**	**0**	**298**	**60**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**189**	**1**	**372**	**13**	**198**	**0**	**0**	**321**	**49**
PM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**201**	**2**	**43**	**20**	**147**	**0**	**0**	**326**	**63**
Maximum PM NO BUILD Volumes	**0**	**0**	**0**	**231**	**2**	**345**	**13**	**290**	**0**	**0**	**336**	**67**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	3	0	0	1	3	0	0	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**200**	**0**	**314**	**13**	**297**	**0**	**0**	**313**	**49**
PM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**234**	**2**	**345**	**14**	**293**	**0**	**0**	**337**	**67**
PM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**202**	**1**	**363**	**22**	**266**	**0**	**0**	**310**	**55**
PM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**208**	**1**	**399**	**15**	**239**	**0**	**0**	**323**	**60**
PM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**180**	**3**	**401**	**13**	**251**	**0**	**0**	**323**	**56**
PM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**240**	**0**	**397**	**16**	**195**	**0**	**0**	**299**	**60**
PM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**192**	**1**	**372**	**14**	**201**	**0**	**0**	**322**	**49**
PM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**204**	**2**	**43**	**21**	**150**	**0**	**0**	**327**	**63**
Maximum PM BUILD Volumes	**0**	**0**	**0**	**234**	**2**	**345**	**14**	**293**	**0**	**0**	**337**	**67**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (4)
N-S Street: **Unser Blvd.**

Year of Existing Counts 2018
Implementation Year **2025 (Phase 2)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***132***	***0***	***64***	***0***	***0***	***0***	***0***	***816***	***948***	***0***	***1,188***	***976***
Background Traffic Growth	20	0	8	0	0	0	0	116	132	0	168	136
Subtotal	152	0	72	0	0	0	0	932	1,080	0	1,356	1,112
BEK	0	0	4	0	0	0	0	4	4	0	28	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	36	0
Subtotal (NO BUILD - A.M.)	***152***	***0***	***88***	***0***	***0***	***0***	***0***	***972***	***1,092***	***0***	***1,420***	***1,112***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	4	0	0	32	0
Total AM Peak Hour BUILD Volumes	**152**	**0**	**92**	**0**	**0**	**0**	**0**	**976**	**1,092**	**0**	**1,452**	**1,112**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***80***	***0***	***56***	***0***	***0***	***0***	***0***	***944***	***696***	***0***	***1,248***	***464***
Background Traffic Growth	12	0	8	0	0	0	0	132	96	0	176	64
Subtotal	92	0	64	0	0	0	0	1,076	792	0	1,424	528
BEK	0	0	4	0	0	0	0	12	24	0	20	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	32	0
Subtotal (NO BUILD - A.M.)	***92***	***0***	***80***	***0***	***0***	***0***	***0***	***1,124***	***824***	***0***	***1,476***	***528***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	12	0	0	12	0
Total PM Peak Hour BUILD Volumes	**92**	**0**	**84**	**0**	**0**	**0**	**0**	**1,136**	**824**	**0**	**1,488**	**528**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Daytona Rd

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **Los Volcanes Rd.** (5)
N-S Street: **Daytona Rd**

Year of Existing Counts 2013
Implementation Year **2025 (Phase 2)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***0***	***396***	***0***	***8***	***292***	***88***	***0***	***0***	***4***	***80***	***0***	***4***
Background Traffic Growth	0	96	0	0	72	20	0	0	0	20	0	0
Subtotal	0	492	0	8	364	108	0	0	4	100	0	4
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***508***	***0***	***8***	***380***	***108***	***0***	***0***	***4***	***100***	***0***	***4***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***33.87%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***33.87%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	40	0	0	0	12	0	4
Total AM Peak Hour BUILD Volumes	**4**	**508**	**0**	**8**	**380**	**148**	**0**	**0**	**4**	**112**	**0**	**8**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***4***	***220***	***0***	***0***	***152***	***52***	***0***	***0***	***0***	***36***	***0***	***0***
Background Traffic Growth	0	52	0	0	36	12	0	0	0	8	0	0
Subtotal	4	272	0	0	188	64	0	0	0	44	0	0
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***4***	***288***	***0***	***0***	***204***	***64***	***0***	***0***	***0***	***44***	***0***	***0***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***33.87%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***33.87%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	16	0	0	0	40	0	4
Total PM Peak Hour BUILD Volumes	**8**	**288**	**0**	**0**	**204**	**80**	**0**	**0**	**0**	**84**	**0**	**4**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Central Ave. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Central Ave.** (6)
N-S Street: **98th St.**

NOTES: Base volumes (2022) are from NICO TIS.

Year of Existing Counts 2022
Implementation Year **2025** **(Phase 2)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	114	**32**	A.M.
	45	**117**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	109	51	9	36	34	41	25	424	53	22	110	31
Existing Volumes (Demand) - Period 2- 7:15 AM	138	77	15	27	37	64	32	474	41	23	152	31
Existing Volumes (Demand) - Period 3- 7:30 AM	107	69	16	35	31	89	5	442	35	27	150	27
Existing Volumes (Demand) - Period 4- 7:45 AM	98	70	14	41	43	43	9	457	61	21	131	34
Existing Volumes (Demand) - Period 5- 8:00 AM	80	47	4	42	46	51	13	323	55	17	133	18
Existing Volumes (Demand) - Period 6- 8:15 AM	51	37	9	50	54	44	13	329	38	25	109	18
Existing Volumes (Demand) - Period 7- 8:30 AM	54	32	7	38	18	49	14	331	42	18	112	23
Existing Volumes (Demand) - Period 8- 8:45 AM	25	27	2	13	24	27	13	161	25	12	60	10
Maximum Existing AM Volumes	**138**	**77**	**15**	**27**	**37**	**64**	**32**	**474**	**41**	**23**	**152**	**31**
Background Traffic Growth	8	5	1	2	2	4	2	28	2	1	9	2
Maverik C-Store Trips	1	0	0	0	0	5	0	4	0	5	4	1
Mercado el Milagro Trips	4	14	0	22	**-4**	0	4	7	2	0	13	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**122**	**70**	**10**	**60**	**32**	**50**	**31**	**463**	**57**	**28**	**136**	**34**
AM Pk Hr. NO BUILD Volumes - Period 2	**151**	**96**	**16**	**51**	**35**	**73**	**38**	**513**	**45**	**29**	**178**	**34**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**120**	**88**	**17**	**59**	**29**	**98**	**11**	**481**	**39**	**33**	**176**	**30**
AM Pk Hr. NO BUILD Volumes - Period 4	**111**	**89**	**15**	**65**	**41**	**52**	**15**	**496**	**65**	**27**	**157**	**37**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**93**	**66**	**5**	**66**	**44**	**60**	**19**	**362**	**59**	**23**	**159**	**21**
AM Pk Hr. NO BUILD Volumes - Period 6	**64**	**56**	**10**	**74**	**52**	**53**	**19**	**368**	**42**	**31**	**135**	**21**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**67**	**51**	**8**	**62**	**16**	**58**	**20**	**370**	**46**	**24**	**138**	**26**
AM Pk Hr. NO BUILD Volumes - Period 8	**38**	**46**	**3**	**37**	**22**	**36**	**19**	**200**	**29**	**18**	**86**	**13**
Maximum AM NO BUILD Volumes	**151**	**96**	**16**	**51**	**35**	**73**	**38**	**513**	**45**	**29**	**178**	**34**
Percent IP Trips Generated(Entering)	***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated	1	0	0	0	0	5	0	3	0	2	1	1
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**123**	**70**	**10**	**60**	**32**	**55**	**31**	**466**	**57**	**30**	**137**	**35**
AM Pk Hr. BUILD Volumes - Period 2	**152**	**96**	**16**	**51**	**35**	**78**	**38**	**516**	**45**	**31**	**179**	**35**
AM Pk Hr. BUILD Volumes - Preiod 3	**121**	**88**	**17**	**59**	**29**	**103**	**11**	**484**	**39**	**35**	**177**	**31**
AM Pk Hr. BUILD Volumes - Preiod 4	**112**	**89**	**15**	**65**	**41**	**57**	**15**	**499**	**65**	**29**	**158**	**38**
AM Pk Hr. BUILD Volumes - Preiod 5	**94**	**66**	**5**	**66**	**44**	**65**	**19**	**365**	**59**	**25**	**160**	**22**
AM Pk Hr. BUILD Volumes - Preiod 6	**65**	**56**	**10**	**74**	**52**	**58**	**19**	**371**	**42**	**33**	**136**	**22**
AM Pk Hr. BUILD Volumes - Preiod 7	**68**	**51**	**8**	**62**	**16**	**63**	**20**	**373**	**46**	**26**	**139**	**27**
AM Pk Hr. BUILD Volumes - Period 8	**39**	**46**	**3**	**37**	**22**	**41**	**19**	**203**	**29**	**20**	**87**	**14**
Maximum AM BUILD Volumes (Demand)	**152**	**96**	**16**	**51**	**35**	**78**	**38**	**516**	**45**	**31**	**179**	**35**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	48	62	10	70	45	40	12	262	49	44	370	71
Existing Volumes (Demand) - Period 2- 4:15 PM	60	42	16	94	60	38	11	224	49	30	394	45
Existing Volumes (Demand) - Period 3- 4:30 PM	48	45	8	71	55	46	12	253	52	29	401	45
Existing Volumes (Demand) - Period 4- 4:45 PM	49	55	10	84	58	49	11	256	45	29	347	100
Existing Volumes (Demand) - Period 5- 5:00 PM	58	63	22	79	64	47	19	209	35	26	345	29
Existing Volumes (Demand) - Period 6- 5:15 PM	51	65	23	83	62	40	17	193	29	35	334	29
Existing Volumes (Demand) - Period 7- 5:30 PM	40	36	30	54	66	47	19	221	37	26	396	57
Existing Volumes (Demand) - Period 8- 5:45 PM	20	21	18	21	29	9	20	81	13	10	98	19
Maximum Existing PM Volumes	**49**	**55**	**10**	**84**	**58**	**49**	**11**	**256**	**45**	**29**	**347**	**100**
Background Traffic Growth	3	3	1	5	3	3	1	15	3	2	21	6
Maverik C-Store Trips	1	0	0	0	0	6	0	4	0	5	4	1
Mercado el Milagro Trips	4	15	0	22	**-5**	0	4	8	2	0	12	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**56**	**80**	**11**	**97**	**43**	**49**	**17**	**289**	**54**	**51**	**407**	**78**
PM Pk Hr. NO BUILD Volumes - Period 2	**68**	**60**	**17**	**121**	**58**	**47**	**16**	**251**	**54**	**37**	**431**	**52**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**56**	**63**	**9**	**98**	**53**	**55**	**17**	**280**	**57**	**36**	**438**	**52**
PM Pk Hr. NO BUILD Volumes - Period 4	**57**	**73**	**11**	**111**	**56**	**58**	**16**	**283**	**50**	**36**	**384**	**107**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**66**	**81**	**23**	**106**	**62**	**56**	**24**	**236**	**40**	**33**	**382**	**36**
PM Pk Hr. NO BUILD Volumes - Period 6	**59**	**83**	**24**	**110**	**60**	**49**	**22**	**220**	**34**	**42**	**371**	**36**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**48**	**54**	**31**	**81**	**64**	**56**	**24**	**248**	**42**	**33**	**433**	**64**
PM Pk Hr. NO BUILD Volumes - Period 8	**28**	**39**	**19**	**48**	**27**	**18**	**25**	**108**	**18**	**17**	**135**	**26**
Maximum PM NO BUILD Volumes	**57**	**73**	**11**	**111**	**56**	**58**	**16**	**283**	**50**	**36**	**384**	**107**
Percent IP Trips Generated(Entering)	***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated	1	0	0	0	0	2	0	1	0	5	3	1
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**57**	**80**	**11**	**97**	**43**	**51**	**17**	**290**	**54**	**56**	**410**	**79**
PM Pk Hr. BUILD Volumes - Period 2	**69**	**60**	**17**	**121**	**58**	**49**	**16**	**252**	**54**	**42**	**434**	**53**
PM Pk Hr. BUILD Volumes - Preiod 3	**57**	**63**	**9**	**98**	**53**	**57**	**17**	**281**	**57**	**41**	**441**	**53**
PM Pk Hr. BUILD Volumes - Preiod 4	**58**	**73**	**11**	**111**	**56**	**60**	**16**	**284**	**50**	**41**	**387**	**108**
PM Pk Hr. BUILD Volumes - Period 5	**67**	**81**	**23**	**106**	**62**	**58**	**24**	**237**	**40**	**38**	**385**	**37**
PM Pk Hr. BUILD Volumes - Preiod 6	**60**	**83**	**24**	**110**	**60**	**51**	**22**	**221**	**34**	**47**	**374**	**37**
PM Pk Hr. BUILD Volumes - Preiod 7	**49**	**54**	**31**	**81**	**64**	**58**	**24**	**249**	**42**	**38**	**436**	**65**
PM Pk Hr. BUILD Volumes - Period 8	**29**	**39**	**19**	**48**	**27**	**20**	**25**	**109**	**18**	**22**	**138**	**27**
Maximum PM BUILD Volumes	**58**	**73**	**11**	**111**	**56**	**60**	**16**	**284**	**50**	**41**	**387**	**108**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (7)

N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019

Implementation Year **2025** **(Phase 2)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	114	**32**	A.M.
	45	**117**	P.M.

100% IP Development

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	27	0	8	0	0	0	11	491	0	0	120	16
Existing Volumes (Demand) - Period 2- 7:15 AM	17	0	9	0	0	0	7	422	0	0	160	15
Existing Volumes (Demand) - Period 3- 7:30 AM	24	0	4	0	0	0	12	357	0	0	181	17
Existing Volumes (Demand) - Period 4- 7:45 AM	26	0	10	0	0	0	13	384	0	0	182	18
Existing Volumes (Demand) - Period 5- 8:00 AM	27	0	12	0	0	0	16	335	0	0	166	18
Existing Volumes (Demand) - Period 6- 8:15 AM	29	0	5	0	0	0	6	327	0	0	129	26
Existing Volumes (Demand) - Period 7- 8:30 AM	26	0	7	0	0	0	8	406	0	0	133	24
Existing Volumes (Demand) - Period 8- 8:45 AM	20	0	0	0	0	0	16	270	0	0	182	24
Maximum Existing AM Volumes	**27**	**0**	**8**	**0**	**0**	**0**	**11**	**491**	**0**	**0**	**120**	**16**
Background Traffic Growth	3	0	1	0	0	0	1	59	0	0	14	2
Maverik C-Store Trips	0	0	0	12	1	14	0	**-7**	16	10	**-3**	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**30**	**0**	**9**	**12**	**1**	**14**	**12**	**553**	**16**	**10**	**141**	**18**
AM Pk Hr. NO BUILD Volumes - Period 2	**20**	**0**	**10**	**12**	**1**	**14**	**8**	**484**	**16**	**10**	**181**	**17**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**27**	**0**	**5**	**12**	**1**	**14**	**13**	**419**	**16**	**10**	**202**	**19**
AM Pk Hr. NO BUILD Volumes - Period 4	**29**	**0**	**11**	**12**	**1**	**14**	**14**	**446**	**16**	**10**	**203**	**20**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**30**	**0**	**13**	**12**	**1**	**14**	**17**	**397**	**16**	**10**	**187**	**20**
AM Pk Hr. NO BUILD Volumes - Period 6	**32**	**0**	**6**	**12**	**1**	**14**	**7**	**389**	**16**	**10**	**150**	**28**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**29**	**0**	**8**	**12**	**1**	**14**	**9**	**468**	**16**	**10**	**154**	**26**
AM Pk Hr. NO BUILD Volumes - Period 8	**23**	**0**	**1**	**12**	**1**	**14**	**17**	**332**	**16**	**10**	**203**	**26**
Maximum AM NO BUILD Volumes	**30**	**0**	**9**	**12**	**1**	**14**	**12**	**553**	**16**	**10**	**141**	**18**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	3	1	3	0	0	8	8	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**30**	**1**	**9**	**15**	**2**	**17**	**12**	**553**	**24**	**18**	**141**	**18**
AM Pk Hr. BUILD Volumes - Period 2	**20**	**1**	**10**	**15**	**2**	**17**	**8**	**484**	**24**	**18**	**181**	**17**
AM Pk Hr. BUILD Volumes - Preiod 3	**27**	**1**	**5**	**15**	**2**	**17**	**13**	**419**	**24**	**18**	**202**	**19**
AM Pk Hr. BUILD Volumes - Preiod 4	**29**	**1**	**11**	**15**	**2**	**17**	**14**	**446**	**24**	**18**	**203**	**20**
AM Pk Hr. BUILD Volumes - Period 5	**30**	**1**	**13**	**15**	**2**	**17**	**17**	**397**	**24**	**18**	**187**	**20**
AM Pk Hr. BUILD Volumes - Preiod 6	**32**	**1**	**6**	**15**	**2**	**17**	**7**	**389**	**24**	**18**	**150**	**28**
AM Pk Hr. BUILD Volumes - Preiod 7	**29**	**1**	**8**	**15**	**2**	**17**	**9**	**468**	**24**	**18**	**154**	**26**
AM Pk Hr. BUILD Volumes - Period 8	**23**	**1**	**1**	**15**	**2**	**17**	**17**	**332**	**24**	**18**	**203**	**26**
Maximum AM BUILD Volumes (Demand)	**30**	**1**	**9**	**15**	**2**	**17**	**12**	**553**	**24**	**18**	**141**	**18**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	24	0	21	0	0	0	15	23	0	0	443	37
Existing Volumes (Demand) - Period 2- 4:15 PM	35	0	17	0	0	0	14	244	0	0	457	33
Existing Volumes (Demand) - Period 3- 4:30 PM	30	0	12	0	0	0	11	231	0	0	429	31
Existing Volumes (Demand) - Period 4- 4:45 PM	26	0	16	0	0	0	5	211	0	0	396	32
Existing Volumes (Demand) - Period 5- 5:00 PM	32	0	13	0	0	0	13	203	0	0	437	43
Existing Volumes (Demand) - Period 6- 5:15 PM	21	0	10	0	0	0	6	272	0	0	484	40
Existing Volumes (Demand) - Period 7- 5:30 PM	25	0	13	0	0	0	18	241	0	0	465	39
Existing Volumes (Demand) - Period 8- 5:45 PM	30	0	13	0	0	0	12	209	0	0	440	54
Maximum Existing PM Volumes	**21**	**0**	**10**	**0**	**0**	**0**	**6**	**272**	**0**	**0**	**484**	**40**
Background Traffic Growth	3	0	1	0	0	0	1	33	0	0	58	5
Maverik C-Store Trips	0	0	0	16	0	11	0	**-3**	14	14	**-6**	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**27**	**0**	**22**	**16**	**0**	**11**	**16**	**63**	**14**	**14**	**505**	**42**
PM Pk Hr. NO BUILD Volumes - Period 2	**38**	**0**	**18**	**16**	**0**	**11**	**15**	**284**	**14**	**14**	**519**	**38**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**33**	**0**	**13**	**16**	**0**	**11**	**12**	**271**	**14**	**14**	**491**	**36**
PM Pk Hr. NO BUILD Volumes - Period 4	**29**	**0**	**17**	**16**	**0**	**11**	**6**	**251**	**14**	**14**	**458**	**37**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**35**	**0**	**14**	**16**	**0**	**11**	**14**	**243**	**14**	**14**	**499**	**48**
PM Pk Hr. NO BUILD Volumes - Period 6	**24**	**0**	**11**	**16**	**0**	**11**	**7**	**312**	**14**	**14**	**546**	**45**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**28**	**0**	**14**	**16**	**0**	**11**	**19**	**281**	**14**	**14**	**527**	**44**
PM Pk Hr. NO BUILD Volumes - Period 8	**33**	**0**	**14**	**16**	**0**	**11**	**13**	**249**	**14**	**14**	**502**	**59**
Maximum PM NO BUILD Volumes	**24**	**0**	**11**	**16**	**0**	**11**	**7**	**312**	**14**	**14**	**546**	**45**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	8	1	8	0	0	3	4	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**27**	**1**	**22**	**24**	**1**	**19**	**16**	**63**	**17**	**18**	**505**	**42**
PM Pk Hr. BUILD Volumes - Period 2	**38**	**1**	**18**	**24**	**1**	**19**	**15**	**284**	**17**	**18**	**519**	**38**
PM Pk Hr. BUILD Volumes - Preiod 3	**33**	**1**	**13**	**24**	**1**	**19**	**12**	**271**	**17**	**18**	**491**	**36**
PM Pk Hr. BUILD Volumes - Preiod 4	**29**	**1**	**17**	**24**	**1**	**19**	**6**	**251**	**17**	**18**	**458**	**37**
PM Pk Hr. BUILD Volumes - Period 5	**35**	**1**	**14**	**24**	**1**	**19**	**14**	**243**	**17**	**18**	**499**	**48**
PM Pk Hr. BUILD Volumes - Preiod 6	**24**	**1**	**11**	**24**	**1**	**19**	**7**	**312**	**17**	**18**	**546**	**45**
PM Pk Hr. BUILD Volumes - Preiod 7	**28**	**1**	**14**	**24**	**1**	**19**	**19**	**281**	**17**	**18**	**527**	**44**
PM Pk Hr. BUILD Volumes - Period 8	**33**	**1**	**14**	**24**	**1**	**19**	**13**	**249**	**17**	**18**	**502**	**59**
Maximum PM BUILD Volumes	**24**	**1**	**11**	**24**	**1**	**19**	**7**	**312**	**17**	**18**	**546**	**45**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (8)

N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019

Implementation Year **2025** **(Phase 2)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	114	**32**	A.M.
	45	**117**	P.M.

100% IP Development

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	0	0	0	123	0	0	14	79	0	0	169	0
Existing Volumes (Demand) - Period 2- 7:15 AM	0	0	0	138	1	1	14	115	0	0	115	0
Existing Volumes (Demand) - Period 3- 7:30 AM	0	0	0	97	0	0	21	141	0	0	102	0
Existing Volumes (Demand) - Period 4- 7:45 AM	0	0	0	109	0	0	21	165	7	0	82	0
Existing Volumes (Demand) - Period 5- 8:00 AM	0	0	0	97	0	0	5	104	0	0	75	0
Existing Volumes (Demand) - Period 6- 8:15 AM	0	0	0	106	0	0	11	88	0	0	94	0
Existing Volumes (Demand) - Period 7- 8:30 AM	0	0	0	101	0	0	17	141	0	0	126	0
Existing Volumes (Demand) - Period 8- 8:45 AM	0	0	0	122	0	0	10	60	0	0	104	0
Maximum Existing AM Volumes	**0**	**0**	**0**	**123**	**0**	**0**	**14**	**79**	**0**	**0**	**169**	**0**
Background Traffic Growth	0	0	0	15	0	0	2	9	0	0	20	0
Maverik C-Store Trips	0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips	0	0	0	1	0	0	1	9	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**141**	**0**	**0**	**18**	**103**	**0**	**0**	**205**	**0**
AM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**156**	**1**	**1**	**18**	**139**	**0**	**0**	**151**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**115**	**0**	**0**	**25**	**165**	**0**	**0**	**138**	**0**
AM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**127**	**0**	**0**	**25**	**189**	**7**	**0**	**118**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**115**	**0**	**0**	**9**	**128**	**0**	**0**	**111**	**0**
AM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**124**	**0**	**0**	**15**	**112**	**0**	**0**	**130**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**119**	**0**	**0**	**21**	**165**	**0**	**0**	**162**	**0**
AM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**140**	**0**	**0**	**14**	**84**	**0**	**0**	**140**	**0**
Maximum AM NO BUILD Volumes	**0**	**0**	**0**	**141**	**0**	**0**	**18**	**103**	**0**	**0**	**205**	**0**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	5	0	0	1	1	0	0	2	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**146**	**0**	**0**	**19**	**104**	**0**	**0**	**207**	**0**
AM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**161**	**1**	**1**	**19**	**140**	**0**	**0**	**153**	**0**
AM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**120**	**0**	**0**	**26**	**166**	**0**	**0**	**140**	**0**
AM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**132**	**0**	**0**	**26**	**190**	**7**	**0**	**120**	**0**
AM Pk Hr. BUILD Volumes - Preiod 5	**0**	**0**	**0**	**120**	**0**	**0**	**10**	**129**	**0**	**0**	**113**	**0**
AM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**129**	**0**	**0**	**16**	**113**	**0**	**0**	**132**	**0**
AM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**124**	**0**	**0**	**22**	**166**	**0**	**0**	**164**	**0**
AM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**145**	**0**	**0**	**15**	**85**	**0**	**0**	**142**	**0**
Maximum AM BUILD Volumes (Demand)	**0**	**0**	**0**	**146**	**0**	**0**	**19**	**104**	**0**	**0**	**207**	**0**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	0	0	0	345	0	0	22	67	0	0	146	1
Existing Volumes (Demand) - Period 2- 4:15 PM	0	0	0	384	1	0	19	69	0	0	65	0
Existing Volumes (Demand) - Period 3- 4:30 PM	0	0	0	387	0	0	12	70	0	0	55	0
Existing Volumes (Demand) - Period 4- 4:45 PM	0	0	0	351	0	0	19	55	0	0	68	0
Existing Volumes (Demand) - Period 5- 5:00 PM	0	0	0	307	0	0	21	74	0	0	80	0
Existing Volumes (Demand) - Period 6- 5:15 PM	0	0	0	341	2	0	10	81	0	0	98	0
Existing Volumes (Demand) - Period 7- 5:30 PM	0	0	0	340	0	0	21	79	0	0	79	0
Existing Volumes (Demand) - Period 8- 5:45 PM	0	0	0	380	1	0	15	72	0	0	66	0
Maximum Existing PM Volumes	**0**	**0**	**0**	**345**	**0**	**0**	**22**	**67**	**0**	**0**	**146**	**1**
Background Traffic Growth	0	0	0	41	0	0	3	8	0	0	18	0
Maverik C-Store Trips	0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips	0	0	0	1	0	0	1	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**389**	**0**	**0**	**27**	**91**	**0**	**0**	**180**	**1**
PM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**428**	**1**	**0**	**24**	**93**	**0**	**0**	**99**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**431**	**0**	**0**	**17**	**94**	**0**	**0**	**89**	**0**
PM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**395**	**0**	**0**	**24**	**79**	**0**	**0**	**102**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**351**	**0**	**0**	**26**	**98**	**0**	**0**	**114**	**0**
PM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**385**	**2**	**0**	**15**	**105**	**0**	**0**	**132**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**384**	**0**	**0**	**26**	**103**	**0**	**0**	**113**	**0**
PM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**424**	**1**	**0**	**20**	**96**	**0**	**0**	**100**	**0**
Maximum PM NO BUILD Volumes	**0**	**0**	**0**	**389**	**0**	**0**	**27**	**91**	**0**	**0**	**180**	**1**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	2	0	0	2	2	0	0	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**391**	**0**	**0**	**29**	**93**	**0**	**0**	**181**	**1**
PM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**430**	**1**	**0**	**26**	**95**	**0**	**0**	**100**	**0**
PM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**433**	**0**	**0**	**19**	**96**	**0**	**0**	**90**	**0**
PM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**397**	**0**	**0**	**26**	**81**	**0**	**0**	**103**	**0**
PM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**353**	**0**	**0**	**28**	**100**	**0**	**0**	**115**	**0**
PM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**387**	**2**	**0**	**17**	**107**	**0**	**0**	**133**	**0**
PM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**386**	**0**	**0**	**28**	**105**	**0**	**0**	**114**	**0**
PM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**426**	**1**	**0**	**22**	**98**	**0**	**0**	**101**	**0**
Maximum PM BUILD Volumes	**0**	**0**	**0**	**391**	**0**	**0**	**29**	**93**	**0**	**0**	**181**	**1**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / 98th St.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (9)
N-S Street: **98th St.**

Year of Existing Counts 2019
Implementation Year **2025 (Phase 2)**

AM Peak

Growth Rates	Eastbound (I-40 S. Ramp) 2.00%			Westbound (I-40 S. Ramp) 2.00%			Northbound (98th St.) 2.00%			Southbound (98th St.) 2.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***732***	***0***	***0***	***716***	***0***
Background Traffic Growth	0	0	0	0	0	0	0	88	0	0	84	0
Subtotal	12	0	0	0	0	0	0	820	0	0	800	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	36	8	0	44	0
Subtotal (NO BUILD - A.M.)	***12***	***0***	***8***	***0***	***0***	***0***	***0***	***880***	***16***	***0***	***876***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	8	0	0	0	0	4	0	0	28	0
Total AM Peak Hour BUILD Volumes	**12**	**0**	**16**	**0**	**0**	**0**	**0**	**884**	**16**	**0**	**904**	**0**

PM Peak

Growth Rates	Eastbound (I-40 S. Ramp) 2.00%			Westbound (I-40 S. Ramp) 2.00%			Northbound (98th St.) 2.00%			Southbound (98th St.) 2.00%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***336***	***0***	***0***	***1,988***	***0***
Background Traffic Growth	0	0	0	0	0	0	0	40	0	0	240	0
Subtotal	12	0	0	0	0	0	0	376	0	0	2,228	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	40	4	0	44	0
Subtotal (NO BUILD - A.M.)	***12***	***0***	***8***	***0***	***0***	***0***	***0***	***440***	***12***	***0***	***2,304***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	12	0	0	12	0
Total PM Peak Hour BUILD Volumes	**12**	**0**	**12**	**0**	**0**	**0**	**0**	**452**	**12**	**0**	**2,316**	**0**

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Daytona Rd.

INTERSECTION: E-W Street: **Bluewater Rd.** (10)
N-S Street: **Daytona Rd.**

Year of Existing Counts 2022
Implementation Year **2025** **(Phase 2)**

	Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
		Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	200	0	0	200	0	0	0	0	0	0	0
Background Traffic Growth		0	12	0	0	12	0	0	0	0	0	0	0
Percent Office Trips Generated(Entering)		***52.90%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***	*0.00%*	***52.90%***
Total Trips Generated		60	0	0	0	0	15	0	0	0	4	0	17
Total AM Peak Hour BUILD Volumes		**60**	**212**	**0**	**0**	**212**	**15**	**0**	**0**	**0**	**4**	**0**	**17**

	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	200	0	0	200	0	0	0	0	0	0	0
Background Traffic Growth	0	12	0	0	12	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***212***	***0***	***0***	***212***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***52.90%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.00%***	*0.00%*	***52.90%***
Total Trips Generated	24	0	0	0	0	6	0	0	0	15	0	62
Total PM Peak Hour BUILD Volumes	**24**	**212**	**0**	**0**	**212**	**6**	**0**	**0**	**0**	**15**	**0**	**62**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	100% Office Development
	45	**117**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025)

Phase 2

INTERSECTION: **Summary**

Bluewater Rd. / Adonai Rd.

(11)

15.0% Truck

	1.00			1.00			1.00			1.00		PHF
	und (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Adonai Rd.)			Southbound (Adonai Rd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	105	5	10	105	0	16	0	31	0	0	0
2025 (NO BUILD - A.M.)	*0*	*111*	*6*	*11*	*111*	*0*	*17*	*0*	*33*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***0***	***171***	***6***	***11***	***128***	***0***	***17***	***0***	***33***	***0***	***0***	***0***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Adonai Rd.)			Southbound (Adonai Rd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	105	16	26	105	0	8	0	16	0	0	0
2025 (NO BUILD - P.M.)	*0*	*111*	*17*	*28*	*111*	*0*	*9*	*0*	*17*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***0***	***135***	***17***	***28***	***172***	***0***	***9***	***0***	***17***	***0***	***0***	***0***

Daytona Rd. / Driveway "A"

(12)

15.0% Truck

	1.00			1.00			1.00			1.00		PHF
	und (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - A.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***0***	***107***	***0***	***0***	***125***	***14***	***0***	***0***	***0***	***4***	***0***	***0***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***0***	***126***	***0***	***0***	***110***	***5***	***0***	***0***	***0***	***14***	***0***	***0***

Daytona Rd. / Driveway "B"

(13)

15.0% Truck

	1.00			1.00			1.00			1.00		PHF
	und (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - A.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***15***	***107***	***0***	***0***	***125***	***0***	***0***	***0***	***0***	***0***	***0***	***4***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***6***	***126***	***0***	***0***	***110***	***0***	***0***	***0***	***0***	***0***	***0***	***15***

Daytona Rd. / Driveway "C"

(14)

15.0% Truck

	1.00			1.00			1.00			1.00		PHF
	und (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	48	0	20	0	0	0	0	788	964	0	1,108	1,148
2025 (NO BUILD - A.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***8***	***121***	***0***	***0***	***125***	***4***	***0***	***0***	***0***	***1***	***0***	***2***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	140	0	52	0	0	0	0	1,512	960	0	3,140	644
2025 (NO BUILD - P.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***3***	***128***	***0***	***0***	***123***	***2***	***0***	***0***	***0***	***4***	***0***	***8***

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025)

Phase 2

INTERSECTION: **Summary**

Daytona Rd. / Driveway "D"

(15)

15.0% Truck

	1.00			1.00			1.00			1.00		PHF
	und (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - A.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - A.M.)	***13***	***123***	***40***	***17***	***100***	***4***	***11***	***0***	***5***	***1***	***0***	***4***

	1.00			1.00			1.00			1.00		PHF
	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	*0*	*100*	*0*	*0*	*100*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025 (BUILD - P.M.)	***5***	***109***	***16***	***7***	***100***	***2***	***41***	***0***	***17***	***4***	***0***	***13***

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Adonai Rd.

INTERSECTION: E-W Street: **Bluewater Rd.** (11)
N-S Street: **Adonai Rd.**

Year of Existing Counts 2018
Implementation Year **2025**

Growth Rates	1.50%			1.50%			1.50%			1.50%		
	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Adonai Rd.)**			**Southbound (Adonai Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	5	10	100	0	15	0	30	0	0	0
Background Traffic Growth	0	11	1	1	11	0	2	0	3	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***111***	***6***	***11***	***111***	***0***	***17***	***0***	***33***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	***52.48%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.42%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***0.42%***	***52.48%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	60	0	0	17	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	**0**	**171**	**6**	**11**	**128**	**0**	**17**	**0**	**33**	**0**	**0**	**0**

	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Adonai Rd.)**			**Southbound (Adonai Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	15	25	100	0	8	0	15	0	0	0
Background Traffic Growth	0	11	2	3	11	0	1	0	2	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***111***	***17***	***28***	***111***	***0***	***9***	***0***	***17***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	***52.48%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.42%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***0.42%***	***52.48%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	24	0	0	61	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	**0**	**135**	**17**	**28**	**172**	**0**	**9**	**0**	**17**	**0**	**0**	**0**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	Phase 1 Development
	45	**117**	P.M.	

	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Adonai Rd.)**			**Southbound (Adonai Rd.)**		
2021 AM Peak Hr. Volumes	0	105	5	10	105	0	16	0	31	0	0	0
2021 PM Peak Hr. Volumes	0	105	16	26	105	0	8	0	16	0	0	0

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "A"

INTERSECTION: E-W Street: **Daytona Rd.** (12)
N-S Street: **Driveway "A"**

Year of Existing Counts 2018
Implementation Year **2025**
Growth Rates **0.00%** **0.00%** **0.00%** **0.00%**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.16%***	***11.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.95%***	*0.00%*	*0.00%*
Total Trips Generated	0	7	0	0	25	14	0	0	0	4	0	0
Total AM Peak Hour BUILD Volumes	**0**	**107**	**0**	**0**	**125**	**14**	**0**	**0**	**0**	**4**	**0**	**0**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.16%***	***11.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.95%***	*0.00%*	*0.00%*
Total Trips Generated	0	26	0	0	10	5	0	0	0	14	0	0
Total PM Peak Hour BUILD Volumes	**0**	**126**	**0**	**0**	**110**	**5**	**0**	**0**	**0**	**14**	**0**	**0**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	Phase 1 Development
	45	**117**	P.M.	

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
2021 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2021 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "B"

INTERSECTION: E-W Street: **Daytona Rd.** (13)
N-S Street: **Driveway "B"**

Year of Existing Counts 2018
Implementation Year **2025**
Growth Rates **0.00%** **0.00%** **0.00%** **0.00%**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***13.23%***	*0.00%*	*0.00%*	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.23%***
Total Trips Generated	15	7	0	0	25	0	0	0	0	0	0	4
Total AM Peak Hour BUILD Volumes	**15**	**107**	**0**	**0**	**125**	**0**	**0**	**0**	**0**	**0**	**0**	**4**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***13.23%***	*0.00%*	*0.00%*	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***22.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***13.23%***
Total Trips Generated	6	26	0	0	10	0	0	0	0	0	0	15
Total PM Peak Hour BUILD Volumes	**6**	**126**	**0**	**0**	**110**	**0**	**0**	**0**	**0**	**0**	**0**	**15**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	Phase 1 Development
	45	**117**	P.M.	

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
2021 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2021 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "C"

INTERSECTION: E-W Street: **Daytona Rd.** (14)
N-S Street: **Driveway "C"**

Year of Existing Counts 2018
Implementation Year **2025**
Growth Rates **0.00%** **0.00%** **0.00%** **0.00%**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***7.00%***	***13.23%***	*0.00%*	*0.00%*	***18.47%***	***3.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***18.47%***	*0.00%*	*0.00%*	***13.23%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.69%***	*0.00%*	***7.00%***
Total Trips Generated	8	21	0	0	25	4	0	0	0	1	0	2
Total AM Peak Hour BUILD Volumes	**8**	**121**	**0**	**0**	**125**	**4**	**0**	**0**	**0**	**1**	**0**	**2**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***7.00%***	***13.23%***	*0.00%*	*0.00%*	***18.47%***	***3.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***18.47%***	*0.00%*	*0.00%*	***13.23%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.69%***	*0.00%*	***7.00%***
Total Trips Generated	3	28	0	0	23	2	0	0	0	4	0	8
Total PM Peak Hour BUILD Volumes	**3**	**128**	**0**	**0**	**123**	**2**	**0**	**0**	**0**	**4**	**0**	**8**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	Phase 1 Development
	45	**117**	P.M.	

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
2021 AM Peak Hr. Volumes	48	0	20	0	0	0	0	788	964	0	1,108	1,148
2021 PM Peak Hr. Volumes	140	0	52	0	0	0	0	1,512	960	0	3,140	644

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "D"

INTERSECTION: E-W Street: **Daytona Rd.** (15)
N-S Street: **Driveway "D"**

Year of Existing Counts 2018
Implementation Year **2025**
Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - A.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***11.00%***	***20.23%***	***34.67%***	***14.78%***	*0.00%*	***3.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***34.67%***	*0.00%*	***14.78%***	***3.69%***	*0.00%*	***11.00%***
Total Trips Generated	13	23	40	17	0	4	11	0	5	1	0	4
Total AM Peak Hour BUILD Volumes	**13**	**123**	**40**	**17**	**100**	**4**	**11**	**0**	**5**	**1**	**0**	**4**

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Subtotal (NO BUILD - P.M.)	***0***	***100***	***0***	***0***	***100***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***11.00%***	***20.23%***	***34.67%***	***14.78%***	*0.00%*	***3.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***34.67%***	*0.00%*	***14.78%***	***3.69%***	*0.00%*	***11.00%***
Total Trips Generated	5	9	16	7	0	2	41	0	17	4	0	13
Total PM Peak Hour BUILD Volumes	**5**	**109**	**16**	**7**	**100**	**2**	**41**	**0**	**17**	**4**	**0**	**13**

	Entering	Exiting		
Number of Office Trips Generated	**114**	**32**	A.M.	Phase 1 Development
	45	**117**	P.M.	

	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
2021 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2021 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

2025 AM Peak Hour NO BUILD Conditions
(Multiple Period Analysis Worksheets)

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	24	9	7	5	3	10	10	360	31	25	124	25
7:15 AM	27	12	13	4	1	15	7	457	22	37	172	18
7:30 AM	37	15	11	7	7	10	3	450	36	31	211	19
7:45 AM	35	12	8	14	6	21	6	389	27	35	210	14
8:00 AM	27	9	9	8	9	14	5	355	10	26	177	25
8:15 AM	23	6	3	7	6	16	4	344	12	30	193	16
8:30 AM	25	8	10	4	8	7	5	326	14	29	172	12
8:45 AM	32	14	6	7	4	12	2	305	18	28	175	17
7:45 AM	35	12	8	14	6	21	6	389	27	35	210	14

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.39	0.25	-	0.14	0.11	0.43	0.15	0.70	0.14	0.82	0.53	0.24
7:15 AM	0.41	0.38	-	0.12	0.04	0.63	0.14	**1.09**	0.12	0.89	0.65	0.15
7:30 AM	0.59	0.38	-	0.20	0.25	0.42	0.03	0.92	0.16	**1.53**	0.72	0.15
7:45 AM	0.52	0.27	-	0.36	0.18	0.73	0.09	**1.26**	0.17	0.71	0.72	0.11
8:00 AM	0.46	0.27	-	0.23	0.32	0.59	0.05	0.68	0.04	**1.36**	0.55	0.17
8:15 AM	0.40	0.14	-	0.20	0.22	0.68	0.05	**1.11**	0.07	0.60	0.56	0.10
8:30 AM	0.43	0.28	-	0.12	0.29	0.30	0.05	0.63	0.06	**1.45**	0.56	0.09
8:45 AM	0.50	0.29	-	0.20	0.14	0.51	0.03	0.64	0.08	0.49	0.51	0.11
7:45 AM	0.52	0.27	-	0.36	0.18	0.73	0.09	1.26	0.17	0.71	0.72	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.1	44.3	-	53.7	53.1	56.9	10.4	16.0	8.7	22.3	17.3	13.5
7:15 AM	46.6	45.0	-	53.4	52.5	61.4	15.0	78.7	14.7	48.1	17.1	10.7
7:30 AM	50.5	44.6	-	54.3	54.3	56.8	9.2	62.7	9.7	**278.5**	10.2	6.9
7:45 AM	46.3	42.0	-	54.5	52.0	62.1	19.8	**159.0**	20.7	**112.6**	12.8	8.2
8:00 AM	47.0	43.8	-	54.5	55.1	60.2	7.4	51.1	7.4	**205.4**	8.4	6.6
8:15 AM	47.3	43.5	-	54.2	54.0	63.1	16.1	**98.6**	16.5	42.7	8.4	6.0
8:30 AM	47.2	44.4	-	53.4	54.7	55.1	7.6	20.9	7.7	**247.0**	8.4	6.0
8:45 AM	47.3	43.6	-	54.3	53.4	58.3	10.8	18.0	10.9	45.0	8.7	6.3
7:45 AM	46.3	42.0	-	54.5	52.0	62.1	19.8	159.0	20.7	112.6	12.8	8.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	C	B	B
7:15 AM	D	D	-	D	D	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	E	A	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	E	E	A	D	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	D	A	A
8:30 AM	D	D	-	D	D	E	A	C	A	F	A	A
8:45 AM	D	D	-	D	D	E	B	B	B	D	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.5**	0.7	-	0.2	0.1	0.5	0.2	1.0	0.3	1.0	0.8	**1.2**
7:15 AM	**1.7**	**1.0**	-	0.2	0.0	0.8	0.2	**2.6**	0.3	**2.0**	0.9	0.7
7:30 AM	**2.4**	**1.1**	-	0.3	0.2	0.5	0.1	**2.4**	0.3	**3.4**	0.5	0.3
7:45 AM	**2.2**	0.8	-	0.7	0.1	**1.1**	0.2	**3.2**	0.4	**3.4**	0.6	0.3
8:00 AM	**1.7**	0.7	-	0.4	0.2	0.7	0.1	**1.9**	0.1	**2.5**	0.4	0.3
8:15 AM	**1.4**	0.4	-	0.3	0.1	0.8	0.1	**2.3**	0.1	**1.7**	0.5	0.2
8:30 AM	**1.5**	0.7	-	0.2	0.2	0.3	0.1	**1.1**	0.1	**3.2**	0.4	0.2
8:45 AM	**2.0**	0.8	-	0.3	0.1	0.6	0.0	0.9	0.2	**1.7**	0.5	0.3
7:45 AM	2.2	0.8	-	0.7	0.1	1.1	0.2	3.2	0.4	3.4	0.6	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	18.6	B
7:15 AM	48.7	D
7:30 AM	50.1	D
7:45 AM	**80.2**	F **X**
8:00 AM	40.7	D
8:15 AM	52.2	D
8:30 AM	32.4	C
8:45 AM	18.6	B
7:45 AM	80.2	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	24	10	8	5	4	11	14	362	31	26	125	25
7:15 AM	27	13	14	4	2	16	11	459	22	38	173	18
7:30 AM	37	16	12	7	8	11	7	452	36	32	212	19
7:45 AM	35	13	9	14	7	22	10	391	27	36	211	14
8:00 AM	27	10	10	8	10	15	9	357	10	27	178	25
8:15 AM	23	7	4	7	7	17	8	346	12	31	194	16
8:30 AM	25	9	11	4	9	8	9	328	14	30	173	12
8:45 AM	32	15	7	7	5	13	6	307	18	29	176	17
7:45 AM	35	13	9	14	7	22	10	391	27	36	211	14

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.40	0.28	-	0.14	0.14	0.47	0.20	0.71	0.14	0.84	0.53	0.24
7:15 AM	0.42	0.41	-	0.12	0.07	0.68	0.20	**1.10**	0.12	0.89	0.65	0.15
7:30 AM	0.60	0.41	-	0.21	0.29	0.46	0.08	0.92	0.16	**1.51**	0.72	0.14
7:45 AM	0.51	0.29	-	0.35	0.20	0.73	0.15	**1.26**	0.17	0.71	0.73	0.11
8:00 AM	0.46	0.30	-	0.23	0.36	0.63	0.09	0.69	0.04	**1.35**	0.55	0.17
8:15 AM	0.40	0.17	-	0.20	0.25	0.70	0.10	**1.12**	0.07	0.61	0.56	0.10
8:30 AM	0.44	0.32	-	0.12	0.32	0.34	0.09	0.64	0.06	**1.44**	0.56	0.09
8:45 AM	0.50	0.32	-	0.20	0.18	0.55	0.08	0.64	0.08	0.50	0.50	0.11
7:45 AM	0.51	0.29	-	0.35	0.20	0.73	0.15	1.26	0.17	0.71	0.73	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.1	44.6	-	53.7	53.4	57.5	10.7	16.2	8.8	23.0	17.9	14.1
7:15 AM	46.6	45.4	-	53.4	52.8	62.9	15.1	**82.0**	14.8	48.1	17.7	11.1
7:30 AM	50.8	45.0	-	54.3	54.7	57.4	9.0	67.4	9.6	**270.0**	10.1	7.0
7:45 AM	45.9	41.9	-	54.1	51.8	61.8	19.8	**161.8**	20.9	**112.6**	13.4	8.6
8:00 AM	47.0	44.1	-	54.6	55.5	61.4	7.4	53.9	7.5	**200.7**	8.6	6.8
8:15 AM	47.2	43.6	-	54.0	54.1	63.7	16.0	**101.1**	16.6	44.6	8.9	6.3
8:30 AM	47.2	44.7	-	53.4	55.1	55.6	7.7	21.9	7.8	**240.4**	8.7	6.2
8:45 AM	47.3	43.9	-	54.3	53.7	59.2	10.7	18.1	10.9	45.5	9.0	6.6
7:45 AM	45.9	41.9	-	54.1	51.8	61.8	19.8	161.8	20.9	112.6	13.4	8.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	C	B	B
7:15 AM	D	D	-	D	D	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	E	A	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	E	E	A	D	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	D	A	A
8:30 AM	D	D	-	D	E	E	A	C	A	F	A	A
8:45 AM	D	D	-	D	D	E	B	B	B	D	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.5**	0.7	-	0.2	0.1	0.5	0.2	**1.0**	0.3	**1.0**	0.8	**1.2**
7:15 AM	**1.7**	**1.1**	-	0.2	0.0	0.8	0.3	**2.7**	0.3	**2.0**	0.9	0.7
7:30 AM	**2.4**	**1.2**	-	0.3	0.2	0.5	0.1	**2.5**	0.3	**3.4**	0.5	0.3
7:45 AM	**2.2**	0.9	-	0.7	0.2	**1.1**	0.3	**3.3**	0.4	**3.5**	0.6	0.3
8:00 AM	**1.7**	0.8	-	0.4	0.2	0.8	0.1	**2.0**	0.1	**2.5**	0.4	0.3
8:15 AM	**1.4**	0.4	-	0.3	0.2	0.9	0.2	**2.3**	0.1	**1.7**	0.5	0.2
8:30 AM	**1.5**	0.8	-	0.2	0.2	0.4	0.1	**1.2**	0.1	**3.2**	0.4	0.2
8:45 AM	**2.0**	0.9	-	0.3	0.1	0.6	0.1	0.9	0.2	**1.7**	0.5	0.3
7:45 AM	2.2	0.9	-	0.7	0.2	1.1	0.3	3.3	0.4	3.5	0.6	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	19.1	B
7:15 AM	50.5	D
7:30 AM	51.9	D
7:45 AM	**81.6**	F **X**
8:00 AM	42	D
8:15 AM	53.7	D
8:30 AM	32.8	C
8:45 AM	19.1	B
7:45 AM	81.6	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	23	8	7	4	2	11	10	342	30	24	115	25
7:15 AM	26	11	13	3	-	16	7	439	21	36	163	18
7:30 AM	36	14	11	6	6	11	3	432	35	30	202	19
7:45 AM	34	11	8	13	5	22	6	371	26	34	201	14
8:00 AM	26	8	9	7	8	15	5	337	9	25	168	25
8:15 AM	22	5	3	6	5	17	4	326	11	29	184	16
8:30 AM	24	7	10	3	7	8	5	308	13	28	163	12
8:45 AM	31	13	6	6	3	13	2	287	17	27	166	17
7:45 AM	34	11	8	13	5	22	6	371	26	34	201	14

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.38	0.24	-	0.12	0.07	0.47	0.14	0.67	0.13	0.79	0.52	0.26
7:15 AM	0.40	0.37	-	0.09	-	0.68	0.13	**1.05**	0.11	0.89	0.64	0.16
7:30 AM	0.57	0.37	-	0.18	0.22	0.47	0.04	0.89	0.16	**1.48**	0.67	0.14
7:45 AM	0.49	0.25	-	0.33	0.14	0.74	0.09	**1.20**	0.16	0.72	0.70	0.11
8:00 AM	0.44	0.26	-	0.20	0.29	0.63	0.05	0.64	0.04	**1.31**	0.50	0.17
8:15 AM	0.38	0.13	-	0.17	0.18	0.71	0.05	**1.05**	0.06	0.54	0.51	0.10
8:30 AM	0.42	0.27	-	0.09	0.25	0.34	0.05	0.59	0.06	**1.40**	0.51	0.08
8:45 AM	0.47	0.27	-	0.17	0.11	0.55	0.02	0.59	0.08	0.43	0.45	0.10
7:45 AM	0.49	0.25	-	0.33	0.14	0.74	0.09	1.20	0.16	0.72	0.70	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.2	44.5	-	53.4	52.9	57.7	10.2	15.0	8.6	19.7	16.9	13.5
7:15 AM	46.7	45.1	-	53.1	-	62.9	14.9	64.5	14.7	48.4	16.8	10.6
7:30 AM	49.5	44.5	-	54.0	54.0	57.5	9.5	34.9	9.7	**257.1**	10.6	7.2
7:45 AM	45.5	41.6	-	53.8	51.4	62.2	19.3	**134.1**	20.1	**99.4**	12.6	8.2
8:00 AM	47.0	43.9	-	54.2	54.7	61.4	7.1	33.6	7.2	**182.5**	7.9	6.4
8:15 AM	47.3	43.5	-	53.8	53.6	64.4	15.6	77.5	16.1	28.8	7.8	5.8
8:30 AM	47.3	44.6	-	53.1	54.4	55.7	7.3	14.7	7.4	**223.5**	8.0	5.9
8:45 AM	47.0	43.4	-	54.0	53.1	59.2	9.8	16.0	10.1	31.5	8.0	6.2
7:45 AM	45.5	41.6	-	53.8	51.4	62.2	19.3	134.1	20.1	99.4	12.6	8.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	B	B	B
7:15 AM	D	D	-	D	-	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	C	A	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	D	E	A	C	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	C	A	A
8:30 AM	D	D	-	D	D	E	A	B	A	F	A	A
8:45 AM	D	D	-	D	D	E	A	B	B	C	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.4**	0.6	-	0.2	0.0	0.5	0.2	0.9	0.3	**1.0**	0.7	0.9
7:15 AM	**1.6**	1.0	-	0.1	-	0.8	0.2	**2.3**	0.2	**2.1**	0.9	0.8
7:30 AM	**2.3**	**1.0**	-	0.3	0.1	0.5	0.1	**1.8**	0.3	**3.2**	0.6	0.4
7:45 AM	**2.1**	0.8	-	0.6	0.1	**1.1**	0.2	**2.8**	0.4	**3.3**	0.6	0.3
8:00 AM	**1.6**	0.7	-	0.3	0.2	0.8	0.1	**1.5**	0.1	**2.0**	0.4	0.3
8:15 AM	**1.4**	0.3	-	0.3	0.1	0.9	0.1	**1.9**	0.1	**1.2**	0.4	0.2
8:30 AM	**1.5**	0.7	-	0.1	0.2	0.4	0.1	0.9	0.1	**2.9**	0.4	0.2
8:45 AM	**1.9**	0.8	-	0.3	0.1	0.6	0.0	0.8	0.2	**1.4**	0.4	0.2
7:45 AM	2.1	0.8	-	0.6	0.1	1.1	0.2	2.8	0.4	3.3	0.6	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	17.8	B
7:15 AM	42	D
7:30 AM	37.4	D
7:45 AM	**69.0**	E
8:00 AM	32.1	C
8:15 AM	42.7	D
8:30 AM	28.2	C
8:45 AM	17	B
7:45 AM	69	E

X

2025 PM Peak Hour NO BUILD Conditions
(Multiple Period Analysis Worksheets)

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	31	12	9	28	30	49	9	228	11	24	383	21
4:15 PM	23	9	9	18	20	48	12	239	14	17	396	41
4:30 PM	22	7	10	15	31	55	9	263	16	28	353	39
4:45 PM	34	12	17	25	19	45	9	259	56	17	368	34
5:00 PM	34	22	9	25	35	61	14	286	9	16	414	30
5:15 PM	24	14	9	26	28	44	9	272	14	21	366	45
5:30 PM	32	14	8	23	26	42	11	293	14	27	383	23
5:45 PM	24	9	10	28	30	52	7	256	11	28	400	35
5:00 PM	34	22	9	25	35	61	14	286	9	16	414	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.43	0.20	-	0.45	0.44	0.85	0.34	0.50	0.05	0.31	0.89	0.11
4:15 PM	0.32	0.19	-	0.30	0.30	0.86	0.42	0.49	0.07	0.22	0.89	0.21
4:30 PM	0.32	0.17	-	0.22	0.42	0.87	0.28	0.57	0.08	0.40	0.80	0.20
4:45 PM	0.43	0.30	-	0.44	0.30	0.84	0.30	0.55	0.27	0.25	0.83	0.17
5:00 PM	0.42	0.26	-	0.36	0.43	0.88	0.53	0.65	0.05	0.27	0.94	0.15
5:15 PM	0.37	0.25	-	0.45	0.45	0.83	0.27	0.56	0.07	0.30	0.79	0.22
5:30 PM	0.45	0.22	-	0.41	0.44	0.83	0.36	0.62	0.07	0.42	0.84	0.11
5:45 PM	0.35	0.19	-	0.43	0.42	0.86	0.24	0.55	0.05	0.36	0.84	0.17
5:00 PM	0.42	0.26	-	0.36	0.43	0.88	0.53	0.65	0.05	0.27	0.94	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	40.6	37.2	-	51.7	50.3	64.2	31.4	17.4	12.2	12.0	40.1	20.9
4:15 PM	41.4	39.1	-	49.7	49.1	62.7	32.5	15.2	10.6	10.8	35.7	20.0
4:30 PM	39.8	37.3	-	46.7	48.4	65.0	25.3	18.8	12.5	13.1	36.5	23.7
4:45 PM	41.5	39.1	-	52.7	49.8	63.0	27.4	17.0	13.5	12.3	37.3	21.6
5:00 PM	37.2	34.6	-	47.0	46.9	69.6	35.4	22.2	13.5	16.2	45.0	27.5
5:15 PM	42.6	40.4	-	53.1	51.7	62.0	24.3	16.3	10.5	11.5	33.0	20.9
5:30 PM	42.5	39.0	-	53.1	52.3	62.8	28.8	18.9	11.6	13.9	37.3	20.0
5:45 PM	40.3	37.7	-	50.5	49.1	63.5	26.6	18.0	11.9	13.0	35.8	20.2
5:00 PM	37.2	34.6	-	47.0	46.9	69.6	35.4	22.2	13.5	16.2	45.0	27.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:30 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C
5:15 PM	D	D	-	D	D	E	C	B	B	B	C	C
5:30 PM	D	D	-	D	D	E	C	B	B	B	D	B
5:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.8**	0.8	-	**1.3**	0.7	**2.4**	0.3	0.7	0.1	0.4	**1.8**	0.9
4:15 PM	**1.4**	0.7	-	0.8	0.4	**2.3**	0.5	0.7	0.1	0.2	**1.7**	**1.3**
4:30 PM	**1.3**	0.7	-	0.7	0.7	**2.7**	0.3	0.9	0.2	0.4	**1.5**	**1.0**
4:45 PM	**2.1**	**1.2**	-	**1.2**	0.4	**2.2**	0.3	0.8	0.7	0.3	**1.7**	**1.3**
5:00 PM	**1.9**	**1.2**	-	**1.1**	0.7	**3.0**	0.5	1.0	0.1	0.2	**1.7**	**1.1**
5:15 PM	**1.5**	0.9	-	**1.3**	0.6	**2.2**	0.3	0.8	0.1	0.3	**1.5**	**1.1**
5:30 PM	**2.0**	0.9	-	**1.1**	0.6	**2.1**	0.4	0.9	0.1	0.4	**1.7**	0.9
5:45 PM	**1.4**	0.7	-	**1.3**	0.6	**2.5**	0.2	0.8	0.1	0.4	**1.7**	**1.2**
5:00 PM	1.9	1.2	-	1.1	0.7	3.0	0.5	1.0	0.1	0.2	1.7	1.1

Intersection Delay and LOS
Time-Period

4:00 PM	34.5	C
4:15 PM	30.7	C
4:30 PM	31.7	C
4:45 PM	31.1	C
5:00 PM	**37.8**	D **X**
5:15 PM	29.4	C
5:30 PM	32	C
5:45 PM	31.7	C
5:00 PM	37.8	D

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	31	13	13	28	31	50	11	229	11	25	385	21
4:15 PM	23	10	13	18	21	49	14	240	14	18	398	41
4:30 PM	22	8	14	15	32	56	11	264	16	29	355	39
4:45 PM	34	13	21	25	20	46	11	260	56	18	370	34
5:00 PM	34	23	13	25	36	62	16	287	9	17	416	30
5:15 PM	24	15	13	26	29	45	11	273	14	22	368	45
5:30 PM	32	15	12	23	27	43	13	294	14	28	385	23
5:45 PM	24	10	14	28	31	53	9	257	11	29	402	35
5:00 PM	34	23	13	25	36	62	16	287	9	17	416	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.43	0.25	-	0.45	0.45	0.85	0.41	0.50	0.05	0.32	0.90	0.11
4:15 PM	0.32	0.24	-	0.30	0.31	0.86	0.46	0.50	0.07	0.23	0.87	0.20
4:30 PM	0.32	0.22	-	0.22	0.42	0.87	0.33	0.58	0.08	0.41	0.80	0.20
4:45 PM	0.43	0.34	-	0.44	0.31	0.84	0.36	0.55	0.27	0.26	0.84	0.17
5:00 PM	0.42	0.30	-	0.36	0.43	0.88	0.58	0.66	0.05	0.29	0.95	0.15
5:15 PM	0.37	0.30	-	0.45	0.45	0.83	0.32	0.57	0.07	0.31	0.80	0.22
5:30 PM	0.45	0.28	-	0.41	0.44	0.83	0.42	0.63	0.07	0.44	0.86	0.12
5:45 PM	0.35	0.24	-	0.43	0.42	0.86	0.31	0.56	0.05	0.38	0.85	0.17
5:00 PM	0.42	0.30	-	0.36	0.43	0.88	0.58	0.66	0.05	0.29	0.95	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	40.3	37.5	-	51.4	50.0	64.3	32.9	17.9	12.5	12.1	41.0	21.5
4:15 PM	41.1	39.4	-	49.4	48.8	62.8	32.5	15.6	10.8	10.9	36.1	21.1
4:30 PM	39.5	37.6	-	46.4	48.1	65.0	26.3	19.3	12.8	13.2	37.7	24.7
4:45 PM	41.1	39.4	-	52.4	49.5	63.1	29.1	17.5	13.9	12.6	38.0	22.1
5:00 PM	36.9	34.9	-	46.7	46.7	69.7	36.1	22.7	13.8	16.7	45.5	28.2
5:15 PM	42.3	40.7	-	52.8	51.5	61.5	25.5	16.7	10.8	11.8	33.9	21.7
5:30 PM	42.2	39.4	-	52.8	52.0	62.4	30.6	19.4	11.8	14.4	38.4	20.6
5:45 PM	40.0	38.0	-	50.2	48.8	63.6	28.2	18.5	12.2	13.2	37.3	21.0
5:00 PM	36.9	34.9	-	46.7	46.7	69.7	36.1	22.7	13.8	16.7	45.5	28.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:30 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C
5:15 PM	D	D	-	D	D	E	C	B	B	B	C	C
5:30 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.8**	**1.0**	-	**1.3**	0.7	**2.5**	0.4	0.7	0.1	0.4	**1.8**	0.8
4:15 PM	**1.4**	0.9	-	0.8	0.4	**2.4**	0.5	0.7	0.1	0.2	**1.6**	**1.2**
4:30 PM	**1.3**	0.9	-	0.7	0.7	**2.7**	0.3	0.9	0.2	0.4	**1.5**	**1.0**
4:45 PM	**2.0**	**1.4**	-	**1.2**	0.4	**2.3**	0.4	0.8	0.7	0.3	**1.7**	**1.3**
5:00 PM	**1.9**	**1.4**	-	**1.1**	0.8	**3.1**	0.6	**1.0**	0.1	0.2	**1.7**	**1.1**
5:15 PM	**1.5**	**1.2**	-	**1.3**	0.6	**2.2**	0.3	0.8	0.1	0.3	**1.5**	**1.1**
5:30 PM	**1.9**	**1.1**	-	**1.1**	0.6	**2.1**	0.5	1.0	0.2	0.4	**1.7**	0.9
5:45 PM	**1.4**	1.0	-	**1.3**	0.7	**2.6**	0.3	0.8	0.1	0.4	**1.7**	**1.2**
5:00 PM	1.9	1.4	-	1.1	0.8	3.1	0.6	1.0	0.1	0.2	1.7	1.1

Intersection Delay and LOS
Time-Period

4:00 PM	35.1	D
4:15 PM	31.1	C
4:30 PM	32.5	C
4:45 PM	31.7	C
5:00 PM	**38.2**	D **X**
5:15 PM	30	C
5:30 PM	32.7	C
5:45 PM	32.6	C
5:00 PM	38.2	D

2025 PM Peak Hour BUILD Conditions [MITIGATED]
(Multiple Period Analysis Worksheets)

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	30	11	9	27	28	47	8	216	11	24	365	21
4:15 PM	22	8	9	17	18	46	11	227	14	17	378	41
4:30 PM	21	6	10	14	29	53	8	251	16	28	335	39
4:45 PM	33	11	17	24	17	43	8	247	56	17	350	34
5:00 PM	33	21	9	24	33	59	13	274	9	16	396	30
5:15 PM	23	13	9	25	26	42	8	260	14	21	348	45
5:30 PM	31	13	8	22	24	40	10	281	14	27	365	23
5:45 PM	23	8	10	27	28	50	6	244	11	28	382	35
5:00 PM	33	21	9	24	33	59	13	274	9	16	396	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.41	0.20	-	0.44	0.42	0.84	0.26	0.48	0.06	0.29	0.86	0.11
4:15 PM	0.30	0.18	-	0.28	0.28	0.84	0.35	0.47	0.07	0.22	0.87	0.21
4:30 PM	0.30	0.16	-	0.21	0.40	0.86	0.21	0.55	0.08	0.37	0.75	0.20
4:45 PM	0.41	0.29	-	0.42	0.28	0.82	0.22	0.53	0.27	0.23	0.80	0.17
5:00 PM	0.41	0.25	-	0.35	0.41	0.87	0.38	0.63	0.05	0.24	0.84	0.14
5:15 PM	0.35	0.24	-	0.44	0.43	0.82	0.21	0.54	0.07	0.28	0.76	0.22
5:30 PM	0.43	0.22	-	0.40	0.41	0.82	0.28	0.60	0.07	0.40	0.81	0.12
5:45 PM	0.33	0.18	-	0.42	0.40	0.84	0.17	0.53	0.05	0.34	0.81	0.17
5:00 PM	0.41	0.25	-	0.35	0.41	0.87	0.38	0.63	0.05	0.24	0.84	0.14

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	37.7	34.5	-	48.0	46.6	57.1	24.4	16.3	11.7	11.8	26.9	13.6
4:15 PM	38.5	36.4	-	46.2	45.5	57.8	27.0	14.3	10.2	10.5	26.8	14.2
4:30 PM	37.0	34.7	-	43.3	44.9	58.0	19.9	17.5	11.9	12.9	27.4	17.4
4:45 PM	38.6	36.4	-	48.9	46.1	57.6	21.1	15.9	13.0	11.8	24.7	13.8
5:00 PM	34.5	32.1	-	43.5	43.4	62.0	26.8	20.6	12.8	15.5	34.8	20.4
5:15 PM	39.6	37.5	-	49.3	48.0	57.4	19.5	15.2	10.1	11.2	24.9	15.5
5:30 PM	39.5	36.3	-	49.3	48.5	58.2	22.2	17.6	11.0	13.7	25.5	13.3
5:45 PM	37.5	35.0	-	46.8	45.5	56.7	20.4	16.9	11.4	12.5	23.0	12.4
5:00 PM	34.5	32.1	-	43.5	43.4	62.0	26.8	20.6	12.8	15.5	34.8	20.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	C	-	D	D	E	C	B	B	B	C	B
4:15 PM	D	D	-	D	D	E	C	B	B	B	C	B
4:30 PM	D	C	-	D	D	E	B	B	B	B	C	B
4:45 PM	D	D	-	D	D	E	C	B	B	B	C	B
5:00 PM	C	C	-	D	D	E	C	C	B	B	C	C
5:15 PM	D	D	-	D	D	E	B	B	B	B	C	B
5:30 PM	D	D	-	D	D	E	C	B	B	B	C	B
5:45 PM	D	D	-	D	D	E	C	B	B	B	C	B
5:00 PM	C	C	-	D	D	E	C	C	B	B	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.6**	0.7	-	**1.2**	0.6	**2.1**	0.2	0.6	0.1	0.4	**1.3**	0.4
4:15 PM	**1.2**	0.6	-	0.7	0.4	**2.1**	0.3	0.6	0.1	0.2	**1.4**	0.9
4:30 PM	**1.1**	0.6	-	0.6	0.6	**2.4**	0.2	0.8	0.2	0.3	**1.1**	0.9
4:45 PM	**1.8**	**1.0**	-	**1.1**	0.3	**2.0**	0.2	0.7	0.6	0.2	**1.2**	0.8
5:00 PM	**1.7**	**1.0**	-	1.0	0.6	**2.7**	0.4	0.9	0.1	0.2	**1.3**	0.7
5:15 PM	**1.3**	0.8	-	**1.1**	0.5	**2.0**	0.2	0.7	0.1	0.2	**1.2**	1.0
5:30 PM	**1.7**	0.8	-	1.0	0.5	**1.9**	0.2	0.8	0.1	0.4	**1.3**	0.5
5:45 PM	**1.2**	0.6	-	**1.2**	0.6	**2.2**	0.1	0.7	0.1	0.4	**1.2**	0.5
5:00 PM	1.7	1.0	-	1.0	0.6	2.7	0.4	0.9	0.1	0.2	1.3	0.7

Intersection Delay and LOS
Time-Period

4:00 PM	26.7	C
4:15 PM	25.1	C
4:30 PM	26.2	C
4:45 PM	24.3	C
5:00 PM	**31.6**	C **X**
5:15 PM	24.5	C
5:30 PM	25.4	C
5:45 PM	24.4	C
5:00 PM	31.6	C

2025 AM Peak Hour NO BUILD Conditions
(Multiple Period Analysis Worksheets)

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	127	32	3	36	55	81	22	523	82	135	314	51
7:15 AM	90	37	3	49	22	68	7	388	120	104	208	24
7:30 AM	58	16	1	53	17	60	8	398	70	97	212	30
7:45 AM	72	16	6	34	14	64	4	353	57	77	198	28
8:00 AM	94	17	10	31	10	50	9	331	51	76	203	34
8:15 AM	79	18	10	29	10	55	7	322	53	64	182	24
8:30 AM	55	13	8	26	15	45	10	301	53	75	199	20
8:45 AM	33	8	2	29	14	38	10	157	43	58	105	12
7:30 AM	58	16	1	53	17	60	8	398	70	97	212	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.47**	0.33	-	0.37	0.51	0.89	0.79	**1.13**	0.57	**1.01**	**1.24**	0.45
7:15 AM	0.95	0.51	-	0.55	0.24	0.88	0.75	**1.20**	**1.19**	**1.00**	**1.08**	0.28
7:30 AM	0.64	0.27	-	0.53	0.21	0.88	0.85	**1.43**	0.81	0.91	**1.00**	0.32
7:45 AM	0.70	0.27	-	0.37	0.16	0.88	0.82	0.63	0.35	**1.86**	**1.05**	0.33
8:00 AM	**1.01**	0.40	-	0.42	0.15	0.86	0.82	**1.15**	0.54	0.59	0.77	0.29
8:15 AM	0.81	0.37	-	0.38	0.13	0.87	0.81	0.61	0.31	**1.50**	0.78	0.23
8:30 AM	0.65	0.32	-	0.35	0.24	0.85	0.79	**1.02**	0.47	0.70	0.75	0.17
8:45 AM	0.42	0.18	-	0.38	0.26	0.83	**1.33**	0.60	0.42	**2.35**	0.68	0.17
7:30 AM	0.64	0.27	-	0.53	0.21	0.88	0.85	1.43	0.81	0.91	1.00	0.32

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**269.1**	36.3	-	29.8	39.2	56.2	71.9	**104.0**	34.7	67.2	**140.2**	23.0
7:15 AM	**437.6**	44.7	-	33.8	39.1	54.9	61.6	**252.8**	**133.5**	71.7	**262.9**	15.1
7:30 AM	**236.9**	45.4	-	35.5	41.1	56.0	74.4	**536.7**	**142.2**	46.3	**298.7**	14.3
7:45 AM	45.6	40.3	-	34.1	39.6	55.1	67.9	**265.6**	21.8	**444.1**	**313.4**	14.1
8:00 AM	**96.1**	45.2	-	38.4	43.2	57.5	**80.1**	**230.3**	40.7	**194.0**	**210.8**	12.9
8:15 AM	55.3	43.0	-	37.1	41.7	56.6	63.5	53.1	15.7	**280.0**	37.3	12.3
8:30 AM	46.3	44.7	-	39.9	45.5	58.5	77.4	72.7	32.4	**114.1**	16.3	11.2
8:45 AM	41.4	46.2	-	41.5	47.8	60.4	**228.6**	21.4	16.5	**661.7**	13.1	10.3
7:30 AM	236.9	45.4	-	35.5	41.1	56.0	74.4	536.7	142.2	46.3	298.7	14.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	C	F	F	C
7:15 AM	F	D	-	C	D	D	E	F	F	F	F	B
7:30 AM	F	D	-	D	D	E	E	F	F	D	F	B
7:45 AM	D	D	-	C	D	E	E	F	C	F	F	B
8:00 AM	F	D	-	D	D	E	F	F	D	F	F	B
8:15 AM	E	D	-	D	D	E	E	D	B	F	D	B
8:30 AM	D	D	-	D	D	E	E	F	C	F	B	B
8:45 AM	D	D	-	D	D	E	F	C	B	F	B	B
7:30 AM	F	D	-	D	D	E	E	F	F	D	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**7.7**	0.7	-	0.7	**1.2**	**1.0**	0.2	0.8	**1.1**	**1.0**	**1.8**	**1.7**
7:15 AM	**10.0**	0.9	-	1.0	0.5	0.9	0.1	**1.2**	**4.5**	**1.2**	**2.7**	0.5
7:30 AM	**5.6**	0.4	-	**1.1**	0.4	0.8	0.1	**2.4**	**4.3**	0.9	**3.0**	0.7
7:45 AM	**1.4**	0.5	-	0.7	0.3	0.8	0.0	**2.0**	0.9	**2.3**	**3.2**	0.7
8:00 AM	**3.3**	0.6	-	0.7	0.2	0.7	0.1	**1.2**	**1.6**	**2.0**	**2.4**	0.6
8:15 AM	**1.9**	0.6	-	0.6	0.2	0.7	0.1	0.5	0.6	**1.3**	0.8	0.6
8:30 AM	0.7	0.5	-	0.6	0.4	0.6	0.1	0.6	**1.4**	**1.2**	0.4	0.4
8:45 AM	**1.1**	0.2	-	0.7	0.4	0.6	0.3	0.3	1.0	**2.7**	0.3	0.3
7:30 AM	5.6	0.4	-	1.1	0.4	0.8	0.1	2.4	4.3	0.9	3.0	0.7

Intersection Delay and LOS

Time-Period			
7:00 AM	109.3	F	
7:15 AM	195.7	F	
7:30 AM	**282.2**	F	X
7:45 AM	249.3	F	
8:00 AM	169.7	F	
8:15 AM	70.2	E	
8:30 AM	51	D	
8:45 AM	137.5	F	
7:30 AM	282.2	F	

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	130	33	4	36	56	81	24	523	82	135	314	59
7:15 AM	93	38	4	49	23	68	9	388	120	104	208	32
7:30 AM	61	17	2	53	18	60	10	398	70	97	212	38
7:45 AM	75	17	7	34	15	64	6	353	57	77	198	36
8:00 AM	97	18	11	31	11	50	11	331	51	76	203	42
8:15 AM	82	19	11	29	11	55	9	322	53	64	182	32
8:30 AM	58	14	9	26	16	45	12	301	53	75	199	28
8:45 AM	36	9	3	29	15	38	12	157	43	58	105	20
7:30 AM	61	17	2	53	18	60	10	398	70	97	212	38

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.52**	0.35	-	0.38	0.52	0.89	0.79	**1.14**	0.57	**1.00**	**1.25**	0.53
7:15 AM	0.98	0.53	-	0.56	0.25	0.88	0.74	**1.19**	**1.19**	**0.99**	**1.09**	0.38
7:30 AM	0.67	0.30	-	0.54	0.22	0.88	0.83	**1.43**	0.81	0.92	**1.00**	0.40
7:45 AM	0.74	0.29	-	0.38	0.18	0.88	0.76	0.63	0.34	**1.84**	**1.05**	0.43
8:00 AM	**1.05**	0.43	-	0.43	0.16	0.86	0.81	**1.16**	0.54	0.59	0.77	0.36
8:15 AM	0.85	0.40	-	0.38	0.15	0.87	0.78	0.60	0.31	**1.48**	0.78	0.31
8:30 AM	0.69	0.35	-	0.36	0.25	0.84	0.79	**1.02**	0.47	0.70	0.75	0.24
8:45 AM	0.46	0.22	-	0.39	0.28	0.83	**1.32**	0.59	0.41	**2.28**	0.67	0.29
7:30 AM	0.67	0.30	-	0.54	0.22	0.88	0.83	1.43	0.81	0.92	1.00	0.40

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**289.2**	36.6	-	29.9	39.3	56.1	70.6	**105.4**	34.3	66.0	**143.8**	24.7
7:15 AM	**502.1**	45.1	-	33.9	39.2	54.7	60.4	**254.9**	**131.1**	62.5	**271.2**	16.3
7:30 AM	**330.9**	45.7	-	35.6	41.2	55.8	69.7	**537.5**	**136.3**	45.6	**308.3**	15.5
7:45 AM	78.7	40.6	-	34.2	39.7	55.0	62.8	**266.6**	22.3	**432.9**	**324.1**	15.2
8:00 AM	**107.4**	45.6	-	38.4	43.3	57.4	74.8	**232.4**	40.5	**190.8**	**222.2**	13.9
8:15 AM	66.9	43.3	-	37.1	41.8	56.5	61.4	53.1	15.9	**272.0**	43.4	13.2
8:30 AM	48.5	45.0	-	39.9	45.6	58.3	73.3	73.4	32.2	**111.7**	16.7	12.1
8:45 AM	41.9	46.5	-	41.5	47.9	60.2	**217.2**	21.5	16.5	**632.3**	13.3	11.3
7:30 AM	330.9	45.7	-	35.6	41.2	55.8	69.7	537.5	136.3	45.6	308.3	15.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	C	F	F	C
7:15 AM	F	D	-	C	D	D	E	F	F	E	F	B
7:30 AM	F	D	-	D	D	E	E	F	F	D	F	B
7:45 AM	E	D	-	C	D	E	E	F	C	F	F	B
8:00 AM	F	D	-	D	D	E	E	F	D	F	F	B
8:15 AM	E	D	-	D	D	E	E	D	B	F	D	B
8:30 AM	D	D	-	D	D	E	E	F	C	F	B	B
8:45 AM	D	D	-	D	D	E	F	C	B	F	B	B
7:30 AM	F	D	-	D	D	E	E	F	F	D	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**8.2**	0.7	-	0.7	**1.2**	**1.0**	0.2	0.8	**1.0**	**1.0**	**1.9**	**1.9**
7:15 AM	**11.3**	0.9	-	1.0	0.5	0.9	0.1	**1.2**	**4.5**	**1.1**	**2.7**	0.7
7:30 AM	**7.3**	0.4	-	**1.1**	0.4	0.8	0.1	**2.4**	**4.2**	0.9	**3.0**	0.9
7:45 AM	**2.6**	0.5	-	0.7	0.3	0.8	0.1	**2.0**	0.9	**2.2**	**3.2**	0.8
8:00 AM	**3.6**	0.6	-	0.7	0.3	0.7	0.1	**1.3**	**1.6**	**2.0**	**2.5**	0.8
8:15 AM	**2.4**	0.6	-	0.6	0.3	0.7	0.1	0.5	0.7	**1.3**	0.9	0.8
8:30 AM	0.9	0.5	-	0.6	0.4	0.6	0.2	0.6	**1.4**	**1.2**	0.4	0.6
8:45 AM	**1.3**	0.3	-	0.7	0.4	0.6	0.4	0.3	1.0	**2.6**	0.3	0.5
7:30 AM	7.3	0.4	-	1.1	0.4	0.8	0.1	2.4	4.2	0.9	3.0	0.9

Intersection Delay and LOS

Time-Period		
7:00 AM	111.9	F
7:15 AM	199.2	F
7:30 AM	**285.5**	F
7:45 AM	248.8	F
8:00 AM	171.7	F
8:15 AM	71.1	E
8:30 AM	50.8	D
8:45 AM	128	F
7:30 AM	285.5	F

X

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	122	31	4	35	53	78	23	496	81	135	297	52
7:15 AM	85	36	4	48	20	65	8	361	119	104	191	25
7:30 AM	53	15	2	52	15	57	9	371	69	97	195	31
7:45 AM	67	15	7	33	12	61	5	326	56	77	181	29
8:00 AM	89	16	11	30	8	47	10	304	50	76	186	35
8:15 AM	74	17	11	28	8	52	8	295	52	64	165	25
8:30 AM	50	12	9	25	13	42	11	274	52	75	182	21
8:45 AM	28	7	3	28	12	35	11	130	42	58	88	13
7:45 AM	67	15	7	33	12	61	5	326	56	77	181	29

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.85**	0.37	-	0.85	0.51	0.89	0.79	**1.07**	0.56	0.97	**1.15**	0.45
7:15 AM	**1.29**	0.60	-	0.89	0.23	0.88	0.79	**1.06**	0.87	**1.84**	**0.99**	0.29
7:30 AM	0.80	0.33	-	0.90	0.20	0.87	0.87	**1.36**	0.82	0.80	0.92	0.33
7:45 AM	**1.02**	0.30	-	0.84	0.15	0.88	0.83	**1.06**	0.58	0.76	0.96	0.35
8:00 AM	**1.35**	0.45	-	0.83	0.12	0.85	0.82	0.60	0.32	**1.38**	0.70	0.29
8:15 AM	**1.12**	0.42	-	0.83	0.11	0.86	0.81	0.82	0.46	0.71	0.70	0.24
8:30 AM	0.76	0.36	-	0.82	0.22	0.84	0.80	0.48	0.30	**1.40**	0.68	0.18
8:45 AM	0.43	0.21	-	0.83	0.23	0.81	**1.44**	0.72	0.75	0.78	0.58	0.19
7:45 AM	1.02	0.30	-	0.84	0.15	0.88	0.83	1.06	0.58	0.76	0.96	0.35

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**451.8**	39.3	-	68.7	39.8	55.8	71.9	**81.8**	35.9	57.5	**100.3**	22.3
7:15 AM	**975.7**	49.0	-	78.4	39.8	54.3	61.8	**122.5**	33.7	**431.6**	**160.1**	15.0
7:30 AM	**1,008.3**	48.7	-	**81.1**	41.8	56.6	75.7	**336.1**	49.8	**326.1**	**105.5**	14.0
7:45 AM	**963.3**	42.8	-	67.0	40.2	55.7	65.8	**526.3**	39.7	**140.4**	56.7	13.9
8:00 AM	**1,098.6**	47.6	-	65.2	43.8	58.1	79.0	**135.2**	17.4	**223.2**	15.2	12.6
8:15 AM	**1,325.3**	45.3	-	65.7	42.3	57.2	62.7	35.3	30.2	**108.1**	15.5	12.2
8:30 AM	**1,246.3**	46.5	-	66.7	46.1	59.1	76.5	20.3	18.3	**234.2**	15.0	11.3
8:45 AM	**867.7**	48.5	-	65.7	48.2	59.8	**272.8**	36.0	42.5	**88.7**	11.3	9.8
7:45 AM	963.3	42.8	-	67.0	40.2	55.7	65.8	526.3	39.7	140.4	56.7	13.9

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	E	D	E	E	F	D	E	F	C
7:15 AM	F	D	-	E	D	D	E	F	C	F	F	B
7:30 AM	F	D	-	F	D	E	E	F	D	F	F	B
7:45 AM	F	D	-	E	D	E	E	F	D	F	E	B
8:00 AM	F	D	-	E	D	E	E	F	B	F	B	B
8:15 AM	F	D	-	E	D	E	E	D	C	F	B	B
8:30 AM	F	D	-	E	D	E	E	C	B	F	B	B
8:45 AM	F	D	-	E	D	E	F	D	D	F	B	A
7:45 AM	F	D	-	E	D	E	E	F	D	F	E	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**5.6**	0.7	-	**1.1**	**1.2**	1.0	0.2	0.7	**1.1**	1.0	**1.5**	**1.7**
7:15 AM	**8.2**	0.9	-	**1.5**	0.4	0.8	0.1	0.7	**2.3**	**2.9**	**1.9**	0.6
7:30 AM	**7.9**	0.4	-	**1.6**	0.3	0.8	0.1	**1.7**	**2.1**	**3.4**	**1.5**	0.6
7:45 AM	**7.7**	0.5	-	1.0	0.3	0.8	0.1	**2.0**	**1.3**	**1.8**	**1.2**	0.6
8:00 AM	**9.2**	0.6	-	0.9	0.2	0.7	0.1	**1.3**	1.0	**1.2**	0.4	0.7
8:15 AM	**10.3**	0.6	-	0.8	0.2	0.7	0.1	0.3	1.0	**1.1**	0.3	0.6
8:30 AM	**9.5**	0.5	-	0.8	0.3	0.6	0.1	0.3	**1.2**	**1.3**	0.3	0.4
8:45 AM	**6.9**	0.2	-	0.8	0.3	0.5	0.4	0.2	**1.5**	**1.3**	0.2	0.3
7:45 AM	7.7	0.5	-	1.0	0.3	0.8	0.1	2.0	1.3	1.8	1.2	0.6

Intersection Delay and LOS

Time-Period		
7:00 AM	107	F
7:15 AM	215	F
7:30 AM	230	F
7:45 AM	**231.9**	F **X**
8:00 AM	168.2	F
8:15 AM	131.8	F
8:30 AM	113.9	F
8:45 AM	69.8	E
7:45 AM	231.9	F

2025 PM Peak Hour NO BUILD Conditions
(Multiple Period Analysis Worksheets)

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	30	13	9	60	17	82	4	260	48	56	345	30
4:15 PM	26	9	8	51	16	73	5	257	44	70	389	25
4:30 PM	55	8	9	64	16	93	6	273	58	66	326	23
4:45 PM	47	17	6	53	12	74	5	314	52	84	353	27
5:00 PM	55	17	18	89	39	103	8	316	71	78	328	25
5:15 PM	46	15	8	56	20	84	6	295	43	63	361	39
5:30 PM	39	14	6	54	24	76	6	303	56	59	349	29
5:45 PM	35	13	6	50	12	65	5	273	52	66	408	42
5:15 PM	46	15	8	56	20	84	6	295	43	63	361	39

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.29	0.25	-	0.57	0.16	0.91	0.90	0.53	0.31	0.79	0.97	0.19
4:15 PM	0.28	0.22	-	0.51	0.17	0.91	0.87	0.52	0.29	0.81	**1.03**	0.15
4:30 PM	0.47	0.17	-	0.53	0.14	0.93	0.86	0.61	0.42	0.98	**1.04**	0.16
4:45 PM	0.45	0.27	-	0.53	0.13	0.91	0.79	0.60	0.32	0.94	0.94	0.16
5:00 PM	0.52	0.31	-	0.78	0.30	0.94	0.79	0.76	0.55	0.95	**1.06**	0.18
5:15 PM	0.43	0.24	-	0.51	0.19	0.92	0.84	0.61	0.28	0.92	**1.03**	0.25
5:30 PM	0.41	0.23	-	0.51	0.24	0.91	0.85	0.60	0.35	0.91	0.97	0.18
5:45 PM	0.37	0.25	-	0.52	0.14	0.90	0.87	0.51	0.31	0.81	0.93	0.22
5:15 PM	0.43	0.24	-	0.51	0.19	0.92	0.84	0.61	0.28	0.92	1.03	0.25

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	34.7	41.2	-	36.8	38.0	64.5	**128.8**	29.3	21.5	62.7	54.6	16.7
4:15 PM	38.1	44.0	-	37.0	40.6	62.5	**112.5**	30.6	23.0	63.7	70.2	16.7
4:30 PM	34.1	36.8	-	33.2	35.0	67.6	**102.5**	32.7	30.3	72.2	**98.5**	19.1
4:45 PM	38.1	43.0	-	37.2	39.8	63.9	**100.2**	31.3	26.7	62.9	70.9	15.4
5:00 PM	32.8	36.0	-	44.1	34.5	68.3	**84.7**	40.5	37.4	66.2	80.0	21.9
5:15 PM	35.1	39.9	-	34.5	37.8	65.4	**100.6**	30.6	25.8	64.7	**114.3**	18.5
5:30 PM	36.2	41.9	-	36.4	40.6	63.8	**100.7**	27.9	24.6	65.9	**110.2**	16.2
5:45 PM	38.9	45.4	-	39.3	42.6	61.9	**112.3**	24.0	20.4	61.4	57.3	15.1
5:15 PM	35.1	39.9	-	34.5	37.8	65.4	100.6	30.6	25.8	64.7	114.3	18.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	D	E	F	C	C	E	D	B
4:15 PM	D	D	-	D	D	E	F	C	C	E	F	B
4:30 PM	C	D	-	C	D	E	F	C	C	E	F	B
4:45 PM	D	D	-	D	D	E	F	C	C	E	E	B
5:00 PM	C	D	-	D	C	E	F	D	D	E	F	C
5:15 PM	D	D	-	C	D	E	F	C	C	E	F	B
5:30 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	E	B
5:15 PM	D	D	-	C	D	E	F	C	C	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	1.0	0.5	-	0.3	0.4	**1.2**	0.1	0.4	0.9	0.4	**1.2**	0.8
4:15 PM	0.9	0.4	-	**1.1**	0.4	**1.0**	0.1	0.4	**1.1**	0.5	**1.4**	0.0
4:30 PM	0.4	0.3	-	0.3	0.3	**1.3**	0.1	0.4	**1.7**	0.5	**1.4**	0.5
4:45 PM	**1.6**	0.5	-	**1.2**	0.3	**1.1**	0.1	0.5	**1.4**	0.5	**1.3**	0.6
5:00 PM	0.5	0.7	-	**1.2**	0.9	**1.5**	0.1	0.5	**2.1**	0.5	**1.3**	0.6
5:15 PM	**1.5**	0.5	-	**1.2**	0.5	**1.2**	0.1	0.4	**1.2**	0.4	**1.6**	0.9
5:30 PM	**1.3**	0.4	-	**1.2**	0.6	**1.1**	0.1	0.4	**1.4**	0.4	**1.6**	0.6
5:45 PM	**1.2**	0.4	-	**1.1**	0.3	0.9	0.1	0.4	**1.2**	0.4	**1.3**	0.9
5:15 PM	1.5	0.5	-	1.2	0.5	1.2	0.1	0.4	1.2	0.4	1.6	0.9

Intersection Delay and LOS
Time-Period

4:00 PM	44.9	D
4:15 PM	52.9	D
4:30 PM	62.7	E
4:45 PM	51.7	D
5:00 PM	56.6	E
5:15 PM	**67.5**	E **X**
5:30 PM	64.7	E
5:45 PM	43.9	D
5:15 PM	67.5	E

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	38	14	11	60	18	82	5	260	48	56	345	33
4:15 PM	34	10	10	51	17	73	6	257	44	70	389	28
4:30 PM	63	9	11	64	17	93	7	273	58	66	326	26
4:45 PM	55	18	8	53	13	74	6	314	52	84	353	30
5:00 PM	63	18	20	89	40	103	9	316	71	78	328	28
5:15 PM	54	16	10	56	21	84	7	295	43	63	361	42
5:30 PM	47	15	8	54	25	76	7	303	56	59	349	32
5:45 PM	43	14	8	50	13	65	6	273	52	66	408	45
5:15 PM	54	16	10	56	21	84	7	295	43	63	361	42

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.36	0.27	-	0.57	0.17	0.91	0.87	0.54	0.32	0.79	**0.99**	0.21
4:15 PM	0.34	0.25	-	0.50	0.18	0.90	0.85	0.54	0.30	0.81	**1.07**	0.17
4:30 PM	0.54	0.20	-	0.54	0.14	0.93	0.84	0.62	0.42	0.98	**1.05**	0.19
4:45 PM	0.54	0.31	-	0.54	0.14	0.91	0.77	0.60	0.32	0.94	0.94	0.18
5:00 PM	0.59	0.34	-	0.79	0.31	0.94	0.79	0.77	0.55	0.95	**1.07**	0.21
5:15 PM	0.51	0.27	-	0.52	0.19	0.92	0.82	0.61	0.29	0.92	**1.04**	0.27
5:30 PM	0.49	0.26	-	0.53	0.25	0.91	0.84	0.60	0.36	0.92	0.98	0.20
5:45 PM	0.45	0.30	-	0.53	0.15	0.89	0.85	0.51	0.32	0.81	0.94	0.23
5:15 PM	0.51	0.27	-	0.52	0.19	0.92	0.82	0.61	0.29	0.92	1.04	0.27

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	34.3	40.8	-	36.8	38.1	65.0	**113.3**	30.3	22.4	62.7	59.9	17.6
4:15 PM	36.4	43.0	-	36.7	40.7	63.5	**101.9**	33.0	25.2	63.7	**82.5**	17.7
4:30 PM	36.0	37.2	-	33.5	35.1	67.4	**95.6**	32.7	30.4	72.2	**133.9**	19.6
4:45 PM	40.1	43.4	-	37.5	39.9	63.6	**92.4**	31.3	26.8	62.9	**111.2**	15.9
5:00 PM	35.9	36.4	-	45.9	34.6	68.2	**81.5**	40.6	37.4	66.3	**135.0**	22.4
5:15 PM	37.0	40.3	-	34.7	37.9	65.2	**93.9**	30.6	25.8	64.7	**170.3**	19.0
5:30 PM	38.2	42.3	-	36.7	40.6	63.6	**93.9**	28.0	24.7	65.9	**173.4**	16.7
5:45 PM	40.3	45.8	-	39.5	42.6	61.7	**102.5**	24.7	22.4	60.2	**118.0**	15.0
5:15 PM	37.0	40.3	-	34.7	37.9	65.2	93.9	30.6	25.8	64.7	170.3	19.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	D	E	F	C	C	E	E	B
4:15 PM	D	D	-	D	D	E	F	C	C	E	F	B
4:30 PM	D	D	-	C	D	E	F	C	C	E	F	B
4:45 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:00 PM	D	D	-	D	C	E	F	D	D	E	F	C
5:15 PM	D	D	-	C	D	E	F	C	C	E	F	B
5:30 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:15 PM	D	D	-	C	D	E	F	C	C	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.2**	0.5	-	0.3	0.4	**1.2**	0.1	0.4	1.0	0.4	**1.2**	0.9
4:15 PM	**1.1**	0.4	-	**1.1**	0.4	**1.0**	0.1	0.4	**1.2**	0.5	**1.5**	0.9
4:30 PM	0.8	0.4	-	0.3	0.4	**1.3**	0.1	0.4	**1.7**	0.5	**1.7**	0.6
4:45 PM	0.6	0.6	-	**1.2**	0.3	**1.1**	0.1	0.5	**1.4**	0.5	**1.6**	0.6
5:00 PM	0.9	0.8	-	**1.3**	0.9	**1.5**	0.1	0.5	**2.1**	0.5	**1.6**	0.7
5:15 PM	0.5	0.6	-	**1.2**	0.5	**1.2**	0.1	0.4	**1.2**	0.4	**2.0**	1.0
5:30 PM	0.2	0.5	-	**1.2**	0.6	**1.1**	0.1	0.4	**1.4**	0.4	**2.0**	0.7
5:45 PM	**1.5**	0.5	-	**1.1**	0.3	0.9	0.1	0.4	**1.3**	0.4	**1.7**	0.9
5:15 PM	0.5	0.6	-	1.2	0.5	1.2	0.1	0.4	1.2	0.4	2.0	1.0

Intersection Delay and LOS
Time-Period

4:00 PM	47.1	D
4:15 PM	58.5	E
4:30 PM	75.1	E
4:45 PM	66.4	E
5:00 PM	73.7	E
5:15 PM	**88**	F **X**
5:30 PM	87.6	F
5:45 PM	68	E
5:15 PM	88	F

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	30	13	11	60	16	84	7	243	47	54	328	32
4:15 PM	26	9	10	51	15	75	8	240	43	68	372	27
4:30 PM	55	8	11	64	15	95	9	256	57	64	309	25
4:45 PM	47	17	8	53	11	76	8	297	51	82	336	29
5:00 PM	55	17	20	89	38	105	11	299	70	76	311	27
5:15 PM	46	15	10	56	19	86	9	278	42	61	344	41
5:30 PM	39	14	8	54	23	78	9	286	55	57	332	31
5:45 PM	35	13	8	50	11	67	8	256	51	64	391	44
5:15 PM	46	15	10	56	19	86	9	278	42	61	344	41

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.71	0.38	-	0.97	0.15	0.91	0.84	0.49	0.30	0.79	0.94	0.21
4:15 PM	0.69	0.35	-	0.89	0.15	0.90	0.82	0.49	0.28	0.81	**1.00**	0.16
4:30 PM	0.83	0.23	-	**1.04**	0.12	0.92	0.83	0.61	0.44	0.96	**1.06**	0.19
4:45 PM	0.79	0.38	-	0.89	0.11	0.90	0.79	0.59	0.33	0.88	0.93	0.18
5:00 PM	0.83	0.39	-	**1.45**	0.29	0.93	0.81	0.81	0.61	0.85	**1.09**	0.21
5:15 PM	0.79	0.34	-	0.91	0.17	0.91	0.81	0.59	0.29	0.88	**1.02**	0.27
5:30 PM	0.76	0.35	-	0.88	0.23	0.90	0.82	0.57	0.35	0.89	0.95	0.20
5:45 PM	0.74	0.42	-	0.81	0.12	0.89	0.83	0.48	0.31	0.79	0.90	0.23
5:15 PM	0.79	0.34	-	0.91	0.17	0.91	0.81	0.59	0.29	0.88	1.02	0.27

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61.1	45.7	-	**100.5**	34.2	56.3	**93.4**	19.4	12.5	53.4	34.7	14.9
4:15 PM	61.5	47.2	-	**80.5**	36.6	54.6	**87.0**	18.5	11.8	51.4	45.8	13.4
4:30 PM	74.1	38.5	-	**118.7**	31.5	61.2	**82.8**	32.1	30.5	65.8	72.7	20.3
4:45 PM	68.1	45.5	-	**86.6**	35.9	57.0	**83.5**	25.9	20.1	53.5	54.6	15.3
5:00 PM	74.1	37.9	-	**272.5**	31.0	61.6	77.2	30.2	21.3	54.4	78.6	21.0
5:15 PM	67.6	42.7	-	**444.9**	34.0	58.3	**81.2**	29.2	25.1	58.1	**121.8**	19.1
5:30 PM	63.9	45.8	-	**342.4**	36.5	56.1	**81.3**	25.9	23.3	60.2	**92.9**	16.3
5:45 PM	61.9	49.8	-	**192.7**	38.4	54.6	**86.3**	20.8	17.5	54.4	32.6	13.5
5:15 PM	67.6	42.7	-	444.9	34.0	58.3	81.2	29.2	25.1	58.1	121.8	19.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	-	F	C	E	F	B	B	D	C	B
4:15 PM	E	D	-	F	D	D	F	B	B	D	F	B
4:30 PM	E	D	-	F	C	E	F	C	C	E	F	C
4:45 PM	E	D	-	F	D	E	F	C	C	D	D	B
5:00 PM	E	D	-	F	C	E	E	C	C	D	F	C
5:15 PM	E	D	-	F	C	E	F	C	C	E	F	B
5:30 PM	E	D	-	F	D	E	F	C	C	E	F	B
5:45 PM	E	D	-	F	D	D	F	C	B	D	C	B
5:15 PM	E	D	-	F	C	E	F	C	C	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.6	0.5	-	**2.0**	0.3	**1.1**	0.1	0.3	0.6	0.4	0.9	0.7
4:15 PM	0.6	0.4	-	**1.6**	0.3	1.0	0.1	0.3	0.5	0.4	**1.1**	0.5
4:30 PM	**1.3**	0.4	-	**2.2**	0.3	**1.2**	0.1	0.4	**1.6**	0.4	**1.1**	0.6
4:45 PM	**1.1**	0.5	-	**1.7**	0.2	1.0	0.1	0.4	**1.0**	0.5	**1.1**	0.6
5:00 PM	**1.3**	0.7	-	**4.4**	0.7	**1.4**	0.1	0.4	**1.1**	0.5	**1.1**	0.7
5:15 PM	**1.1**	0.5	-	**4.9**	0.4	**1.1**	0.1	0.4	**1.1**	0.4	**1.5**	0.9
5:30 PM	0.9	0.5	-	**4.0**	0.5	1.0	0.1	0.4	**1.3**	0.4	**1.4**	0.6
5:45 PM	0.8	0.5	-	**2.7**	0.2	0.9	0.1	0.3	**1.0**	0.4	0.9	0.8
5:15 PM	1.1	0.5	-	4.9	0.4	1.1	0.1	0.4	1.1	0.4	1.5	0.9

Intersection Delay and LOS
Time-Period

4:00 PM	37.7	D
4:15 PM	40.3	D
4:30 PM	59.2	E
4:45 PM	46.5	D
5:00 PM	70.2	E
5:15 PM	**91.2**	F **X**
5:30 PM	73	E
5:45 PM	40.7	D
5:15 PM	91.2	F

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	90	-	-	11	205	-	-	639	-
7:15 AM	-	-	-	99	-	-	11	234	-	-	633	-
7:30 AM	-	-	-	100	-	-	10	281	-	-	598	-
7:45 AM	-	-	-	113	-	-	9	261	-	-	590	-
8:00 AM	-	-	-	101	-	-	17	268	-	-	438	-
8:15 AM	-	-	-	104	-	-	20	196	-	-	415	-
8:30 AM	-	-	-	106	-	-	9	197	-	-	410	-
8:45 AM	-	-	-	105	-	-	15	177	-	-	431	-
7:45 AM	-	-	-	113	-	-	9	261	-	-	590	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.85	-	-	0.59	0.69	-	-	0.70	-
7:15 AM	-	-	-	0.86	-	-	0.52	0.69	-	-	0.70	-
7:30 AM	-	-	-	0.86	-	-	0.36	0.64	-	-	0.66	-
7:45 AM	-	-	-	0.87	-	-	0.38	0.72	-	-	0.67	-
8:00 AM	-	-	-	0.86	-	-	0.41	0.66	-	-	0.49	-
8:15 AM	-	-	-	0.86	-	-	0.57	0.64	-	-	0.48	-
8:30 AM	-	-	-	0.87	-	-	0.27	0.61	-	-	0.46	-
8:45 AM	-	-	-	0.87	-	-	0.41	0.50	-	-	0.49	-
7:45 AM	-	-	-	0.87	-	-	0.38	0.72	-	-	0.67	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.5	-	-	23.8	6.3	-	-	10.5	-
7:15 AM	-	-	-	51.7	-	-	21.6	6.4	-	-	11.0	-
7:30 AM	-	-	-	51.6	-	-	11.8	3.4	-	-	10.0	-
7:45 AM	-	-	-	51.2	-	-	14.1	6.5	-	-	11.1	-
8:00 AM	-	-	-	51.6	-	-	7.3	4.0	-	-	8.4	-
8:15 AM	-	-	-	51.3	-	-	10.2	5.6	-	-	9.1	-
8:30 AM	-	-	-	51.1	-	-	6.2	2.7	-	-	8.0	-
8:45 AM	-	-	-	51.2	-	-	8.1	1.8	-	-	8.7	-
7:45 AM	-	-	-	51.2	-	-	14.1	6.5	-	-	11.1	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.3	-	-	0.2	0.3	-	-	0.9	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.9	-
7:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.3	-	-	0.9	-
8:00 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.6	-
8:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.6	-
8:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.5	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.6	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.3	-	-	0.9	-

Intersection Delay and LOS
Time-Period

7:00 AM	12.4	B
7:15 AM	12.9	B
7:30 AM	11.4	B
7:45 AM	13.4	B
8:00 AM	11	B
8:15 AM	12.3	B
8:30 AM	10.8	B
8:45 AM	11.4	B
7:45 AM	13.4	B

X

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	96	-	-	12	206	-	-	642	-
7:15 AM	-	-	-	105	-	-	12	235	-	-	636	-
7:30 AM	-	-	-	106	-	-	11	282	-	-	601	-
7:45 AM	-	-	-	119	-	-	10	262	-	-	593	-
8:00 AM	-	-	-	107	-	-	18	269	-	-	441	-
8:15 AM	-	-	-	110	-	-	21	197	-	-	418	-
8:30 AM	-	-	-	112	-	-	10	198	-	-	413	-
8:45 AM	-	-	-	111	-	-	16	178	-	-	434	-
7:45 AM	-	-	-	119	-	-	10	262	-	-	593	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.86	-	-	0.63	0.70	-	-	0.72	-
7:15 AM	-	-	-	0.87	-	-	0.57	0.70	-	-	0.72	-
7:30 AM	-	-	-	0.87	-	-	0.40	0.65	-	-	0.67	-
7:45 AM	-	-	-	0.88	-	-	0.42	0.73	-	-	0.68	-
8:00 AM	-	-	-	0.87	-	-	0.44	0.67	-	-	0.50	-
8:15 AM	-	-	-	0.87	-	-	0.60	0.64	-	-	0.49	-
8:30 AM	-	-	-	0.87	-	-	0.30	0.62	-	-	0.47	-
8:45 AM	-	-	-	0.87	-	-	0.44	0.51	-	-	0.50	-
7:45 AM	-	-	-	0.88	-	-	0.42	0.73	-	-	0.68	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.0	-	-	25.8	6.4	-	-	11.3	-
7:15 AM	-	-	-	51.2	-	-	24.0	6.6	-	-	11.9	-
7:30 AM	-	-	-	51.1	-	-	13.7	3.7	-	-	10.7	-
7:45 AM	-	-	-	51.8	-	-	16.5	6.8	-	-	12.0	-
8:00 AM	-	-	-	51.1	-	-	8.1	4.1	-	-	9.0	-
8:15 AM	-	-	-	50.8	-	-	11.6	5.8	-	-	9.7	-
8:30 AM	-	-	-	51.1	-	-	6.8	3.1	-	-	8.6	-
8:45 AM	-	-	-	51.0	-	-	9.0	1.9	-	-	9.3	-
7:45 AM	-	-	-	51.8	-	-	16.5	6.8	-	-	12.0	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	1.0	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	1.0	-
7:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.9	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.3	-	-	0.9	-
8:00 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	0.6	-
8:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.6	-
8:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.6	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.6	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.3	-	-	0.9	-

Intersection Delay and LOS
Time-Period

7:00 AM	13.1	B	
7:15 AM	13.7	B	
7:30 AM	12.1	B	
7:45 AM	14.2	B	X
8:00 AM	11.6	B	
8:15 AM	12.9	B	
8:30 AM	11.5	B	
8:45 AM	11.9	B	
7:45 AM	B	14.2	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	90	-	-	12	193	-	-	611	-
7:15 AM	-	-	-	99	-	-	12	222	-	-	605	-
7:30 AM	-	-	-	100	-	-	11	269	-	-	570	-
7:45 AM	-	-	-	113	-	-	10	249	-	-	562	-
8:00 AM	-	-	-	101	-	-	18	256	-	-	410	-
8:15 AM	-	-	-	104	-	-	21	184	-	-	387	-
8:30 AM	-	-	-	106	-	-	10	185	-	-	382	-
8:45 AM	-	-	-	105	-	-	16	165	-	-	403	-
7:45 AM	-	-	-	113	-	-	10	249	-	-	562	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.85	-	-	0.60	0.65	-	-	0.67	-
7:15 AM	-	-	-	0.86	-	-	0.55	0.70	-	-	0.68	-
7:30 AM	-	-	-	0.86	-	-	0.37	0.63	-	-	0.63	-
7:45 AM	-	-	-	0.87	-	-	0.38	0.67	-	-	0.64	-
8:00 AM	-	-	-	0.86	-	-	0.41	0.65	-	-	0.46	-
8:15 AM	-	-	-	0.86	-	-	0.55	0.60	-	-	0.45	-
8:30 AM	-	-	-	0.87	-	-	0.27	0.57	-	-	0.43	-
8:45 AM	-	-	-	0.87	-	-	0.39	0.45	-	-	0.46	-
7:45 AM	-	-	-	0.87	-	-	0.38	0.67	-	-	0.64	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.5	-	-	22.1	3.3	-	-	10.0	-
7:15 AM	-	-	-	51.7	-	-	20.6	3.0	-	-	10.7	-
7:30 AM	-	-	-	51.6	-	-	10.8	2.0	-	-	9.6	-
7:45 AM	-	-	-	51.2	-	-	11.8	2.6	-	-	10.7	-
8:00 AM	-	-	-	51.6	-	-	7.3	2.3	-	-	8.2	-
8:15 AM	-	-	-	51.3	-	-	8.5	2.3	-	-	8.8	-
8:30 AM	-	-	-	51.1	-	-	6.2	2.0	-	-	7.8	-
8:45 AM	-	-	-	51.2	-	-	7.2	0.8	-	-	8.4	-
7:45 AM	-	-	-	51.2	-	-	11.8	2.6	-	-	10.7	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.3	-	-	0.2	0.1	-	-	0.9	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.1	-	-	0.9	-
7:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-
8:00 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.5	-
8:15 AM	-	-	-	0.4	-	-	0.2	0.1	-	-	0.5	-
8:30 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.5	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.0	-	-	0.5	-
7:45 AM	-	-	-	0.4	-	-	0.1	0.1	-	-	0.8	-

Intersection Delay and LOS
Time-Period

7:00 AM	11.3	B	
7:15 AM	11.5	B	
7:30 AM	10.8	B	
7:45 AM	11.9	B	X
8:00 AM	10.3	B	
8:15 AM	11.1	B	
8:30 AM	10.8	B	
8:45 AM	11.4	B	
7:45 AM	B	11.9	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	197	-	-	12	294	-	-	312	-
4:15 PM	-	-	-	231	-	-	13	290	-	-	336	-
4:30 PM	-	-	-	199	-	-	21	263	-	-	309	-
4:45 PM	-	-	-	205	-	-	14	236	-	-	322	-
5:00 PM	-	-	-	177	-	-	12	248	-	-	322	-
5:15 PM	-	-	-	237	-	-	15	192	-	-	298	-
5:30 PM	-	-	-	189	-	-	13	198	-	-	321	-
5:45 PM	-	-	-	201	-	-	20	147	-	-	326	-
5:15 PM	-	-	-	237	-	-	15	192	-	-	298	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.21	0.68	-	-	0.42	-
4:15 PM	-	-	-	0.92	-	-	0.26	0.71	-	-	0.49	-
4:30 PM	-	-	-	0.92	-	-	0.41	0.76	-	-	0.43	-
4:45 PM	-	-	-	0.92	-	-	0.32	0.75	-	-	0.45	-
5:00 PM	-	-	-	0.91	-	-	0.29	0.82	-	-	0.42	-
5:15 PM	-	-	-	0.93	-	-	0.42	0.82	-	-	0.46	-
5:30 PM	-	-	-	0.91	-	-	0.35	0.75	-	-	0.43	-
5:45 PM	-	-	-	0.92	-	-	0.58	0.64	-	-	0.47	-
5:15 PM	-	-	-	0.93	-	-	0.42	0.82	-	-	0.46	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	47.2	-	-	10.8	29.7	-	-	14.5	-
4:15 PM	-	-	-	47.2	-	-	14.2	35.0	-	-	18.7	-
4:30 PM	-	-	-	47.3	-	-	12.2	29.5	-	-	16.3	-
4:45 PM	-	-	-	47.3	-	-	12.3	33.2	-	-	16.4	-
5:00 PM	-	-	-	49.0	-	-	9.3	25.1	-	-	13.5	-
5:15 PM	-	-	-	47.1	-	-	15.5	37.5	-	-	20.3	-
5:30 PM	-	-	-	48.0	-	-	11.3	31.8	-	-	15.0	-
5:45 PM	-	-	-	47.3	-	-	15.0	26.7	-	-	18.3	-
5:15 PM	-	-	-	47.1	-	-	15.5	37.5	-	-	20.3	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:00 PM	-	-	-	D	-	-	A	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.7	-	-	0.1	0.8	-	-	0.6	-
4:15 PM	-	-	-	0.8	-	-	0.1	0.8	-	-	0.7	-
4:30 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.6	-
4:45 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.7	-
5:00 PM	-	-	-	0.6	-	-	0.1	0.9	-	-	0.6	-
5:15 PM	-	-	-	0.8	-	-	0.2	1.0	-	-	0.7	-
5:30 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.6	-
5:45 PM	-	-	-	0.7	-	-	0.3	0.7	-	-	0.7	-
5:15 PM	-	-	-	0.8	-	-	0.2	1.0	-	-	0.7	-

Intersection Delay and LOS
Time-Period

4:00 PM	27.9	C
4:15 PM	31.8	C
4:30 PM	28.3	C
4:45 PM	30	C
5:00 PM	25.3	C
5:15 PM	33.9	C
5:30 PM	28.7	C
5:45 PM	27.6	C
5:15 PM	C	33.9

X

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	200	-	-	13	297	-	-	313	-
4:15 PM	-	-	-	234	-	-	14	293	-	-	337	-
4:30 PM	-	-	-	202	-	-	22	266	-	-	310	-
4:45 PM	-	-	-	208	-	-	15	239	-	-	323	-
5:00 PM	-	-	-	180	-	-	13	251	-	-	323	-
5:15 PM	-	-	-	240	-	-	16	195	-	-	299	-
5:30 PM	-	-	-	192	-	-	14	201	-	-	322	-
5:45 PM	-	-	-	204	-	-	21	150	-	-	327	-
5:15 PM	-	-	-	240	-	-	16	195	-	-	299	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.23	0.70	-	-	0.42	-
4:15 PM	-	-	-	0.93	-	-	0.28	0.73	-	-	0.49	-
4:30 PM	-	-	-	0.92	-	-	0.43	0.78	-	-	0.44	-
4:45 PM	-	-	-	0.92	-	-	0.35	0.77	-	-	0.45	-
5:00 PM	-	-	-	0.91	-	-	0.31	0.84	-	-	0.42	-
5:15 PM	-	-	-	0.93	-	-	0.44	0.84	-	-	0.47	-
5:30 PM	-	-	-	0.91	-	-	0.38	0.76	-	-	0.44	-
5:45 PM	-	-	-	0.92	-	-	0.60	0.66	-	-	0.48	-
5:15 PM	-	-	-	0.93	-	-	0.44	0.84	-	-	0.47	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	47.3	-	-	11.2	29.8	-	-	15.0	-
4:15 PM	-	-	-	47.1	-	-	14.6	34.7	-	-	19.2	-
4:30 PM	-	-	-	47.3	-	-	12.7	30.0	-	-	16.8	-
4:45 PM	-	-	-	47.3	-	-	12.8	33.4	-	-	16.9	-
5:00 PM	-	-	-	48.8	-	-	9.5	25.4	-	-	13.9	-
5:15 PM	-	-	-	47.1	-	-	16.0	37.9	-	-	21.0	-
5:30 PM	-	-	-	47.7	-	-	11.6	31.6	-	-	15.5	-
5:45 PM	-	-	-	47.3	-	-	15.7	26.5	-	-	18.9	-
5:15 PM	-	-	-	47.1	-	-	16.0	37.9	-	-	21.0	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:00 PM	-	-	-	D	-	-	A	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.7	-	-	0.1	0.8	-	-	0.6	-
4:15 PM	-	-	-	0.8	-	-	0.1	0.9	-	-	0.7	-
4:30 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.6	-
4:45 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.7	-
5:00 PM	-	-	-	0.6	-	-	0.1	0.9	-	-	0.6	-
5:15 PM	-	-	-	0.8	-	-	0.3	1.0	-	-	0.7	-
5:30 PM	-	-	-	0.7	-	-	0.2	0.9	-	-	0.6	-
5:45 PM	-	-	-	0.7	-	-	0.3	0.7	-	-	0.7	-
5:15 PM	-	-	-	0.8	-	-	0.3	1.0	-	-	0.7	-

Intersection Delay and LOS
Time-Period

4:00 PM	28.2	C	
4:15 PM	31.9	C	
4:30 PM	28.8	C	
4:45 PM	30.3	C	
5:00 PM	25.5	C	
5:15 PM	34.2	C	X
5:30 PM	28.8	C	
5:45 PM	27.9	C	
5:15 PM	C	34.2	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	189	-	-	13	282	-	-	297	-
4:15 PM	-	-	-	223	-	-	14	278	-	-	321	-
4:30 PM	-	-	-	191	-	-	22	251	-	-	294	-
4:45 PM	-	-	-	197	-	-	15	224	-	-	307	-
5:00 PM	-	-	-	169	-	-	13	236	-	-	307	-
5:15 PM	-	-	-	229	-	-	16	180	-	-	283	-
5:30 PM	-	-	-	181	-	-	14	186	-	-	306	-
5:45 PM	-	-	-	193	-	-	21	135	-	-	311	-
5:15 PM	-	-	-	229	-	-	16	180	-	-	283	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	0.20	0.64	-	-	0.39	-
4:15 PM	-	-	-	**1.02**	-	-	0.24	0.64	-	-	0.44	-
4:30 PM	-	-	-	0.93	-	-	0.40	0.72	-	-	0.40	-
4:45 PM	-	-	-	0.94	-	-	0.32	0.71	-	-	0.42	-
5:00 PM	-	-	-	0.92	-	-	0.29	0.78	-	-	0.40	-
5:15 PM	-	-	-	**1.04**	-	-	0.40	0.73	-	-	0.40	-
5:30 PM	-	-	-	0.90	-	-	0.36	0.71	-	-	0.41	-
5:45 PM	-	-	-	0.94	-	-	0.56	0.60	-	-	0.45	-
5:15 PM	-	-	-	1.04	-	-	0.40	0.73	-	-	0.40	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	58.3	-	-	9.0	6.3	-	-	12.8	-
4:15 PM	-	-	-	77.0	-	-	10.2	7.7	-	-	14.8	-
4:30 PM	-	-	-	59.0	-	-	11.1	8.7	-	-	14.4	-
4:45 PM	-	-	-	59.6	-	-	10.9	6.4	-	-	14.3	-
5:00 PM	-	-	-	56.0	-	-	9.0	8.5	-	-	12.0	-
5:15 PM	-	-	-	**84.8**	-	-	11.2	7.6	-	-	15.7	-
5:30 PM	-	-	-	63.6	-	-	9.9	7.2	-	-	13.6	-
5:45 PM	-	-	-	58.9	-	-	10.6	7.4	-	-	16.8	-
5:15 PM	-	-	-	84.8	-	-	11.2	7.6	-	-	15.7	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	E	-	-	A	A	-	-	B	-
4:15 PM	-	-	-	F	-	-	B	A	-	-	B	-
4:30 PM	-	-	-	E	-	-	B	A	-	-	B	-
4:45 PM	-	-	-	E	-	-	B	A	-	-	B	-
5:00 PM	-	-	-	E	-	-	A	A	-	-	B	-
5:15 PM	-	-	-	F	-	-	B	A	-	-	B	-
5:30 PM	-	-	-	E	-	-	A	A	-	-	B	-
5:45 PM	-	-	-	E	-	-	B	A	-	-	B	-
5:15 PM	-	-	-	F	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.7	-	-	0.1	0.2	-	-	0.5	-
4:15 PM	-	-	-	0.9	-	-	0.1	0.2	-	-	0.6	-
4:30 PM	-	-	-	0.7	-	-	0.2	0.3	-	-	0.5	-
4:45 PM	-	-	-	0.7	-	-	0.1	0.2	-	-	0.6	-
5:00 PM	-	-	-	0.6	-	-	0.1	0.3	-	-	0.5	-
5:15 PM	-	-	-	1.0	-	-	0.2	0.2	-	-	0.6	-
5:30 PM	-	-	-	0.7	-	-	0.1	0.2	-	-	0.5	-
5:45 PM	-	-	-	0.7	-	-	0.2	0.2	-	-	0.6	-
5:15 PM	-	-	-	1.0	-	-	0.2	0.2	-	-	0.6	-

Intersection Delay and LOS
Time-Period

4:00 PM	20.4	C
4:15 PM	27.7	C
4:30 PM	21.4	C
4:45 PM	20.9	C
5:00 PM	18.4	B
5:15 PM	29.5	C X
5:30 PM	20.9	C
5:45 PM	22.5	C
5:15 PM	C	29.5

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	152	0	0	972	1420	0
Future Vol, veh/h	152	0	0	972	1420	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	152	0	0	972	1420	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1906	-	-	0	-	0
Stage 1	1420	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 69	0	0	-	-	0
Stage 1	*610	0	0	-	-	0
Stage 2	*604	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 69	-	-	-	-	-
Mov Cap-2 Maneuver	*309	-	-	-	-	-
Stage 1	*610	-	-	-	-	-
Stage 2	*604	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	309	-
HCM Lane V/C Ratio	-	0.492	-
HCM Control Delay (s)	-	27.4	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	2.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	152	0	0	976	1452	0
Future Vol, veh/h	152	0	0	976	1452	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	152	0	0	976	1452	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1940	-	-	0	-	0
Stage 1	1452	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 65	0	0	-	-	0
Stage 1	*610	0	0	-	-	0
Stage 2	*604	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 65	-	-	-	-	-
Mov Cap-2 Maneuver	*307	-	-	-	-	-
Stage 1	*610	-	-	-	-	-
Stage 2	*604	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.7	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	307	-
HCM Lane V/C Ratio	-	0.495	-
HCM Control Delay (s)	-	27.7	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	2.6	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	92	0	0	1124	1476	0
Future Vol, veh/h	92	0	0	1124	1476	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	92	0	0	1124	1476	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2038	-	-	0	-	0
Stage 1	1476	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*452	0	0	-	-	0
Stage 1	*589	0	0	-	-	0
Stage 2	*548	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*452	-	-	-	-	-
Mov Cap-2 Maneuver	*464	-	-	-	-	-
Stage 1	*589	-	-	-	-	-
Stage 2	*548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	464	-
HCM Lane V/C Ratio	-	0.198	-
HCM Control Delay (s)	-	14.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	92	0	0	1136	1488	0
Future Vol, veh/h	92	0	0	1136	1488	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	92	0	0	1136	1488	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2056	-	-	0	-	0
Stage 1	1488	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*452	0	0	-	-	0
Stage 1	*589	0	0	-	-	0
Stage 2	*548	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*452	-	-	-	-	-
Mov Cap-2 Maneuver	*464	-	-	-	-	-
Stage 1	*589	-	-	-	-	-
Stage 2	*548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	464	-
HCM Lane V/C Ratio	-	0.198	-
HCM Control Delay (s)	-	14.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	508	380	108	100	4
Future Vol, veh/h	1	508	380	108	100	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	1	508	380	108	100	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	944	434
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	510	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1011	-	-	-	276	595
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	577	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1011	-	-	-	276	595
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	577	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	24.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1011	-	-	-	276	595
HCM Lane V/C Ratio	0.001	-	-	-	0.362	0.007
HCM Control Delay (s)	8.6	0	-	-	25.3	11.1
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	0	-	-	-	1.6	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	508	380	148	112	8
Future Vol, veh/h	4	508	380	148	112	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	4	508	380	148	112	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	528	0	-	0	970	454
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	516	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	976	-	-	-	266	580
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	574	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	976	-	-	-	264	580
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	609	-
Stage 2	-	-	-	-	574	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	27.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	976	-	-	-	264	580
HCM Lane V/C Ratio	0.004	-	-	-	0.424	0.014
HCM Control Delay (s)	8.7	0	-	-	28.3	11.3
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	0	-	-	-	2	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	288	204	64	44	1
Future Vol, veh/h	4	288	204	64	44	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	4	288	204	64	44	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	268	0	-	0	532	236
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	296	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1224	-	-	-	486	772
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	726	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1224	-	-	-	484	772
Mov Cap-2 Maneuver	-	-	-	-	484	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1224	-	-	-	484	772
HCM Lane V/C Ratio	0.003	-	-	-	0.091	0.001
HCM Control Delay (s)	8	0	-	-	13.2	9.7
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	288	204	80	84	4
Future Vol, veh/h	8	288	204	80	84	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	8	288	204	80	84	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	284	0	-	0	548	244
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	304	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1207	-	-	-	476	764
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1207	-	-	-	472	764
Mov Cap-2 Maneuver	-	-	-	-	472	-
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1207	-	-	-	472	764
HCM Lane V/C Ratio	0.007	-	-	-	0.178	0.005
HCM Control Delay (s)	8	0	-	-	14.3	9.7
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0

2025 AM Peak Hour NO BUILD Conditions
(Multiple Period Analysis)

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	122	70	10	60	32	50	31	463	57	28	136	34
7:15 AM	151	96	16	51	35	73	38	513	45	29	178	34
7:30 AM	120	88	17	59	29	98	11	481	39	33	176	30
7:45 AM	111	89	15	65	41	52	15	496	65	27	157	37
8:00 AM	93	66	5	66	44	60	19	362	59	23	159	21
8:15 AM	64	56	10	74	52	53	19	368	42	31	135	21
8:30 AM	67	51	8	62	16	58	20	370	46	24	138	26
8:45 AM	38	46	3	37	22	36	19	200	29	18	86	13
7:45 AM	111	89	15	65	41	52	15	496	65	27	157	37

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.14**	0.46	0.47	0.84	0.47	0.86	0.54	**1.31**	0.36	0.91	0.70	0.70
7:15 AM	**1.41**	0.53	0.54	0.81	0.42	**1.03**	0.53	**1.47**	0.29	0.97	0.72	0.72
7:30 AM	**1.12**	0.52	0.52	0.84	0.35	**1.33**	0.17	**1.40**	0.26	0.86	0.54	0.54
7:45 AM	**1.04**	0.53	0.54	0.91	0.55	0.76	0.22	**1.41**	0.41	0.84	0.55	0.55
8:00 AM	0.87	0.37	0.37	0.92	0.56	0.91	0.24	0.98	0.36	0.79	0.51	0.51
8:15 AM	0.60	0.37	0.38	**1.03**	0.73	0.87	0.21	**0.99**	0.25	**1.00**	0.46	0.47
8:30 AM	0.72	0.33	0.34	0.87	0.21	0.90	0.25	**0.99**	0.27	0.90	0.55	0.55
8:45 AM	0.74	0.46	0.46	0.75	0.42	0.81	0.13	0.41	0.13	**1.46**	0.43	0.43
7:45 AM	1.04	0.53	0.54	0.91	0.55	0.76	0.22	1.41	0.41	0.84	0.55	0.55

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**144.5**	45.9	46.0	78.1	50.5	72.8	25.9	**179.2**	25.5	55.4	37.3	38.2
7:15 AM	**383.6**	42.7	42.9	73.3	46.2	**112.5**	25.6	**531.2**	24.7	**85.2**	33.4	33.7
7:30 AM	**638.0**	43.2	43.5	77.5	45.5	**233.9**	22.0	**933.1**	24.6	63.1	28.6	28.9
7:45 AM	**721.5**	44.5	44.8	**88.9**	**80.2**	**126.1**	20.7	**1,269.6**	26.1	45.9	28.0	28.4
8:00 AM	**661.9**	42.4	42.5	**91.9**	49.8	**80.2**	19.3	**1,397.3**	24.1	42.6	25.7	25.8
8:15 AM	**408.3**	43.9	44.1	**121.1**	55.1	69.1	18.2	**1,379.6**	22.1	66.4	23.1	23.2
8:30 AM	**134.1**	43.8	43.9	**85.3**	45.5	73.5	18.8	**1,369.0**	21.7	45.2	26.8	27.2
8:45 AM	64.9	53.9	54.1	66.3	53.8	63.8	9.2	**766.1**	11.2	**250.5**	12.5	12.6
7:45 AM	721.5	44.5	44.8	88.9	80.2	126.1	20.7	1,269.6	26.1	45.9	28.0	28.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	E	D	E	C	F	C	E	D	D
7:15 AM	F	D	D	E	D	F	C	F	C	F	C	C
7:30 AM	F	D	D	E	D	F	C	F	C	E	C	C
7:45 AM	F	D	D	F	F	F	C	F	C	D	C	C
8:00 AM	F	D	D	F	D	F	B	F	C	D	C	C
8:15 AM	F	D	D	F	E	E	B	F	C	E	C	C
8:30 AM	F	D	D	F	D	E	B	F	C	D	C	C
8:45 AM	E	D	D	E	D	E	A	F	B	F	B	B
7:45 AM	F	D	D	F	F	F	C	F	C	D	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**2.0**	0.1	0.1	0.7	0.2	0.3	0.3	**3.2**	0.6	**1.4**	0.9	0.9
7:15 AM	**4.2**	0.2	0.2	0.6	0.2	0.6	0.4	**7.6**	0.5	**1.4**	0.6	0.6
7:30 AM	**6.6**	0.2	0.2	0.7	0.2	**1.1**	0.1	**12.5**	0.4	**1.2**	0.6	0.5
7:45 AM	**7.4**	0.2	0.2	0.9	0.4	0.6	0.1	**17.1**	0.7	0.8	0.5	0.5
8:00 AM	**6.9**	0.1	0.1	0.9	0.2	0.4	0.2	**19.6**	0.6	0.7	0.5	0.4
8:15 AM	**4.5**	0.1	0.1	**1.1**	0.3	0.4	0.2	**19.5**	0.4	**1.2**	0.4	0.4
8:30 AM	**1.6**	0.1	0.1	0.8	0.1	0.4	0.2	**19.4**	0.5	0.8	0.5	0.5
8:45 AM	0.4	0.1	0.1	0.4	0.1	0.2	0.1	**14.8**	0.2	**2.7**	0.2	0.2
7:45 AM	7.4	0.2	0.2	0.9	0.4	0.6	0.1	17.1	0.7	0.8	0.5	0.5

Intersection Delay and LOS

Time-Period		
7:00 AM	107	F
7:15 AM	277.2	F
7:30 AM	481.2	F
7:45 AM	**623.6**	F **X**
8:00 AM	595.1	F
8:15 AM	584.3	F
8:30 AM	567.8	F
8:45 AM	260.1	F
7:45 AM	623.6	F

2025 AM Peak Hour NO BUILD Conditions
(Multiple Period Analysis)

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	30	-	9	12	1	14	12	553	16	10	141	18
7:15 AM	20	-	10	12	1	14	8	484	16	10	181	17
7:30 AM	27	-	5	12	1	14	13	419	16	10	202	19
7:45 AM	29	-	11	12	1	14	14	446	16	10	203	20
8:00 AM	30	-	13	12	1	14	17	397	16	10	187	20
8:15 AM	32	-	6	12	1	14	7	389	16	10	150	28
8:30 AM	29	-	8	12	1	14	9	468	16	10	154	26
8:45 AM	23	-	1	12	1	14	17	332	16	10	203	26
8:30 AM	29	-	8	12	1	14	9	468	16	10	154	26

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.24	0.08	-	0.09	0.14	-	0.16	**1.62**	0.11	0.39	0.70	0.70
7:15 AM	0.16	0.09	-	0.09	0.14	-	0.09	**1.67**	0.12	0.28	0.63	0.63
7:30 AM	0.22	0.05	-	0.09	0.14	-	0.18	**1.58**	0.14	0.21	0.52	0.52
7:45 AM	0.23	0.10	-	0.09	0.14	-	0.18	**1.59**	0.13	0.20	0.50	0.50
8:00 AM	0.24	0.12	-	0.09	0.14	-	0.23	**1.58**	0.14	0.20	0.46	0.47
8:15 AM	0.26	0.06	-	0.09	0.14	-	0.09	**1.52**	0.14	0.26	0.52	0.52
8:30 AM	0.23	0.08	-	0.09	0.14	-	0.10	**1.56**	0.12	0.28	0.58	0.58
8:45 AM	0.18	0.01	-	0.09	0.14	-	0.16	0.83	0.09	0.22	0.58	0.58
8:30 AM	0.23	0.08	-	0.09	0.14	-	0.10	1.56	0.12	0.28	0.58	0.58

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	27.6	33.1	-	25.5	33.9	-	19.7	**309.3**	16.5	31.7	24.7	29.6
7:15 AM	26.4	33.2	-	25.5	33.9	-	19.7	**896.7**	26.5	30.5	31.9	34.1
7:30 AM	27.2	32.5	-	25.4	33.9	-	20.4	**1,457.4**	26.5	29.7	32.0	33.5
7:45 AM	27.4	33.4	-	25.5	33.9	-	20.5	**1,981.9**	26.5	29.6	32.0	33.4
8:00 AM	27.6	33.6	-	25.5	33.9	-	20.6	**2,507.9**	26.5	29.6	31.3	32.6
8:15 AM	27.8	32.6	-	25.4	33.9	-	19.5	**3,003.7**	26.6	30.3	30.8	32.5
8:30 AM	27.4	32.9	-	25.5	33.9	-	19.6	**3,490.5**	26.5	30.7	31.2	33.3
8:45 AM	26.7	32.0	-	25.4	33.9	-	21.6	**3,670.4**	26.7	29.8	32.6	34.5
8:30 AM	27.4	32.9	-	25.5	33.9	-	19.6	3,490.5	26.5	30.7	31.2	33.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	B	F	B	C	C	C
7:15 AM	C	C	-	C	C	-	B	F	C	C	C	C
7:30 AM	C	C	-	C	C	-	C	F	C	C	C	C
7:45 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:00 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:15 AM	C	C	-	C	C	-	B	F	C	C	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	C	C	C
8:45 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	C	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.5	0.1	-	0.1	0.2	-	0.1	**5.0**	0.1	0.2	0.2	0.3
7:15 AM	0.3	0.1	-	0.1	0.2	-	0.1	**13.0**	0.2	0.1	0.2	0.2
7:30 AM	0.5	0.1	-	0.1	0.2	-	0.2	**20.5**	0.2	0.1	0.2	0.2
7:45 AM	0.5	0.1	-	0.1	0.2	-	0.2	**27.5**	0.2	0.1	0.2	0.2
8:00 AM	0.5	0.2	-	0.1	0.2	-	0.2	**34.5**	0.3	0.1	0.2	0.2
8:15 AM	0.6	0.1	-	0.1	0.2	-	0.1	**41.1**	0.3	0.1	0.2	0.2
8:30 AM	0.5	0.1	-	0.1	0.2	-	0.1	**47.7**	0.3	0.1	0.2	0.2
8:45 AM	0.4	0.0	-	0.1	0.2	-	0.2	**50.1**	0.3	0.1	0.2	0.2
8:30 AM	0.5	0.1	-	0.1	0.2	-	0.1	47.7	0.3	0.1	0.2	0.2

Intersection Delay and LOS
Time-Period

7:00 AM	175.6	F
7:15 AM	519.1	F
7:30 AM	857.3	F
7:45 AM	1165.3	F
8:00 AM	1482.9	F
8:15 AM	1723.8	F
8:30 AM	**1966.2**	F X
8:45 AM	1530.7	F
8:30 AM	1966.2	F

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	141	-	-	18	103	-	-	205	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-
7:30 AM	-	-	-	115	-	-	25	165	-	-	138	-
7:45 AM	-	-	-	127	-	-	25	189	-	-	118	-
8:00 AM	-	-	-	115	-	-	9	128	-	-	111	-
8:15 AM	-	-	-	124	-	-	15	112	-	-	130	-
8:30 AM	-	-	-	119	-	-	21	165	-	-	162	-
8:45 AM	-	-	-	140	-	-	14	84	-	-	140	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.44	0.52	-	-	0.27	-
7:15 AM	-	-	-	0.87	0.01	-	0.29	0.54	-	-	0.21	-
7:30 AM	-	-	-	0.85	-	-	0.30	0.50	-	-	0.17	-
7:45 AM	-	-	-	0.86	-	-	0.26	0.52	-	-	0.15	-
8:00 AM	-	-	-	0.85	-	-	0.14	0.54	-	-	0.13	-
8:15 AM	-	-	-	0.86	-	-	0.27	0.52	-	-	0.16	-
8:30 AM	-	-	-	0.85	-	-	0.28	0.52	-	-	0.20	-
8:45 AM	-	-	-	0.87	-	-	0.29	0.43	-	-	0.18	-
7:15 AM	-	-	-	0.87	0.01	-	0.29	0.54	-	-	0.21	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	53.2	-	-	9.4	4.2	-	-	13.0	-
7:15 AM	-	-	-	52.8	38.6	-	9.5	3.7	-	-	12.9	-
7:30 AM	-	-	-	55.9	-	-	6.8	3.6	-	-	9.6	-
7:45 AM	-	-	-	54.6	-	-	7.4	3.9	-	-	10.1	-
8:00 AM	-	-	-	55.9	-	-	6.2	3.6	-	-	8.2	-
8:15 AM	-	-	-	54.9	-	-	7.2	4.1	-	-	10.0	-
8:30 AM	-	-	-	55.4	-	-	7.0	3.7	-	-	9.8	-
8:45 AM	-	-	-	53.3	-	-	8.5	3.5	-	-	11.5	-
7:15 AM	-	-	-	52.8	38.6	-	9.5	3.7	-	-	12.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	A	A	-	-	B	-
7:30 AM	-	-	-	E	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:00 AM	-	-	-	E	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:30 AM	-	-	-	E	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	A	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.6	0.1	-	-	0.2	-
7:15 AM	-	-	-	0.5	-	-	0.5	0.1	-	-	0.1	-
7:30 AM	-	-	-	0.4	-	-	0.4	0.1	-	-	0.1	-
7:45 AM	-	-	-	0.4	-	-	0.4	0.1	-	-	0.1	-
8:00 AM	-	-	-	0.4	-	-	0.2	0.1	-	-	0.1	-
8:15 AM	-	-	-	0.4	-	-	0.4	0.1	-	-	0.1	-
8:30 AM	-	-	-	0.4	-	-	0.4	0.1	-	-	0.1	-
8:45 AM	-	-	-	0.4	-	-	0.5	0.1	-	-	0.1	-
7:15 AM	-	-	-	0.5	-	-	0.5	0.1	-	-	0.1	-

Intersection Delay and LOS
Time-Period

7:00 AM	17.2	B	
7:15 AM	18.2	B	X
7:30 AM	15.3	B	
7:45 AM	16.3	B	
8:00 AM	15.2	B	
8:15 AM	16.1	B	
8:30 AM	15.3	B	
8:45 AM	18.2	B	X
7:15 AM	18.2	B	

2025 AM Peak Hour BUILD Conditions
(Multiple Period Analysis)

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	123	70	10	60	32	55	31	466	57	30	137	35
7:15 AM	152	96	16	51	35	78	38	516	45	31	179	35
7:30 AM	121	88	17	59	29	103	11	484	39	35	177	31
7:45 AM	112	89	15	65	41	57	15	499	65	29	158	38
8:00 AM	94	66	5	66	44	65	19	365	59	25	160	22
8:15 AM	65	56	10	74	52	58	19	371	42	33	136	22
8:30 AM	68	51	8	62	16	63	20	373	46	26	139	27
8:45 AM	39	46	3	37	22	41	19	203	29	20	87	14
8:15 AM	65	56	10	74	52	58	19	371	42	33	136	22

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.15**	0.39	0.40	0.84	0.38	0.77	0.58	**1.36**	0.37	**1.16**	0.73	0.73
7:15 AM	**1.42**	0.53	0.54	0.81	0.42	**1.10**	0.55	**1.50**	0.29	0.93	0.70	0.70
7:30 AM	**1.13**	0.52	0.52	0.84	0.35	**1.40**	0.17	**1.41**	0.26	0.88	0.52	0.52
7:45 AM	**1.05**	0.51	0.52	0.91	0.49	0.76	0.22	**1.43**	0.42	0.84	0.54	0.54
8:00 AM	0.88	0.35	0.35	0.92	0.53	0.91	0.25	**1.03**	0.37	0.79	0.51	0.51
8:15 AM	0.61	0.32	0.33	**1.03**	0.62	0.82	0.23	**1.08**	0.27	0.97	0.48	0.48
8:30 AM	0.69	0.29	0.30	0.87	0.18	0.84	0.27	**1.06**	0.30	0.93	0.57	0.57
8:45 AM	0.75	0.21	0.22	0.75	0.19	0.43	0.18	0.56	0.18	**1.36**	0.55	0.55
8:15 AM	0.61	0.32	0.33	1.03	0.62	0.82	0.23	1.08	0.27	0.97	0.48	0.48

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**148.0**	43.6	43.9	78.1	48.3	67.6	29.6	**201.4**	26.8	**142.0**	43.3	44.7
7:15 AM	**396.1**	46.0	46.5	73.3	49.2	**133.9**	26.4	**585.0**	25.3	**191.7**	33.2	33.4
7:30 AM	**658.2**	46.6	47.2	77.5	49.1	**293.7**	22.0	**993.7**	24.7	**98.0**	28.3	28.5
7:45 AM	**749.6**	46.8	47.3	**88.9**	**87.2**	**156.2**	21.5	**1,348.1**	27.2	58.5	28.4	28.8
8:00 AM	**701.1**	42.7	42.8	**91.9**	52.2	**86.2**	20.6	**1,547.2**	25.8	49.8	27.2	27.3
8:15 AM	**454.8**	42.2	42.5	**121.1**	55.8	71.8	20.6	**1,637.6**	25.0	**90.4**	26.0	26.2
8:30 AM	**162.9**	41.5	41.8	**85.3**	43.1	72.4	21.2	**1,656.1**	24.7	74.4	30.1	30.6
8:45 AM	64.8	37.3	37.4	66.3	37.5	42.5	18.5	**1,434.7**	21.8	**207.0**	24.5	24.7
8:15 AM	454.8	42.2	42.5	121.1	55.8	71.8	20.6	1,637.6	25.0	90.4	26.0	26.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	E	D	E	C	F	C	F	D	D
7:15 AM	F	D	D	E	D	F	C	F	C	F	C	C
7:30 AM	F	D	D	E	D	F	C	F	C	F	C	C
7:45 AM	F	D	D	F	F	F	C	F	C	E	C	C
8:00 AM	F	D	D	F	D	F	C	F	C	D	C	C
8:15 AM	F	D	D	F	E	E	C	F	C	F	C	C
8:30 AM	F	D	D	F	D	E	C	F	C	E	C	C
8:45 AM	E	D	D	E	D	D	B	F	C	F	C	C
8:15 AM	F	D	D	F	E	E	C	F	C	F	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**3.1**	0.2	0.2	**1.3**	0.3	0.6	0.5	**5.1**	**1.1**	**4.0**	**1.3**	**1.2**
7:15 AM	**6.1**	0.3	0.3	**1.1**	0.3	**1.0**	0.7	**10.4**	0.9	**4.3**	0.9	0.9
7:30 AM	**7.9**	0.3	0.3	**1.3**	0.3	**1.9**	0.2	**15.1**	0.7	**2.8**	0.8	0.8
7:45 AM	**8.6**	0.3	0.3	**1.5**	0.7	**1.1**	0.2	**20.0**	**1.2**	**1.9**	0.8	0.8
8:00 AM	**8.0**	0.2	0.2	**1.5**	0.4	0.7	0.3	**21.4**	**1.1**	**1.5**	0.7	0.7
8:15 AM	**5.6**	0.2	0.2	**1.9**	0.5	0.6	0.3	**22.0**	0.8	**2.8**	0.6	0.6
8:30 AM	**2.6**	0.2	0.2	**1.4**	0.1	0.7	0.3	**22.8**	0.9	**2.2**	0.8	0.8
8:45 AM	0.8	0.1	0.1	0.7	0.2	0.4	0.3	**20.2**	0.5	**4.2**	0.4	0.4
8:15 AM	5.6	0.2	0.2	1.9	0.5	0.6	0.3	22.0	0.8	2.8	0.6	0.6

Intersection Delay and LOS
Time-Period

7:00 AM	120.9	F
7:15 AM	305.8	F
7:30 AM	516.5	F
7:45 AM	663.2	F
8:00 AM	656.8	F
8:15 AM	**691.4**	F **X**
8:30 AM	687.5	F
8:45 AM	459.9	F
8:15 AM	691.4	F

2025 AM Peak Hour BUILD Conditions
(Multiple Period Analysis)

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	250	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	30	1	9	15	2	17	12	553	24	18	141	18
7:15 AM	20	1	10	15	2	17	8	484	24	18	181	17
7:30 AM	27	1	5	15	2	17	13	419	24	18	202	19
7:45 AM	29	1	11	15	2	17	14	446	24	18	203	20
8:00 AM	30	1	13	15	2	17	17	397	24	18	187	20
8:15 AM	32	1	6	15	2	17	7	389	24	18	150	28
8:30 AM	29	1	8	15	2	17	9	468	24	18	154	26
8:45 AM	23	1	1	15	2	17	17	332	24	18	203	26
8:30 AM	29	1	8	15	2	17	9	468	24	18	154	26

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.25	0.09	-	0.12	0.18	-	0.15	**1.58**	0.15	0.67	0.67	0.67
7:15 AM	0.16	0.10	-	0.12	0.18	-	0.09	**1.63**	0.18	0.49	0.60	0.60
7:30 AM	0.22	0.06	-	0.11	0.18	-	0.17	**1.55**	0.20	0.37	0.50	0.50
7:45 AM	0.24	0.11	-	0.12	0.18	-	0.18	**1.55**	0.19	0.35	0.49	0.49
8:00 AM	0.25	0.13	-	0.12	0.18	-	0.23	**1.55**	0.21	0.35	0.45	0.45
8:15 AM	0.26	0.06	-	0.11	0.18	-	0.08	**1.44**	0.20	0.45	0.50	0.50
8:30 AM	0.24	0.08	-	0.11	0.18	-	0.09	**1.50**	0.17	0.49	0.55	0.56
8:45 AM	0.19	0.02	-	0.11	0.18	-	0.16	0.84	0.14	0.39	0.56	0.56
8:30 AM	0.24	0.08	-	0.11	0.18	-	0.09	1.50	0.17	0.49	0.55	0.56

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	27.7	33.2	-	25.8	34.5	-	19.4	**291.5**	16.0	41.6	23.6	28.1
7:15 AM	26.5	33.3	-	25.8	34.5	-	19.7	**842.7**	27.1	34.7	31.8	33.7
7:30 AM	27.3	32.6	-	25.7	34.5	-	20.4	**1,372.7**	27.1	32.4	31.9	33.3
7:45 AM	27.6	33.5	-	25.8	34.5	-	20.5	**1,865.9**	27.1	32.0	31.9	33.2
8:00 AM	27.7	33.8	-	25.9	34.5	-	20.5	**2,357.1**	27.2	32.0	31.3	32.4
8:15 AM	27.9	32.8	-	25.7	34.5	-	19.5	**2,799.9**	27.2	33.9	30.7	32.3
8:30 AM	27.6	33.0	-	25.8	34.5	-	19.6	**3,223.0**	27.2	35.1	31.1	32.9
8:45 AM	26.9	32.1	-	25.7	34.5	-	21.5	**3,381.1**	27.5	32.7	32.5	34.2
8:30 AM	27.6	33.0	-	25.8	34.5	-	19.6	3,223.0	27.2	35.1	31.1	32.9

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	B	F	B	D	C	C
7:15 AM	C	C	-	C	C	-	B	F	C	C	C	C
7:30 AM	C	C	-	C	C	-	C	F	C	C	C	C
7:45 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:00 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:15 AM	C	C	-	C	C	-	B	F	C	C	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	D	C	C
8:45 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	D	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.9	0.2	-	0.2	0.3	-	0.2	**6.7**	0.3	0.8	0.3	0.4
7:15 AM	0.6	0.2	-	0.2	0.3	-	0.2	**14.4**	0.5	0.4	0.3	0.3
7:30 AM	0.8	0.1	-	0.2	0.3	-	0.3	**21.2**	0.5	0.4	0.3	0.3
7:45 AM	0.9	0.2	-	0.2	0.3	-	0.3	**27.8**	0.5	0.4	0.3	0.3
8:00 AM	0.9	0.3	-	0.2	0.3	-	0.3	**34.4**	0.5	0.4	0.3	0.3
8:15 AM	**1.0**	0.1	-	0.2	0.3	-	0.2	**39.9**	0.5	0.4	0.3	0.3
8:30 AM	0.9	0.2	-	0.2	0.3	-	0.2	**45.9**	0.5	0.4	0.3	0.3
8:45 AM	0.7	0.0	-	0.2	0.3	-	0.4	**46.7**	0.7	0.4	0.3	0.3
8:30 AM	0.9	0.2	-	0.2	0.3	-	0.2	45.9	0.5	0.4	0.3	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	162.5	F
7:15 AM	475.8	F
7:30 AM	787.5	F
7:45 AM	1065.6	F
8:00 AM	1355.2	F
8:15 AM	1539.1	F
8:30 AM	**1755.8**	F X
8:45 AM	1388.1	F
8:30 AM	1755.8	F

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	-	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	141	-	-	18	103	-	-	205	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-
7:30 AM	-	-	-	115	-	-	25	165	-	-	138	-
7:45 AM	-	-	-	127	-	-	25	189	-	-	118	-
8:00 AM	-	-	-	115	-	-	9	128	-	-	111	-
8:15 AM	-	-	-	124	-	-	15	112	-	-	130	-
8:30 AM	-	-	-	119	-	-	21	165	-	-	162	-
8:45 AM	-	-	-	140	-	-	14	84	-	-	140	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.44	0.52	-	-	0.27	-
7:15 AM	-	-	-	0.87	0.01	-	0.29	0.54	-	-	0.21	-
7:30 AM	-	-	-	0.85	-	-	0.30	0.50	-	-	0.17	-
7:45 AM	-	-	-	0.86	-	-	0.26	0.53	-	-	0.15	-
8:00 AM	-	-	-	0.85	-	-	0.14	0.55	-	-	0.13	-
8:15 AM	-	-	-	0.86	-	-	0.27	0.53	-	-	0.16	-
8:30 AM	-	-	-	0.85	-	-	0.29	0.52	-	-	0.20	-
8:45 AM	-	-	-	0.87	-	-	0.29	0.44	-	-	0.18	-
7:15 AM	-	-	-	0.87	0.01	-	0.29	0.54	-	-	0.21	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	53.2	-	-	9.4	4.4	-	-	13.0	-
7:15 AM	-	-	-	52.8	38.6	-	9.5	4.1	-	-	12.9	-
7:30 AM	-	-	-	55.9	-	-	6.8	3.7	-	-	9.6	-
7:45 AM	-	-	-	54.6	-	-	7.4	4.1	-	-	10.1	-
8:00 AM	-	-	-	55.9	-	-	6.2	3.8	-	-	8.3	-
8:15 AM	-	-	-	54.9	-	-	7.2	4.2	-	-	10.0	-
8:30 AM	-	-	-	55.4	-	-	7.0	3.8	-	-	9.8	-
8:45 AM	-	-	-	53.3	-	-	8.5	4.0	-	-	11.5	-
7:15 AM	-	-	-	52.8	38.6	-	9.5	4.1	-	-	12.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	A	A	-	-	B	-
7:30 AM	-	-	-	E	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:00 AM	-	-	-	E	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:30 AM	-	-	-	E	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	A	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.7	-	-	0.8	0.1	-	-	0.3	-
7:15 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.2	-
7:30 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.2	-
7:45 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.2	-
8:00 AM	-	-	-	0.6	-	-	0.3	0.1	-	-	0.1	-
8:15 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.2	-
8:30 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.2	-
8:45 AM	-	-	-	0.7	-	-	0.9	0.1	-	-	0.2	-
7:15 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.2	-

Intersection Delay and LOS
Time-Period

7:00 AM	17.3	B	
7:15 AM	18.3	B	X
7:30 AM	15.3	B	
7:45 AM	16.3	B	
8:00 AM	15.2	B	
8:15 AM	16.1	B	
8:30 AM	15.3	B	
8:45 AM	18.2	B	
7:15 AM	B	18.3	

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	123	70	10	60	32	55	31	466	57	30	137	35
7:15 AM	152	96	16	51	35	78	38	516	45	31	179	35
7:30 AM	121	88	17	59	29	103	11	484	39	35	177	31
7:45 AM	112	89	15	65	41	57	15	499	65	29	158	38
8:00 AM	94	66	5	66	44	65	19	365	59	25	160	22
8:15 AM	65	56	10	74	52	58	19	371	42	33	136	22
8:30 AM	68	51	8	62	16	63	20	373	46	26	139	27
8:45 AM	39	46	3	37	22	41	19	203	29	20	87	14
7:30 AM	121	88	17	59	29	103	11	484	39	35	177	31

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.15**	0.39	0.40	0.84	0.38	0.77	0.44	0.95	0.31	**1.10**	0.59	0.26
7:15 AM	**1.42**	0.53	0.54	0.81	0.42	**1.10**	0.48	**1.05**	0.25	0.93	0.60	0.20
7:30 AM	**1.13**	0.52	0.52	0.84	0.35	**1.40**	0.15	0.98	0.21	0.87	0.46	0.14
7:45 AM	**1.05**	0.51	0.52	0.91	0.49	0.76	0.18	**1.00**	0.35	0.84	0.44	0.19
8:00 AM	0.88	0.35	0.35	0.92	0.52	0.91	0.23	0.72	0.31	0.65	0.46	0.11
8:15 AM	0.61	0.32	0.33	**1.03**	0.62	0.82	0.21	0.75	0.23	0.74	0.42	0.12
8:30 AM	0.69	0.29	0.30	0.87	0.18	0.81	0.24	0.75	0.25	0.67	0.49	0.17
8:45 AM	0.75	0.21	0.22	0.75	0.19	0.43	0.24	0.41	0.17	0.48	0.49	0.15
7:30 AM	1.13	0.52	0.52	0.84	0.35	1.40	0.15	0.98	0.21	0.87	0.46	0.14

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**148.0**	43.6	43.9	78.1	48.3	67.6	22.8	46.7	18.7	**128.5**	29.0	13.8
7:15 AM	**396.1**	46.0	46.5	73.3	49.2	**133.9**	22.6	71.4	18.6	**146.5**	29.0	14.0
7:30 AM	**658.2**	46.6	47.2	77.5	49.1	**293.7**	21.1	**89.9**	17.4	70.9	24.1	11.0
7:45 AM	**749.6**	46.8	47.3	**88.9**	**87.2**	**156.2**	20.4	**82.4**	18.8	60.6	24.3	12.0
8:00 AM	**701.1**	42.7	42.8	**91.9**	52.0	**85.0**	20.2	33.8	17.9	31.9	24.9	11.3
8:15 AM	**454.8**	42.2	42.5	**121.1**	55.8	71.8	20.2	33.7	17.4	38.9	24.3	11.9
8:30 AM	**162.9**	41.5	41.8	**85.3**	42.4	68.8	20.4	33.2	17.3	32.9	25.0	12.9
8:45 AM	64.8	37.3	37.4	66.3	37.5	42.5	21.0	26.3	18.6	20.3	23.3	14.6
7:30 AM	658.2	46.6	47.2	77.5	49.1	293.7	21.1	89.9	17.4	70.9	24.1	11.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	E	D	E	C	D	B	F	C	B
7:15 AM	F	D	D	E	D	F	C	F	B	F	C	B
7:30 AM	F	D	D	E	D	F	C	F	B	E	C	B
7:45 AM	F	D	D	F	F	F	C	F	B	E	C	B
8:00 AM	F	D	D	F	D	F	C	C	B	C	C	B
8:15 AM	F	D	D	F	E	E	C	C	B	D	C	B
8:30 AM	F	D	D	F	D	E	C	C	B	C	C	B
8:45 AM	E	D	D	E	D	D	C	C	B	C	C	B
7:30 AM	F	D	D	E	D	F	C	F	B	E	C	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**3.1**	0.2	0.2	**1.3**	0.3	0.6	0.5	**1.8**	0.9	**4.0**	0.8	-
7:15 AM	**6.1**	0.3	0.3	**1.1**	0.3	**1.0**	0.6	**2.4**	0.7	**3.8**	0.7	-
7:30 AM	**7.9**	0.3	0.3	**1.3**	0.3	**1.9**	0.2	**2.5**	0.6	**2.4**	0.7	-
7:45 AM	**8.6**	0.3	0.3	**1.5**	0.7	**1.1**	0.2	**2.4**	**1.0**	**1.9**	0.6	-
8:00 AM	**8.0**	0.2	0.2	**1.5**	0.4	0.7	0.3	**1.3**	0.9	**1.2**	0.6	-
8:15 AM	**5.6**	0.2	0.2	**1.9**	0.5	0.6	0.3	**1.3**	0.7	**1.8**	0.5	-
8:30 AM	**2.6**	0.2	0.2	**1.4**	0.1	0.7	0.3	**1.3**	0.7	**1.5**	0.6	-
8:45 AM	0.8	0.1	0.1	0.7	0.2	0.4	0.3	0.6	0.5	**1.7**	0.6	-
7:30 AM	7.9	0.3	0.3	1.3	0.3	1.9	0.2	2.5	0.6	2.4	0.7	-

Intersection Delay and LOS

Time-Period		
7:00 AM	56.1	E
7:15 AM	100.5	F
7:30 AM	**145.2**	F **X**
7:45 AM	131	F
8:00 AM	102	F
8:15 AM	70.1	E
8:30 AM	45.7	D
8:45 AM	30.7	C
7:30 AM	145.2	F

2025 AM Peak Hour BUILD Conditions [MITIGATED]
(Multiple Period Analysis)

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	250	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	30	1	9	15	2	17	12	553	24	18	141	18
7:15 AM	20	1	10	15	2	17	8	484	24	18	181	17
7:30 AM	27	1	5	15	2	17	13	419	24	18	202	19
7:45 AM	29	1	11	15	2	17	14	446	24	18	203	20
8:00 AM	30	1	13	15	2	17	17	397	24	18	187	20
8:15 AM	32	1	6	15	2	17	7	389	24	18	150	28
8:30 AM	29	1	8	15	2	17	9	468	24	18	154	26
8:45 AM	23	1	1	15	2	17	17	332	24	18	203	26
8:00 AM	30	1	13	15	2	17	17	397	24	18	187	20

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.56	0.21	-	0.24	0.40	-	0.15	0.78	0.79	0.82	0.40	0.40
7:15 AM	0.37	0.23	-	0.25	0.40	-	0.11	0.83	0.85	0.64	0.36	0.36
7:30 AM	0.50	0.13	-	0.23	0.40	-	0.17	0.80	0.81	0.46	0.30	0.30
7:45 AM	0.54	0.26	-	0.25	0.40	-	0.17	0.80	0.82	0.44	0.29	0.29
8:00 AM	0.56	0.30	-	0.26	0.40	-	0.17	0.64	0.64	0.35	0.27	0.27
8:15 AM	0.60	0.15	-	0.23	0.40	-	0.08	0.62	0.62	0.44	0.30	0.30
8:30 AM	0.54	0.19	-	0.24	0.40	-	0.09	0.63	0.63	0.49	0.33	0.33
8:45 AM	0.43	0.04	-	0.22	0.40	-	0.13	0.34	0.35	0.23	0.33	0.34
8:00 AM	0.56	0.30	-	0.26	0.40	-	0.17	0.64	0.64	0.35	0.27	0.27

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	59.5	53.1	-	47.8	58.1	-	7.5	12.5	13.4	56.4	7.5	9.7
7:15 AM	51.1	53.5	-	47.9	58.1	-	6.9	13.6	14.6	44.0	5.6	7.1
7:30 AM	56.4	51.3	-	47.4	58.1	-	7.0	13.1	13.9	32.7	6.4	7.7
7:45 AM	58.4	54.0	-	48.0	58.1	-	6.9	12.7	13.5	32.0	5.2	6.6
8:00 AM	59.5	55.1	-	48.2	58.1	-	7.0	14.9	16.4	18.2	5.2	6.5
8:15 AM	61.7	51.7	-	47.5	58.1	-	6.7	13.6	15.0	19.2	5.5	7.7
8:30 AM	58.4	52.6	-	47.7	58.1	-	7.0	13.9	15.2	21.8	6.9	9.2
8:45 AM	52.7	49.7	-	47.2	58.1	-	6.9	16.2	17.5	9.8	5.7	7.4
8:00 AM	59.5	55.1	-	48.2	58.1	-	7.0	14.9	16.4	18.2	5.2	6.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	E	D	-	D	E	-	A	B	B	E	A	A
7:15 AM	D	D	-	D	E	-	A	B	B	D	A	A
7:30 AM	E	D	-	D	E	-	A	B	B	C	A	A
7:45 AM	E	D	-	D	E	-	A	B	B	C	A	A
8:00 AM	E	E	-	D	E	-	A	B	B	B	A	A
8:15 AM	E	D	-	D	E	-	A	B	B	B	A	A
8:30 AM	E	D	-	D	E	-	A	B	B	C	A	A
8:45 AM	D	D	-	D	E	-	A	B	B	A	A	A
8:00 AM	E	E	-	D	E	-	A	B	B	B	A	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.5	0.3	-	0.3	0.5	-	0.1	**1.1**	**1.2**	1.0	0.2	0.2
7:15 AM	0.9	0.3	-	0.3	0.5	-	0.1	**1.3**	**1.4**	0.7	0.1	0.1
7:30 AM	0.3	0.2	-	0.3	0.5	-	0.2	**1.2**	**1.2**	0.5	0.1	0.1
7:45 AM	0.5	0.3	-	0.3	0.5	-	0.2	**1.2**	**1.2**	0.4	0.1	0.1
8:00 AM	0.5	0.4	-	0.3	0.5	-	0.2	**1.2**	**1.3**	0.2	0.1	0.1
8:15 AM	0.7	0.2	-	0.3	0.5	-	0.1	**1.1**	**1.2**	0.3	0.1	0.1
8:30 AM	0.5	0.2	-	0.3	0.5	-	0.1	**1.2**	**1.2**	0.4	0.1	0.2
8:45 AM	**1.1**	0.1	-	0.3	0.5	-	0.2	0.9	0.9	0.2	0.1	0.1
8:00 AM	0.5	0.4	-	0.3	0.5	-	0.2	1.2	1.3	0.2	0.1	0.1

Intersection Delay and LOS
Time-Period

7:00 AM	15.9	B
7:15 AM	14.9	B
7:30 AM	14.9	B
7:45 AM	14.8	B
8:00 AM	**16.6**	B **X**
8:15 AM	15.8	B
8:30 AM	15.9	B
8:45 AM	15.3	B
8:00 AM	16.6	B

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	-	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	141	-	-	18	103	-	-	205	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-
7:30 AM	-	-	-	115	-	-	25	165	-	-	138	-
7:45 AM	-	-	-	127	-	-	25	189	-	-	118	-
8:00 AM	-	-	-	115	-	-	9	128	-	-	111	-
8:15 AM	-	-	-	124	-	-	15	112	-	-	130	-
8:30 AM	-	-	-	119	-	-	21	165	-	-	162	-
8:45 AM	-	-	-	140	-	-	14	84	-	-	140	-
7:15 AM	-	-	-	156	1	-	18	139	-	-	151	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.74	0.96	-	-	0.30	-
7:15 AM	-	-	-	0.87	0.01	-	0.54	**1.07**	-	-	0.22	-
7:30 AM	-	-	-	0.85	-	-	0.57	0.93	-	-	0.17	-
7:45 AM	-	-	-	0.86	-	-	0.47	0.98	-	-	0.16	-
8:00 AM	-	-	-	0.85	-	-	0.21	0.82	-	-	0.14	-
8:15 AM	-	-	-	0.86	-	-	0.39	0.76	-	-	0.17	-
8:30 AM	-	-	-	0.85	-	-	0.42	0.78	-	-	0.21	-
8:45 AM	-	-	-	0.87	-	-	0.29	0.44	-	-	0.18	-
7:15 AM	-	-	-	0.87	0.01	-	0.54	1.07	-	-	0.22	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	53.2	-	-	13.9	23.5	-	-	16.4	-
7:15 AM	-	-	-	52.8	38.6	-	11.4	57.3	-	-	15.7	-
7:30 AM	-	-	-	55.9	-	-	6.6	50.6	-	-	8.6	-
7:45 AM	-	-	-	54.6	-	-	8.6	27.4	-	-	12.2	-
8:00 AM	-	-	-	55.9	-	-	6.5	11.5	-	-	8.8	-
8:15 AM	-	-	-	54.9	-	-	7.9	10.4	-	-	11.1	-
8:30 AM	-	-	-	55.4	-	-	7.8	10.5	-	-	10.9	-
8:45 AM	-	-	-	53.3	-	-	8.5	5.2	-	-	11.5	-
7:15 AM	-	-	-	52.8	38.6	-	11.4	57.3	-	-	15.7	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	C	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	F	-	-	B	-
7:30 AM	-	-	-	E	-	-	A	D	-	-	A	-
7:45 AM	-	-	-	D	-	-	A	C	-	-	B	-
8:00 AM	-	-	-	E	-	-	A	B	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	B	-	-	B	-
8:30 AM	-	-	-	E	-	-	A	B	-	-	B	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	F	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.7	-	-	**2.2**	0.9	-	-	0.4	-
7:15 AM	-	-	-	0.7	-	-	**1.7**	**1.4**	-	-	0.3	-
7:30 AM	-	-	-	0.6	-	-	0.5	**1.3**	-	-	0.2	-
7:45 AM	-	-	-	0.6	-	-	**1.5**	**1.0**	-	-	0.2	-
8:00 AM	-	-	-	0.6	-	-	0.6	0.5	-	-	0.1	-
8:15 AM	-	-	-	0.6	-	-	**1.2**	0.5	-	-	0.2	-
8:30 AM	-	-	-	0.6	-	-	**1.1**	0.5	-	-	0.2	-
8:45 AM	-	-	-	0.7	-	-	0.9	0.2	-	-	0.2	-
7:15 AM	-	-	-	0.7	-	-	1.7	1.4	-	-	0.3	-

Intersection Delay and LOS
Time-Period

7:00 AM	25.3	C
7:15 AM	46.5	D
7:30 AM	40.6	D
7:45 AM	27.7	C
8:00 AM	17.7	B
8:15 AM	17.6	B
8:30 AM	17.1	B
8:45 AM	18.8	B
7:15 AM	D	46.5

X

2025 PM Peak Hour NO BUILD Conditions
(Multiple Period Analysis)

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	56	80	11	97	43	49	17	289	54	51	407	78
4:15 PM	68	60	17	121	58	47	16	251	54	37	431	52
4:30 PM	56	63	9	98	53	55	17	280	57	36	438	52
4:45 PM	57	73	11	111	56	58	16	283	50	36	384	107
5:00 PM	66	81	23	106	62	56	24	236	40	33	382	36
5:15 PM	59	83	24	110	60	49	22	220	34	42	371	36
5:30 PM	48	54	31	81	64	56	24	248	42	33	433	64
5:45 PM	28	39	19	48	27	18	25	108	18	17	135	26
5:45 PM	28	39	19	48	27	18	25	108	18	17	135	26

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.79	0.75	0.77	0.98	0.57	0.76	0.55	0.80	0.33	0.68	0.97	**0.99**
4:15 PM	0.82	0.62	0.64	**1.23**	0.77	0.81	0.53	0.68	0.33	0.48	**1.05**	**1.07**
4:30 PM	0.79	0.57	0.58	**0.99**	0.68	0.83	0.55	0.77	0.35	0.51	**1.05**	**1.05**
4:45 PM	0.79	0.63	0.64	**1.12**	0.68	0.83	0.53	0.80	0.32	0.53	**1.08**	**1.09**
5:00 PM	0.82	0.75	0.77	**1.07**	0.77	0.82	0.66	0.67	0.26	0.47	**1.09**	**1.09**
5:15 PM	0.80	0.77	0.79	**1.11**	0.69	0.72	0.63	0.65	0.23	0.55	**1.07**	**1.07**
5:30 PM	0.76	0.71	0.75	0.82	0.79	0.82	0.67	0.67	0.26	0.41	**1.07**	**1.07**
5:45 PM	0.67	0.49	0.52	0.55	0.26	0.28	0.69	0.28	0.10	0.36	**1.03**	**1.02**
5:45 PM	0.67	0.49	0.52	0.55	0.26	0.28	0.69	0.28	0.10	0.36	1.03	1.02

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	56.1	49.7	50.3	**88.4**	42.8	47.7	30.0	30.2	20.7	24.0	29.9	33.2
4:15 PM	59.7	46.2	46.8	**170.1**	48.3	51.8	29.8	25.9	20.2	19.4	50.8	59.8
4:30 PM	56.1	45.3	45.6	**290.9**	44.2	52.6	30.0	29.3	21.0	20.9	**106.1**	**107.7**
4:45 PM	56.4	45.3	45.6	**327.9**	43.5	53.2	29.9	31.2	21.2	22.1	**165.4**	**170.9**
5:00 PM	59.1	48.4	49.9	**422.5**	47.9	52.8	31.0	27.2	20.5	19.2	**256.4**	**258.9**
5:15 PM	57.0	49.8	51.7	**502.4**	43.5	45.3	30.7	27.4	20.9	18.7	**322.7**	**326.1**
5:30 PM	54.2	48.3	49.9	**457.3**	47.6	50.9	31.1	25.6	19.0	18.0	**371.8**	**379.9**
5:45 PM	55.8	44.7	45.4	**206.3**	36.4	36.7	31.4	16.8	15.2	13.9	**416.6**	**426.2**
5:45 PM	55.8	44.7	45.4	206.3	36.4	36.7	31.4	16.8	15.2	13.9	416.6	426.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	C	C	C	C	C
4:15 PM	E	D	D	F	D	D	C	C	C	B	F	F
4:30 PM	E	D	D	F	D	D	C	C	C	C	F	F
4:45 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:00 PM	E	D	D	F	D	D	C	C	C	B	F	F
5:15 PM	E	D	D	F	D	D	C	C	C	B	F	F
5:30 PM	D	D	D	F	D	D	C	C	B	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.9	0.3	0.2	**1.9**	0.4	0.4	0.2	**1.3**	0.9	**1.0**	**1.2**	**1.2**
4:15 PM	**1.2**	0.2	0.2	**3.1**	0.5	0.4	0.2	**1.0**	0.8	0.8	**1.6**	**1.7**
4:30 PM	0.9	0.2	0.2	**3.7**	0.4	0.5	0.2	**1.2**	0.9	0.9	**2.3**	**2.3**
4:45 PM	1.0	0.2	0.2	**4.3**	0.4	0.5	0.2	**1.2**	0.8	0.9	**3.1**	**3.0**
5:00 PM	**1.2**	0.3	0.3	**5.0**	0.5	0.5	0.3	1.0	0.6	1.0	**4.1**	**4.1**
5:15 PM	1.0	0.3	0.3	**5.8**	0.5	0.4	0.3	0.9	0.5	**1.0**	**4.8**	**4.8**
5:30 PM	0.8	0.2	0.2	**5.1**	0.5	0.5	0.3	1.0	0.6	0.8	**5.6**	**5.6**
5:45 PM	0.5	0.2	0.2	**2.5**	0.2	0.2	0.3	0.4	0.2	0.5	**6.1**	**6.1**
5:45 PM	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.4	0.2	0.5	6.1	6.1

Intersection Delay and LOS
Time-Period

4:00 PM	39.1	D
4:15 PM	57.1	E
4:30 PM	84	F
4:45 PM	112.2	F
5:00 PM	153.2	F
5:15 PM	188.4	F
5:30 PM	197.6	F
5:45 PM	**243.9**	F **X**
5:45 PM	243.9	F

2025 PM Peak Hour NO BUILD Conditions
(Multiple Period Analysis)

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	27	-	22	16	-	11	16	63	14	14	505	42
4:15 PM	38	-	18	16	-	11	15	284	14	14	519	38
4:30 PM	33	-	13	16	-	11	12	271	14	14	491	36
4:45 PM	29	-	17	16	-	11	6	251	14	14	458	37
5:00 PM	35	-	14	16	-	11	14	243	14	14	499	48
5:15 PM	24	-	11	16	-	11	7	312	14	14	546	45
5:30 PM	28	-	14	16	-	11	19	281	14	14	527	44
5:45 PM	33	-	14	16	-	11	13	249	14	14	502	59
5:30 PM	28	-	14	16	-	11	19	281	14	14	527	44

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.19	0.18	-	0.12	0.09	-	**1.56**	**1.08**	0.54	0.24	**1.29**	**1.30**
4:15 PM	0.27	0.15	-	0.12	0.09	-	0.40	**1.35**	0.15	0.22	**1.20**	**1.17**
4:30 PM	0.24	0.11	-	0.11	0.09	-	0.36	**1.45**	0.17	0.23	**1.18**	**1.16**
4:45 PM	0.21	0.14	-	0.11	0.09	-	0.20	**1.49**	0.19	0.24	**1.13**	**1.10**
5:00 PM	0.25	0.11	-	0.11	0.09	-	0.42	**1.30**	0.17	0.20	**1.06**	**1.03**
5:15 PM	0.17	0.09	-	0.11	0.09	-	0.16	**1.25**	0.13	0.21	**1.18**	**1.15**
5:30 PM	0.20	0.11	-	0.11	0.09	-	0.49	**1.28**	0.14	0.21	**1.13**	**1.10**
5:45 PM	0.24	0.11	-	0.11	0.09	-	0.17	0.56	0.07	0.22	**1.20**	**1.16**
5:30 PM	0.20	0.11	-	0.11	0.09	-	0.49	1.28	0.14	0.21	1.13	1.10

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.1	25.9	-	19.6	24.0	-	**295.7**	**89.0**	45.6	23.8	**159.9**	**168.2**
4:15 PM	22.1	25.4	-	19.6	24.0	-	**267.1**	**270.9**	28.0	25.1	**388.0**	**385.1**
4:30 PM	21.7	24.9	-	19.5	24.0	-	30.3	**625.5**	27.8	25.2	**548.7**	**548.2**
4:45 PM	21.3	25.3	-	19.6	24.0	-	28.2	**1,047.6**	27.8	25.3	**679.0**	**681.4**
5:00 PM	21.8	25.0	-	19.5	24.0	-	32.0	**1,406.9**	27.8	25.3	**758.9**	**767.4**
5:15 PM	20.8	24.7	-	19.5	24.0	-	28.3	**1,653.5**	27.7	25.3	**849.3**	**853.4**
5:30 PM	21.2	25.0	-	19.5	24.0	-	33.8	**1,887.4**	27.8	25.2	**979.3**	**986.1**
5:45 PM	21.7	25.0	-	19.5	24.0	-	29.2	**1,812.0**	27.6	25.2	**1,115.4**	**1,123.4**
5:30 PM	21.2	25.0	-	19.5	24.0	-	33.8	1,887.4	27.8	25.2	979.3	986.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	B	C	-	F	F	D	C	F	F
4:15 PM	C	C	-	B	C	-	F	F	C	C	F	F
4:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	B	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.7	0.4	-	0.2	0.1	-	**4.4**	**2.1**	**2.0**	0.2	**1.3**	**1.3**
4:15 PM	1.0	0.3	-	0.2	0.1	-	**3.1**	**4.8**	0.4	0.2	**2.3**	**2.2**
4:30 PM	0.8	0.2	-	0.2	0.1	-	0.3	**9.0**	0.4	0.2	**3.0**	**2.9**
4:45 PM	0.7	0.3	-	0.2	0.1	-	0.2	**13.7**	0.4	0.2	**3.5**	**3.5**
5:00 PM	0.9	0.2	-	0.2	0.1	-	0.4	**17.2**	0.4	0.2	**3.9**	**3.8**
5:15 PM	0.6	0.2	-	0.2	0.1	-	0.2	**19.7**	0.4	0.2	**4.4**	**4.3**
5:30 PM	0.7	0.2	-	0.2	0.1	-	0.5	**22.4**	0.4	0.2	**4.9**	**4.9**
5:45 PM	0.8	0.2	-	0.2	0.1	-	0.3	**21.0**	0.4	0.2	**5.6**	**5.5**
5:30 PM	0.7	0.2	-	0.2	0.1	-	0.5	22.4	0.4	0.2	4.9	4.9

Intersection Delay and LOS
Time-Period

4:00 PM	133.6	F
4:15 PM	303.5	F
4:30 PM	512.1	F
4:45 PM	741.2	F
5:00 PM	889.9	F
5:15 PM	1036.4	F
5:30 PM	**1169.5**	F X
5:45 PM	1098	F
5:30 PM	1169.5	F

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	389	-	-	27	91	-	-	180	-
4:15 PM	-	-	-	428	1	-	24	93	-	-	99	-
4:30 PM	-	-	-	431	-	-	17	94	-	-	89	-
4:45 PM	-	-	-	395	-	-	24	79	-	-	102	-
5:00 PM	-	-	-	351	-	-	26	98	-	-	114	-
5:15 PM	-	-	-	385	2	-	15	105	-	-	132	-
5:30 PM	-	-	-	384	-	-	26	103	-	-	113	-
5:45 PM	-	-	-	424	1	-	20	96	-	-	100	-
4:00 PM	-	-	-	389	-	-	27	91	-	-	180	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.84	0.77	-	-	0.98	-
4:15 PM	-	-	-	0.93	0.00	-	0.78	0.94	-	-	0.60	-
4:30 PM	-	-	-	0.94	-	-	0.57	**0.99**	-	-	0.50	-
4:45 PM	-	-	-	0.92	-	-	0.73	0.79	-	-	0.60	-
5:00 PM	-	-	-	0.90	-	-	0.63	0.72	-	-	0.44	-
5:15 PM	-	-	-	0.91	0.01	-	0.47	0.86	-	-	0.48	-
5:30 PM	-	-	-	0.91	-	-	0.65	0.79	-	-	0.53	-
5:45 PM	-	-	-	0.93	0.00	-	0.44	0.60	-	-	0.45	-
4:00 PM	-	-	-	0.92	-	-	0.84	0.77	-	-	0.98	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.9	-	-	40.9	42.1	-	-	74.2	-
4:15 PM	-	-	-	28.8	9.2	-	41.0	48.3	-	-	48.9	-
4:30 PM	-	-	-	28.9	-	-	37.7	53.1	-	-	46.1	-
4:45 PM	-	-	-	28.8	-	-	38.6	42.2	-	-	48.6	-
5:00 PM	-	-	-	30.1	-	-	31.3	39.4	-	-	39.3	-
5:15 PM	-	-	-	29.0	11.5	-	31.3	43.4	-	-	39.2	-
5:30 PM	-	-	-	29.0	-	-	35.1	41.9	-	-	44.0	-
5:45 PM	-	-	-	28.7	9.4	-	35.3	35.8	-	-	41.9	-
4:00 PM	-	-	-	28.9	-	-	40.9	42.1	-	-	74.2	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	D	D	-	-	E	-
4:15 PM	-	-	-	C	A	-	D	D	-	-	D	-
4:30 PM	-	-	-	C	-	-	D	D	-	-	D	-
4:45 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:00 PM	-	-	-	C	-	-	C	D	-	-	D	-
5:15 PM	-	-	-	C	B	-	C	D	-	-	D	-
5:30 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:45 PM	-	-	-	C	A	-	D	D	-	-	D	-
4:00 PM	-	-	-	C	-	-	D	D	-	-	E	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.2**	-	-	**2.4**	0.4	-	-	0.6	-
4:15 PM	-	-	-	**1.3**	-	-	0.1	0.4	-	-	0.3	-
4:30 PM	-	-	-	**1.3**	-	-	**1.5**	0.5	-	-	0.3	-
4:45 PM	-	-	-	**1.2**	-	-	**2.2**	0.4	-	-	0.3	-
5:00 PM	-	-	-	**1.1**	-	-	**1.9**	0.4	-	-	0.3	-
5:15 PM	-	-	-	**1.2**	0.0	-	**1.1**	0.4	-	-	0.4	-
5:30 PM	-	-	-	**1.2**	-	-	**1.9**	0.4	-	-	0.3	-
5:45 PM	-	-	-	**1.3**	-	-	**1.5**	0.3	-	-	0.3	-
4:00 PM	-	-	-	1.2	-	-	2.4	0.4	-	-	0.6	-

Intersection Delay and LOS
Time-Period

4:00 PM	42.8	D
4:15 PM	37.7	D
4:30 PM	38.6	D
4:45 PM	36	D
5:00 PM	34.4	C
5:15 PM	35.2	D
5:30 PM	35.4	D
5:45 PM	32.4	C
4:00 PM	D	42.8

X

2025 PM Peak Hour BUILD Conditions
(Multiple Period Analysis)

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	57	80	11	97	43	51	17	290	54	56	410	79
4:15 PM	69	60	17	121	58	49	16	252	54	42	434	53
4:30 PM	57	63	9	98	53	57	17	281	57	41	441	53
4:45 PM	58	73	11	111	56	60	16	284	50	41	387	108
5:00 PM	67	81	23	106	62	58	24	237	40	38	385	37
5:15 PM	60	83	24	110	60	51	22	221	34	47	374	37
5:30 PM	49	54	31	81	64	58	24	249	42	38	436	65
5:45 PM	29	39	19	48	27	20	25	109	18	22	138	27
5:45 PM	29	39	19	48	27	20	25	109	18	22	138	27

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.79	0.75	0.76	0.98	0.57	0.80	0.55	0.81	0.34	0.73	0.98	**1.01**
4:15 PM	0.83	0.60	0.63	**1.23**	0.77	0.81	0.53	0.71	0.34	0.53	**1.07**	**1.07**
4:30 PM	0.79	0.55	0.56	**0.99**	0.66	0.84	0.55	0.80	0.36	0.58	**1.07**	**1.07**
4:45 PM	0.79	0.60	0.61	**1.12**	0.67	0.84	0.52	0.83	0.33	0.60	**1.11**	**1.11**
5:00 PM	0.82	0.72	0.74	**1.07**	0.75	0.83	0.66	0.70	0.27	0.55	**1.13**	**1.13**
5:15 PM	0.80	0.77	0.79	**1.11**	0.70	0.74	0.62	0.66	0.23	0.60	**1.08**	**1.08**
5:30 PM	0.76	0.68	0.72	0.82	0.77	0.82	0.67	0.70	0.26	0.47	**1.10**	**1.10**
5:45 PM	0.68	0.49	0.52	0.55	0.27	0.30	0.69	0.28	0.11	0.45	**1.02**	**1.01**
5:45 PM	0.68	0.49	0.52	0.55	0.27	0.30	0.69	0.28	0.11	0.45	1.02	1.01

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	56.4	49.6	50.2	**88.4**	42.9	50.1	30.0	31.3	21.2	24.8	31.7	36.2
4:15 PM	60.0	45.6	46.1	**170.1**	48.6	52.3	29.9	28.1	21.7	19.7	63.9	65.2
4:30 PM	56.4	44.4	44.7	**290.9**	43.4	53.5	30.0	31.4	22.2	22.3	**127.5**	**129.7**
4:45 PM	56.7	44.4	44.7	**327.9**	42.8	54.1	30.0	33.7	22.3	23.4	**210.4**	**218.1**
5:00 PM	59.4	47.1	48.3	**422.5**	46.8	53.8	31.0	28.9	21.6	20.3	**331.7**	**335.9**
5:15 PM	57.3	49.8	51.6	**502.4**	44.2	46.3	30.7	28.3	21.5	19.2	**415.6**	**420.7**
5:30 PM	54.1	47.1	48.5	**457.3**	46.7	51.6	31.0	27.2	20.0	19.1	**481.8**	**492.8**
5:45 PM	55.7	44.7	45.4	**206.3**	36.7	37.0	31.4	17.4	15.8	13.7	**527.8**	**540.7**
5:45 PM	55.7	44.7	45.4	206.3	36.7	37.0	31.4	17.4	15.8	13.7	527.8	540.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	C	C	C	C	F
4:15 PM	E	D	D	F	D	D	C	C	C	B	F	F
4:30 PM	E	D	D	F	D	D	C	C	C	C	F	F
4:45 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:00 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:15 PM	E	D	D	F	D	D	C	C	C	B	F	F
5:30 PM	D	D	D	F	D	D	C	C	C	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	1.0	0.3	0.2	**1.9**	0.4	0.4	0.2	**1.3**	0.9	**1.1**	**1.2**	**1.3**
4:15 PM	**1.2**	0.2	0.2	**3.1**	0.5	0.4	0.2	**1.1**	0.9	1.0	**1.8**	**1.8**
4:30 PM	1.0	0.2	0.2	**3.7**	0.4	0.5	0.2	**1.2**	0.9	1.0	**2.6**	**2.6**
4:45 PM	1.0	0.2	0.2	**4.3**	0.4	0.5	0.2	**1.3**	0.8	**1.1**	**3.7**	**3.6**
5:00 PM	**1.2**	0.3	0.3	**5.0**	0.5	0.5	0.4	**1.0**	0.6	**1.2**	**5.0**	**5.0**
5:15 PM	**1.0**	0.3	0.3	**5.8**	0.5	0.4	0.3	0.9	0.5	**1.1**	**5.9**	**5.9**
5:30 PM	0.8	0.2	0.2	**5.1**	0.5	0.5	0.3	**1.0**	0.6	1.0	**7.0**	**6.9**
5:45 PM	0.5	0.2	0.2	**2.5**	0.2	0.2	0.3	0.4	0.2	0.6	**7.5**	**7.4**
5:45 PM	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.4	0.2	0.6	7.5	7.4

Intersection Delay and LOS
Time-Period

4:00 PM	40.3	D
4:15 PM	60.9	E
4:30 PM	92.3	F
4:45 PM	129.2	F
5:00 PM	180.9	F
5:15 PM	222.1	F
5:30 PM	240.1	F
5:45 PM	**296.6**	F
5:45 PM	296.6	F

X

2025 PM Peak Hour BUILD Conditions
(Multiple Period Analysis)

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	27	1	22	24	1	19	16	63	17	18	505	42
4:15 PM	38	1	18	24	1	19	15	284	17	18	519	38
4:30 PM	33	1	13	24	1	19	12	271	17	18	491	36
4:45 PM	29	1	17	24	1	19	6	251	17	18	458	37
5:00 PM	35	1	14	24	1	19	14	243	17	18	546	45
5:15 PM	24	1	11	24	1	19	7	312	17	18	546	45
5:30 PM	28	1	14	24	1	19	19	281	17	18	527	44
5:45 PM	33	1	14	24	1	19	13	249	17	18	502	59
5:30 PM	28	1	14	24	1	19	19	281	17	18	527	44

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.21	0.19	-	0.18	0.16	-	**1.52**	**1.06**	0.64	0.31	**1.26**	**1.28**
4:15 PM	0.29	0.15	-	0.17	0.16	-	0.40	**1.35**	0.18	0.29	**1.19**	**1.17**
4:30 PM	0.25	0.11	-	0.17	0.16	-	0.36	**1.45**	0.20	0.30	**1.18**	**1.15**
4:45 PM	0.22	0.15	-	0.17	0.16	-	0.20	**1.49**	0.23	0.30	**1.12**	**1.10**
5:00 PM	0.27	0.12	-	0.17	0.16	-	0.42	**1.30**	0.20	0.24	**1.06**	**1.03**
5:15 PM	0.18	0.10	-	0.17	0.16	-	0.16	**1.25**	0.15	0.26	**1.18**	**1.15**
5:30 PM	0.21	0.12	-	0.17	0.16	-	0.49	**1.28**	0.17	0.26	**1.13**	**1.10**
5:45 PM	0.25	0.12	-	0.17	0.16	-	0.17	0.57	0.09	0.28	**1.19**	**1.16**
5:30 PM	0.21	0.12	-	0.17	0.16	-	0.49	1.28	0.17	0.26	1.13	1.10

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.3	26.0	-	20.3	24.9	-	**280.6**	79.8	48.2	24.4	**147.8**	**154.8**
4:15 PM	22.4	25.5	-	20.3	24.9	-	**239.9**	**250.6**	28.4	25.7	**363.4**	**360.3**
4:30 PM	21.9	25.0	-	20.2	24.9	-	30.1	**606.2**	28.1	25.7	**522.4**	**521.5**
4:45 PM	21.5	25.4	-	20.2	24.9	-	28.1	**1,027.6**	28.1	25.8	**651.1**	**653.2**
5:00 PM	22.1	25.1	-	20.2	24.9	-	31.8	**1,386.3**	28.2	25.7	**729.8**	**737.6**
5:15 PM	21.0	24.8	-	20.1	24.9	-	28.2	**1,634.8**	28.1	25.8	**820.9**	**824.5**
5:30 PM	21.4	25.1	-	20.2	24.9	-	33.6	**1,871.4**	28.1	25.7	**950.0**	**956.3**
5:45 PM	21.9	25.1	-	20.2	24.9	-	29.3	**1,801.1**	27.9	25.8	**1,085.2**	**1,092.5**
5:30 PM	21.4	25.1	-	20.2	24.9	-	33.6	1,871.4	28.1	25.7	950.0	956.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	C	C	-	F	F	D	C	F	F
4:15 PM	C	C	-	C	C	-	F	F	C	C	F	F
4:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.7	0.4	-	0.3	0.3	-	**4.2**	**2.0**	**2.4**	0.3	**1.2**	**1.2**
4:15 PM	1.0	0.3	-	0.3	0.3	-	**2.8**	**4.6**	0.5	0.3	**2.2**	**2.1**
4:30 PM	0.8	0.2	-	0.3	0.3	-	0.3	**8.7**	0.5	0.3	**2.9**	**2.8**
4:45 PM	0.7	0.3	-	0.3	0.3	-	0.2	**13.5**	0.5	0.3	**3.4**	**3.4**
5:00 PM	0.9	0.2	-	0.3	0.3	-	0.4	**16.9**	0.5	0.3	**3.7**	**3.7**
5:15 PM	0.6	0.2	-	0.3	0.3	-	0.2	**19.5**	0.5	0.3	**4.2**	**4.2**
5:30 PM	0.7	0.2	-	0.3	0.3	-	0.5	**22.2**	0.5	0.3	**4.8**	**4.7**
5:45 PM	0.8	0.2	-	0.3	0.3	-	0.3	**20.8**	0.5	0.3	**5.4**	**5.3**
5:30 PM	0.7	0.2	-	0.3	0.3	-	0.5	22.2	0.5	0.3	4.8	4.7

Intersection Delay and LOS
Time-Period

4:00 PM	120.6	F
4:15 PM	276.6	F
4:30 PM	479.6	F
4:45 PM	701.3	F
5:00 PM	845.6	F
5:15 PM	988.9	F
5:30 PM	**1119.4**	F X
5:45 PM	1045.4	F
5:30 PM	1119.4	F

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	391	-	-	29	93	-	-	181	-
4:15 PM	-	-	-	430	1	-	26	95	-	-	100	-
4:30 PM	-	-	-	433	-	-	19	96	-	-	90	-
4:45 PM	-	-	-	397	-	-	26	81	-	-	103	-
5:00 PM	-	-	-	353	-	-	28	100	-	-	115	-
5:15 PM	-	-	-	387	2	-	17	107	-	-	133	-
5:30 PM	-	-	-	386	-	-	28	105	-	-	114	-
5:45 PM	-	-	-	426	1	-	22	98	-	-	101	-
4:15 PM	-	-	-	430	1	-	26	95	-	-	100	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.86	0.79	-	-	**1.07**	-
4:15 PM	-	-	-	0.93	0.00	-	**1.51**	0.96	-	-	0.58	-
4:30 PM	-	-	-	0.94	-	-	0.63	**1.01**	-	-	0.54	-
4:45 PM	-	-	-	0.92	-	-	0.80	0.80	-	-	0.60	-
5:00 PM	-	-	-	0.90	-	-	0.67	0.74	-	-	0.47	-
5:15 PM	-	-	-	0.91	0.01	-	0.52	0.87	-	-	0.52	-
5:30 PM	-	-	-	0.91	-	-	0.69	0.81	-	-	0.57	-
5:45 PM	-	-	-	0.93	0.00	-	0.49	0.63	-	-	0.48	-
4:15 PM	-	-	-	0.93	0.00	-	1.51	0.96	-	-	0.58	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.9	-	-	44.9	43.2	-	-	**101.6**	-
4:15 PM	-	-	-	28.8	9.1	-	**266.2**	40.1	-	-	53.4	-
4:30 PM	-	-	-	28.9	-	-	**138.4**	42.1	-	-	47.8	-
4:45 PM	-	-	-	28.8	-	-	39.2	42.5	-	-	48.3	-
5:00 PM	-	-	-	30.0	-	-	32.4	39.7	-	-	40.8	-
5:15 PM	-	-	-	28.9	11.4	-	32.3	43.9	-	-	40.7	-
5:30 PM	-	-	-	29.0	-	-	36.3	42.4	-	-	45.9	-
5:45 PM	-	-	-	28.8	9.3	-	36.3	38.4	-	-	43.4	-
4:15 PM	-	-	-	28.8	9.1	-	266.2	40.1	-	-	53.4	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	D	D	-	-	F	-
4:15 PM	-	-	-	C	A	-	F	D	-	-	D	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	D	-
4:45 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:00 PM	-	-	-	C	-	-	C	D	-	-	D	-
5:15 PM	-	-	-	C	B	-	C	D	-	-	D	-
5:30 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:45 PM	-	-	-	C	A	-	D	D	-	-	D	-
4:15 PM	-	-	-	C	A	-	F	D	-	-	D	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.2**	-	-	**2.7**	0.4	-	-	0.7	-
4:15 PM	-	-	-	**1.3**	-	-	**5.0**	0.3	-	-	0.4	-
4:30 PM	-	-	-	**1.3**	-	-	**3.6**	0.2	-	-	0.3	-
4:45 PM	-	-	-	**1.2**	-	-	**2.3**	0.4	-	-	0.3	-
5:00 PM	-	-	-	**1.1**	-	-	**2.0**	0.4	-	-	0.3	-
5:15 PM	-	-	-	**1.2**	-	-	**1.2**	0.5	-	-	0.4	-
5:30 PM	-	-	-	**1.2**	-	-	**2.0**	0.4	-	-	0.3	-
5:45 PM	-	-	-	**1.3**	-	-	**1.7**	0.4	-	-	0.3	-
4:15 PM	-	-	-	1.3	-	-	5.0	0.3	-	-	0.4	-

Intersection Delay and LOS
Time-Period

4:00 PM	49.1	D
4:15 PM	53.5	D
4:30 PM	41.6	D
4:45 PM	36.1	D
5:00 PM	34.8	C
5:15 PM	35.6	D
5:30 PM	35.9	D
5:45 PM	33.3	C
4:15 PM	D	53.5

X

2025 PM Peak Hour BUILD Conditions [MITIGATED]
(Multiple Period Analysis)

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	250
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	57	80	11	97	43	51	17	290	54	56	410	79
4:15 PM	69	60	17	121	58	49	16	252	54	42	434	53
4:30 PM	57	63	9	98	53	57	17	281	57	41	441	53
4:45 PM	58	73	11	111	56	60	16	284	50	41	387	108
5:00 PM	67	81	23	106	62	58	24	237	40	38	385	37
5:15 PM	60	83	24	110	60	51	22	221	34	47	374	37
5:30 PM	49	54	31	81	64	58	24	249	42	38	436	65
5:45 PM	29	39	19	48	27	20	25	109	18	22	138	27
5:45 PM	29	39	19	48	27	20	25	109	18	22	138	27

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.79	0.75	0.76	0.98	0.57	0.80	0.54	0.59	0.27	0.70	**1.05**	0.38
4:15 PM	0.83	0.60	0.63	**1.23**	0.77	0.81	0.53	0.50	0.27	0.50	**1.11**	0.25
4:30 PM	0.79	0.55	0.56	**0.99**	0.66	0.84	0.55	0.56	0.28	0.52	**1.10**	0.25
4:45 PM	0.79	0.60	0.61	**1.12**	0.67	0.84	0.52	0.58	0.25	0.51	0.94	0.49
5:00 PM	0.82	0.72	0.74	**1.07**	0.75	0.83	0.66	0.49	0.20	0.46	**1.07**	0.19
5:15 PM	0.80	0.77	0.79	**1.11**	0.70	0.74	0.62	0.46	0.18	0.58	**1.12**	0.21
5:30 PM	0.76	0.68	0.72	0.82	0.77	0.82	0.67	0.49	0.21	0.42	**1.05**	0.30
5:45 PM	0.68	0.49	0.52	0.55	0.28	0.30	0.67	0.20	0.08	0.47	0.96	0.37
5:45 PM	0.68	0.49	0.52	0.55	0.28	0.30	0.67	0.20	0.08	0.47	0.96	0.37

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	56.4	49.6	50.2	**88.4**	42.9	50.1	30.0	25.1	13.4	21.9	66.3	17.1
4:15 PM	60.0	45.6	46.1	**170.1**	48.6	52.3	29.9	22.9	12.8	16.6	**128.7**	11.3
4:30 PM	56.4	44.4	44.7	**290.9**	43.4	53.5	30.0	24.0	13.1	17.8	**224.6**	12.4
4:45 PM	56.7	44.4	44.7	**327.9**	42.8	54.1	30.0	25.1	13.4	18.7	**249.7**	16.6
5:00 PM	59.4	47.1	48.3	**422.5**	46.8	53.8	31.0	23.9	13.0	17.8	**267.4**	12.7
5:15 PM	57.3	49.8	51.6	**502.4**	44.2	46.3	30.7	23.9	13.0	17.3	**347.0**	12.7
5:30 PM	54.1	47.1	48.5	**457.3**	46.7	51.6	31.0	22.3	11.8	16.4	**418.4**	14.2
5:45 PM	55.7	44.7	45.4	**206.3**	36.9	37.3	30.7	16.5	9.4	13.7	**411.5**	14.5
5:45 PM	55.7	44.7	45.4	206.3	36.9	37.3	30.7	16.5	9.4	13.7	411.5	14.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	C	B	C	F	B
4:15 PM	E	D	D	F	D	D	C	C	B	B	F	B
4:30 PM	E	D	D	F	D	D	C	C	B	B	F	B
4:45 PM	E	D	D	F	D	D	C	C	B	B	F	B
5:00 PM	E	D	D	F	D	D	C	C	B	B	F	B
5:15 PM	E	D	D	F	D	D	C	C	B	B	F	B
5:30 PM	D	D	D	F	D	D	C	C	B	B	F	B
5:45 PM	E	D	D	F	D	D	C	B	A	B	F	B
5:45 PM	E	D	D	F	D	D	C	B	A	B	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	1.0	0.3	0.2	**1.9**	0.4	0.4	0.2	0.8	0.7	**1.9**	**2.0**	1.0
4:15 PM	**1.2**	0.2	0.2	**3.1**	0.5	0.4	0.2	0.7	0.6	**1.4**	**2.9**	0.5
4:30 PM	1.0	0.2	0.2	**3.7**	0.4	0.5	0.2	0.8	0.7	**1.3**	**3.9**	0.5
4:45 PM	1.0	0.2	0.2	**4.3**	0.4	0.5	0.2	0.8	0.6	**1.4**	**4.0**	**1.2**
5:00 PM	**1.2**	0.3	0.3	**5.0**	0.5	0.5	0.4	0.7	0.5	**1.3**	**4.1**	0.4
5:15 PM	**1.0**	0.3	0.3	**5.8**	0.5	0.4	0.3	0.6	0.4	**1.6**	**5.2**	0.4
5:30 PM	0.8	0.2	0.2	**5.1**	0.5	0.5	0.3	0.7	0.5	**1.3**	**6.0**	0.7
5:45 PM	0.5	0.2	0.2	**2.5**	0.2	0.2	0.3	0.2	0.2	0.9	**5.9**	0.4
5:45 PM	0.5	0.2	0.2	2.5	0.2	0.2	0.3	0.2	0.2	0.9	5.9	0.4

Intersection Delay and LOS
Time-Period

4:00 PM	47.4	D
4:15 PM	79.6	E
4:30 PM	119.7	F
4:45 PM	122.3	F
5:00 PM	147.3	F
5:15 PM	187.8	F
5:30 PM	195.3	F
5:45 PM	**206.0**	F **X**
5:45 PM	206	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	27	1	22	24	1	19	16	63	17	18	505	42
4:15 PM	38	1	18	24	1	19	15	284	17	18	519	38
4:30 PM	33	1	13	24	1	19	12	271	17	18	491	36
4:45 PM	29	1	17	24	1	19	6	251	17	18	458	37
5:00 PM	35	1	14	24	1	19	14	243	17	18	546	45
5:15 PM	24	1	11	24	1	19	7	312	17	18	546	45
5:30 PM	28	1	14	24	1	19	19	281	17	18	527	44
5:45 PM	33	1	14	24	1	19	13	249	17	18	502	59
4:00 PM	27	1	22	24	1	19	16	63	17	18	505	42

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.41	0.42	-	0.38	0.36	-	**1.19**	0.49	0.49	0.25	0.77	0.78
4:15 PM	0.58	0.34	-	0.36	0.36	-	0.33	0.50	0.50	0.22	0.73	0.74
4:30 PM	0.50	0.25	-	0.34	0.36	-	0.27	0.54	0.54	0.26	0.72	0.72
4:45 PM	0.44	0.33	-	0.36	0.36	-	0.14	0.56	0.56	0.28	0.69	0.69
5:00 PM	0.53	0.27	-	0.34	0.36	-	0.28	0.49	0.49	0.19	0.65	0.65
5:15 PM	0.37	0.22	-	0.33	0.36	-	0.12	0.46	0.46	0.20	0.72	0.72
5:30 PM	0.43	0.27	-	0.34	0.36	-	0.34	0.48	0.48	0.20	0.69	0.70
5:45 PM	0.50	0.27	-	0.34	0.36	-	0.13	0.21	0.22	0.13	0.73	0.74
4:00 PM	0.41	0.42	-	0.38	0.36	-	1.19	0.49	0.49	0.25	0.77	0.78

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	41.5	47.7	-	40.9	46.2	-	**135.0**	18.1	20.8	11.4	3.8	4.8
4:15 PM	49.0	45.7	-	40.2	46.2	-	46.0	15.1	16.0	11.1	10.4	11.7
4:30 PM	45.3	43.6	-	39.6	46.2	-	13.0	17.4	18.7	12.8	5.3	6.4
4:45 PM	42.6	45.3	-	40.1	46.2	-	10.1	18.9	20.4	13.6	3.5	4.6
5:00 PM	46.7	44.0	-	39.7	46.2	-	11.1	16.3	17.6	11.1	2.7	3.8
5:15 PM	40.4	42.9	-	39.3	46.2	-	10.5	17.1	18.2	11.0	4.1	5.6
5:30 PM	41.9	44.0	-	39.7	46.2	-	12.8	14.1	15.1	10.9	3.6	5.0
5:45 PM	45.3	44.0	-	39.7	46.2	-	11.4	10.8	11.1	8.8	5.4	7.1
4:00 PM	41.5	47.7	-	40.9	46.2	-	135.0	18.1	20.8	11.4	3.8	4.8

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	-	F	B	C	B	A	A
4:15 PM	D	D	-	D	D	-	D	B	B	B	B	B
4:30 PM	D	D	-	D	D	-	B	B	B	B	A	A
4:45 PM	D	D	-	D	D	-	B	B	C	B	A	A
5:00 PM	D	D	-	D	D	-	B	B	B	B	A	A
5:15 PM	D	D	-	D	D	-	B	B	B	B	A	A
5:30 PM	D	D	-	D	D	-	B	B	B	B	A	A
5:45 PM	D	D	-	D	D	-	B	B	B	A	A	A
4:00 PM	D	D	-	D	D	-	F	B	C	B	A	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	1.0	0.5	-	0.4	0.4	-	**2.9**	1.0	1.0	0.2	0.1	0.1
4:15 PM	0.6	0.4	-	0.4	0.4	-	0.8	0.8	0.8	0.2	0.3	0.3
4:30 PM	0.3	0.3	-	0.4	0.4	-	0.2	1.0	**1.0**	0.2	0.1	0.1
4:45 PM	**1.1**	0.4	-	0.4	0.4	-	0.1	**1.1**	**1.1**	0.2	0.1	0.1
5:00 PM	0.4	0.3	-	0.4	0.4	-	0.3	0.9	0.9	0.1	0.1	0.1
5:15 PM	0.9	0.3	-	0.4	0.4	-	0.1	0.9	0.9	0.2	0.1	0.1
5:30 PM	**1.0**	0.3	-	0.4	0.4	-	0.3	0.8	0.8	0.2	0.1	0.1
5:45 PM	0.3	0.3	-	0.4	0.4	-	0.1	0.3	0.3	0.2	0.1	0.1
4:00 PM	1.0	0.5	-	0.4	0.4	-	2.9	1.0	1.0	0.2	0.1	0.1

Intersection Delay and LOS
Time-Period

4:00 PM	**20.8**	C	**X**
4:15 PM	16.6	B	
4:30 PM	13.9	B	
4:45 PM	13.9	B	
5:00 PM	12.6	B	
5:15 PM	12.5	B	
5:30 PM	11.6	B	
5:45 PM	11.5	B	
4:00 PM	20.8	C	

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	391	-	-	29	93	-	-	181	-
4:15 PM	-	-	-	430	1	-	26	95	-	-	100	-
4:30 PM	-	-	-	433	-	-	19	96	-	-	90	-
4:45 PM	-	-	-	397	-	-	26	81	-	-	103	-
5:00 PM	-	-	-	353	-	-	28	100	-	-	115	-
5:15 PM	-	-	-	387	2	-	17	107	-	-	133	-
5:30 PM	-	-	-	386	-	-	28	105	-	-	114	-
5:45 PM	-	-	-	426	1	-	22	98	-	-	101	-
4:45 PM	-	-	-	397	-	-	26	81	-	-	103	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.90	0.83	-	-	**1.09**	-
4:15 PM	-	-	-	0.93	0.00	-	**1.94**	**1.23**	-	-	0.58	-
4:30 PM	-	-	-	0.94	-	-	0.87	**1.39**	-	-	0.54	-
4:45 PM	-	-	-	0.92	-	-	**1.11**	**1.14**	-	-	0.62	-
5:00 PM	-	-	-	0.90	-	-	0.75	0.92	-	-	0.69	-
5:15 PM	-	-	-	0.91	0.01	-	0.58	**1.06**	-	-	0.70	-
5:30 PM	-	-	-	0.91	-	-	**1.00**	**1.00**	-	-	0.39	-
5:45 PM	-	-	-	0.93	0.00	-	0.52	0.63	-	-	0.40	-
4:45 PM	-	-	-	0.92	-	-	1.11	1.14	-	-	0.62	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.9	-	-	61.0	43.7	-	-	**109.3**	-
4:15 PM	-	-	-	28.8	9.1	-	**473.7**	**141.0**	-	-	56.2	-
4:30 PM	-	-	-	28.9	-	-	**465.0**	**426.5**	-	-	47.8	-
4:45 PM	-	-	-	28.8	-	-	**411.8**	**600.8**	-	-	49.5	-
5:00 PM	-	-	-	30.0	-	-	**257.5**	**540.0**	-	-	51.5	-
5:15 PM	-	-	-	28.9	11.4	-	61.7	**589.1**	-	-	49.8	-
5:30 PM	-	-	-	29.0	-	-	67.7	**618.3**	-	-	36.6	-
5:45 PM	-	-	-	28.8	9.3	-	32.6	**508.4**	-	-	39.6	-
4:45 PM	-	-	-	28.8	-	-	411.8	600.8	-	-	49.5	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	E	D	-	-	F	-
4:15 PM	-	-	-	C	A	-	F	F	-	-	E	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	D	-
4:45 PM	-	-	-	C	-	-	F	F	-	-	D	-
5:00 PM	-	-	-	C	-	-	F	F	-	-	D	-
5:15 PM	-	-	-	C	B	-	E	F	-	-	D	-
5:30 PM	-	-	-	C	-	-	E	F	-	-	D	-
5:45 PM	-	-	-	C	A	-	C	F	-	-	D	-
4:45 PM	-	-	-	C	-	-	F	F	-	-	D	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.2**	-	-	**3.9**	0.5	-	-	0.7	-
4:15 PM	-	-	-	**1.3**	-	-	**10.4**	0.8	-	-	0.4	-
4:30 PM	-	-	-	**1.3**	-	-	**12.0**	**2.4**	-	-	0.3	-
4:45 PM	-	-	-	**1.2**	-	-	**12.8**	**3.1**	-	-	0.3	-
5:00 PM	-	-	-	**1.1**	-	-	**11.8**	**3.2**	-	-	0.4	-
5:15 PM	-	-	-	**1.2**	0.0	-	**3.3**	**3.1**	-	-	0.4	-
5:30 PM	-	-	-	**1.2**	-	-	**2.6**	**3.2**	-	-	0.3	-
5:45 PM	-	-	-	**1.3**	-	-	1.0	**2.4**	-	-	0.3	-
4:45 PM	-	-	-	1.2	-	-	12.8	3.1	-	-	0.3	-

Intersection Delay and LOS
Time-Period

4:00 PM	52.1	D
4:15 PM	109.5	F
4:30 PM	208	F
4:45 PM	270.1	F X
5:00 PM	232.3	F
5:15 PM	228.3	F
5:30 PM	229	F
5:45 PM	135.3	F
4:45 PM F	270.1	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	880	876	0
Future Vol, veh/h	12	0	0	880	876	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	12	0	0	880	876	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1316	-	-	0	-	0
Stage 1	876	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	133	0	0	-	-	0
Stage 1	337	0	0	-	-	0
Stage 2	580	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	133	-	-	-	-	-
Mov Cap-2 Maneuver	133	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.7	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	133	-
HCM Lane V/C Ratio	-	0.09	-
HCM Control Delay (s)	-	34.7	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	884	904	0
Future Vol, veh/h	12	0	0	884	904	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	12	0	0	884	904	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1346	-	-	0	-	0
Stage 1	904	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	127	0	0	-	-	0
Stage 1	326	0	0	-	-	0
Stage 2	579	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	127	-	-	-	-	-
Mov Cap-2 Maneuver	127	-	-	-	-	-
Stage 1	326	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.3	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	127	-
HCM Lane V/C Ratio	-	0.094	-
HCM Control Delay (s)	-	36.3	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	0.3	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	440	2304	0
Future Vol, veh/h	12	0	0	440	2304	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	12	0	0	440	2304	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2524	-	-	0	-	0
Stage 1	2304	-	-	-	-	-
Stage 2	220	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	19	0	0	-	-	0
Stage 1	51	0	0	-	-	0
Stage 2	758	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	19	-	-	-	-	-
Mov Cap-2 Maneuver	19	-	-	-	-	-
Stage 1	51	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 358	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	19	-
HCM Lane V/C Ratio	-	0.632	-
HCM Control Delay (s)	-	$ 358	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	1.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	152	2316	0
Future Vol, veh/h	12	0	0	152	2316	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	12	0	0	152	2316	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2392	-	-	0	-	0
Stage 1	2316	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	23	0	0	-	-	0
Stage 1	51	0	0	-	-	0
Stage 2	901	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	23	-	-	-	-	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	51	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	273.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	23	-
HCM Lane V/C Ratio	-	0.522	-
HCM Control Delay (s)	-	273.8	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	1.5	-

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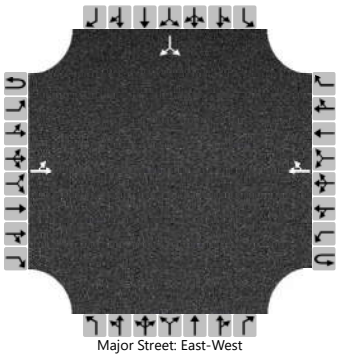
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 2

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		60	212				212	15						17		4
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		60													21	
Capacity, c (veh/h)		1268													488	
v/c Ratio		0.05													0.04	
95% Queue Length, Q_{95} (veh)		0.1													0.1	
Control Delay (s/veh)		8.0													12.7	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		2.1												12.7		
Approach LOS														B		

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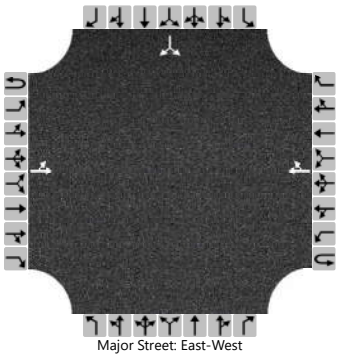
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Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 2

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		24	212				212	6						15		62
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24													77	
Capacity, c (veh/h)		1278													717	
v/c Ratio		0.02													0.11	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
Control Delay (s/veh)		7.9													10.6	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		1.0												10.6		
Approach LOS														B		

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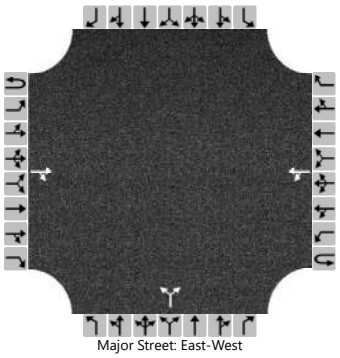
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Analysis Year	2025
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Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 2

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			171	6		11	128			17		33				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						11					50					
Capacity, c (veh/h)						1393					784					
v/c Ratio						0.01					0.06					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.6					9.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.7				9.9							
Approach LOS									A							

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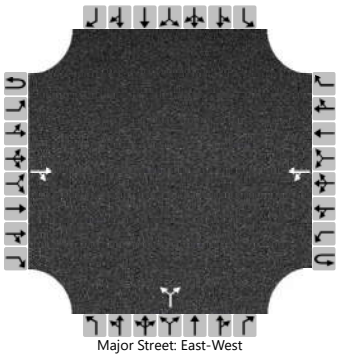
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Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 2

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			135	17		28	172			9		17				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						28					26					
Capacity, c (veh/h)						1423					775					
v/c Ratio						0.02					0.03					
95% Queue Length, Q_{95} (veh)						0.1					0.1					
Control Delay (s/veh)						7.6					9.8					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.2				9.8						
Approach LOS										A						

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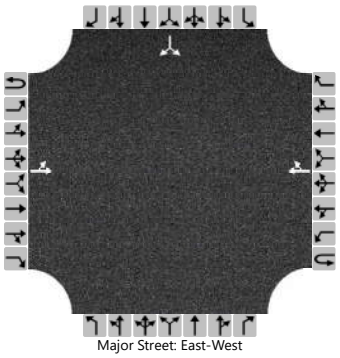
General Information

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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	107				125	14						5		5
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													10	
Capacity, c (veh/h)		1368													787	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6													9.6	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.4												9.6		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

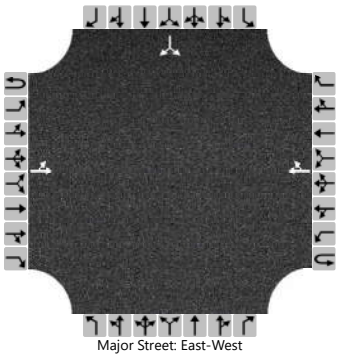
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	126				110	5						14		5
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													19	
Capacity, c (veh/h)		1397													753	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.6													9.9	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.3												9.9			
Approach LOS													A			

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HCS7 Two-Way Stop-Control Report

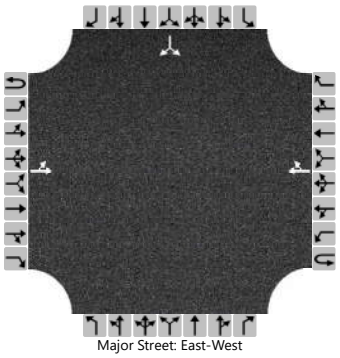
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "B"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "B"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		15	107				125	5						5		4
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		15													9	
Capacity, c (veh/h)		1379													766	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6													9.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		1.0												9.8		
Approach LOS														A		

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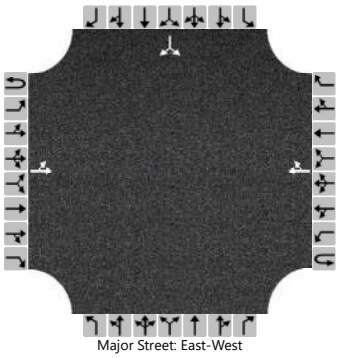
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Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "B"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "B"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	126				110	5						5		15
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													20	
Capacity, c (veh/h)		1397													847	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.6													9.4	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.4												9.4		
Approach LOS														A		

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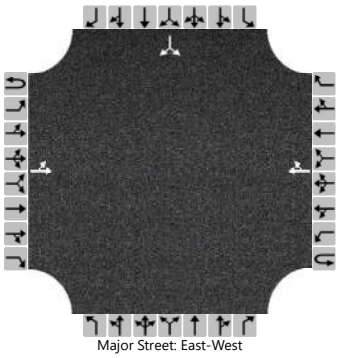
General Information

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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "C"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "C"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	121				125	4						1		2
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8													3	
Capacity, c (veh/h)		1380													813	
v/c Ratio		0.01													0.00	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6													9.4	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												9.4		
Approach LOS														A		

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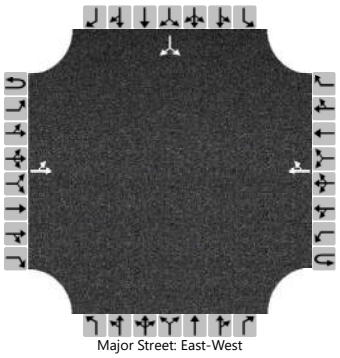
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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "C"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "C"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	128				123	2						4		8
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													12	
Capacity, c (veh/h)		1385													819	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6													9.5	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.2												9.5			
Approach LOS													A			

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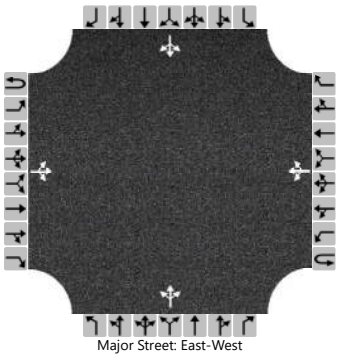
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		13	123	40		17	100	4		11	1	5		1	1	4
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		13				17					17				6	
Capacity, c (veh/h)		1410				1340					663				769	
v/c Ratio		0.01				0.01					0.03				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		7.6				7.7					10.6				9.7	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)	0.6				1.2				10.6				9.7			
Approach LOS									B				A			

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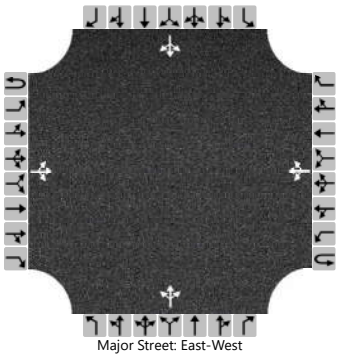
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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2025
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 2

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	109	16		7	100	2		41	1	17		4	1	13
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				7					59				18	
Capacity, c (veh/h)		1413				1385					717				825	
v/c Ratio		0.00				0.01					0.08				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.3				0.1	
Control Delay (s/veh)		7.6				7.6					10.5				9.5	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)		0.3				0.5				10.5				9.5		
Approach LOS										B				A		

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Phase 3 Analysis

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (1)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Horizon Year **2030** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	15	7	6	4	2	7	10	291	27	19	87	19
Existing Volumes (Demand) - Period 2- 7:15 AM	18	10	12	3	0	12	7	388	18	31	135	12
Existing Volumes (Demand) - Period 3- 7:30 AM	28	13	10	6	6	7	3	381	32	25	174	13
Existing Volumes (Demand) - Period 4- 7:45 AM	26	10	7	13	5	18	6	320	23	29	173	8
Existing Volumes (Demand) - Period 5- 8:00 AM	18	7	8	7	8	11	5	286	6	20	140	19
Existing Volumes (Demand) - Period 6- 8:15 AM	14	4	2	6	5	13	4	275	8	24	156	10
Existing Volumes (Demand) - Period 7- 8:30 AM	16	6	9	3	7	4	5	257	10	23	135	6
Existing Volumes (Demand) - Period 8- 8:45 AM	23	12	5	6	3	9	2	236	14	22	138	11
Maximum Existing AM Volumes	**28**	**13**	**10**	**6**	**6**	**7**	**3**	**381**	**32**	**25**	**174**	**13**
Background Traffic Growth	7	3	2	1	1	2	1	91	8	6	42	3
BEK	0	0	0	0	0	0	0	3	0	0	1	0
Maverik C-Store	5	0	0	0	0	2	0	13	0	2	12	4
AM Pk Hr. NO BUILD Volumes - Preiod 1	**27**	**10**	**8**	**5**	**3**	**11**	**11**	**398**	**35**	**27**	**142**	**26**
AM Pk Hr. NO BUILD Volumes - Period 2	**30**	**13**	**14**	**4**	**1**	**16**	**8**	**495**	**26**	**39**	**190**	**19**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**40**	**16**	**12**	**7**	**7**	**11**	**4**	**488**	**40**	**33**	**229**	**20**
AM Pk Hr. NO BUILD Volumes - Period 4	**38**	**13**	**9**	**14**	**6**	**22**	**7**	**427**	**31**	**37**	**228**	**15**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**30**	**10**	**10**	**8**	**9**	**15**	**6**	**393**	**14**	**28**	**195**	**26**
AM Pk Hr. NO BUILD Volumes - Period 6	**26**	**7**	**4**	**7**	**6**	**17**	**5**	**382**	**16**	**32**	**211**	**17**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**28**	**9**	**11**	**4**	**8**	**8**	**6**	**364**	**18**	**31**	**190**	**13**
AM Pk Hr. NO BUILD Volumes - Period 8	**35**	**15**	**7**	**7**	**4**	**13**	**3**	**343**	**22**	**30**	**193**	**18**
Maximum AM NO BUILD Volumes	**40**	**16**	**12**	**7**	**7**	**11**	**4**	**488**	**40**	**33**	**229**	**20**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.44%***	***0.16%***	***14.16%***	***1.57%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	***3.54%***	***1.44%***	***14.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.16%***	***1.57%***	*0.00%*
Total Primary Trips Generated	1	1	3	0	1	1	10	2	0	1	1	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**28**	**11**	**11**	**5**	**4**	**12**	**21**	**400**	**35**	**28**	**143**	**26**
AM Pk Hr. BUILD Volumes - Period 2	**31**	**14**	**17**	**4**	**2**	**17**	**18**	**497**	**26**	**40**	**191**	**19**
AM Pk Hr. BUILD Volumes - Preiod 3	**41**	**17**	**15**	**7**	**8**	**12**	**14**	**490**	**40**	**34**	**230**	**20**
AM Pk Hr. BUILD Volumes - Preiod 4	**39**	**14**	**12**	**14**	**7**	**23**	**17**	**429**	**31**	**38**	**229**	**15**
AM Pk Hr. BUILD Volumes - Period 5	**31**	**11**	**13**	**8**	**10**	**16**	**16**	**395**	**14**	**29**	**196**	**26**
AM Pk Hr. BUILD Volumes - Preiod 6	**27**	**8**	**7**	**7**	**7**	**18**	**15**	**384**	**16**	**33**	**212**	**17**
AM Pk Hr. BUILD Volumes - Preiod 7	**29**	**10**	**14**	**4**	**9**	**9**	**16**	**366**	**18**	**32**	**191**	**13**
AM Pk Hr. BUILD Volumes - Period 8	**36**	**16**	**10**	**7**	**5**	**14**	**13**	**345**	**22**	**31**	**194**	**18**
Maximum AM BUILD Volumes (Demand)	**41**	**17**	**15**	**7**	**8**	**12**	**14**	**490**	**40**	**34**	**230**	**20**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	9	8	25	26	40	7	180	10	19	318	14
Existing Volumes (Demand) - Period 2- 4:15 PM	15	6	8	15	16	39	10	191	13	12	331	34
Existing Volumes (Demand) - Period 3- 4:30 PM	14	4	9	12	27	46	7	215	15	23	288	32
Existing Volumes (Demand) - Period 4- 4:45 PM	26	9	16	22	15	36	7	211	55	12	303	27
Existing Volumes (Demand) - Period 5- 5:00 PM	26	19	8	22	31	52	12	238	8	11	349	23
Existing Volumes (Demand) - Period 6- 5:15 PM	16	11	8	23	24	35	7	224	13	16	301	38
Existing Volumes (Demand) - Period 7- 5:30 PM	24	11	7	20	22	33	9	245	13	22	318	16
Existing Volumes (Demand) - Period 8- 5:45 PM	16	6	9	25	26	43	5	208	10	23	335	28
Maximum Existing PM Volumes	**26**	**19**	**8**	**22**	**31**	**52**	**12**	**238**	**8**	**11**	**349**	**23**
Background Traffic Growth	6	5	2	5	7	12	3	57	2	3	84	6
BEK	0	0	0	0	0	0	0	2	0	1	4	0
Maverik C-Store	4	0	0	0	0	2	0	13	0	2	12	4
PM Pk Hr. NO BUILD Volumes - Preiod 1	**33**	**14**	**10**	**30**	**33**	**54**	**10**	**252**	**12**	**25**	**418**	**24**
PM Pk Hr. NO BUILD Volumes - Period 2	**25**	**11**	**10**	**20**	**23**	**53**	**13**	**263**	**15**	**18**	**431**	**44**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**24**	**9**	**11**	**17**	**34**	**60**	**10**	**287**	**17**	**29**	**388**	**42**
PM Pk Hr. NO BUILD Volumes - Period 4	**36**	**14**	**18**	**27**	**22**	**50**	**10**	**283**	**57**	**18**	**403**	**37**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**36**	**24**	**10**	**27**	**38**	**66**	**15**	**310**	**10**	**17**	**449**	**33**
PM Pk Hr. NO BUILD Volumes - Period 6	**26**	**16**	**10**	**28**	**31**	**49**	**10**	**296**	**15**	**22**	**401**	**48**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**34**	**16**	**9**	**25**	**29**	**47**	**12**	**317**	**15**	**28**	**418**	**26**
PM Pk Hr. NO BUILD Volumes - Period 8	**26**	**11**	**11**	**30**	**33**	**57**	**8**	**280**	**12**	**29**	**435**	**38**
Maximum PM NO BUILD Volumes	**36**	**24**	**10**	**27**	**38**	**66**	**15**	**310**	**10**	**17**	**449**	**33**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.44%***	***0.16%***	***14.16%***	***1.57%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	***3.54%***	***1.44%***	***14.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.16%***	***1.57%***	*0.00%*
Total Primary Trips Generated	3	1	10	0	1	1	4	1	0	1	2	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**36**	**15**	**20**	**30**	**34**	**55**	**14**	**253**	**12**	**26**	**420**	**24**
PM Pk Hr. BUILD Volumes - Period 2	**28**	**12**	**20**	**20**	**24**	**54**	**17**	**264**	**15**	**19**	**433**	**44**
PM Pk Hr. BUILD Volumes - Preiod 3	**27**	**10**	**21**	**17**	**35**	**61**	**14**	**288**	**17**	**30**	**390**	**42**
PM Pk Hr. BUILD Volumes - Preiod 4	**39**	**15**	**28**	**27**	**23**	**51**	**14**	**284**	**57**	**19**	**405**	**37**
PM Pk Hr. BUILD Volumes - Period 5	**39**	**25**	**20**	**27**	**39**	**67**	**19**	**311**	**10**	**18**	**451**	**33**
PM Pk Hr. BUILD Volumes - Preiod 6	**29**	**17**	**20**	**28**	**32**	**50**	**14**	**297**	**15**	**23**	**403**	**48**
PM Pk Hr. BUILD Volumes - Preiod 7	**37**	**17**	**19**	**25**	**30**	**48**	**16**	**318**	**15**	**29**	**420**	**26**
PM Pk Hr. BUILD Volumes - Period 8	**29**	**12**	**21**	**30**	**34**	**58**	**12**	**281**	**12**	**30**	**437**	**38**
Maximum PM BUILD Volumes	**39**	**25**	**20**	**27**	**39**	**67**	**19**	**311**	**10**	**18**	**451**	**33**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Los Volcanes Rd.** (2)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Horizon Year **2030** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M. 100% IP Development
	87	**275**	P.M.

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	111	27	3	15	47	61	19	459	52	103	275	45
Existing Volumes (Demand) - Period 2- 7:15 AM	74	32	3	28	14	48	4	324	90	72	169	18
Existing Volumes (Demand) - Period 3- 7:30 AM	42	11	1	32	9	40	5	334	40	65	173	24
Existing Volumes (Demand) - Period 4- 7:45 AM	56	11	6	13	6	44	1	289	27	45	159	22
Existing Volumes (Demand) - Period 5- 8:00 AM	78	12	10	10	2	30	6	267	21	44	164	28
Existing Volumes (Demand) - Period 6- 8:15 AM	63	13	10	8	2	35	4	258	23	32	143	18
Existing Volumes (Demand) - Period 7- 8:30 AM	39	8	8	5	7	25	7	237	23	43	160	14
Existing Volumes (Demand) - Period 8- 8:45 AM	17	3	2	8	6	18	7	93	13	26	66	6
Maximum Existing AM Volumes	**111**	**27**	**3**	**15**	**47**	**61**	**19**	**459**	**52**	**103**	**275**	**45**
Background Traffic Growth	27	6	1	4	11	15	5	110	12	25	66	11
BEK	0	0	0	1	0	1	0	0	4	7	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**138**	**34**	**4**	**38**	**59**	**87**	**24**	**569**	**87**	**146**	**341**	**56**
AM Pk Hr. NO BUILD Volumes - Period 2	**101**	**39**	**4**	**51**	**26**	**74**	**9**	**434**	**125**	**115**	**235**	**29**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**69**	**18**	**2**	**55**	**21**	**66**	**10**	**444**	**75**	**108**	**239**	**35**
AM Pk Hr. NO BUILD Volumes - Period 4	**83**	**18**	**7**	**36**	**18**	**70**	**6**	**399**	**62**	**88**	**225**	**33**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**105**	**19**	**11**	**33**	**14**	**56**	**11**	**377**	**56**	**87**	**230**	**39**
AM Pk Hr. NO BUILD Volumes - Period 6	**90**	**20**	**11**	**31**	**14**	**61**	**9**	**368**	**58**	**75**	**209**	**29**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**66**	**15**	**9**	**28**	**19**	**51**	**12**	**347**	**58**	**86**	**226**	**25**
AM Pk Hr. NO BUILD Volumes - Period 8	**44**	**10**	**3**	**31**	**18**	**44**	**12**	**203**	**48**	**69**	**132**	**17**
Maximum AM NO BUILD Volumes	**138**	**34**	**4**	**38**	**59**	**87**	**24**	**569**	**87**	**146**	**341**	**56**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***0.35%***	***2.58%***	*0.00%*	***1.73%***	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***23.42%***
Percent IP Trips Generated(Exiting)	***23.42%***	***2.58%***	***1.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***0.35%***	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	5	1	1	1	2	0	2	1	1	0	3	17
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**143**	**35**	**5**	**39**	**61**	**87**	**26**	**570**	**88**	**146**	**344**	**73**
AM Pk Hr. BUILD Volumes - Period 2	**106**	**40**	**5**	**52**	**28**	**74**	**11**	**435**	**126**	**115**	**238**	**46**
AM Pk Hr. BUILD Volumes - Preiod 3	**74**	**19**	**3**	**56**	**23**	**66**	**12**	**445**	**76**	**108**	**242**	**52**
AM Pk Hr. BUILD Volumes - Preiod 4	**88**	**19**	**8**	**37**	**20**	**70**	**8**	**400**	**63**	**88**	**228**	**50**
AM Pk Hr. BUILD Volumes - Period 5	**110**	**20**	**12**	**34**	**16**	**56**	**13**	**378**	**57**	**87**	**233**	**56**
AM Pk Hr. BUILD Volumes - Preiod 6	**95**	**21**	**12**	**32**	**16**	**61**	**11**	**369**	**59**	**75**	**212**	**46**
AM Pk Hr. BUILD Volumes - Preiod 7	**71**	**16**	**10**	**29**	**21**	**51**	**14**	**348**	**59**	**86**	**229**	**42**
AM Pk Hr. BUILD Volumes - Period 8	**49**	**11**	**4**	**32**	**20**	**44**	**14**	**204**	**49**	**69**	**135**	**34**
Maximum AM BUILD Volumes (Demand)	**143**	**35**	**5**	**39**	**61**	**87**	**26**	**570**	**88**	**146**	**344**	**73**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	10	7	30	11	53	3	221	21	33	305	27
Existing Volumes (Demand) - Period 2- 4:15 PM	19	6	6	21	10	44	4	218	17	47	349	22
Existing Volumes (Demand) - Period 3- 4:30 PM	48	5	7	34	10	64	5	234	31	43	286	20
Existing Volumes (Demand) - Period 4- 4:45 PM	40	14	4	23	6	45	4	275	25	61	313	24
Existing Volumes (Demand) - Period 5- 5:00 PM	48	14	16	59	33	74	7	277	44	55	288	22
Existing Volumes (Demand) - Period 6- 5:15 PM	39	12	6	26	14	55	5	256	16	40	321	36
Existing Volumes (Demand) - Period 7- 5:30 PM	32	11	4	24	18	47	5	264	29	36	309	26
Existing Volumes (Demand) - Period 8- 5:45 PM	28	10	4	20	6	36	4	234	25	43	368	39
Maximum Existing PM Volumes	**48**	**14**	**16**	**59**	**33**	**74**	**7**	**277**	**44**	**55**	**288**	**22**
Background Traffic Growth	12	3	4	14	8	18	2	66	11	13	69	5
BEK	0	0	0	4	0	9	0	0	2	4	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**35**	**14**	**11**	**66**	**20**	**90**	**5**	**287**	**53**	**61**	**374**	**32**
PM Pk Hr. NO BUILD Volumes - Period 2	**31**	**10**	**10**	**57**	**19**	**81**	**6**	**284**	**49**	**75**	**418**	**27**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**60**	**9**	**11**	**70**	**19**	**101**	**7**	**300**	**63**	**71**	**355**	**25**
PM Pk Hr. NO BUILD Volumes - Period 4	**52**	**18**	**8**	**59**	**15**	**82**	**6**	**341**	**57**	**89**	**382**	**29**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**60**	**18**	**20**	**95**	**42**	**111**	**9**	**343**	**76**	**83**	**357**	**27**
PM Pk Hr. NO BUILD Volumes - Period 6	**51**	**16**	**10**	**62**	**23**	**92**	**7**	**322**	**48**	**68**	**390**	**41**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**44**	**15**	**8**	**60**	**27**	**84**	**7**	**330**	**61**	**64**	**378**	**31**
PM Pk Hr. NO BUILD Volumes - Period 8	**40**	**14**	**8**	**56**	**15**	**73**	**6**	**300**	**57**	**71**	**437**	**44**
Maximum PM NO BUILD Volumes	**60**	**18**	**20**	**95**	**42**	**111**	**9**	**343**	**76**	**83**	**357**	**27**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***0.35%***	***2.58%***	*0.00%*	***1.73%***	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***23.42%***
Percent IP Trips Generated(Exiting)	***23.42%***	***2.58%***	***1.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***0.35%***	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	17	2	2	1	1	0	1	3	1	0	1	6
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**52**	**16**	**13**	**67**	**21**	**90**	**6**	**290**	**54**	**61**	**375**	**38**
PM Pk Hr. BUILD Volumes - Period 2	**48**	**12**	**12**	**58**	**20**	**81**	**7**	**287**	**50**	**75**	**419**	**33**
PM Pk Hr. BUILD Volumes - Preiod 3	**77**	**11**	**13**	**71**	**20**	**101**	**8**	**303**	**64**	**71**	**356**	**31**
PM Pk Hr. BUILD Volumes - Preiod 4	**69**	**20**	**10**	**60**	**16**	**82**	**7**	**344**	**58**	**89**	**383**	**35**
PM Pk Hr. BUILD Volumes - Period 5	**77**	**20**	**22**	**96**	**43**	**111**	**10**	**346**	**77**	**83**	**358**	**33**
PM Pk Hr. BUILD Volumes - Preiod 6	**68**	**18**	**12**	**63**	**24**	**92**	**8**	**325**	**49**	**68**	**391**	**47**
PM Pk Hr. BUILD Volumes - Preiod 7	**61**	**17**	**10**	**61**	**28**	**84**	**8**	**333**	**62**	**64**	**379**	**37**
PM Pk Hr. BUILD Volumes - Period 8	**57**	**16**	**10**	**57**	**16**	**73**	**7**	**303**	**58**	**71**	**438**	**50**
Maximum PM BUILD Volumes	**77**	**20**	**22**	**96**	**43**	**111**	**10**	**346**	**77**	**83**	**358**	**33**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (3)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Horizon Year **2030** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	0	0	0	70	0	35	7	166	0	0	559	37
Existing Volumes (Demand) - Period 2- 7:15 AM	0	0	0	79	0	39	7	195	0	0	553	44
Existing Volumes (Demand) - Period 3- 7:30 AM	0	0	0	80	0	33	6	242	0	0	518	38
Existing Volumes (Demand) - Period 4- 7:45 AM	0	0	0	93	1	45	5	222	0	0	510	42
Existing Volumes (Demand) - Period 5- 8:00 AM	0	0	0	81	1	38	13	229	0	0	358	37
Existing Volumes (Demand) - Period 6- 8:15 AM	0	0	0	84	0	73	16	157	0	0	335	35
Existing Volumes (Demand) - Period 7- 8:30 AM	0	0	0	86	0	50	5	158	0	0	330	25
Existing Volumes (Demand) - Period 8- 8:45 AM	0	0	0	85	0	60	11	138	0	0	351	25
Maximum Existing AM Volumes	**0**	**0**	**0**	**93**	**1**	**45**	**5**	**222**	**0**	**0**	**510**	**42**
Background Traffic Growth	0	0	0	22	0	11	1	53	0	0	122	10
BEK	0	0	0	5	0	0	0	1	0	0	2	0
Maverik C-Store	0	0	0	2	0	0	3	7	0	0	7	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**99**	**0**	**46**	**11**	**227**	**0**	**0**	**690**	**47**
AM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**108**	**0**	**50**	**11**	**256**	**0**	**0**	**684**	**54**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**109**	**0**	**44**	**10**	**303**	**0**	**0**	**649**	**48**
AM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**122**	**1**	**56**	**9**	**283**	**0**	**0**	**641**	**52**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**110**	**1**	**49**	**17**	**290**	**0**	**0**	**489**	**47**
AM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**113**	**0**	**84**	**20**	**218**	**0**	**0**	**466**	**45**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**115**	**0**	**61**	**9**	**219**	**0**	**0**	**461**	**35**
AM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**114**	**0**	**71**	**15**	**199**	**0**	**0**	**482**	**35**
Maximum AM NO BUILD Volumes	**0**	**0**	**0**	**122**	**1**	**56**	**9**	**283**	**0**	**0**	**641**	**52**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	13	0	0	1	2	0	0	6	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**112**	**0**	**46**	**12**	**229**	**0**	**0**	**696**	**47**
AM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**121**	**0**	**50**	**12**	**258**	**0**	**0**	**690**	**54**
AM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**122**	**0**	**44**	**11**	**305**	**0**	**0**	**655**	**48**
AM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**135**	**1**	**56**	**10**	**285**	**0**	**0**	**647**	**52**
AM Pk Hr. BUILD Volumes - Preiod 5	**0**	**0**	**0**	**123**	**1**	**49**	**18**	**292**	**0**	**0**	**495**	**47**
AM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**126**	**0**	**84**	**21**	**220**	**0**	**0**	**472**	**45**
AM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**128**	**0**	**61**	**10**	**221**	**0**	**0**	**467**	**35**
AM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**127**	**0**	**71**	**16**	**201**	**0**	**0**	**488**	**35**
Maximum AM BUILD Volumes (Demand)	**0**	**0**	**0**	**135**	**1**	**56**	**10**	**285**	**0**	**0**	**647**	**52**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	0	0	0	164	0	272	8	250	0	0	264	41
Existing Volumes (Demand) - Period 2- 4:15 PM	0	0	0	198	2	303	9	246	0	0	288	59
Existing Volumes (Demand) - Period 3- 4:30 PM	0	0	0	166	1	321	17	219	0	0	261	47
Existing Volumes (Demand) - Period 4- 4:45 PM	0	0	0	172	1	357	10	192	0	0	274	52
Existing Volumes (Demand) - Period 5- 5:00 PM	0	0	0	144	3	359	8	204	0	0	274	48
Existing Volumes (Demand) - Period 6- 5:15 PM	0	0	0	204	0	355	11	148	0	0	250	52
Existing Volumes (Demand) - Period 7- 5:30 PM	0	0	0	156	1	330	9	154	0	0	273	41
Existing Volumes (Demand) - Period 8- 5:45 PM	0	0	0	168	2	1	16	103	0	0	278	55
Maximum Existing PM Volumes	**0**	**0**	**0**	**198**	**2**	**303**	**9**	**246**	**0**	**0**	**288**	**59**
Background Traffic Growth	0	0	0	48	0	73	2	59	0	0	69	14
BEK	0	0	0	3	0	0	1	3	0	0	1	0
Maverik C-Store	0	0	0	2	0	0	2	7	0	0	7	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**217**	**0**	**345**	**13**	**319**	**0**	**0**	**341**	**55**
PM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**251**	**2**	**376**	**14**	**315**	**0**	**0**	**365**	**73**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**219**	**1**	**394**	**22**	**288**	**0**	**0**	**338**	**61**
PM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**225**	**1**	**430**	**15**	**261**	**0**	**0**	**351**	**66**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**197**	**3**	**432**	**13**	**273**	**0**	**0**	**351**	**62**
PM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**257**	**0**	**428**	**16**	**217**	**0**	**0**	**327**	**66**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**209**	**1**	**403**	**14**	**223**	**0**	**0**	**350**	**55**
PM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**221**	**2**	**74**	**21**	**172**	**0**	**0**	**355**	**69**
Maximum PM NO BUILD Volumes	**0**	**0**	**0**	**251**	**2**	**376**	**14**	**315**	**0**	**0**	**365**	**73**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	5	0	0	1	6	0	0	2	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**222**	**0**	**345**	**14**	**325**	**0**	**0**	**343**	**55**
PM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**256**	**2**	**376**	**15**	**321**	**0**	**0**	**367**	**73**
PM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**224**	**1**	**394**	**23**	**294**	**0**	**0**	**340**	**61**
PM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**230**	**1**	**430**	**16**	**267**	**0**	**0**	**353**	**66**
PM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**202**	**3**	**432**	**14**	**279**	**0**	**0**	**353**	**62**
PM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**262**	**0**	**428**	**17**	**223**	**0**	**0**	**329**	**66**
PM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**214**	**1**	**403**	**15**	**229**	**0**	**0**	**352**	**55**
PM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**226**	**2**	**74**	**22**	**178**	**0**	**0**	**357**	**69**
Maximum PM BUILD Volumes	**0**	**0**	**0**	**256**	**2**	**376**	**15**	**321**	**0**	**0**	**367**	**73**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (4)
N-S Street: **Unser Blvd.**

Year of Existing Counts 2018
Horizon Year **2030 (Phase 3)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***132***	***0***	***64***	***0***	***0***	***0***	***0***	***816***	***948***	***0***	***1,188***	***976***
Background Traffic Growth	32	0	16	0	0	0	0	196	228	0	284	236
Subtotal	164	0	80	0	0	0	0	1,012	1,176	0	1,472	1,212
BEK	0	0	4	0	0	0	0	4	4	0	28	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	36	0
Subtotal (NO BUILD - A.M.)	***164***	***0***	***96***	***0***	***0***	***0***	***0***	***1,052***	***1,188***	***0***	***1,536***	***1,212***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	8	0	0	76	0
Total AM Peak Hour BUILD Volumes	**164**	**0**	**100**	**0**	**0**	**0**	**0**	**1,060**	**1,188**	**0**	**1,612**	**1,212**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***80***	***0***	***56***	***0***	***0***	***0***	***0***	***944***	***696***	***0***	***1,248***	***464***
Background Traffic Growth	20	0	12	0	0	0	0	228	168	0	300	112
Subtotal	100	0	68	0	0	0	0	1,172	864	0	1,548	576
BEK	0	0	4	0	0	0	0	12	24	0	20	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	32	0
Subtotal (NO BUILD - A.M.)	***100***	***0***	***84***	***0***	***0***	***0***	***0***	***1,220***	***896***	***0***	***1,600***	***576***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	24	0	0	24	0
Total PM Peak Hour BUILD Volumes	**100**	**0**	**88**	**0**	**0**	**0**	**0**	**1,244**	**896**	**0**	**1,624**	**576**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Daytona Rd

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **Los Volcanes Rd.** (5)
N-S Street: **Daytona Rd**

Year of Existing Counts 2013
Horizon Year **2030 (Phase 3)**

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***0***	***396***	***0***	***8***	***292***	***88***	***0***	***0***	***4***	***80***	***0***	***4***
Background Traffic Growth	0	136	0	4	100	28	0	0	0	28	0	0
Subtotal	0	532	0	12	392	116	0	0	4	108	0	4
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***548***	***0***	***12***	***408***	***116***	***0***	***0***	***4***	***108***	***0***	***4***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	80	0	0	0	20	0	4
Total AM Peak Hour BUILD Volumes	**4**	**548**	**0**	**12**	**408**	**196**	**0**	**0**	**4**	**128**	**0**	**8**

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

PM Peak

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***4***	***220***	***0***	***0***	***152***	***52***	***0***	***0***	***0***	***36***	***0***	***0***
Background Traffic Growth	0	76	0	0	52	16	0	0	0	12	0	0
Subtotal	4	296	0	0	204	68	0	0	0	48	0	0
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***4***	***312***	***0***	***0***	***220***	***68***	***0***	***0***	***0***	***48***	***0***	***0***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	28	0	0	0	80	0	4
Total PM Peak Hour BUILD Volumes	**8**	**312**	**0**	**0**	**220**	**96**	**0**	**0**	**0**	**128**	**0**	**4**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Central Ave. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Central Ave.** (6)
N-S Street: **98th St.**

NOTES: Base volumes (2022) are from NICO TIS.

Year of Existing Counts 2022
Horizon Year **2030** **(Phase 3)**

	Entering	Exiting		
IP Trip Generation Rate (Hourly)	**276**	**70**	A.M.	100% IP Development
	87	**275**	P.M.	

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	109	51	9	36	34	41	25	424	53	22	110	31
Existing Volumes (Demand) - Period 2- 7:15 AM	138	77	15	27	37	64	32	474	41	23	152	31
Existing Volumes (Demand) - Period 3- 7:30 AM	107	69	16	35	31	89	5	442	35	27	150	27
Existing Volumes (Demand) - Period 4- 7:45 AM	98	70	14	41	43	43	9	457	61	21	131	34
Existing Volumes (Demand) - Period 5- 8:00 AM	80	47	4	42	46	51	13	323	55	17	133	18
Existing Volumes (Demand) - Period 6- 8:15 AM	51	37	9	50	54	44	13	329	38	25	109	18
Existing Volumes (Demand) - Period 7- 8:30 AM	54	32	7	38	18	49	14	331	42	18	112	23
Existing Volumes (Demand) - Period 8- 8:45 AM	25	27	2	13	24	27	13	161	25	12	60	10
Maximum Existing AM Volumes	**138**	**77**	**15**	**27**	**37**	**64**	**32**	**474**	**41**	**23**	**152**	**31**
Background Traffic Growth	22	12	2	4	6	10	5	76	7	4	24	5
Maverik C-Store Trips	1	0	0	0	0	5	0	4	0	5	4	1
Mercado el Milagro Trips	4	14	0	22	**-4**	0	4	7	2	0	13	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**136**	**77**	**11**	**62**	**36**	**56**	**34**	**511**	**62**	**31**	**151**	**37**
AM Pk Hr. NO BUILD Volumes - Period 2	**165**	**103**	**17**	**53**	**39**	**79**	**41**	**561**	**50**	**32**	**193**	**37**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**134**	**95**	**18**	**61**	**33**	**104**	**14**	**529**	**44**	**36**	**191**	**33**
AM Pk Hr. NO BUILD Volumes - Period 4	**125**	**96**	**16**	**67**	**45**	**58**	**18**	**544**	**70**	**30**	**172**	**40**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**107**	**73**	**6**	**68**	**48**	**66**	**22**	**410**	**64**	**26**	**174**	**24**
AM Pk Hr. NO BUILD Volumes - Period 6	**78**	**63**	**11**	**76**	**56**	**59**	**22**	**416**	**47**	**34**	**150**	**24**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**81**	**58**	**9**	**64**	**20**	**64**	**23**	**418**	**51**	**27**	**153**	**29**
AM Pk Hr. NO BUILD Volumes - Period 8	**52**	**53**	**4**	**39**	**26**	**42**	**22**	**248**	**34**	**21**	**101**	**16**
Maximum AM NO BUILD Volumes	**165**	**103**	**17**	**53**	**39**	**79**	**41**	**561**	**50**	**32**	**193**	**37**
Percent IP Trips Generated(Entering)	***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated	3	0	0	0	0	11	0	6	0	3	2	1
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**139**	**77**	**11**	**62**	**36**	**67**	**34**	**517**	**62**	**34**	**153**	**38**
AM Pk Hr. BUILD Volumes - Period 2	**168**	**103**	**17**	**53**	**39**	**90**	**41**	**567**	**50**	**35**	**195**	**38**
AM Pk Hr. BUILD Volumes - Preiod 3	**137**	**95**	**18**	**61**	**33**	**115**	**14**	**535**	**44**	**39**	**193**	**34**
AM Pk Hr. BUILD Volumes - Preiod 4	**128**	**96**	**16**	**67**	**45**	**69**	**18**	**550**	**70**	**33**	**174**	**41**
AM Pk Hr. BUILD Volumes - Preiod 5	**110**	**73**	**6**	**68**	**48**	**77**	**22**	**416**	**64**	**29**	**176**	**25**
AM Pk Hr. BUILD Volumes - Preiod 6	**81**	**63**	**11**	**76**	**56**	**70**	**22**	**422**	**47**	**37**	**152**	**25**
AM Pk Hr. BUILD Volumes - Preiod 7	**84**	**58**	**9**	**64**	**20**	**75**	**23**	**424**	**51**	**30**	**155**	**30**
AM Pk Hr. BUILD Volumes - Period 8	**55**	**53**	**4**	**39**	**26**	**53**	**22**	**254**	**34**	**24**	**103**	**17**
Maximum AM BUILD Volumes (Demand)	**168**	**103**	**17**	**53**	**39**	**90**	**41**	**567**	**50**	**35**	**195**	**38**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	48	62	10	70	45	40	12	262	49	44	370	71
Existing Volumes (Demand) - Period 2- 4:15 PM	60	42	16	94	60	38	11	224	49	30	394	45
Existing Volumes (Demand) - Period 3- 4:30 PM	48	45	8	71	55	46	12	253	52	29	401	45
Existing Volumes (Demand) - Period 4- 4:45 PM	49	55	10	84	58	49	11	256	45	29	347	100
Existing Volumes (Demand) - Period 5- 5:00 PM	58	63	22	79	64	47	19	209	35	26	345	29
Existing Volumes (Demand) - Period 6- 5:15 PM	51	65	23	83	62	40	17	193	29	35	334	29
Existing Volumes (Demand) - Period 7- 5:30 PM	40	36	30	54	66	47	19	221	37	26	396	57
Existing Volumes (Demand) - Period 8- 5:45 PM	20	21	18	21	29	9	20	81	13	10	98	19
Maximum Existing PM Volumes	**49**	**55**	**10**	**84**	**58**	**49**	**11**	**256**	**45**	**29**	**347**	**100**
Background Traffic Growth	8	9	2	13	9	8	2	41	7	5	56	16
Maverik C-Store Trips	1	0	0	0	0	6	0	4	0	5	4	1
Mercado el Milagro Trips	4	15	0	22	**-5**	0	4	8	2	0	12	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**61**	**86**	**12**	**105**	**49**	**54**	**18**	**315**	**58**	**54**	**442**	**88**
PM Pk Hr. NO BUILD Volumes - Period 2	**73**	**66**	**18**	**129**	**64**	**52**	**17**	**277**	**58**	**40**	**466**	**62**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**61**	**69**	**10**	**106**	**59**	**60**	**18**	**306**	**61**	**39**	**473**	**62**
PM Pk Hr. NO BUILD Volumes - Period 4	**62**	**79**	**12**	**119**	**62**	**63**	**17**	**309**	**54**	**39**	**419**	**117**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**71**	**87**	**24**	**114**	**68**	**61**	**25**	**262**	**44**	**36**	**417**	**46**
PM Pk Hr. NO BUILD Volumes - Period 6	**64**	**89**	**25**	**118**	**66**	**54**	**23**	**246**	**38**	**45**	**406**	**46**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**53**	**60**	**32**	**89**	**70**	**61**	**25**	**274**	**46**	**36**	**468**	**74**
PM Pk Hr. NO BUILD Volumes - Period 8	**33**	**45**	**20**	**56**	**33**	**23**	**26**	**134**	**22**	**20**	**170**	**36**
Maximum PM NO BUILD Volumes	**62**	**79**	**12**	**119**	**62**	**63**	**17**	**309**	**54**	**39**	**419**	**117**
Percent IP Trips Generated(Entering)	***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated	1	0	0	0	0	4	0	2	0	11	6	3
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**62**	**86**	**12**	**105**	**49**	**58**	**18**	**317**	**58**	**65**	**448**	**91**
PM Pk Hr. BUILD Volumes - Period 2	**74**	**66**	**18**	**129**	**64**	**56**	**17**	**279**	**58**	**51**	**472**	**65**
PM Pk Hr. BUILD Volumes - Preiod 3	**62**	**69**	**10**	**106**	**59**	**64**	**18**	**308**	**61**	**50**	**479**	**65**
PM Pk Hr. BUILD Volumes - Preiod 4	**63**	**79**	**12**	**119**	**62**	**67**	**17**	**311**	**54**	**50**	**425**	**120**
PM Pk Hr. BUILD Volumes - Period 5	**72**	**87**	**24**	**114**	**68**	**65**	**25**	**264**	**44**	**47**	**423**	**49**
PM Pk Hr. BUILD Volumes - Preiod 6	**65**	**89**	**25**	**118**	**66**	**58**	**23**	**248**	**38**	**56**	**412**	**49**
PM Pk Hr. BUILD Volumes - Preiod 7	**54**	**60**	**32**	**89**	**70**	**65**	**25**	**276**	**46**	**47**	**474**	**77**
PM Pk Hr. BUILD Volumes - Period 8	**34**	**45**	**20**	**56**	**33**	**27**	**26**	**136**	**22**	**31**	**176**	**39**
Maximum PM BUILD Volumes	**63**	**79**	**12**	**119**	**62**	**67**	**17**	**311**	**54**	**50**	**425**	**120**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (7)

N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019

Horizon Year **2030** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates 2.00% 2.00% 2.00% 2.00%

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	27	0	8	0	0	0	11	491	0	0	120	16
Existing Volumes (Demand) - Period 2- 7:15 AM	17	0	9	0	0	0	7	422	0	0	160	15
Existing Volumes (Demand) - Period 3- 7:30 AM	24	0	4	0	0	0	12	357	0	0	181	17
Existing Volumes (Demand) - Period 4- 7:45 AM	26	0	10	0	0	0	13	384	0	0	182	18
Existing Volumes (Demand) - Period 5- 8:00 AM	27	0	12	0	0	0	16	335	0	0	166	18
Existing Volumes (Demand) - Period 6- 8:15 AM	29	0	5	0	0	0	6	327	0	0	129	26
Existing Volumes (Demand) - Period 7- 8:30 AM	26	0	7	0	0	0	8	406	0	0	133	24
Existing Volumes (Demand) - Period 8- 8:45 AM	20	0	0	0	0	0	16	270	0	0	182	24
Maximum Existing AM Volumes	**27**	**0**	**8**	**0**	**0**	**0**	**11**	**491**	**0**	**0**	**120**	**16**
Background Traffic Growth	6	0	2	0	0	0	2	108	0	0	26	4
Maverik C-Store Trips	0	0	0	12	1	14	0	**-7**	16	10	**-3**	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**33**	**0**	**10**	**12**	**1**	**14**	**13**	**602**	**16**	**10**	**153**	**20**
AM Pk Hr. NO BUILD Volumes - Period 2	**23**	**0**	**11**	**12**	**1**	**14**	**9**	**533**	**16**	**10**	**193**	**19**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**30**	**0**	**6**	**12**	**1**	**14**	**14**	**468**	**16**	**10**	**214**	**21**
AM Pk Hr. NO BUILD Volumes - Period 4	**32**	**0**	**12**	**12**	**1**	**14**	**15**	**495**	**16**	**10**	**215**	**22**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**33**	**0**	**14**	**12**	**1**	**14**	**18**	**446**	**16**	**10**	**199**	**22**
AM Pk Hr. NO BUILD Volumes - Period 6	**35**	**0**	**7**	**12**	**1**	**14**	**8**	**438**	**16**	**10**	**162**	**30**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**32**	**0**	**9**	**12**	**1**	**14**	**10**	**517**	**16**	**10**	**166**	**28**
AM Pk Hr. NO BUILD Volumes - Period 8	**26**	**0**	**2**	**12**	**1**	**14**	**18**	**381**	**16**	**10**	**215**	**28**
Maximum AM NO BUILD Volumes	**33**	**0**	**10**	**12**	**1**	**14**	**13**	**602**	**16**	**10**	**153**	**20**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	5	1	5	0	0	18	19	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**33**	**1**	**10**	**17**	**2**	**19**	**13**	**602**	**34**	**29**	**153**	**20**
AM Pk Hr. BUILD Volumes - Period 2	**23**	**1**	**11**	**17**	**2**	**19**	**9**	**533**	**34**	**29**	**193**	**19**
AM Pk Hr. BUILD Volumes - Preiod 3	**30**	**1**	**6**	**17**	**2**	**19**	**14**	**468**	**34**	**29**	**214**	**21**
AM Pk Hr. BUILD Volumes - Preiod 4	**32**	**1**	**12**	**17**	**2**	**19**	**15**	**495**	**34**	**29**	**215**	**22**
AM Pk Hr. BUILD Volumes - Preiod 5	**33**	**1**	**14**	**17**	**2**	**19**	**18**	**446**	**34**	**29**	**199**	**22**
AM Pk Hr. BUILD Volumes - Preiod 6	**35**	**1**	**7**	**17**	**2**	**19**	**8**	**438**	**34**	**29**	**162**	**30**
AM Pk Hr. BUILD Volumes - Preiod 7	**32**	**1**	**9**	**17**	**2**	**19**	**10**	**517**	**34**	**29**	**166**	**28**
AM Pk Hr. BUILD Volumes - Period 8	**26**	**1**	**2**	**17**	**2**	**19**	**18**	**381**	**34**	**29**	**215**	**28**
Maximum AM BUILD Volumes (Demand)	**33**	**1**	**10**	**17**	**2**	**19**	**13**	**602**	**34**	**29**	**153**	**20**

2.00% 2.00% 2.00% 2.00%

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	24	0	21	0	0	0	15	23	0	0	443	37
Existing Volumes (Demand) - Period 2- 4:15 PM	35	0	17	0	0	0	14	244	0	0	457	33
Existing Volumes (Demand) - Period 3- 4:30 PM	30	0	12	0	0	0	11	231	0	0	429	31
Existing Volumes (Demand) - Period 4- 4:45 PM	26	0	16	0	0	0	5	211	0	0	396	32
Existing Volumes (Demand) - Period 5- 5:00 PM	32	0	13	0	0	0	13	203	0	0	437	43
Existing Volumes (Demand) - Period 6- 5:15 PM	21	0	10	0	0	0	6	272	0	0	484	40
Existing Volumes (Demand) - Period 7- 5:30 PM	25	0	13	0	0	0	18	241	0	0	465	39
Existing Volumes (Demand) - Period 8- 5:45 PM	30	0	13	0	0	0	12	209	0	0	440	54
Maximum Existing PM Volumes	**21**	**0**	**10**	**0**	**0**	**0**	**6**	**272**	**0**	**0**	**484**	**40**
Background Traffic Growth	5	0	2	0	0	0	1	60	0	0	106	9
Maverik C-Store Trips	0	0	0	16	0	11	0	**-3**	14	14	**-6**	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**29**	**0**	**23**	**16**	**0**	**11**	**16**	**90**	**14**	**14**	**553**	**46**
PM Pk Hr. NO BUILD Volumes - Period 2	**40**	**0**	**19**	**16**	**0**	**11**	**15**	**311**	**14**	**14**	**567**	**42**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**35**	**0**	**14**	**16**	**0**	**11**	**12**	**298**	**14**	**14**	**539**	**40**
PM Pk Hr. NO BUILD Volumes - Period 4	**31**	**0**	**18**	**16**	**0**	**11**	**6**	**278**	**14**	**14**	**506**	**41**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**37**	**0**	**15**	**16**	**0**	**11**	**14**	**270**	**14**	**14**	**547**	**52**
PM Pk Hr. NO BUILD Volumes - Period 6	**26**	**0**	**12**	**16**	**0**	**11**	**7**	**339**	**14**	**14**	**594**	**49**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**30**	**0**	**15**	**16**	**0**	**11**	**19**	**308**	**14**	**14**	**575**	**48**
PM Pk Hr. NO BUILD Volumes - Period 8	**35**	**0**	**15**	**16**	**0**	**11**	**13**	**276**	**14**	**14**	**550**	**63**
Maximum PM NO BUILD Volumes	**26**	**0**	**12**	**16**	**0**	**11**	**7**	**339**	**14**	**14**	**594**	**49**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	18	1	19	0	0	6	6	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**29**	**1**	**23**	**34**	**1**	**30**	**16**	**90**	**20**	**20**	**553**	**46**
PM Pk Hr. BUILD Volumes - Period 2	**40**	**1**	**19**	**34**	**1**	**30**	**15**	**311**	**20**	**20**	**567**	**42**
PM Pk Hr. BUILD Volumes - Preiod 3	**35**	**1**	**14**	**34**	**1**	**30**	**12**	**298**	**20**	**20**	**539**	**40**
PM Pk Hr. BUILD Volumes - Preiod 4	**31**	**1**	**18**	**34**	**1**	**30**	**6**	**278**	**20**	**20**	**506**	**41**
PM Pk Hr. BUILD Volumes - Period 5	**37**	**1**	**15**	**34**	**1**	**30**	**14**	**270**	**20**	**20**	**547**	**52**
PM Pk Hr. BUILD Volumes - Preiod 6	**26**	**1**	**12**	**34**	**1**	**30**	**7**	**339**	**20**	**20**	**594**	**49**
PM Pk Hr. BUILD Volumes - Preiod 7	**30**	**1**	**15**	**34**	**1**	**30**	**19**	**308**	**20**	**20**	**575**	**48**
PM Pk Hr. BUILD Volumes - Period 8	**35**	**1**	**15**	**34**	**1**	**30**	**13**	**276**	**20**	**20**	**550**	**63**
Maximum PM BUILD Volumes	**26**	**1**	**12**	**34**	**1**	**30**	**7**	**339**	**20**	**20**	**594**	**49**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (8)

N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019

Horizon Year **2030** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	0	0	0	123	0	0	14	79	0	0	169	0
Existing Volumes (Demand) - Period 2- 7:15 AM	0	0	0	138	1	1	14	115	0	0	115	0
Existing Volumes (Demand) - Period 3- 7:30 AM	0	0	0	97	0	0	21	141	0	0	102	0
Existing Volumes (Demand) - Period 4- 7:45 AM	0	0	0	109	0	0	21	165	7	0	82	0
Existing Volumes (Demand) - Period 5- 8:00 AM	0	0	0	97	0	0	5	104	0	0	75	0
Existing Volumes (Demand) - Period 6- 8:15 AM	0	0	0	106	0	0	11	88	0	0	94	0
Existing Volumes (Demand) - Period 7- 8:30 AM	0	0	0	101	0	0	17	141	0	0	126	0
Existing Volumes (Demand) - Period 8- 8:45 AM	0	0	0	122	0	0	10	60	0	0	104	0
Maximum Existing AM Volumes	**0**	**0**	**0**	**123**	**0**	**0**	**14**	**79**	**0**	**0**	**169**	**0**
Background Traffic Growth	0	0	0	27	0	0	3	17	0	0	37	0
Maverik C-Store Trips	0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips	0	0	0	1	0	0	1	9	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**153**	**0**	**0**	**19**	**111**	**0**	**0**	**222**	**0**
AM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**168**	**1**	**1**	**19**	**147**	**0**	**0**	**168**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**127**	**0**	**0**	**26**	**173**	**0**	**0**	**155**	**0**
AM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**139**	**0**	**0**	**26**	**197**	**7**	**0**	**135**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**127**	**0**	**0**	**10**	**136**	**0**	**0**	**128**	**0**
AM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**136**	**0**	**0**	**16**	**120**	**0**	**0**	**147**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**131**	**0**	**0**	**22**	**173**	**0**	**0**	**179**	**0**
AM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**152**	**0**	**0**	**15**	**92**	**0**	**0**	**157**	**0**
Maximum AM NO BUILD Volumes	**0**	**0**	**0**	**153**	**0**	**0**	**19**	**111**	**0**	**0**	**222**	**0**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	13	0	0	1	2	0	0	4	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**166**	**0**	**0**	**20**	**113**	**0**	**0**	**226**	**0**
AM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**181**	**1**	**1**	**20**	**149**	**0**	**0**	**172**	**0**
AM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**140**	**0**	**0**	**27**	**175**	**0**	**0**	**159**	**0**
AM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**152**	**0**	**0**	**27**	**199**	**7**	**0**	**139**	**0**
AM Pk Hr. BUILD Volumes - Preiod 5	**0**	**0**	**0**	**140**	**0**	**0**	**11**	**138**	**0**	**0**	**132**	**0**
AM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**149**	**0**	**0**	**17**	**122**	**0**	**0**	**151**	**0**
AM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**144**	**0**	**0**	**23**	**175**	**0**	**0**	**183**	**0**
AM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**165**	**0**	**0**	**16**	**94**	**0**	**0**	**161**	**0**
Maximum AM BUILD Volumes (Demand)	**0**	**0**	**0**	**166**	**0**	**0**	**20**	**113**	**0**	**0**	**226**	**0**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	0	0	0	345	0	0	22	67	0	0	146	1
Existing Volumes (Demand) - Period 2- 4:15 PM	0	0	0	384	1	0	19	69	0	0	65	0
Existing Volumes (Demand) - Period 3- 4:30 PM	0	0	0	387	0	0	12	70	0	0	55	0
Existing Volumes (Demand) - Period 4- 4:45 PM	0	0	0	351	0	0	19	55	0	0	68	0
Existing Volumes (Demand) - Period 5- 5:00 PM	0	0	0	307	0	0	21	74	0	0	80	0
Existing Volumes (Demand) - Period 6- 5:15 PM	0	0	0	341	2	0	10	81	0	0	98	0
Existing Volumes (Demand) - Period 7- 5:30 PM	0	0	0	340	0	0	21	79	0	0	79	0
Existing Volumes (Demand) - Period 8- 5:45 PM	0	0	0	380	1	0	15	72	0	0	66	0
Maximum Existing PM Volumes	**0**	**0**	**0**	**345**	**0**	**0**	**22**	**67**	**0**	**0**	**146**	**1**
Background Traffic Growth	0	0	0	76	0	0	5	15	0	0	32	0
Maverik C-Store Trips	0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips	0	0	0	1	0	0	1	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**0**	**0**	**0**	**424**	**0**	**0**	**29**	**98**	**0**	**0**	**194**	**1**
PM Pk Hr. NO BUILD Volumes - Period 2	**0**	**0**	**0**	**463**	**1**	**0**	**26**	**100**	**0**	**0**	**113**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**0**	**0**	**0**	**466**	**0**	**0**	**19**	**101**	**0**	**0**	**103**	**0**
PM Pk Hr. NO BUILD Volumes - Period 4	**0**	**0**	**0**	**430**	**0**	**0**	**26**	**86**	**0**	**0**	**116**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**0**	**0**	**0**	**386**	**0**	**0**	**28**	**105**	**0**	**0**	**128**	**0**
PM Pk Hr. NO BUILD Volumes - Period 6	**0**	**0**	**0**	**420**	**2**	**0**	**17**	**112**	**0**	**0**	**146**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**0**	**0**	**0**	**419**	**0**	**0**	**28**	**110**	**0**	**0**	**127**	**0**
PM Pk Hr. NO BUILD Volumes - Period 8	**0**	**0**	**0**	**459**	**1**	**0**	**22**	**103**	**0**	**0**	**114**	**0**
Maximum PM NO BUILD Volumes	**0**	**0**	**0**	**424**	**0**	**0**	**29**	**98**	**0**	**0**	**194**	**1**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	0	0	4	0	0	3	4	0	0	2	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**0**	**0**	**0**	**428**	**0**	**0**	**32**	**102**	**0**	**0**	**196**	**1**
PM Pk Hr. BUILD Volumes - Period 2	**0**	**0**	**0**	**467**	**1**	**0**	**29**	**104**	**0**	**0**	**115**	**0**
PM Pk Hr. BUILD Volumes - Preiod 3	**0**	**0**	**0**	**470**	**0**	**0**	**22**	**105**	**0**	**0**	**105**	**0**
PM Pk Hr. BUILD Volumes - Preiod 4	**0**	**0**	**0**	**434**	**0**	**0**	**29**	**90**	**0**	**0**	**118**	**0**
PM Pk Hr. BUILD Volumes - Period 5	**0**	**0**	**0**	**390**	**0**	**0**	**31**	**109**	**0**	**0**	**130**	**0**
PM Pk Hr. BUILD Volumes - Preiod 6	**0**	**0**	**0**	**424**	**2**	**0**	**20**	**116**	**0**	**0**	**148**	**0**
PM Pk Hr. BUILD Volumes - Preiod 7	**0**	**0**	**0**	**423**	**0**	**0**	**31**	**114**	**0**	**0**	**129**	**0**
PM Pk Hr. BUILD Volumes - Period 8	**0**	**0**	**0**	**463**	**1**	**0**	**25**	**107**	**0**	**0**	**116**	**0**
Maximum PM BUILD Volumes	**0**	**0**	**0**	**428**	**0**	**0**	**32**	**102**	**0**	**0**	**196**	**1**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / 98th St.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (9)
N-S Street: **98th St.**

Year of Existing Counts 2019
Horizon Year **2030** **(Phase 3)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***732***	***0***	***0***	***716***	***0***
Background Traffic Growth	4	0	0	0	0	0	0	160	0	0	156	0
Subtotal	16	0	0	0	0	0	0	892	0	0	872	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	36	8	0	44	0
Subtotal (NO BUILD - A.M.)	***16***	***0***	***8***	***0***	***0***	***0***	***0***	***952***	***16***	***0***	***948***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	12	0	0	0	0	8	0	0	68	0
Total AM Peak Hour BUILD Volumes	**16**	**0**	**20**	**0**	**0**	**0**	**0**	**960**	**16**	**0**	**1,016**	**0**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***336***	***0***	***0***	***1,988***	***0***
Background Traffic Growth	4	0	0	0	0	0	0	72	0	0	436	0
Subtotal	16	0	0	0	0	0	0	408	0	0	2,424	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	40	4	0	44	0
Subtotal (NO BUILD - A.M.)	***16***	***0***	***8***	***0***	***0***	***0***	***0***	***472***	***12***	***0***	***2,500***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	28	0	0	24	0
Total PM Peak Hour BUILD Volumes	**16**	**0**	**12**	**0**	**0**	**0**	**0**	**500**	**12**	**0**	**2,524**	**0**

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Daytona Rd.

INTERSECTION: E-W Street: **Bluewater Rd.** (10)
N-S Street: **Daytona Rd.**

Year of Existing Counts 2021
Horizon Year **2030 (Phase 3)**

	Growth Rates	2.00%			2.00%			2.00%			2.00%		
		Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	200	0	0	200	0	0	0	0	0	0	0
Background Traffic Growth		0	36	0	0	36	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***0***	***236***	***0***	***0***	***236***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***46.60%***	*0.00%*	*0.00%*	*0.00%*	***5.62%***	***13.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***5.62%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***46.60%***	*0.00%*	***13.52%***
Total Trips Generated		129	4	0	0	16	37	0	0	0	33	0	9
Total AM Peak Hour BUILD Volumes		**129**	**240**	**0**	**0**	**252**	**37**	**0**	**0**	**0**	**33**	**0**	**9**

		2.00%			2.00%			2.00%			2.00%		
		Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	200	0	0	200	0	0	0	0	0	0	0
Background Traffic Growth		0	36	0	0	36	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)		***0***	***236***	***0***	***0***	***236***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***46.60%***	*0.00%*	*0.00%*	*0.00%*	***5.62%***	***13.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***5.62%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***46.60%***	*0.00%*	***13.52%***
Total Trips Generated		41	15	0	0	5	12	0	0	0	128	0	37
Total PM Peak Hour BUILD Volumes		**41**	**251**	**0**	**0**	**241**	**12**	**0**	**0**	**0**	**128**	**0**	**37**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	100% Office Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2030)

Phase 3

INTERSECTION: **Summary**

Bluewater Rd. / Adonai Rd.

(11)

15.0% Truck	1.00 Eastbound (Bluewater Rd.) Left	Eastbound (Bluewater Rd.) Thru	Westbound (Bluewater Rd.) Right	Westbound (Bluewater Rd.) Left	Westbound (Bluewater Rd.) Thru	Northbound (Adonai Rd.) Right	Northbound (Adonai Rd.) Left	Northbound (Adonai Rd.) Thru	Southbound (Adonai Rd.) Right	Southbound (Adonai Rd.) Left	Southbound (Adonai Rd.) Thru	1.00 PHF Right
Existing (2021)	0	106	5	11	106	0	16	0	32	0	0	0
2030 (NO BUILD - A.M.)	*0*	*124*	*6*	*12*	*124*	*0*	*19*	*0*	*37*	*0*	*0*	*0*
2030 (BUILD - A.M.)	***17***	***251***	***6***	***12***	***156***	***16***	***19***	***0***	***38***	***4***	***0***	***4***

	1.00 Eastbound (Bluewater Rd.) Left	Eastbound (Bluewater Rd.) Thru	Westbound (Bluewater Rd.) Right	Westbound (Bluewater Rd.) Left	Westbound (Bluewater Rd.) Thru	Northbound (Adonai Rd.) Right	Northbound (Adonai Rd.) Left	Northbound (Adonai Rd.) Thru	Southbound (Adonai Rd.) Right	Southbound (Adonai Rd.) Left	Southbound (Adonai Rd.) Thru	1.00 PHF Right
Existing (2021)	0	106	16	27	106	0	8	0	16	0	0	0
2030 (NO BUILD - P.M.)	*0*	*124*	*19*	*31*	*124*	*0*	*10*	*0*	*19*	*0*	*0*	*0*
2030 (BUILD - P.M.)	***5***	***164***	***19***	***32***	***251***	***5***	***10***	***0***	***19***	***15***	***0***	***17***

Daytona Rd. / Driveway "A"

(12)

15.0% Truck	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "A") Right	Northbound (Driveway "A") Left	Northbound (Driveway "A") Thru	Southbound (Driveway "A") Right	Southbound (Driveway "A") Left	Southbound (Driveway "A") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - A.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - A.M.)	***0***	***140***	***0***	***0***	***188***	***13***	***0***	***0***	***0***	***3***	***0***	***0***

	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "A") Right	Northbound (Driveway "A") Left	Northbound (Driveway "A") Thru	Southbound (Driveway "A") Right	Southbound (Driveway "A") Left	Southbound (Driveway "A") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - P.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - P.M.)	***0***	***188***	***0***	***0***	***144***	***4***	***0***	***0***	***0***	***13***	***0***	***0***

Daytona Rd. / Driveway "B"

(13)

15.0% Truck	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "B") Right	Northbound (Driveway "B") Left	Northbound (Driveway "B") Thru	Southbound (Driveway "B") Right	Southbound (Driveway "B") Left	Southbound (Driveway "B") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - A.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - A.M.)	***15***	***140***	***0***	***0***	***188***	***0***	***0***	***0***	***0***	***0***	***0***	***4***

	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "B") Right	Northbound (Driveway "B") Left	Northbound (Driveway "B") Thru	Southbound (Driveway "B") Right	Southbound (Driveway "B") Left	Southbound (Driveway "B") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - P.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - P.M.)	***5***	***188***	***0***	***0***	***144***	***0***	***0***	***0***	***0***	***0***	***0***	***15***

Daytona Rd. / Driveway "C"

(14)

15.0% Truck	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "C") Right	Northbound (Driveway "C") Left	Northbound (Driveway "C") Thru	Southbound (Driveway "C") Right	Southbound (Driveway "C") Left	Southbound (Driveway "C") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - A.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - A.M.)	***19***	***153***	***0***	***0***	***183***	***9***	***0***	***0***	***0***	***2***	***0***	***2***

	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "C") Right	Northbound (Driveway "C") Left	Northbound (Driveway "C") Thru	Southbound (Driveway "C") Right	Southbound (Driveway "C") Left	Southbound (Driveway "C") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - P.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - P.M.)	***6***	***185***	***0***	***0***	***156***	***3***	***0***	***0***	***0***	***8***	***0***	***9***

Daytona Rd. / Driveway "D"

(15)

15.0% Truck	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "D") Right	Northbound (Driveway "D") Left	Northbound (Driveway "D") Thru	Southbound (Driveway "D") Right	Southbound (Driveway "D") Left	Southbound (Driveway "D") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - A.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - A.M.)	***64***	***139***	***87***	***28***	***144***	***8***	***22***	***0***	***10***	***3***	***0***	***14***

	1.00 Eastbound (Daytona Rd.) Left	Eastbound (Daytona Rd.) Thru	Westbound (Daytona Rd.) Right	Westbound (Daytona Rd.) Left	Westbound (Daytona Rd.) Thru	Northbound (Driveway "D") Right	Northbound (Driveway "D") Left	Northbound (Driveway "D") Thru	Southbound (Driveway "D") Right	Southbound (Driveway "D") Left	Southbound (Driveway "D") Thru	1.00 PHF Right
Existing (2021)	0	106	0	0	106	0	0	0	0	0	0	0
2030 (NO BUILD - P.M.)	*0*	*124*	*0*	*0*	*124*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030 (BUILD - P.M.)	***20***	***129***	***28***	***9***	***130***	***3***	***87***	***0***	***38***	***12***	***0***	***55***

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2030)

Phase 3

INTERSECTION: **Summary**

Driveway "E" / Daytona Rd.

(16)

15.0% Truck

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Driveway "E")			Westbound (Driveway "E")			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2021)	0	0	0	0	0	0	0	106	0	0	106	0	
2030 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*124*	*0*	*0*	*124*	*0*	
2030 (BUILD - A.M.)	***1***	***0***	***1***	***0***	***0***	***0***	***0***	***291***	***0***	***0***	***136***	***8***	

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Driveway "E")			Westbound (Driveway "E")			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2021)	0	0	0	0	0	0	0	106	0	0	106	0	
2030 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*124*	*0*	*0*	*124*	*0*	
2030 (BUILD - P.M.)	***3***	***0***	***3***	***0***	***0***	***0***	***0***	***179***	***0***	***0***	***128***	***3***	

Drivewawy "F" / Daytona Rd.

(17)

15.0% Truck

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Drivewawy "F")			Westbound (Drivewawy "F")			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2021)	0	0	0	0	0	0	0	106	0	0	106	0	
2030 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*124*	*0*	*0*	*124*	*0*	
2030 (BUILD - A.M.)	***1***	***0***	***1***	***0***	***0***	***0***	***0***	***290***	***0***	***0***	***163***	***8***	

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Drivewawy "F")			Westbound (Drivewawy "F")			Northbound (Daytona Rd.)			Southbound (Daytona Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2021)	0	0	0	0	0	0	0	106	0	0	106	0	
2030 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*124*	*0*	*0*	*124*	*0*	
2030 (BUILD - P.M.)	***3***	***0***	***3***	***0***	***0***	***0***	***0***	***176***	***0***	***0***	***263***	***3***	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Adonai Rd.

INTERSECTION: E-W Street: **Bluewater Rd.** (11)
N-S Street: **Adonai Rd.**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Adonai Rd.)**			**Southbound (Adonai Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	5	10	100	0	15	0	30	0	0	0
Background Traffic Growth	0	24	1	2	24	0	4	0	7	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***124***	***6***	***12***	***124***	***0***	***19***	***0***	***37***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***6.30%***	***46.18%***	*0.00%*	*0.00%*	*0.00%*	***5.62%***	*0.00%*	*0.00%*	***0.42%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***0.42%***	***46.18%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.62%***	*0.00%*	***6.30%***
Total Trips Generated	17	127	0	0	32	16	0	0	1	4	0	4
Total AM Peak Hour BUILD Volumes	**17**	**251**	**6**	**12**	**156**	**16**	**19**	**0**	**38**	**4**	**0**	**4**

	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Adonai Rd.)**			**Southbound (Adonai Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	15	25	100	0	8	0	15	0	0	0
Background Traffic Growth	0	24	4	6	24	0	2	0	4	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***124***	***19***	***31***	***124***	***0***	***10***	***0***	***19***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***6.30%***	***46.18%***	*0.00%*	*0.00%*	*0.00%*	***5.62%***	*0.00%*	*0.00%*	***0.42%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***0.42%***	***46.18%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.62%***	*0.00%*	***6.30%***
Total Trips Generated	5	40	0	1	127	5	0	0	0	15	0	17
Total PM Peak Hour BUILD Volumes	**5**	**164**	**19**	**32**	**251**	**5**	**10**	**0**	**19**	**15**	**0**	**17**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	Phase 1 Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "A"

INTERSECTION: E-W Street: **Daytona Rd.** (12)
N-S Street: **Driveway "A"**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Daytona Rd.)			**Westbound (Daytona Rd.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth	0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.27%***	***4.70%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.70%***	*0.00%*	*0.00%*
Total Trips Generated	0	16	0	0	64	13	0	0	0	3	0	0
Total AM Peak Hour BUILD Volumes	**0**	**140**	**0**	**0**	**188**	**13**	**0**	**0**	**0**	**3**	**0**	**0**

	2.00%			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Daytona Rd.)			**Westbound (Daytona Rd.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth	0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.27%***	***4.70%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.70%***	*0.00%*	*0.00%*
Total Trips Generated	0	64	0	0	20	4	0	0	0	13	0	0
Total PM Peak Hour BUILD Volumes	**0**	**188**	**0**	**0**	**144**	**4**	**0**	**0**	**0**	**13**	**0**	**0**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	Phase 1 Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "B"

INTERSECTION: E-W Street: **Daytona Rd.** (13)
N-S Street: **Driveway "B"**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

	Growth Rates	2.00%			2.00%			2.00%			2.00%		
		Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth		0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***5.29%***	*0.00%*	*0.00%*	*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.29%***
Total Trips Generated		15	16	0	0	64	0	0	0	0	0	0	4
Total AM Peak Hour BUILD Volumes		**15**	**140**	**0**	**0**	**188**	**0**	**0**	**0**	**0**	**0**	**0**	**4**

	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth	0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)	***5.29%***	*0.00%*	*0.00%*	*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***23.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.29%***
Total Trips Generated	5	64	0	0	20	0	0	0	0	0	0	15
Total PM Peak Hour BUILD Volumes	**5**	**188**	**0**	**0**	**144**	**0**	**0**	**0**	**0**	**0**	**0**	**15**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	Phase 1 Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "C"

INTERSECTION: E-W Street: **Daytona Rd.** (14)
N-S Street: **Driveway "C"**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

	Growth Rates	2.00%			2.00%			2.00%			2.00%		
		Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth		0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***7.00%***	***5.29%***	*0.00%*	*0.00%*	***20.00%***	***3.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***20.30%***	*0.00%*	*0.00%*	***5.29%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.97%***	*0.00%*	***3.20%***
Total Trips Generated		19	29	0	0	59	9	0	0	0	2	0	2
Total AM Peak Hour BUILD Volumes		**19**	**153**	**0**	**0**	**183**	**9**	**0**	**0**	**0**	**2**	**0**	**2**

		2.00%			2.00%			2.00%			2.00%		
		Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "C")			Southbound (Driveway "C")		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth		0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)		***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***7.00%***	***5.29%***	*0.00%*	*0.00%*	***20.00%***	***3.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***20.30%***	*0.00%*	*0.00%*	***5.29%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***2.97%***	*0.00%*	***3.20%***
Total Trips Generated		6	61	0	0	32	3	0	0	0	8	0	9
Total PM Peak Hour BUILD Volumes		**6**	**185**	**0**	**0**	**156**	**3**	**0**	**0**	**0**	**8**	**0**	**9**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	Phase 1 Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Daytona Rd. / Driveway "D"

INTERSECTION: E-W Street: **Daytona Rd.** (15)
N-S Street: **Driveway "D"**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

	Growth Rates	2.00%			2.00%			2.00%			2.00%		
		Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth		0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***23.20%***	***5.29%***	***31.63%***	***10.00%***	***7.30%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***31.63%***	*0.00%*	***13.94%***	***4.33%***	*0.00%*	***20.00%***
Total Trips Generated		64	15	87	28	20	8	22	0	10	3	0	14
Total AM Peak Hour BUILD Volumes		**64**	**139**	**87**	**28**	**144**	**8**	**22**	**0**	**10**	**3**	**0**	**14**

		2.00%			2.00%			2.00%			2.00%		
		Eastbound (Daytona Rd.)			Westbound (Daytona Rd.)			Northbound (Driveway "D")			Southbound (Driveway "D")		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		0	100	0	0	100	0	0	0	0	0	0	0
Background Traffic Growth		0	24	0	0	24	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)		***0***	***124***	***0***	***0***	***124***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Office Trips Generated(Entering)		***23.20%***	***5.29%***	***31.63%***	***10.00%***	***7.30%***	***3.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***31.63%***	*0.00%*	***13.94%***	***4.33%***	*0.00%*	***20.00%***
Total Trips Generated		20	5	28	9	6	3	87	0	38	12	0	55
Total PM Peak Hour BUILD Volumes		**20**	**129**	**28**	**9**	**130**	**3**	**87**	**0**	**38**	**12**	**0**	**55**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	Phase 1 Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Driveway "E" / Daytona Rd.

INTERSECTION: E-W Street: **Driveway "E"** (16)
N-S Street: **Daytona Rd.**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Driveway "E")			**Westbound (Driveway "E")**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	100	0	0	100	0
Background Traffic Growth	0	0	0	0	0	0	0	24	0	0	24	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***124***	***0***	***0***	***124***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***60.12%***	*0.00%*	*0.00%*	***4.30%***	***3.00%***
Percent Office Trips Generated(Exiting)	***1.03%***	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	1	0	1	0	0	0	0	167	0	0	12	8
Total AM Peak Hour BUILD Volumes	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**291**	**0**	**0**	**136**	**8**

	2.00%			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Driveway "E")			**Westbound (Driveway "E")**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	100	0	0	100	0
Background Traffic Growth	0	0	0	0	0	0	0	24	0	0	24	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***124***	***0***	***0***	***124***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***60.12%***	*0.00%*	*0.00%*	***4.30%***	***3.00%***
Percent Office Trips Generated(Exiting)	***1.03%***	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	3	0	3	0	0	0	0	55	0	0	4	3
Total PM Peak Hour BUILD Volumes	**3**	**0**	**3**	**0**	**0**	**0**	**0**	**179**	**0**	**0**	**128**	**3**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	100% Office Development
	87	**275**	P.M.	

Westpointe 40 Development (Interstate 40 / 98th St.)

Projected Turning Movements Worksheet

Drivewawy "F" / Daytona Rd.

INTERSECTION: E-W Street: **Drivewawy "F"** (17)
N-S Street: **Daytona Rd.**

Year of Existing Counts 2018
Horizon Year **2030** **(Phase 3)**

Growth Rates	**2.00%**			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Drivewawy "F")			**Westbound (Drivewawy "F")**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	100	0	0	100	0
Background Traffic Growth	0	0	0	0	0	0	0	24	0	0	24	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***124***	***0***	***0***	***124***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***60.12%***	*0.00%*	*0.00%*	***1.30%***	***3.00%***
Percent Office Trips Generated(Exiting)	***1.00%***	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.12%***	*0.00%*
Total Trips Generated	1	0	1	0	0	0	0	166	0	0	39	8
Subtotal AM Pk Hr. BUILD Volumes	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**290**	**0**	**0**	**163**	**8**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**290**	**0**	**0**	**163**	**8**

	2.00%			**2.00%**			**2.00%**			**2.00%**		
	Eastbound (Drivewawy "F")			**Westbound (Drivewawy "F")**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	100	0	0	100	0
Background Traffic Growth	0	0	0	0	0	0	0	24	0	0	24	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***124***	***0***	***0***	***124***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***60.12%***	*0.00%*	*0.00%*	***1.30%***	***3.00%***
Percent Office Trips Generated(Exiting)	***1.00%***	*0.00%*	***1.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.12%***	*0.00%*
Total Trips Generated	3	0	3	0	0	0	0	52	0	0	139	3
Subtotal PM Pk Hr. BUILD Volumes	**3**	**0**	**3**	**0**	**0**	**0**	**0**	**176**	**0**	**0**	**263**	**3**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**3**	**0**	**3**	**0**	**0**	**0**	**0**	**176**	**0**	**0**	**263**	**3**

	Entering	Exiting		
Number of Office Trips Generated	**276**	**70**	A.M.	100% Office Development
	87	**275**	P.M.	

	Eastbound (Drivewawy "F")			**Westbound (Drivewawy "F")**			**Northbound (Daytona Rd.)**			**Southbound (Daytona Rd.)**		
2021 AM Peak Hr. Volumes	0	0	0	0	0	0	0	106	0	0	106	0
2021 PM Peak Hr. Volumes	0	0	0	0	0	0	0	106	0	0	106	0

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	27	10	8	5	3	11	11	398	35	27	142	26
7:15 AM	30	13	14	4	1	16	8	495	26	39	190	19
7:30 AM	40	16	12	7	7	11	4	488	40	33	229	20
7:45 AM	38	13	9	14	6	22	7	427	31	37	228	15
8:00 AM	30	10	10	8	9	15	6	393	14	28	195	26
8:15 AM	26	7	4	7	6	17	5	382	16	32	211	17
8:30 AM	28	9	11	4	8	8	6	364	18	31	190	13
8:45 AM	35	15	7	7	4	13	3	343	22	30	193	18
7:45 AM	38	13	9	14	6	22	7	427	31	37	228	15

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.42	0.27	-	0.14	0.11	0.47	0.16	0.79	0.16	0.86	0.53	0.22
7:15 AM	0.45	0.40	-	0.12	0.04	0.68	0.15	**1.16**	0.14	0.89	0.64	0.14
7:30 AM	0.64	0.41	-	0.21	0.25	0.47	0.04	0.96	0.18	**1.38**	0.70	0.14
7:45 AM	0.55	0.29	-	0.35	0.17	0.73	0.11	**1.38**	0.19	0.73	0.71	0.10
8:00 AM	0.49	0.30	-	0.23	0.32	0.63	0.06	0.76	0.06	**1.39**	0.62	0.18
8:15 AM	0.43	0.16	-	0.20	0.21	0.71	0.07	**1.23**	0.09	0.69	0.63	0.11
8:30 AM	0.46	0.30	-	0.12	0.29	0.34	0.06	0.71	0.08	**1.48**	0.63	0.10
8:45 AM	0.54	0.32	-	0.20	0.14	0.55	0.04	**1.11**	0.13	0.58	0.57	0.12
7:45 AM	0.55	0.29	-	0.35	0.17	0.73	0.11	1.38	0.19	0.73	0.71	0.10

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	46.7	43.8	-	53.7	53.1	57.6	11.1	19.7	9.5	29.2	19.3	14.7
7:15 AM	46.7	44.9	-	53.4	52.5	62.9	14.7	**105.4**	14.3	47.2	17.8	11.3
7:30 AM	52.9	45.0	-	54.3	54.3	57.5	8.1	**134.4**	9.3	**210.9**	8.3	6.1
7:45 AM	47.3	41.9	-	54.1	51.6	61.9	19.6	**347.1**	20.9	**99.7**	13.6	8.6
8:00 AM	47.1	43.7	-	54.6	55.1	61.4	7.3	**197.8**	7.8	**217.0**	8.4	6.6
8:15 AM	46.8	42.8	-	54.0	53.8	63.8	17.4	**257.7**	17.3	74.3	10.8	7.2
8:30 AM	46.8	43.9	-	53.4	54.7	55.6	8.0	**93.1**	8.2	**255.4**	9.0	6.4
8:45 AM	48.5	43.9	-	54.3	53.4	59.2	17.0	**97.3**	18.1	69.9	9.2	6.5
7:45 AM	47.3	41.9	-	54.1	51.6	61.9	19.6	347.1	20.9	99.7	13.6	8.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	B	A	C	B	B
7:15 AM	D	D	-	D	D	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	F	A	F	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	E	E	A	F	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	E	B	A
8:30 AM	D	D	-	D	D	E	A	F	A	F	A	A
8:45 AM	D	D	-	D	D	E	B	F	B	E	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.7**	0.7	-	0.2	0.1	0.5	0.2	**1.2**	0.3	0.9	0.8	**1.2**
7:15 AM	**1.9**	**1.1**	-	0.2	0.0	0.8	0.2	**3.2**	0.3	**1.9**	0.9	0.7
7:30 AM	**2.7**	**1.2**	-	0.3	0.2	0.5	0.1	**3.7**	0.4	**2.7**	0.3	0.2
7:45 AM	**2.4**	0.9	-	0.7	0.1	**1.1**	0.2	**5.4**	0.4	**2.8**	0.6	0.3
8:00 AM	**1.9**	0.8	-	0.4	0.2	0.8	0.1	**4.8**	0.1	**2.7**	0.3	0.3
8:15 AM	**1.6**	0.4	-	0.3	0.1	0.9	0.1	**4.1**	0.2	**2.2**	0.6	0.3
8:30 AM	**1.7**	0.8	-	0.2	0.2	0.4	0.1	**2.8**	0.1	**3.3**	0.4	0.2
8:45 AM	**2.2**	0.9	-	0.3	0.1	0.6	0.1	**2.2**	0.3	**2.3**	0.5	0.2
7:45 AM	2.4	0.9	-	0.7	0.1	1.1	0.2	5.4	0.4	2.8	0.6	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	21.4	C
7:15 AM	62.7	E
7:30 AM	78.1	E
7:45 AM	**161.0**	F **X**
8:00 AM	103.3	F
8:15 AM	122.6	F
8:30 AM	62.5	E
8:45 AM	52.6	D
7:45 AM	161	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28	11	11	5	4	12	21	400	35	28	143	26
7:15 AM	31	14	17	4	2	17	18	497	26	40	191	19
7:30 AM	41	17	15	7	8	12	14	490	40	34	230	20
7:45 AM	39	14	12	14	7	23	17	429	31	38	229	15
8:00 AM	31	11	13	8	10	16	16	395	14	29	196	26
8:15 AM	27	8	7	7	7	18	15	384	16	33	212	17
8:30 AM	29	10	14	4	9	9	16	366	18	32	191	13
8:45 AM	36	16	10	7	5	14	13	345	22	31	194	18
7:45 AM	39	14	12	14	7	23	17	429	31	38	229	15

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.44	0.33	-	0.15	0.14	0.51	0.29	0.81	0.16	0.86	0.54	0.22
7:15 AM	0.46	0.46	-	0.12	0.07	0.69	0.31	**1.17**	0.14	0.89	0.65	0.15
7:30 AM	0.67	0.47	-	0.21	0.29	0.51	0.15	0.97	0.18	**1.37**	0.71	0.14
7:45 AM	0.56	0.34	-	0.35	0.19	0.74	0.24	**1.39**	0.20	0.74	0.73	0.11
8:00 AM	0.51	0.36	-	0.23	0.35	0.67	0.14	0.76	0.06	**1.38**	0.63	0.19
8:15 AM	0.43	0.22	-	0.19	0.23	0.71	0.20	**1.24**	0.09	0.71	0.65	0.12
8:30 AM	0.48	0.36	-	0.12	0.32	0.38	0.15	0.72	0.08	**1.46**	0.63	0.10
8:45 AM	0.56	0.38	-	0.20	0.18	0.59	0.16	**1.11**	0.13	0.58	0.57	0.12
7:45 AM	0.56	0.34	-	0.35	0.19	0.74	0.24	1.39	0.20	0.74	0.73	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	46.6	44.2	-	53.7	53.4	58.3	12.1	21.2	10.1	31.2	20.4	15.5
7:15 AM	46.6	45.3	-	53.0	52.4	62.7	15.6	**112.1**	14.6	47.2	19.3	12.3
7:30 AM	54.3	45.8	-	54.3	54.7	58.2	8.1	**150.1**	9.4	**204.5**	9.1	6.8
7:45 AM	47.4	42.2	-	53.7	51.4	61.4	19.7	**378.7**	21.2	**99.5**	15.4	9.8
8:00 AM	47.5	44.3	-	54.5	55.3	62.4	7.4	**223.8**	7.9	**212.2**	9.2	7.2
8:15 AM	46.3	42.8	-	53.6	53.6	63.3	17.5	**308.8**	17.5	79.2	12.3	8.2
8:30 AM	46.9	44.4	-	53.4	55.1	56.1	7.8	**123.8**	8.4	**248.8**	9.5	6.9
8:45 AM	49.3	44.6	-	54.3	53.7	60.2	16.6	**99.8**	18.1	70.6	10.1	7.3
7:45 AM	47.4	42.2	-	53.7	51.4	61.4	19.7	378.7	21.2	99.5	15.4	9.8

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	C	B	C	C	B
7:15 AM	D	D	-	D	D	E	B	F	B	D	B	B
7:30 AM	D	D	-	D	D	E	A	F	A	F	A	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A
8:00 AM	D	D	-	D	E	E	A	F	A	F	A	A
8:15 AM	D	D	-	D	D	E	B	F	B	E	B	A
8:30 AM	D	D	-	D	E	E	A	F	A	F	A	A
8:45 AM	D	D	-	D	D	E	B	F	B	E	B	A
7:45 AM	D	D	-	D	D	E	B	F	C	F	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.7**	0.9	-	0.2	0.1	0.6	0.4	**1.3**	0.3	0.9	0.8	**1.2**
7:15 AM	**1.9**	**1.3**	-	0.2	0.0	0.9	0.4	**3.4**	0.3	**1.9**	0.9	0.7
7:30 AM	0.6	**1.4**	-	0.3	0.2	0.6	0.2	**3.9**	0.4	**2.7**	0.3	0.2
7:45 AM	**2.4**	**1.1**	-	0.6	0.1	**1.2**	0.5	**5.7**	0.4	**2.8**	0.7	0.3
8:00 AM	**1.9**	1.0	-	0.4	0.2	0.8	0.2	**5.2**	0.1	**2.7**	0.4	0.3
8:15 AM	**1.7**	0.6	-	0.3	0.2	0.9	0.4	**4.6**	0.2	**2.3**	0.6	0.3
8:30 AM	**1.8**	1.0	-	0.2	0.2	0.4	0.3	**3.4**	0.2	**3.3**	0.4	0.1
8:45 AM	**2.3**	**1.1**	-	0.3	0.1	0.7	0.3	**2.3**	0.3	**2.4**	0.5	0.2
7:45 AM	2.4	1.1	-	0.6	0.1	1.2	0.5	5.7	0.4	2.8	0.7	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	22.7	C
7:15 AM	66	E
7:30 AM	84.8	F
7:45 AM	**173.5**	F **X**
8:00 AM	113.5	F
8:15 AM	144	F
8:30 AM	74.6	E
8:45 AM	54.2	D
7:45 AM	173.5	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28	11	11	5	4	12	21	400	35	28	143	26
7:15 AM	31	14	17	4	2	17	18	497	26	40	191	19
7:30 AM	41	17	15	7	8	12	14	490	40	34	230	20
7:45 AM	39	14	12	14	7	23	17	429	31	38	229	15
8:00 AM	31	11	13	8	10	16	16	395	14	29	196	26
8:15 AM	27	8	7	7	7	18	15	384	16	33	212	17
8:30 AM	29	10	14	4	9	9	16	366	18	32	191	13
8:45 AM	36	16	10	7	5	14	13	345	22	31	194	18
7:15 AM	31	14	17	4	2	17	18	497	26	40	191	19

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.44	0.33	-	0.15	0.14	0.25	0.29	0.55	0.16	0.76	0.54	0.22
7:15 AM	0.47	0.46	-	0.12	0.07	0.23	0.31	0.78	0.13	0.89	0.65	0.15
7:30 AM	0.67	0.47	-	0.21	0.29	0.22	0.29	0.70	0.18	0.86	0.71	0.14
7:45 AM	0.58	0.35	-	0.36	0.20	0.39	0.35	0.62	0.15	0.87	0.71	0.11
8:00 AM	0.52	0.36	-	0.23	0.36	0.35	0.26	0.54	0.06	0.69	0.62	0.19
8:15 AM	0.44	0.22	-	0.20	0.25	0.38	0.26	0.53	0.07	0.71	0.64	0.12
8:30 AM	0.48	0.36	-	0.12	0.32	0.19	0.26	0.51	0.08	0.72	0.64	0.10
8:45 AM	0.56	0.38	-	0.20	0.18	0.31	0.19	0.47	0.10	0.60	0.57	0.12
7:15 AM	0.47	0.46	-	0.12	0.07	0.23	0.31	0.78	0.13	0.89	0.65	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	46.6	44.2	-	53.7	53.4	47.3	12.0	13.1	9.3	17.6	20.3	15.4
7:15 AM	46.9	45.7	-	53.4	52.8	40.1	14.9	22.9	12.8	39.5	19.2	12.2
7:30 AM	54.3	45.8	-	54.3	54.7	45.2	16.2	17.0	10.5	30.5	19.5	11.4
7:45 AM	48.4	42.8	-	54.5	52.1	45.8	17.7	16.3	10.8	25.2	21.6	12.1
8:00 AM	47.6	44.4	-	54.6	55.5	49.0	12.3	12.6	8.3	16.1	15.4	10.3
8:15 AM	46.7	43.1	-	54.0	54.1	48.9	12.6	12.5	8.4	16.3	15.9	9.7
8:30 AM	46.9	44.4	-	53.4	55.1	46.6	12.3	12.6	8.7	15.7	14.8	8.8
8:45 AM	49.3	44.6	-	54.3	53.7	48.6	9.9	11.7	8.5	11.2	11.9	7.9
7:15 AM	46.9	45.7	-	53.4	52.8	40.1	14.9	22.9	12.8	39.5	19.2	12.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	D	B	B	A	B	C	B
7:15 AM	D	D	-	D	D	D	B	C	B	D	B	B
7:30 AM	D	D	-	D	D	D	B	B	B	C	B	B
7:45 AM	D	D	-	D	D	D	B	B	B	C	C	B
8:00 AM	D	D	-	D	E	D	B	B	A	B	B	B
8:15 AM	D	D	-	D	D	D	B	B	A	B	B	A
8:30 AM	D	D	-	D	E	D	B	B	A	B	B	A
8:45 AM	D	D	-	D	D	D	A	B	A	B	B	A
7:15 AM	D	D	-	D	D	D	B	C	B	D	B	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.7**	0.9	-	0.2	0.1	0.5	0.3	0.7	0.3	0.9	0.8	**1.2**
7:15 AM	**1.9**	**1.3**	-	0.2	0.0	0.7	0.4	**1.1**	0.3	**1.9**	0.9	0.7
7:30 AM	0.6	**1.4**	-	0.3	0.2	0.5	0.3	1.0	0.4	**1.4**	**1.0**	0.6
7:45 AM	**2.5**	**1.1**	-	0.7	0.2	1.0	0.3	0.8	0.3	1.0	**1.0**	0.5
8:00 AM	**1.9**	1.0	-	0.4	0.2	0.7	0.3	0.7	0.1	0.8	0.9	0.9
8:15 AM	**1.7**	0.6	-	0.3	0.2	0.8	0.3	0.6	0.1	0.9	0.9	0.6
8:30 AM	**1.8**	1.0	-	0.2	0.2	0.4	0.3	0.6	0.2	0.9	0.9	0.3
8:45 AM	**2.3**	**1.1**	-	0.3	0.1	0.6	0.2	0.6	0.2	0.5	0.7	0.3
7:15 AM	1.9	1.3	-	0.2	0.0	0.7	0.4	1.1	0.3	1.9	0.9	0.7

Intersection Delay and LOS
Time-Period

7:00 AM	18.2	B
7:15 AM	**23.9**	C X
7:30 AM	21.1	C
7:45 AM	21.8	C
8:00 AM	17	B
8:15 AM	16.7	B
8:30 AM	16.4	B
8:45 AM	15.3	B
7:15 AM	23.9	C

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	-	-	-	-	-	-	-	-	-	-	-	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	33	14	10	30	33	54	10	252	12	25	418	24
4:15 PM	25	11	10	20	23	53	13	263	15	18	431	44
4:30 PM	24	9	11	17	34	60	10	287	17	29	388	42
4:45 PM	36	14	18	27	22	50	10	283	57	18	403	37
5:00 PM	36	24	10	27	38	66	15	310	10	17	449	33
5:15 PM	26	16	10	28	31	49	10	296	15	22	401	48
5:30 PM	34	16	9	25	29	47	12	317	15	28	418	26
5:45 PM	26	11	11	30	33	57	8	280	12	29	435	38
5:00 PM	36	24	10	27	38	66	15	310	10	17	449	33

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.44	0.22	-	0.46	0.45	0.86	0.39	0.57	0.06	0.33	0.91	0.12
4:15 PM	0.33	0.21	-	0.31	0.32	0.87	0.44	0.56	0.07	0.24	0.88	0.20
4:30 PM	0.33	0.19	-	0.24	0.42	0.88	0.31	0.64	0.09	0.42	0.81	0.20
4:45 PM	0.44	0.31	-	0.45	0.32	0.85	0.37	0.61	0.28	0.28	0.88	0.18
5:00 PM	0.44	0.27	-	0.37	0.44	0.89	0.55	0.72	0.05	0.31	0.95	0.16
5:15 PM	0.38	0.26	-	0.46	0.45	0.85	0.30	0.63	0.07	0.32	0.80	0.22
5:30 PM	0.47	0.24	-	0.42	0.44	0.85	0.41	0.69	0.07	0.46	0.87	0.12
5:45 PM	0.36	0.21	-	0.44	0.43	0.87	0.32	0.63	0.06	0.41	0.90	0.18
5:00 PM	0.44	0.27	-	0.37	0.44	0.89	0.55	0.72	0.05	0.31	0.95	0.16

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	39.1	35.8	-	50.4	48.9	66.5	32.9	19.8	13.2	13.8	41.6	23.4
4:15 PM	39.8	37.6	-	48.5	47.8	65.0	32.8	17.5	11.6	12.5	38.5	23.1
4:30 PM	38.3	35.8	-	45.5	47.1	67.0	26.6	21.5	13.5	15.3	38.9	26.4
4:45 PM	40.2	37.9	-	51.4	48.5	64.9	31.7	19.4	14.6	13.9	40.0	23.7
5:00 PM	36.2	33.6	-	45.9	45.7	71.7	35.7	25.2	14.3	18.9	45.4	29.2
5:15 PM	41.0	38.8	-	51.7	50.3	62.5	25.7	18.8	11.5	13.6	35.5	23.5
5:30 PM	41.3	37.9	-	51.8	50.8	63.8	31.3	21.6	12.4	16.4	39.1	22.0
5:45 PM	38.8	36.3	-	49.2	47.8	65.6	31.7	20.9	13.1	15.0	39.5	22.7
5:00 PM	36.2	33.6	-	45.9	45.7	71.7	35.7	25.2	14.3	18.9	45.4	29.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:30 PM	D	D	-	D	D	E	C	C	B	B	D	C
4:45 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C
5:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:30 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:45 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	B	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Delay and LOS

Time-Period		
4:00 PM	35.7	D
4:15 PM	32.7	C
4:30 PM	33.7	C
4:45 PM	33.2	C
5:00 PM	**38.8**	D X
5:15 PM	31.3	C
5:30 PM	33.7	C
5:45 PM	34.4	C
5:00 PM	38.8	D

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	36	15	20	30	34	55	14	253	12	26	420	24
4:15 PM	28	12	20	20	24	54	17	264	15	19	433	44
4:30 PM	27	10	21	17	35	61	14	288	17	30	390	42
4:45 PM	39	15	28	27	23	51	14	284	57	19	405	37
5:00 PM	39	25	20	27	39	67	19	311	10	18	451	33
5:15 PM	29	17	20	28	32	50	14	297	15	23	403	48
5:30 PM	37	17	19	25	30	48	16	318	15	29	420	26
5:45 PM	29	12	21	30	34	58	12	281	12	30	437	38
5:00 PM	39	25	20	27	39	67	19	311	10	18	451	33

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.47	0.32	-	0.47	0.45	0.86	0.51	0.57	0.06	0.35	0.92	0.12
4:15 PM	0.36	0.31	-	0.31	0.33	0.86	0.55	0.57	0.07	0.26	0.90	0.21
4:30 PM	0.36	0.29	-	0.25	0.43	0.88	0.42	0.66	0.09	0.45	0.83	0.20
4:45 PM	0.48	0.41	-	0.45	0.32	0.85	0.48	0.62	0.28	0.30	0.90	0.19
5:00 PM	0.48	0.36	-	0.38	0.44	0.89	0.64	0.73	0.05	0.34	0.97	0.16
5:15 PM	0.41	0.36	-	0.46	0.46	0.84	0.41	0.64	0.07	0.35	0.82	0.22
5:30 PM	0.50	0.35	-	0.43	0.45	0.84	0.51	0.70	0.07	0.47	0.88	0.12
5:45 PM	0.39	0.31	-	0.45	0.43	0.87	0.46	0.64	0.06	0.43	0.93	0.18
5:00 PM	0.48	0.36	-	0.38	0.44	0.89	0.64	0.73	0.05	0.34	0.97	0.16

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	39.1	36.7	-	50.3	48.6	66.3	34.6	20.4	13.6	14.1	43.1	24.5
4:15 PM	39.1	38.0	-	48.2	47.5	65.5	34.8	18.5	12.2	13.1	40.8	25.0
4:30 PM	37.7	36.2	-	45.2	46.8	67.6	29.4	22.8	14.2	16.5	41.3	28.5
4:45 PM	40.3	39.1	-	51.1	48.1	64.7	33.8	20.0	15.0	14.4	40.8	24.4
5:00 PM	36.3	34.6	-	45.8	45.5	71.6	36.5	25.9	14.6	20.0	47.1	30.1
5:15 PM	40.3	39.2	-	51.5	50.0	63.0	28.8	20.0	12.2	14.5	38.9	26.2
5:30 PM	41.4	38.9	-	51.5	50.5	63.6	33.5	22.3	12.7	17.0	40.9	23.2
5:45 PM	38.2	36.7	-	49.1	47.5	66.2	34.2	22.1	13.8	15.8	41.4	24.0
5:00 PM	36.3	34.6	-	45.8	45.5	71.6	36.5	25.9	14.6	20.0	47.1	30.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	E	C	C	B	B	D	C
4:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
4:30 PM	D	D	-	D	D	E	C	C	B	B	D	C
4:45 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	C	D	C
5:15 PM	D	D	-	D	D	E	C	B	B	B	D	C
5:30 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:45 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:00 PM	D	C	-	D	D	E	D	C	B	C	D	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**2.1**	**1.4**	-	**1.4**	0.7	**2.7**	0.5	0.9	0.1	0.3	**1.7**	0.8
4:15 PM	**1.6**	**1.3**	-	0.9	0.5	**2.6**	0.6	0.8	0.2	0.2	**1.6**	0.9
4:30 PM	**1.5**	**1.2**	-	0.7	0.7	**3.0**	0.4	**1.0**	0.2	0.3	**1.5**	1.0
4:45 PM	**2.3**	**1.7**	-	**1.3**	0.5	**2.5**	0.5	0.9	0.7	0.2	**1.7**	**1.2**
5:00 PM	**2.2**	**1.7**	-	**1.2**	0.8	**3.3**	0.6	**1.2**	0.1	0.2	**1.7**	**1.1**
5:15 PM	**1.7**	**1.5**	-	**1.3**	0.7	**2.4**	0.5	1.0	0.2	0.3	**1.5**	**1.1**
5:30 PM	**2.2**	**1.5**	-	**1.2**	0.7	**2.4**	0.6	**1.1**	0.2	0.3	**1.6**	0.8
5:45 PM	**1.7**	**1.3**	-	**1.4**	0.7	**2.8**	0.4	1.0	0.1	0.3	**1.7**	**1.1**
5:00 PM	2.2	1.7	-	1.2	0.8	3.3	0.6	1.2	0.1	0.2	1.7	1.1

Intersection Delay and LOS
Time-Period

4:00 PM	36.6	D
4:15 PM	34.3	C
4:30 PM	35.3	D
4:45 PM	33.8	C
5:00 PM	**39.7**	D **X**
5:15 PM	33.4	C
5:30 PM	34.8	C
5:45 PM	35.7	D
5:00 PM	39.7	D

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	36	15	20	30	34	55	14	253	12	26	420	24
4:15 PM	28	12	20	20	24	54	17	264	15	19	433	44
4:30 PM	27	10	21	17	35	61	14	288	17	30	390	42
4:45 PM	39	15	28	27	23	51	14	284	57	19	405	37
5:00 PM	39	25	20	27	39	67	19	311	10	18	451	33
5:15 PM	29	17	20	28	32	50	14	297	15	23	403	48
5:30 PM	37	17	19	25	30	48	16	318	15	29	420	26
5:45 PM	29	12	21	30	34	58	12	281	12	30	437	38
5:00 PM	39	25	20	27	39	67	19	311	10	18	451	33

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.48	0.33	-	0.48	0.47	0.71	0.54	0.40	0.06	0.32	0.96	0.11
4:15 PM	0.36	0.32	-	0.32	0.34	0.74	0.59	0.40	0.07	0.23	0.93	0.19
4:30 PM	0.37	0.30	-	0.25	0.45	0.73	0.44	0.46	0.09	0.39	0.86	0.19
4:45 PM	0.49	0.42	-	0.46	0.33	0.72	0.52	0.43	0.28	0.27	0.94	0.17
5:00 PM	0.49	0.37	-	0.39	0.45	0.79	0.68	0.51	0.05	0.28	**1.01**	0.15
5:15 PM	0.42	0.37	-	0.48	0.47	0.70	0.44	0.45	0.07	0.31	0.85	0.20
5:30 PM	0.52	0.36	-	0.44	0.46	0.67	0.54	0.48	0.07	0.41	0.91	0.11
5:45 PM	0.40	0.31	-	0.46	0.45	0.71	0.48	0.44	0.06	0.38	0.95	0.17
5:00 PM	0.49	0.37	-	0.39	0.45	0.79	0.68	0.51	0.05	0.28	1.01	0.15

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	39.9	37.4	-	51.2	49.5	50.5	36.0	16.8	13.3	11.8	43.1	15.1
4:15 PM	39.6	38.5	-	48.8	48.1	52.8	36.3	15.2	12.0	11.1	39.8	16.0
4:30 PM	38.5	37.0	-	46.2	47.8	49.8	31.2	17.9	13.8	12.4	39.9	18.6
4:45 PM	40.9	39.6	-	51.8	48.7	52.1	35.6	16.0	14.7	11.5	41.3	14.8
5:00 PM	36.9	35.1	-	46.4	46.1	55.4	38.2	19.8	14.4	15.2	54.4	19.4
5:15 PM	40.9	39.8	-	52.3	50.7	51.4	31.0	15.8	11.9	11.2	37.0	15.6
5:30 PM	42.3	39.6	-	52.4	51.3	50.5	34.7	16.9	12.4	12.0	38.7	13.5
5:45 PM	39.0	37.4	-	50.1	48.5	49.6	35.2	17.6	13.4	12.0	41.6	15.4
5:00 PM	36.9	35.1	-	46.4	46.1	55.4	38.2	19.8	14.4	15.2	54.4	19.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	D	D	B	B	B	D	B
4:15 PM	D	D	-	D	D	D	D	B	B	B	D	B
4:30 PM	D	D	-	D	D	D	C	B	B	B	D	B
4:45 PM	D	D	-	D	D	D	D	B	B	B	D	B
5:00 PM	D	D	-	D	D	E	D	B	B	B	F	B
5:15 PM	D	D	-	D	D	D	C	B	B	B	D	B
5:30 PM	D	D	-	D	D	D	C	B	B	B	D	B
5:45 PM	D	D	-	D	D	D	D	B	B	B	D	B
5:00 PM	D	D	-	D	D	E	D	B	B	B	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**2.1**	**1.4**	-	**1.4**	0.7	**2.4**	0.5	0.5	0.1	0.3	**1.8**	0.7
4:15 PM	**1.6**	**1.3**	-	0.9	0.5	**2.4**	0.6	0.5	0.2	0.2	**1.7**	**1.1**
4:30 PM	**1.5**	**1.2**	-	0.8	0.7	**2.6**	0.5	0.6	0.2	0.3	**1.6**	**1.2**
4:45 PM	**2.3**	**1.7**	-	**1.3**	0.5	**2.3**	0.5	0.6	0.7	0.3	**1.8**	**1.1**
5:00 PM	**2.2**	**1.7**	-	**1.2**	0.8	**3.0**	0.7	0.7	0.1	0.2	**1.9**	0.9
5:15 PM	**1.7**	**1.5**	-	**1.4**	0.7	**2.2**	0.5	0.6	0.2	0.3	**1.6**	**1.2**
5:30 PM	**2.3**	**1.5**	-	**1.2**	0.7	**2.1**	0.6	0.7	0.2	0.3	**1.7**	0.7
5:45 PM	**1.7**	**1.3**	-	**1.4**	0.7	**2.5**	0.4	0.6	0.1	0.4	**1.8**	1.0
5:00 PM	2.2	1.7	-	1.2	0.8	3.0	0.7	0.7	0.1	0.2	1.9	0.9

Intersection Delay and LOS
Time-Period

4:00 PM	34.7	C
4:15 PM	31.9	C
4:30 PM	31.8	C
4:45 PM	32.1	C
5:00 PM	**39.7**	D **X**
5:15 PM	30.3	C
5:30 PM	31.4	C
5:45 PM	33.3	C
5:00 PM	39.7	D

Intersection # 2

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	138	34	4	38	59	87	24	569	87	146	341	56
7:15 AM	101	39	4	51	26	74	9	434	125	115	235	29
7:30 AM	69	18	2	55	21	66	10	444	75	108	239	35
7:45 AM	83	18	7	36	18	70	6	399	62	88	225	33
8:00 AM	105	19	11	33	14	56	11	377	56	87	230	39
8:15 AM	90	20	11	31	14	61	9	368	58	75	209	29
8:30 AM	66	15	9	28	19	51	12	347	58	86	226	25
8:45 AM	44	10	3	31	18	44	12	203	48	69	132	17
8:00 AM	105	19	11	33	14	56	11	377	56	87	230	39

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.56**	0.34	-	0.38	0.52	0.90	0.79	**1.26**	0.62	**1.16**	**1.41**	0.52
7:15 AM	**1.04**	0.51	-	0.55	0.26	0.89	0.68	**1.25**	**1.15**	**1.13**	**1.23**	0.34
7:30 AM	0.74	0.29	-	0.53	0.24	0.89	0.82	**1.56**	0.85	0.93	**1.14**	0.38
7:45 AM	0.80	0.28	-	0.38	0.19	0.89	0.68	**1.09**	0.54	0.87	**1.19**	0.39
8:00 AM	**1.10**	0.41	-	0.43	0.18	0.87	0.79	**1.28**	0.56	0.83	0.89	0.34
8:15 AM	0.90	0.38	-	0.38	0.17	0.88	0.66	0.59	0.30	**1.48**	0.90	0.28
8:30 AM	0.76	0.34	-	0.36	0.27	0.86	0.77	**1.15**	0.53	0.72	0.87	0.22
8:45 AM	0.54	0.21	-	0.39	0.29	0.85	**1.08**	0.51	0.37	**2.15**	0.78	0.23
8:00 AM	1.10	0.41	-	0.43	0.18	0.87	0.79	1.28	0.56	0.83	0.89	0.34

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**307.2**	35.2	-	28.4	37.8	57.0	68.8	**153.0**	32.0	**122.5**	**216.1**	25.9
7:15 AM	**558.0**	43.3	-	32.3	37.8	55.8	59.7	**386.9**	**117.4**	**236.7**	**459.7**	17.0
7:30 AM	**446.9**	44.1	-	34.1	39.8	55.3	66.2	**749.3**	**121.7**	**242.2**	**603.9**	16.1
7:45 AM	**207.7**	39.2	-	32.5	38.3	56.1	61.3	**1,040.0**	41.1	**153.8**	**746.5**	15.9
8:00 AM	**189.0**	44.0	-	36.6	41.8	56.1	71.8	**1,207.7**	38.0	55.8	**747.5**	14.7
8:15 AM	**174.0**	41.9	-	35.4	40.3	55.2	59.5	**580.6**	22.0	**270.9**	**661.8**	14.6
8:30 AM	64.8	43.5	-	38.1	44.1	57.1	71.0	**750.0**	35.1	**118.3**	**535.3**	12.8
8:45 AM	42.2	45.0	-	39.6	46.3	58.9	**99.3**	**217.0**	17.2	**574.8**	**357.9**	11.7
8:00 AM	189.0	44.0	-	36.6	41.8	56.1	71.8	1,207.7	38.0	55.8	747.5	14.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	C	F	F	C
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:30 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:45 AM	F	D	-	C	D	E	E	F	D	F	F	B
8:00 AM	F	D	-	D	D	E	E	F	D	E	F	B
8:15 AM	F	D	-	D	D	E	E	F	C	F	F	B
8:30 AM	E	D	-	D	D	E	E	F	D	F	F	B
8:45 AM	D	D	-	D	D	E	F	F	B	F	F	B
8:00 AM	F	D	-	D	D	E	E	F	D	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**9.0**	0.7	-	0.7	**1.2**	**1.1**	0.2	1.0	**1.2**	**1.4**	**2.5**	**1.9**
7:15 AM	**12.9**	0.9	-	1.0	0.6	1.0	0.1	**1.7**	**4.1**	**2.4**	**4.2**	0.6
7:30 AM	**9.9**	0.4	-	**1.1**	0.5	0.9	0.1	**3.2**	**3.9**	**2.5**	**5.2**	0.7
7:45 AM	**6.0**	0.5	-	0.7	0.4	0.9	0.1	**3.8**	**1.5**	**1.8**	**6.4**	0.7
8:00 AM	**5.5**	0.6	-	0.7	0.3	0.8	0.1	**4.6**	**1.6**	0.8	**6.4**	0.8
8:15 AM	**5.1**	0.7	-	0.7	0.3	0.8	0.1	**3.9**	1.0	**1.4**	**5.6**	0.6
8:30 AM	**1.8**	0.5	-	0.6	0.5	0.7	0.1	**3.0**	**1.5**	**1.4**	**4.9**	0.5
8:45 AM	**1.5**	0.3	-	0.7	0.4	0.6	0.1	**1.8**	0.7	**2.7**	**3.6**	0.3
8:00 AM	5.5	0.6	-	0.7	0.3	0.8	0.1	4.6	1.6	0.8	6.4	0.8

Intersection Delay and LOS

Time-Period		
7:00 AM	155.1	F
7:15 AM	321.3	F
7:30 AM	475.4	F
7:45 AM	554.1	F
8:00 AM	**609.1**	F **X**
8:15 AM	423.7	F
8:30 AM	418.6	F
8:45 AM	279	F
8:00 AM	609.1	F

Intersection # 2

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	143	35	5	39	61	87	26	570	88	146	344	73
7:15 AM	106	40	5	52	28	74	11	435	126	115	238	46
7:30 AM	74	19	3	56	23	66	12	445	76	108	242	52
7:45 AM	88	19	8	37	20	70	8	400	63	88	228	50
8:00 AM	110	20	12	34	16	56	13	378	57	87	233	56
8:15 AM	95	21	12	32	16	61	11	369	59	75	212	46
8:30 AM	71	16	10	29	21	51	14	348	59	86	229	42
8:45 AM	49	11	4	32	20	44	14	204	49	69	135	34
7:45 AM	88	19	8	37	20	70	8	400	63	88	228	50

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.73**	0.36	-	0.38	0.53	0.90	0.79	**1.26**	0.63	**1.15**	**1.42**	0.68
7:15 AM	**1.10**	0.53	-	0.57	0.28	0.89	0.66	**1.24**	**1.15**	**1.10**	**1.23**	0.53
7:30 AM	0.80	0.32	-	0.55	0.26	0.88	0.81	**1.56**	0.86	0.90	**1.14**	0.55
7:45 AM	0.90	0.31	-	0.38	0.22	0.89	0.69	**1.09**	0.50	0.86	**1.18**	0.58
8:00 AM	**1.17**	0.44	-	0.45	0.21	0.86	0.78	0.74	0.36	**1.34**	0.89	0.48
8:15 AM	0.97	0.41	-	0.40	0.19	0.87	0.67	**1.03**	0.49	0.73	0.90	0.44
8:30 AM	0.83	0.37	-	0.38	0.30	0.85	0.76	0.64	0.35	**1.36**	0.87	0.36
8:45 AM	0.61	0.25	-	0.41	0.33	0.84	**1.06**	0.95	0.70	0.78	0.77	0.43
7:45 AM	0.90	0.31	-	0.38	0.22	0.89	0.69	1.09	0.50	0.86	1.18	0.58

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**381.0**	35.6	-	28.2	38.1	56.8	67.7	**155.1**	31.4	**116.4**	**219.8**	28.8
7:15 AM	**686.1**	43.9	-	32.5	38.0	55.6	58.8	**387.9**	**116.0**	**214.6**	**468.5**	19.1
7:30 AM	**655.7**	44.6	-	34.3	40.0	55.1	63.5	**747.0**	**124.6**	**196.3**	**611.5**	18.2
7:45 AM	**498.4**	39.6	-	32.4	38.5	55.9	60.7	**1,038.9**	26.2	**94.9**	**751.6**	18.3
8:00 AM	**549.9**	44.5	-	36.7	42.0	56.0	68.2	**509.3**	23.0	**207.1**	**750.6**	16.7
8:15 AM	**596.8**	42.4	-	35.4	40.5	55.1	59.1	**680.7**	36.6	**108.1**	**665.2**	16.3
8:30 AM	**560.6**	44.0	-	38.0	44.3	56.9	67.1	**227.7**	22.0	**213.8**	**537.7**	14.7
8:45 AM	**330.2**	45.6	-	39.5	46.6	58.7	**91.5**	79.0	37.3	**93.8**	**352.6**	13.5
7:45 AM	498.4	39.6	-	32.4	38.5	55.9	60.7	1,038.9	26.2	94.9	751.6	18.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	F	C	F	F	C
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:30 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:45 AM	F	D	-	C	D	E	E	F	C	F	F	B
8:00 AM	F	D	-	D	D	E	E	F	C	F	F	B
8:15 AM	F	D	-	D	D	E	E	F	D	F	F	B
8:30 AM	F	D	-	D	D	E	E	F	C	F	F	B
8:45 AM	F	D	-	D	D	E	F	E	D	F	F	B
7:45 AM	F	D	-	C	D	E	E	F	C	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**10.3**	0.8	-	0.7	**1.3**	**1.1**	0.2	1.0	**1.2**	**1.4**	**2.5**	**2.4**
7:15 AM	**15.5**	1.0	-	**1.0**	0.6	1.0	0.1	**1.7**	**4.1**	**2.2**	**4.2**	1.0
7:30 AM	**13.7**	0.5	-	**1.1**	0.5	0.9	0.1	**3.2**	**3.9**	**2.1**	**5.2**	**1.1**
7:45 AM	**11.6**	0.5	-	0.7	0.4	0.9	0.1	**3.8**	0.8	**1.3**	**6.3**	**1.3**
8:00 AM	**12.7**	0.7	-	0.7	0.4	0.8	0.2	**3.5**	**1.3**	**1.3**	**6.3**	**1.2**
8:15 AM	**13.7**	0.7	-	0.7	0.4	0.8	0.1	**2.5**	**1.2**	**1.2**	**5.6**	**1.0**
8:30 AM	**11.0**	0.6	-	0.6	0.5	0.7	0.2	**2.0**	**1.3**	**1.3**	**4.8**	0.8
8:45 AM	**6.3**	0.3	-	0.7	0.5	0.6	0.2	0.5	**1.1**	**1.3**	**3.5**	0.7
7:45 AM	11.6	0.5	-	0.7	0.4	0.9	0.1	3.8	0.8	1.3	6.3	1.3

Intersection Delay and LOS

Time-Period			
7:00 AM	160.7	F	
7:15 AM	322.4	F	
7:30 AM	470.1	F	
7:45 AM	**549.1**	F	X
8:00 AM	441.7	F	
8:15 AM	451.9	F	
8:30 AM	301.6	F	
8:45 AM	166.1	F	
7:45 AM	549.1	F	

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	4	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	4	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	143	35	5	39	61	87	26	570	88	146	344	73
7:15 AM	106	40	5	52	28	74	11	435	126	115	238	46
7:30 AM	74	19	3	56	23	66	12	445	76	108	242	52
7:45 AM	88	19	8	37	20	70	8	400	63	88	228	50
8:00 AM	110	20	12	34	16	56	13	378	57	87	233	56
8:15 AM	95	21	12	32	16	61	11	369	59	75	212	46
8:30 AM	71	16	10	29	21	51	14	348	59	86	229	42
8:45 AM	49	11	4	32	20	44	14	204	49	69	135	34
7:45 AM	88	19	8	37	20	70	8	400	63	88	228	50

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.73**	0.36	-	0.38	0.53	0.90	0.79	0.95	0.63	**1.15**	**1.42**	0.68
7:15 AM	**1.10**	0.53	-	0.57	0.28	0.89	0.76	**1.07**	**1.33**	**1.10**	**1.23**	0.53
7:30 AM	0.80	0.32	-	0.55	0.26	0.88	0.81	**1.17**	0.86	0.90	**1.14**	0.55
7:45 AM	0.90	0.31	-	0.38	0.22	0.89	0.85	**1.08**	0.71	0.86	**1.18**	0.58
8:00 AM	**1.17**	0.44	-	0.45	0.21	0.86	0.78	0.61	0.37	**1.34**	0.89	0.48
8:15 AM	0.97	0.41	-	0.40	0.19	0.87	0.79	0.85	0.58	0.73	0.90	0.44
8:30 AM	0.83	0.37	-	0.38	0.30	0.85	0.76	0.48	0.35	**1.36**	0.87	0.36
8:45 AM	0.61	0.25	-	0.41	0.33	0.84	**1.17**	0.73	0.75	0.78	0.77	0.44
7:45 AM	0.90	0.31	-	0.38	0.22	0.89	0.85	1.08	0.71	0.86	1.18	0.58

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**381.0**	35.6	-	28.2	38.1	56.8	71.8	51.6	41.5	**116.1**	**219.5**	28.5
7:15 AM	**686.1**	43.9	-	32.5	38.0	55.6	69.7	**84.7**	**203.8**	**214.4**	**468.5**	19.1
7:30 AM	**655.7**	44.6	-	34.3	40.0	55.1	72.9	**189.8**	**293.9**	**196.2**	**611.4**	18.1
7:45 AM	**498.4**	39.6	-	32.4	38.5	55.9	**88.7**	**305.8**	**98.5**	**94.7**	**751.5**	18.3
8:00 AM	**549.9**	44.5	-	36.7	42.0	56.0	72.6	74.0	22.6	**207.1**	**750.6**	16.6
8:15 AM	**596.8**	42.4	-	35.4	40.5	55.1	76.3	43.7	40.6	**107.9**	**665.2**	16.3
8:30 AM	**560.6**	44.0	-	38.0	44.3	56.9	69.9	23.3	22.3	**213.8**	**537.7**	14.7
8:45 AM	**330.2**	45.6	-	39.5	46.6	58.7	**156.9**	38.7	47.6	**93.8**	**352.6**	13.7
7:45 AM	498.4	39.6	-	32.4	38.5	55.9	88.7	305.8	98.5	94.7	751.5	18.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	-	C	D	E	E	D	D	F	F	C
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:30 AM	F	D	-	C	D	E	E	F	F	F	F	B
7:45 AM	F	D	-	C	D	E	F	F	F	F	F	B
8:00 AM	F	D	-	D	D	E	E	E	C	F	F	B
8:15 AM	F	D	-	D	D	E	E	D	D	F	F	B
8:30 AM	F	D	-	D	D	E	E	C	C	F	F	B
8:45 AM	F	D	-	D	D	E	F	D	D	F	F	B
7:45 AM	F	D	-	C	D	E	F	F	F	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**10.3**	0.8	-	0.7	**1.3**	**1.1**	0.2	0.5	**1.6**	**1.4**	**2.5**	**2.4**
7:15 AM	**15.5**	1.0	-	**1.0**	0.6	1.0	0.1	0.7	**7.2**	**2.2**	**4.2**	1.0
7:30 AM	**13.7**	0.5	-	**1.1**	0.5	0.9	0.2	**1.1**	**7.5**	**2.1**	**5.2**	**1.1**
7:45 AM	**11.6**	0.5	-	0.7	0.4	0.9	0.1	**1.4**	**3.5**	**1.3**	**6.3**	**1.1**
8:00 AM	**12.7**	0.7	-	0.7	0.4	0.8	0.2	0.8	**1.4**	**1.3**	**6.3**	**1.2**
8:15 AM	**13.7**	0.7	-	0.7	0.4	0.8	0.1	0.5	**1.8**	**1.2**	**5.6**	**1.1**
8:30 AM	**11.0**	0.6	-	0.6	0.5	0.7	0.2	0.3	**1.4**	**1.3**	**4.8**	0.8
8:45 AM	**6.3**	0.3	-	0.7	0.5	0.6	0.3	0.3	**1.8**	**1.3**	**3.5**	0.8
7:45 AM	11.6	0.5	-	0.7	0.4	0.9	0.1	1.4	3.5	1.3	6.3	1.1

Intersection Delay and LOS

Time-Period			
7:00 AM	137.5	F	
7:15 AM	253.1	F	
7:30 AM	316.8	F	
7:45 AM	**377.2**	F	X
8:00 AM	317.6	F	
8:15 AM	277.9	F	
8:30 AM	244.6	F	
8:45 AM	154.7	F	
7:45 AM	377.2	F	

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	-	-	-	-	-	-	-	-	-	-	-	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	35	14	11	66	20	90	5	287	53	61	374	32
4:15 PM	31	10	10	57	19	81	6	284	49	75	418	27
4:30 PM	60	9	11	70	19	101	7	300	63	71	355	25
4:45 PM	52	18	8	59	15	82	6	341	57	89	382	29
5:00 PM	60	18	20	95	42	111	9	343	76	83	357	27
5:15 PM	51	16	10	62	23	92	7	322	48	68	390	41
5:30 PM	44	15	8	60	27	84	7	330	61	64	378	31
5:45 PM	40	14	8	56	15	73	6	300	57	71	437	44
5:45 PM	40	14	8	56	15	73	6	300	57	71	437	44

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.32	0.25	-	0.59	0.17	0.92	0.87	0.63	0.38	0.80	**1.14**	0.22
4:15 PM	0.30	0.23	-	0.53	0.18	0.91	0.85	0.60	0.33	0.96	**1.20**	0.17
4:30 PM	0.50	0.18	-	0.56	0.15	0.94	0.84	0.72	0.49	**1.00**	**1.20**	0.19
4:45 PM	0.48	0.28	-	0.56	0.14	0.92	0.80	**1.20**	0.53	0.83	**1.08**	0.18
5:00 PM	0.55	0.32	-	0.81	0.31	0.95	0.78	0.89	0.64	0.98	**1.23**	0.21
5:15 PM	0.46	0.25	-	0.55	0.20	0.93	0.83	0.74	0.35	0.88	**1.19**	0.28
5:30 PM	0.44	0.24	-	0.55	0.25	0.92	0.83	0.69	0.41	0.94	**1.12**	0.21
5:45 PM	0.40	0.26	-	0.56	0.16	0.90	0.85	0.60	0.37	0.84	**1.07**	0.24
5:45 PM	0.40	0.26	-	0.56	0.16	0.90	0.85	0.60	0.37	0.84	1.07	0.24

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	31.8	38.5	-	35.8	36.1	66.5	**111.8**	34.1	25.2	62.3	**110.6**	18.9
4:15 PM	34.8	41.1	-	35.8	38.5	64.5	**102.4**	30.5	26.8	66.3	**240.0**	16.6
4:30 PM	32.9	35.1	-	32.5	33.3	69.0	**92.8**	37.4	34.0	75.1	**462.5**	21.0
4:45 PM	36.7	40.9	-	36.6	37.8	65.1	**94.6**	**147.9**	44.2	60.6	**534.6**	17.7
5:00 PM	32.5	34.5	-	45.4	32.9	71.1	79.7	**127.5**	41.7	71.7	**784.4**	23.8
5:15 PM	33.9	38.0	-	33.8	35.9	66.7	**91.9**	39.5	28.2	63.4	**874.8**	22.0
5:30 PM	34.9	39.9	-	35.7	38.5	65.1	**91.1**	32.3	27.9	66.6	**974.5**	18.2
5:45 PM	37.1	43.2	-	38.5	40.5	63.5	**99.4**	28.6	25.5	59.9	**992.1**	16.5
5:45 PM	37.1	43.2	-	38.5	40.5	63.5	99.4	28.6	25.5	59.9	992.1	16.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	D	E	F	C	C	E	F	B
4:15 PM	C	D	-	D	D	E	F	C	C	E	F	B
4:30 PM	C	D	-	C	C	E	F	D	C	F	F	C
4:45 PM	D	D	-	D	D	E	F	F	D	E	F	B
5:00 PM	C	C	-	D	C	E	E	F	D	E	F	C
5:15 PM	C	D	-	C	D	E	F	D	C	E	F	C
5:30 PM	C	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:45 PM	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Delay and LOS

Time-Period		
4:00 PM	68.2	E
4:15 PM	125.1	F
4:30 PM	197.5	F
4:45 PM	256.1	F
5:00 PM	305.5	F
5:15 PM	357	F
5:30 PM	389.2	F
5:45 PM	**417.5**	F **X**
5:45 PM	417.5	F

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	52	16	13	67	21	90	6	290	54	61	375	38
4:15 PM	48	12	12	58	20	81	7	287	50	75	419	33
4:30 PM	77	11	13	71	20	101	8	303	64	71	356	31
4:45 PM	69	20	10	60	16	82	7	344	58	89	383	35
5:00 PM	77	20	22	96	43	111	10	346	77	83	358	33
5:15 PM	68	18	12	63	24	92	8	325	49	68	391	47
5:30 PM	61	17	10	61	28	84	8	333	62	64	379	37
5:45 PM	57	16	10	57	16	73	7	303	58	71	438	50
5:45 PM	57	16	10	57	16	73	7	303	58	71	438	50

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.47	0.29	-	0.61	0.18	0.92	0.85	0.64	0.38	0.80	**1.15**	0.26
4:15 PM	0.46	0.27	-	0.55	0.19	0.91	0.84	0.61	0.34	0.96	**1.22**	0.22
4:30 PM	0.64	0.22	-	0.58	0.16	0.94	0.82	0.73	0.50	**1.00**	**1.21**	0.24
4:45 PM	0.64	0.32	-	0.59	0.15	0.91	0.76	0.71	0.38	0.95	**1.09**	0.22
5:00 PM	0.70	0.35	-	0.84	0.31	0.95	0.78	0.90	0.64	0.98	**1.25**	0.26
5:15 PM	0.62	0.29	-	0.57	0.20	0.92	0.81	0.72	0.35	0.94	**1.20**	0.32
5:30 PM	0.61	0.28	-	0.57	0.26	0.91	0.82	0.70	0.42	0.94	**1.13**	0.25
5:45 PM	0.57	0.31	-	0.59	0.17	0.90	0.83	0.60	0.37	0.84	**1.08**	0.28
5:45 PM	0.57	0.31	-	0.59	0.17	0.90	0.83	0.60	0.37	0.84	1.08	0.28

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	34.6	38.9	-	36.9	36.2	66.2	**101.8**	33.3	24.0	62.7	**114.8**	19.9
4:15 PM	36.5	41.0	-	36.4	38.6	64.8	**95.0**	31.2	27.4	65.9	**258.2**	17.6
4:30 PM	38.0	35.5	-	33.3	33.3	68.8	**87.6**	37.6	34.2	74.3	**494.5**	21.9
4:45 PM	42.2	41.4	-	37.5	37.9	64.9	**85.5**	36.4	30.3	63.4	**570.4**	18.0
5:00 PM	40.1	34.9	-	49.4	33.0	71.0	77.2	48.5	42.0	71.1	**838.1**	24.7
5:15 PM	39.1	38.4	-	34.7	35.9	66.5	**86.6**	35.4	29.1	64.9	**930.8**	21.3
5:30 PM	40.7	40.3	-	36.5	38.6	64.9	**86.1**	32.5	28.0	66.3	**1,036.0**	18.9
5:45 PM	41.6	43.7	-	39.5	40.5	63.3	**92.3**	28.7	25.6	59.8	**1,056.8**	17.1
5:45 PM	41.6	43.7	-	39.5	40.5	63.3	92.3	28.7	25.6	59.8	1,056.8	17.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	D	E	F	C	C	E	F	B
4:15 PM	D	D	-	D	D	E	F	C	C	E	F	B
4:30 PM	D	D	-	C	C	E	F	D	C	E	F	C
4:45 PM	D	D	-	D	D	E	F	D	C	E	F	B
5:00 PM	D	C	-	D	C	E	E	D	D	E	F	C
5:15 PM	D	D	-	C	D	E	F	D	C	E	F	C
5:30 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	F	B
5:45 PM	D	D	-	D	D	E	F	C	C	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.3	0.6	-	0.5	0.5	**1.3**	0.1	0.4	1.0	0.5	**1.7**	**1.1**
4:15 PM	0.2	0.5	-	0.2	0.5	**1.2**	0.1	0.4	**1.4**	0.5	**2.9**	0.7
4:30 PM	**1.4**	0.5	-	0.5	0.4	**1.4**	0.1	0.5	**1.9**	0.5	**4.1**	0.8
4:45 PM	**1.2**	0.7	-	0.3	0.4	**1.2**	0.1	0.6	**1.6**	0.5	**4.9**	0.8
5:00 PM	**1.6**	0.8	-	**1.5**	0.9	**1.6**	0.1	0.6	**2.4**	0.5	**5.8**	0.9
5:15 PM	**1.1**	0.6	-	0.3	0.5	**1.3**	0.1	0.5	**1.4**	0.4	**7.1**	**1.1**
5:30 PM	0.9	0.6	-	0.3	0.6	**1.2**	0.1	0.5	**1.6**	0.4	**8.0**	0.9
5:45 PM	0.7	0.6	-	0.3	0.4	**1.0**	0.1	0.4	**1.5**	0.4	**8.7**	**1.1**
5:45 PM	0.7	0.6	-	0.3	0.4	1.0	0.1	0.4	1.5	0.4	8.7	1.1

Intersection Delay and LOS
Time-Period

4:00 PM	68.7	E
4:15 PM	130.3	F
4:30 PM	204.5	F
4:45 PM	234.2	F
5:00 PM	296.6	F
5:15 PM	368	F
5:30 PM	401.9	F
5:45 PM	**432.2**	F
5:45 PM	432.2	F

X

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	4	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	4	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	52	16	13	67	21	90	6	290	54	61	375	38
4:15 PM	48	12	12	58	20	81	7	287	50	75	419	33
4:30 PM	77	11	13	71	20	101	8	303	64	71	356	31
4:45 PM	69	20	10	60	16	82	7	344	58	89	383	35
5:00 PM	77	20	22	96	43	111	10	346	77	83	358	33
5:15 PM	68	18	12	63	24	92	8	325	49	68	391	47
5:30 PM	61	17	10	61	28	84	8	333	62	64	379	37
5:45 PM	57	16	10	57	16	73	7	303	58	71	438	50
5:45 PM	57	16	10	57	16	73	7	303	58	71	438	50

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.51	0.32	-	0.67	0.20	0.70	0.85	0.45	0.29	0.80	**1.08**	0.21
4:15 PM	0.50	0.30	-	0.60	0.21	0.67	0.84	0.43	0.27	0.96	**1.16**	0.18
4:30 PM	0.70	0.24	-	0.63	0.18	0.74	0.82	0.51	0.37	**0.99**	**1.14**	0.19
4:45 PM	0.71	0.37	-	0.65	0.17	0.64	0.76	0.49	0.29	0.95	**1.03**	0.18
5:00 PM	0.78	0.39	-	0.92	0.35	0.74	0.78	0.61	0.46	0.97	**1.15**	0.20
5:15 PM	0.67	0.32	-	0.62	0.23	0.71	0.81	0.50	0.26	0.94	**1.14**	0.27
5:30 PM	0.66	0.31	-	0.62	0.28	0.70	0.82	0.50	0.32	0.94	**1.07**	0.21
5:45 PM	0.62	0.35	-	0.63	0.19	0.65	0.83	0.43	0.29	0.84	**1.03**	0.23
5:45 PM	0.62	0.35	-	0.63	0.19	0.65	0.83	0.43	0.29	0.84	1.03	0.23

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	38.0	42.1	-	41.9	39.1	37.6	**106.5**	31.1	17.8	63.8	**88.5**	13.1
4:15 PM	39.8	44.0	-	40.4	41.4	37.9	**98.7**	25.7	17.2	65.7	**176.7**	10.9
4:30 PM	43.5	38.5	-	37.8	36.2	37.3	**92.3**	30.4	21.8	73.4	**336.7**	14.0
4:45 PM	48.6	45.0	-	43.1	41.2	35.9	**89.1**	28.8	19.0	63.2	**376.4**	10.9
5:00 PM	49.1	38.6	-	67.4	36.5	34.8	**81.4**	35.8	26.7	66.8	**516.9**	16.0
5:15 PM	44.1	41.4	-	38.9	38.7	38.1	**90.7**	28.6	18.6	64.7	**591.9**	13.6
5:30 PM	45.2	43.0	-	40.4	41.1	39.1	**91.5**	26.5	17.8	66.1	**667.3**	12.0
5:45 PM	45.4	46.5	-	43.6	43.0	39.5	**97.3**	23.9	16.0	59.7	**675.1**	10.6
5:45 PM	45.4	46.5	-	43.6	43.0	39.5	97.3	23.9	16.0	59.7	675.1	10.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	D	F	C	B	E	F	B
4:15 PM	D	D	-	D	D	D	F	C	B	E	F	B
4:30 PM	D	D	-	D	D	D	F	C	C	E	F	B
4:45 PM	D	D	-	D	D	D	F	C	B	E	F	B
5:00 PM	D	D	-	E	D	C	F	D	C	E	F	B
5:15 PM	D	D	-	D	D	D	F	C	B	E	F	B
5:30 PM	D	D	-	D	D	D	F	C	B	E	F	B
5:45 PM	D	D	-	D	D	D	F	C	B	E	F	B
5:45 PM	D	D	-	D	D	D	F	C	B	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.4	0.6	-	0.6	0.5	1.0	0.1	0.4	**1.1**	0.5	**1.5**	0.9
4:15 PM	0.3	0.5	-	0.3	0.5	0.9	0.1	0.3	**1.1**	0.5	**2.3**	0.6
4:30 PM	**1.6**	0.5	-	0.6	0.4	**1.1**	0.1	0.4	**1.6**	0.5	**3.2**	0.6
4:45 PM	**1.4**	0.7	-	0.4	0.4	0.9	0.1	0.4	**1.4**	0.5	**3.6**	0.6
5:00 PM	**1.8**	0.9	-	**1.9**	1.0	**1.2**	0.1	0.4	**2.0**	0.5	**4.1**	0.7
5:15 PM	**1.3**	0.7	-	0.4	0.6	**1.0**	0.1	0.4	**1.2**	0.4	**5.0**	0.9
5:30 PM	**1.0**	0.6	-	0.4	0.7	1.0	0.1	0.4	**1.4**	0.4	**5.7**	0.7
5:45 PM	0.8	0.6	-	0.3	0.4	0.8	0.1	0.3	**1.3**	0.4	**6.0**	0.8
5:45 PM	0.8	0.6	-	0.3	0.4	0.8	0.1	0.3	1.3	0.4	6.0	0.8

Intersection Delay and LOS
Time-Period

4:00 PM	56	E
4:15 PM	93.3	F
4:30 PM	143.9	F
4:45 PM	160	F
5:00 PM	190.8	F
5:15 PM	239.6	F
5:30 PM	264.4	F
5:45 PM	**281.4**	F **X**
5:45 PM	281.4	F

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	350	900	500	-	-	-	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	99	-	-	11	227	-	-	690	-
7:15 AM	-	-	-	108	-	-	11	256	-	-	684	-
7:30 AM	-	-	-	109	-	-	10	303	-	-	649	-
7:45 AM	-	-	-	122	-	-	9	283	-	-	641	-
8:00 AM	-	-	-	110	-	-	17	290	-	-	489	-
8:15 AM	-	-	-	113	-	-	20	218	-	-	466	-
8:30 AM	-	-	-	115	-	-	9	219	-	-	461	-
8:45 AM	-	-	-	114	-	-	15	199	-	-	482	-
7:45 AM	-	-	-	122	-	-	9	283	-	-	641	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.86	-	-	0.61	0.72	-	-	0.77	-
7:15 AM	-	-	-	0.87	-	-	0.55	0.73	-	-	0.77	-
7:30 AM	-	-	-	0.87	-	-	0.39	0.68	-	-	0.73	-
7:45 AM	-	-	-	0.88	-	-	0.40	0.73	-	-	0.74	-
8:00 AM	-	-	-	0.87	-	-	0.46	0.69	-	-	0.56	-
8:15 AM	-	-	-	0.87	-	-	0.63	0.68	-	-	0.55	-
8:30 AM	-	-	-	0.87	-	-	0.30	0.65	-	-	0.53	-
8:45 AM	-	-	-	0.87	-	-	0.47	0.56	-	-	0.56	-
7:45 AM	-	-	-	0.88	-	-	0.40	0.73	-	-	0.74	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	51.7	-	-	28.6	7.3	-	-	12.6	-
7:15 AM	-	-	-	51.0	-	-	27.4	7.5	-	-	13.3	-
7:30 AM	-	-	-	50.9	-	-	18.0	5.3	-	-	11.9	-
7:45 AM	-	-	-	52.0	-	-	19.1	6.8	-	-	13.2	-
8:00 AM	-	-	-	50.8	-	-	10.0	4.6	-	-	9.8	-
8:15 AM	-	-	-	51.2	-	-	15.7	7.1	-	-	10.5	-
8:30 AM	-	-	-	51.4	-	-	7.7	3.7	-	-	9.3	-
8:45 AM	-	-	-	51.3	-	-	11.4	2.7	-	-	10.1	-
7:45 AM	-	-	-	52.0	-	-	19.1	6.8	-	-	13.2	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.1	0.6	-	-	-	-
7:15 AM	-	-	-	0.4	-	-	0.1	0.6	-	-	-	-
7:30 AM	-	-	-	0.4	-	-	0.0	0.4	-	-	-	-
7:45 AM	-	-	-	0.4	-	-	0.0	0.5	-	-	-	-
8:00 AM	-	-	-	0.4	-	-	0.0	0.3	-	-	-	-
8:15 AM	-	-	-	0.4	-	-	0.1	0.6	-	-	-	-
8:30 AM	-	-	-	0.4	-	-	0.0	0.2	-	-	-	-
8:45 AM	-	-	-	0.4	-	-	0.1	0.2	-	-	-	-
7:45 AM	-	-	-	0.4	-	-	0.0	0.5	-	-	-	-

Intersection Delay and LOS
Time-Period

7:00 AM	14.1	B	
7:15 AM	14.7	B	
7:30 AM	13.3	B	
7:45 AM	14.9	B	X
8:00 AM	12	B	
8:15 AM	13.8	B	
8:30 AM	12	B	
8:45 AM	12.4	B	
7:45 AM	14.9	B	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	112	-	-	12	229	-	-	696	-
7:15 AM	-	-	-	121	-	-	12	258	-	-	690	-
7:30 AM	-	-	-	122	-	-	11	305	-	-	655	-
7:45 AM	-	-	-	135	-	-	10	285	-	-	647	-
8:00 AM	-	-	-	123	-	-	18	292	-	-	495	-
8:15 AM	-	-	-	126	-	-	21	220	-	-	472	-
8:30 AM	-	-	-	128	-	-	10	221	-	-	467	-
8:45 AM	-	-	-	127	-	-	16	201	-	-	488	-
7:45 AM	-	-	-	135	-	-	10	285	-	-	647	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.66	0.73	-	-	0.80	-
7:15 AM	-	-	-	0.88	-	-	0.60	0.74	-	-	0.80	-
7:30 AM	-	-	-	0.88	-	-	0.44	0.70	-	-	0.76	-
7:45 AM	-	-	-	0.89	-	-	0.45	0.75	-	-	0.77	-
8:00 AM	-	-	-	0.88	-	-	0.57	0.83	-	-	0.59	-
8:15 AM	-	-	-	0.88	-	-	0.66	0.69	-	-	0.57	-
8:30 AM	-	-	-	0.89	-	-	0.37	0.74	-	-	0.55	-
8:45 AM	-	-	-	0.88	-	-	0.51	0.58	-	-	0.58	-
7:45 AM	-	-	-	0.89	-	-	0.45	0.75	-	-	0.77	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	51.1	-	-	30.3	7.5	-	-	14.6	-
7:15 AM	-	-	-	52.0	-	-	29.5	7.9	-	-	15.4	-
7:30 AM	-	-	-	52.0	-	-	22.6	5.9	-	-	13.7	-
7:45 AM	-	-	-	53.2	-	-	23.5	7.5	-	-	15.1	-
8:00 AM	-	-	-	52.1	-	-	15.2	7.2	-	-	11.4	-
8:15 AM	-	-	-	52.4	-	-	17.2	6.6	-	-	11.9	-
8:30 AM	-	-	-	52.6	-	-	10.0	6.0	-	-	10.7	-
8:45 AM	-	-	-	52.5	-	-	13.0	2.8	-	-	11.5	-
7:45 AM	-	-	-	53.2	-	-	23.5	7.5	-	-	15.1	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	C	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	**1.2**	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	**1.3**	-
7:30 AM	-	-	-	0.4	-	-	0.2	0.2	-	-	**1.1**	-
7:45 AM	-	-	-	0.5	-	-	0.1	0.3	-	-	**1.2**	-
8:00 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.8	-
8:15 AM	-	-	-	0.5	-	-	0.3	0.3	-	-	0.8	-
8:30 AM	-	-	-	0.5	-	-	0.1	0.2	-	-	0.7	-
8:45 AM	-	-	-	0.5	-	-	0.2	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.5	-	-	0.1	0.3	-	-	1.2	-

Intersection Delay and LOS
Time-Period

7:00 AM	15.7	B	
7:15 AM	16.5	B	
7:30 AM	15	B	
7:45 AM	16.7	B	X
8:00 AM	14.1	B	
8:15 AM	14.9	B	
8:30 AM	13.8	B	
8:45 AM	13.8	B	
7:45 AM	B	16.7	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	112	-	-	12	229	-	-	696	-
7:15 AM	-	-	-	121	-	-	12	258	-	-	690	-
7:30 AM	-	-	-	122	-	-	11	305	-	-	655	-
7:45 AM	-	-	-	135	-	-	10	285	-	-	647	-
8:00 AM	-	-	-	123	-	-	18	292	-	-	495	-
8:15 AM	-	-	-	126	-	-	21	220	-	-	472	-
8:30 AM	-	-	-	128	-	-	10	221	-	-	467	-
8:45 AM	-	-	-	127	-	-	16	201	-	-	488	-
7:45 AM	-	-	-	135	-	-	10	285	-	-	647	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.74	0.85	-	-	0.80	-
7:15 AM	-	-	-	0.88	-	-	0.70	0.90	-	-	0.81	-
7:30 AM	-	-	-	0.88	-	-	0.52	0.86	-	-	0.76	-
7:45 AM	-	-	-	0.89	-	-	0.53	0.91	-	-	0.77	-
8:00 AM	-	-	-	0.88	-	-	0.57	0.83	-	-	0.59	-
8:15 AM	-	-	-	0.88	-	-	0.74	0.80	-	-	0.57	-
8:30 AM	-	-	-	0.89	-	-	0.37	0.74	-	-	0.55	-
8:45 AM	-	-	-	0.88	-	-	0.54	0.62	-	-	0.58	-
7:45 AM	-	-	-	0.89	-	-	0.53	0.91	-	-	0.77	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	51.1	-	-	31.4	8.0	-	-	14.9	-
7:15 AM	-	-	-	52.0	-	-	30.8	9.2	-	-	15.8	-
7:30 AM	-	-	-	52.0	-	-	25.4	6.4	-	-	14.1	-
7:45 AM	-	-	-	53.2	-	-	25.8	8.7	-	-	15.5	-
8:00 AM	-	-	-	52.1	-	-	15.6	7.7	-	-	11.4	-
8:15 AM	-	-	-	52.4	-	-	21.3	7.7	-	-	12.2	-
8:30 AM	-	-	-	52.6	-	-	10.1	6.3	-	-	10.7	-
8:45 AM	-	-	-	52.5	-	-	14.5	3.1	-	-	11.6	-
7:45 AM	-	-	-	53.2	-	-	25.8	8.7	-	-	15.5	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	C	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.2	0.4	-	-	**1.2**	-
7:15 AM	-	-	-	0.4	-	-	0.2	0.4	-	-	**1.3**	-
7:30 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	**1.1**	-
7:45 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	**1.2**	-
8:00 AM	-	-	-	0.4	-	-	0.2	0.3	-	-	0.8	-
8:15 AM	-	-	-	0.5	-	-	0.5	0.3	-	-	0.8	-
8:30 AM	-	-	-	0.5	-	-	0.1	0.3	-	-	0.7	-
8:45 AM	-	-	-	0.5	-	-	0.2	0.1	-	-	0.8	-
7:45 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	1.2	-

Intersection Delay and LOS
Time-Period

7:00 AM	15.6	B	
7:15 AM	16.7	B	
7:30 AM	14.8	B	
7:45 AM	16.8	B	X
8:00 AM	14.3	B	
8:15 AM	15.2	B	
8:30 AM	14	B	
8:45 AM	13.7	B	
7:45 AM	B	16.8	

Intersection # 3

Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	-	-	-	-	-	-	-	-	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	217	-	-	13	319	-	-	341	-
4:15 PM	-	-	-	251	-	-	14	315	-	-	365	-
4:30 PM	-	-	-	219	-	-	22	288	-	-	338	-
4:45 PM	-	-	-	225	-	-	15	261	-	-	351	-
5:00 PM	-	-	-	197	-	-	13	273	-	-	351	-
5:15 PM	-	-	-	257	-	-	16	217	-	-	327	-
5:30 PM	-	-	-	209	-	-	14	223	-	-	350	-
5:45 PM	-	-	-	221	-	-	21	172	-	-	355	-
5:15 PM	-	-	-	257	-	-	16	217	-	-	327	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.26	0.79	-	-	0.48	-
4:15 PM	-	-	-	0.93	-	-	0.32	0.82	-	-	0.56	-
4:30 PM	-	-	-	0.92	-	-	0.48	0.87	-	-	0.50	-
4:45 PM	-	-	-	0.92	-	-	0.35	0.76	-	-	0.51	-
5:00 PM	-	-	-	0.92	-	-	0.35	0.92	-	-	0.48	-
5:15 PM	-	-	-	0.93	-	-	0.49	0.94	-	-	0.53	-
5:30 PM	-	-	-	0.92	-	-	0.41	0.85	-	-	0.50	-
5:45 PM	-	-	-	0.92	-	-	0.64	0.75	-	-	0.54	-
5:15 PM	-	-	-	0.93	-	-	0.49	0.94	-	-	0.53	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	47.3	-	-	13.1	34.5	-	-	17.3	-
4:15 PM	-	-	-	46.9	-	-	17.1	40.8	-	-	22.1	-
4:30 PM	-	-	-	47.3	-	-	14.9	34.6	-	-	19.4	-
4:45 PM	-	-	-	47.2	-	-	14.2	32.7	-	-	19.1	-
5:00 PM	-	-	-	47.2	-	-	11.1	27.5	-	-	16.2	-
5:15 PM	-	-	-	46.8	-	-	18.7	46.4	-	-	23.8	-
5:30 PM	-	-	-	47.3	-	-	13.7	37.4	-	-	17.9	-
5:45 PM	-	-	-	47.3	-	-	18.9	33.8	-	-	21.6	-
5:15 PM	-	-	-	46.8	-	-	18.7	46.4	-	-	23.8	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
4:30 PM	-	-	-	D	-	-	B	C	-	-	B	-
4:45 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	D	-	-	B	-
5:45 PM	-	-	-	D	-	-	B	C	-	-	C	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
4:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:15 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:30 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:45 PM	-	-	-	-	-	-	-	-	-	-	-	-
5:15 PM	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Delay and LOS

Time-Period		
4:00 PM	31	C
4:15 PM	35.2	D
4:30 PM	31.7	C
4:45 PM	30.7	C
5:00 PM	27.1	C
5:15 PM	38.6	D
5:30 PM	32.1	C
5:45 PM	31.7	C
5:15 PM	38.6	D

X

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	222	-	-	14	325	-	-	343	-
4:15 PM	-	-	-	256	-	-	15	321	-	-	367	-
4:30 PM	-	-	-	224	-	-	23	294	-	-	340	-
4:45 PM	-	-	-	230	-	-	16	267	-	-	353	-
5:00 PM	-	-	-	202	-	-	14	279	-	-	353	-
5:15 PM	-	-	-	262	-	-	17	223	-	-	329	-
5:30 PM	-	-	-	214	-	-	15	229	-	-	352	-
5:45 PM	-	-	-	226	-	-	22	178	-	-	357	-
5:15 PM	-	-	-	262	-	-	17	223	-	-	329	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.29	0.83	-	-	0.49	-
4:15 PM	-	-	-	0.93	-	-	0.35	0.87	-	-	0.57	-
4:30 PM	-	-	-	0.92	-	-	0.51	0.91	-	-	0.51	-
4:45 PM	-	-	-	0.92	-	-	0.42	0.91	-	-	0.53	-
5:00 PM	-	-	-	0.92	-	-	0.38	0.97	-	-	0.49	-
5:15 PM	-	-	-	0.93	-	-	0.52	0.99	-	-	0.55	-
5:30 PM	-	-	-	0.92	-	-	0.45	0.90	-	-	0.51	-
5:45 PM	-	-	-	0.92	-	-	0.68	0.79	-	-	0.56	-
5:15 PM	-	-	-	0.93	-	-	0.52	0.99	-	-	0.55	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	47.2	-	-	13.6	35.3	-	-	18.1	-
4:15 PM	-	-	-	46.8	-	-	18.1	42.2	-	-	23.0	-
4:30 PM	-	-	-	47.2	-	-	15.8	37.0	-	-	20.3	-
4:45 PM	-	-	-	47.2	-	-	15.8	41.0	-	-	20.4	-
5:00 PM	-	-	-	47.3	-	-	11.8	31.6	-	-	17.0	-
5:15 PM	-	-	-	46.7	-	-	19.9	54.0	-	-	24.9	-
5:30 PM	-	-	-	47.3	-	-	14.6	39.6	-	-	18.8	-
5:45 PM	-	-	-	47.2	-	-	20.5	34.3	-	-	22.7	-
5:15 PM	-	-	-	46.7	-	-	19.9	54.0	-	-	24.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	D	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
4:30 PM	-	-	-	D	-	-	B	D	-	-	C	-
4:45 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:00 PM	-	-	-	D	-	-	B	C	-	-	B	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	D	-	-	B	-
5:45 PM	-	-	-	D	-	-	C	C	-	-	C	-
5:15 PM	-	-	-	D	-	-	B	D	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.8	-	-	0.1	1.0	-	-	0.7	-
4:15 PM	-	-	-	0.9	-	-	0.2	**1.0**	-	-	0.9	-
4:30 PM	-	-	-	0.8	-	-	0.3	**1.1**	-	-	0.8	-
4:45 PM	-	-	-	0.8	-	-	0.2	**1.1**	-	-	0.8	-
5:00 PM	-	-	-	0.7	-	-	0.2	**1.1**	-	-	0.7	-
5:15 PM	-	-	-	0.9	-	-	0.3	**1.2**	-	-	0.8	-
5:30 PM	-	-	-	0.7	-	-	0.2	**1.1**	-	-	0.8	-
5:45 PM	-	-	-	0.8	-	-	0.4	0.9	-	-	0.8	-
5:15 PM	-	-	-	0.9	-	-	0.3	1.2	-	-	0.8	-

Intersection Delay and LOS
Time-Period

4:00 PM	31.6	C
4:15 PM	36.1	D
4:30 PM	33	C
4:45 PM	34.8	C
5:00 PM	29.3	C
5:15 PM	42.2	D X
5:30 PM	33.5	C
5:45 PM	32.4	C
5:15 PM	42.2	D

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	222	-	-	14	325	-	-	343	-
4:15 PM	-	-	-	256	-	-	15	321	-	-	367	-
4:30 PM	-	-	-	224	-	-	23	294	-	-	340	-
4:45 PM	-	-	-	230	-	-	16	267	-	-	353	-
5:00 PM	-	-	-	202	-	-	14	279	-	-	353	-
5:15 PM	-	-	-	262	-	-	17	223	-	-	329	-
5:30 PM	-	-	-	214	-	-	15	229	-	-	352	-
5:45 PM	-	-	-	226	-	-	22	178	-	-	357	-
5:15 PM	-	-	-	262	-	-	17	223	-	-	329	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.92	-	-	0.29	0.83	-	-	0.49	-
4:15 PM	-	-	-	0.93	-	-	0.35	0.87	-	-	0.57	-
4:30 PM	-	-	-	0.92	-	-	0.51	0.91	-	-	0.51	-
4:45 PM	-	-	-	0.92	-	-	0.43	0.91	-	-	0.53	-
5:00 PM	-	-	-	0.92	-	-	0.38	0.97	-	-	0.49	-
5:15 PM	-	-	-	0.93	-	-	0.52	0.99	-	-	0.55	-
5:30 PM	-	-	-	0.92	-	-	0.45	0.90	-	-	0.51	-
5:45 PM	-	-	-	0.92	-	-	0.68	0.79	-	-	0.56	-
5:15 PM	-	-	-	0.93	-	-	0.52	0.99	-	-	0.55	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	47.2	-	-	13.9	37.5	-	-	18.1	-
4:15 PM	-	-	-	46.8	-	-	18.3	43.7	-	-	23.0	-
4:30 PM	-	-	-	47.2	-	-	16.5	40.6	-	-	20.3	-
4:45 PM	-	-	-	47.2	-	-	16.2	43.9	-	-	20.4	-
5:00 PM	-	-	-	47.3	-	-	13.1	46.3	-	-	16.9	-
5:15 PM	-	-	-	46.7	-	-	20.4	57.9	-	-	24.8	-
5:30 PM	-	-	-	47.3	-	-	15.0	41.8	-	-	18.8	-
5:45 PM	-	-	-	47.2	-	-	21.1	33.2	-	-	22.6	-
5:15 PM	-	-	-	46.7	-	-	20.4	57.9	-	-	24.8	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	D	-	-	B	-
4:15 PM	-	-	-	D	-	-	B	D	-	-	C	-
4:30 PM	-	-	-	D	-	-	B	D	-	-	C	-
4:45 PM	-	-	-	D	-	-	B	D	-	-	C	-
5:00 PM	-	-	-	D	-	-	B	D	-	-	B	-
5:15 PM	-	-	-	D	-	-	C	E	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	D	-	-	B	-
5:45 PM	-	-	-	D	-	-	C	C	-	-	C	-
5:15 PM	-	-	-	D	-	-	C	E	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.8	-	-	0.1	**1.0**	-	-	0.7	-
4:15 PM	-	-	-	0.9	-	-	0.2	**1.1**	-	-	0.9	-
4:30 PM	-	-	-	0.8	-	-	0.3	**1.1**	-	-	0.8	-
4:45 PM	-	-	-	0.8	-	-	0.2	**1.2**	-	-	0.8	-
5:00 PM	-	-	-	0.7	-	-	0.2	**1.3**	-	-	0.7	-
5:15 PM	-	-	-	0.9	-	-	0.3	**1.3**	-	-	0.8	-
5:30 PM	-	-	-	0.7	-	-	0.2	**1.2**	-	-	0.8	-
5:45 PM	-	-	-	0.8	-	-	0.4	0.9	-	-	0.8	-
5:15 PM	-	-	-	0.9	-	-	0.3	1.3	-	-	0.8	-

Intersection Delay and LOS
Time-Period

4:00 PM	32.6	C
4:15 PM	36.7	D
4:30 PM	34.6	C
4:45 PM	36	D
5:00 PM	36.1	D
5:15 PM	43.8	D
5:30 PM	34.4	C
5:45 PM	32	C
5:15 PM	43.8	D

X

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	0	0	1052	1536	0
Future Vol, veh/h	164	0	0	1052	1536	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	164	0	0	1052	1536	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2062	-	-	0	-	0
Stage 1	1536	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 55	0	0	-	-	0
Stage 1	*589	0	0	-	-	0
Stage 2	*560	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 55	-	-	-	-	-
Mov Cap-2 Maneuver	*287	-	-	-	-	-
Stage 1	*589	-	-	-	-	-
Stage 2	*560	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	287	-
HCM Lane V/C Ratio	-	0.571	-
HCM Control Delay (s)	-	33	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	3.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	0	0	1060	1612	0
Future Vol, veh/h	164	0	0	1060	1612	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	164	0	0	1060	1612	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2142	-	-	0	-	0
Stage 1	1612	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 49	0	0	-	-	0
Stage 1	*569	0	0	-	-	0
Stage 2	*560	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 49	-	-	-	-	-
Mov Cap-2 Maneuver	*280	-	-	-	-	-
Stage 1	*569	-	-	-	-	-
Stage 2	*560	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	280	-
HCM Lane V/C Ratio	-	0.586	-
HCM Control Delay (s)	-	34.5	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	3.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	1220	1600	0
Future Vol, veh/h	100	0	0	1220	1600	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	100	0	0	1220	1600	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2210	-	-	0	-	0
Stage 1	1600	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*411	0	0	-	-	0
Stage 1	*569	0	0	-	-	0
Stage 2	*507	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*411	-	-	-	-	-
Mov Cap-2 Maneuver	*430	-	-	-	-	-
Stage 1	*569	-	-	-	-	-
Stage 2	*507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	430	-
HCM Lane V/C Ratio	-	0.233	-
HCM Control Delay (s)	-	15.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	1244	1624	0
Future Vol, veh/h	100	0	0	1244	1624	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	100	0	0	1244	1624	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2246	-	-	0	-	0
Stage 1	1624	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*411	0	0	-	-	0
Stage 1	*569	0	0	-	-	0
Stage 2	*507	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*411	-	-	-	-	-
Mov Cap-2 Maneuver	*430	-	-	-	-	-
Stage 1	*569	-	-	-	-	-
Stage 2	*507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	430	-
HCM Lane V/C Ratio	-	0.233	-
HCM Control Delay (s)	-	15.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	548	408	116	108	4
Future Vol, veh/h	1	548	408	116	108	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	1	548	408	116	108	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	524	0	-	0	1016	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	550	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	980	-	-	-	249	571
Stage 1	-	-	-	-	605	-
Stage 2	-	-	-	-	553	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	980	-	-	-	249	571
Mov Cap-2 Maneuver	-	-	-	-	249	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	29.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	980	-	-	-	249	571
HCM Lane V/C Ratio	0.001	-	-	-	0.434	0.007
HCM Control Delay (s)	8.7	0	-	-	30.1	11.3
HCM Lane LOS	A	A	-	-	D	B
HCM 95th %tile Q(veh)	0	-	-	-	2.1	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	518	408	196	128	8
Future Vol, veh/h	4	518	408	196	128	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	4	518	408	196	128	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	604	0	-	0	1032	506
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	913	-	-	-	244	541
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	567	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	913	-	-	-	243	541
Mov Cap-2 Maneuver	-	-	-	-	243	-
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	567	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	33.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	913	-	-	-	243	541
HCM Lane V/C Ratio	0.004	-	-	-	0.527	0.015
HCM Control Delay (s)	9	0	-	-	35.2	11.8
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0	-	-	-	2.8	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	312	220	68	48	1
Future Vol, veh/h	4	312	220	68	48	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	4	312	220	68	48	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	288	0	-	0	574	254
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1203	-	-	-	459	754
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1203	-	-	-	457	754
Mov Cap-2 Maneuver	-	-	-	-	457	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1203	-	-	-	457	754
HCM Lane V/C Ratio	0.003	-	-	-	0.105	0.001
HCM Control Delay (s)	8	0	-	-	13.8	9.8
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	312	220	96	128	4
Future Vol, veh/h	8	312	220	96	128	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	8	312	220	96	128	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	596	268
Stage 1	-	-	-	-	268	-
Stage 2	-	-	-	-	328	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1174	-	-	-	446	740
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1174	-	-	-	442	740
Mov Cap-2 Maneuver	-	-	-	-	442	-
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1174	-	-	-	442	740
HCM Lane V/C Ratio	0.007	-	-	-	0.29	0.005
HCM Control Delay (s)	8.1	0	-	-	16.4	9.9
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	1.2	0

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	136	77	11	62	36	56	34	511	62	31	151	37
7:15 AM	165	103	17	53	39	79	41	561	50	32	193	37
7:30 AM	134	95	18	61	33	104	14	529	44	36	191	33
7:45 AM	125	96	16	67	45	58	18	544	70	30	172	40
8:00 AM	107	73	6	68	48	66	22	410	64	26	174	24
8:15 AM	78	63	11	76	56	59	22	416	47	34	150	24
8:30 AM	81	58	9	64	20	64	23	418	51	27	153	29
8:45 AM	52	53	4	39	26	42	22	248	34	21	101	16
8:30 AM	81	58	9	64	20	64	23	418	51	27	153	29

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.27**	0.47	0.48	0.87	0.48	0.89	0.66	**1.49**	0.41	**1.01**	0.79	0.79
7:15 AM	**1.55**	0.57	0.58	0.82	0.47	**1.11**	0.64	**1.63**	0.33	**1.00**	0.79	0.79
7:30 AM	**1.26**	0.56	0.57	0.85	0.39	**1.41**	0.24	**1.54**	0.29	0.95	0.60	0.60
7:45 AM	**1.17**	0.56	0.57	0.94	0.56	0.77	0.28	**1.56**	0.45	0.90	0.62	0.62
8:00 AM	**1.00**	0.39	0.39	0.95	0.58	0.93	0.31	**1.16**	0.41	0.85	0.59	0.59
8:15 AM	0.73	0.39	0.40	**1.06**	0.72	0.90	0.27	**1.18**	0.30	**1.02**	0.54	0.54
8:30 AM	0.76	0.34	0.35	0.89	0.24	0.92	0.32	**1.22**	0.33	0.88	0.64	0.64
8:45 AM	0.49	0.32	0.33	0.76	0.44	0.84	0.19	0.61	0.19	**1.42**	0.56	0.56
8:30 AM	0.76	0.34	0.35	0.89	0.24	0.92	0.32	1.22	0.33	0.88	0.64	0.64

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**196.2**	44.7	44.9	**81.4**	49.3	76.9	33.0	**259.4**	27.5	**80.7**	42.5	43.7
7:15 AM	**558.5**	44.0	44.4	74.3	46.9	**138.6**	32.3	**761.1**	25.9	**103.5**	35.6	36.0
7:30 AM	**924.7**	44.5	44.9	79.2	48.1	**303.4**	23.0	**1,287.3**	25.2	**84.6**	31.5	31.9
7:45 AM	**1,120.4**	44.7	45.0	**95.0**	**98.8**	**163.7**	22.2	**1,761.4**	27.9	60.6	30.2	30.6
8:00 AM	**1,218.6**	41.5	41.6	**98.4**	49.5	**87.3**	21.3	**2,056.5**	26.5	57.4	28.8	29.0
8:15 AM	**1,061.0**	42.9	43.0	**129.3**	55.4	76.0	20.0	**2,209.1**	24.5	**89.5**	26.0	26.1
8:30 AM	**832.3**	41.8	41.9	**102.5**	44.5	**81.2**	21.9	**2,448.8**	25.6	56.0	30.9	31.3
8:45 AM	**485.8**	43.7	43.8	67.3	52.5	63.6	14.5	**1,958.6**	17.7	**229.2**	20.1	20.3
8:30 AM	832.3	41.8	41.9	102.5	44.5	81.2	21.9	2,448.8	25.6	56.0	30.9	31.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	E	C	F	C	F	D	D
7:15 AM	F	D	D	E	D	F	C	F	C	F	D	D
7:30 AM	F	D	D	E	D	F	C	F	C	F	C	C
7:45 AM	F	D	D	F	F	F	C	F	C	E	C	C
8:00 AM	F	D	D	F	D	F	C	F	C	E	C	C
8:15 AM	F	D	D	F	E	E	C	F	C	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	E	C	C
8:45 AM	F	D	D	E	D	E	B	F	B	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	E	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**3.8**	0.3	0.2	**1.4**	0.3	0.6	0.6	**6.3**	**1.2**	**3.0**	**1.4**	**1.3**
7:15 AM	**8.0**	0.3	0.3	**1.2**	0.4	**1.1**	0.8	**13.1**	1.0	**3.0**	1.0	1.0
7:30 AM	**10.7**	0.3	0.3	**1.3**	0.4	**2.0**	0.2	**19.3**	0.9	**2.7**	1.0	0.9
7:45 AM	**12.4**	0.3	0.3	**1.6**	0.8	**1.1**	0.3	**25.7**	**1.3**	**2.0**	0.9	0.9
8:00 AM	**13.0**	0.2	0.2	**1.6**	0.4	0.8	0.3	**28.3**	**1.2**	**1.7**	0.8	0.8
8:15 AM	**11.4**	0.2	0.2	**2.0**	0.5	0.6	0.3	**30.3**	0.9	**2.9**	0.7	0.7
8:30 AM	**9.2**	0.2	0.2	**1.6**	0.2	0.7	0.4	**32.6**	1.0	**2.2**	0.8	0.8
8:45 AM	**5.9**	0.2	0.2	0.8	0.3	0.4	0.3	**30.7**	0.5	**4.6**	0.4	0.4
8:30 AM	9.2	0.2	0.2	1.6	0.2	0.7	0.4	32.6	1.0	2.2	0.8	0.8

Intersection Delay and LOS
Time-Period

7:00 AM	146.4	F
7:15 AM	391.8	F
7:30 AM	663.1	F
7:45 AM	872	F
8:00 AM	902.7	F
8:15 AM	961.8	F
8:30 AM	**1053.1**	F **X**
8:45 AM	672.2	F
8:30 AM	1053.1	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	139	77	11	62	36	67	34	517	62	34	153	38
7:15 AM	168	103	17	53	39	90	41	567	50	35	195	38
7:30 AM	137	95	18	61	33	115	14	535	44	39	193	34
7:45 AM	128	96	16	67	45	69	18	550	70	33	174	41
8:00 AM	110	73	6	68	48	77	22	416	64	29	176	25
8:15 AM	81	63	11	76	56	70	22	422	47	37	152	25
8:30 AM	84	58	9	64	20	75	23	424	51	30	155	30
8:45 AM	55	53	4	39	26	53	22	254	34	24	103	17
8:30 AM	84	58	9	64	20	75	23	424	51	30	155	30

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.30**	0.43	0.44	0.87	0.43	0.94	0.68	**1.50**	0.41	**1.27**	0.79	0.79
7:15 AM	**1.57**	0.57	0.58	0.82	0.47	**1.27**	0.64	**1.65**	0.33	**1.06**	0.77	0.77
7:30 AM	**1.28**	0.56	0.57	0.85	0.39	**1.56**	0.24	**1.56**	0.29	**1.01**	0.60	0.60
7:45 AM	**1.20**	0.55	0.56	0.94	0.54	0.91	0.28	**1.60**	0.46	0.92	0.62	0.62
8:00 AM	**1.03**	0.39	0.39	0.95	0.57	**1.02**	0.32	**1.21**	0.42	0.81	0.59	0.59
8:15 AM	0.76	0.37	0.37	**1.06**	0.64	0.92	0.29	**1.23**	0.31	**1.10**	0.55	0.55
8:30 AM	0.79	0.33	0.34	0.89	0.24	**1.06**	0.31	**1.23**	0.33	0.98	0.64	0.64
8:45 AM	0.52	0.28	0.28	0.76	0.36	0.85	0.24	0.74	0.21	**1.20**	0.59	0.59
8:30 AM	0.79	0.33	0.34	0.89	0.24	1.06	0.31	1.23	0.33	0.98	0.64	0.64

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**207.9**	42.0	42.2	**81.4**	46.4	**89.4**	36.9	**267.1**	27.5	**181.5**	46.0	47.5
7:15 AM	**596.1**	44.0	44.4	74.3	46.9	**196.6**	32.5	**784.6**	25.9	**360.6**	35.4	35.8
7:30 AM	**986.9**	44.5	44.9	79.2	56.6	**436.8**	22.8	**1,326.5**	25.2	**402.7**	30.0	30.3
7:45 AM	**1,207.1**	44.3	44.7	**95.0**	**141.0**	**347.4**	22.6	**1,845.6**	28.7	**349.2**	30.0	30.3
8:00 AM	**1,327.1**	41.4	41.5	**98.4**	63.8	**220.8**	22.2	**2,212.8**	27.7	**207.0**	30.2	30.4
8:15 AM	**1,201.5**	41.2	41.4	**129.3**	55.9	**111.3**	21.4	**2,408.6**	25.6	**193.1**	28.7	29.0
8:30 AM	**998.3**	40.6	40.8	**102.5**	43.9	**120.1**	21.7	**2,615.2**	26.1	**234.3**	29.8	30.1
8:45 AM	**675.6**	40.4	40.4	67.3	48.8	67.6	19.2	**2,599.1**	22.4	**266.7**	25.8	26.0
8:30 AM	998.3	40.6	40.8	102.5	43.9	120.1	21.7	2,615.2	26.1	234.3	29.8	30.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	F	D	F	C	F	D	D
7:15 AM	F	D	D	E	D	F	C	F	C	F	D	D
7:30 AM	F	D	D	E	E	F	C	F	C	F	C	C
7:45 AM	F	D	D	F	F	F	C	F	C	F	C	C
8:00 AM	F	D	D	F	E	F	C	F	C	F	C	C
8:15 AM	F	D	D	F	E	F	C	F	C	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	F	C	C
8:45 AM	F	D	D	E	D	E	B	F	C	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	F	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**4.0**	0.2	0.2	**1.4**	0.3	0.8	0.6	**6.5**	**1.2**	**4.8**	**1.4**	**1.3**
7:15 AM	**8.4**	0.3	0.3	**1.2**	0.4	**1.4**	0.8	**13.5**	1.0	**7.0**	**1.0**	1.0
7:30 AM	**11.4**	0.3	0.3	**1.3**	0.4	**2.6**	0.2	**19.9**	0.9	**7.6**	0.9	0.9
7:45 AM	**13.3**	0.3	0.3	**1.6**	1.0	**1.8**	0.3	**26.5**	**1.4**	**6.9**	0.9	0.9
8:00 AM	**14.0**	0.2	0.2	**1.6**	0.6	**1.4**	0.4	**29.6**	**1.2**	**4.7**	0.8	0.8
8:15 AM	**12.7**	0.2	0.2	**2.0**	0.6	0.9	0.4	**32.1**	0.9	**4.9**	0.7	0.7
8:30 AM	**10.8**	0.2	0.2	**1.6**	0.2	1.0	0.4	**34.7**	1.0	**5.2**	0.8	0.8
8:45 AM	**7.7**	0.2	0.2	0.8	0.3	0.6	0.3	**33.8**	0.6	**6.1**	0.6	0.6
8:30 AM	10.8	0.2	0.2	1.6	0.2	1.0	0.4	34.7	1.0	5.2	0.8	0.8

Intersection Delay and LOS

Time-Period		
7:00 AM	156.6	F
7:15 AM	417.5	F
7:30 AM	706.5	F
7:45 AM	931.7	F
8:00 AM	982.6	F
8:15 AM	1056.1	F
8:30 AM	**1141.1**	F X
8:45 AM	889.7	F
8:30 AM	1141.1	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	139	77	11	62	36	67	34	517	62	34	153	38
7:15 AM	168	103	17	53	39	90	41	567	50	35	195	38
7:30 AM	137	95	18	61	33	115	14	535	44	39	193	34
7:45 AM	128	96	16	67	45	69	18	550	70	33	174	41
8:00 AM	110	73	6	68	48	77	22	416	64	29	176	25
8:15 AM	81	63	11	76	56	70	22	422	47	37	152	25
8:30 AM	84	58	9	64	20	75	23	424	51	30	155	30
8:45 AM	55	53	4	39	26	53	22	254	34	24	103	17
7:45 AM	128	96	16	67	45	69	18	550	70	33	174	41

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.30**	0.43	0.44	0.87	0.43	0.94	0.53	**1.05**	0.33	**1.27**	0.64	0.27
7:15 AM	**1.57**	0.57	0.58	0.82	0.47	**1.27**	0.55	**1.15**	0.27	**1.06**	0.66	0.22
7:30 AM	**1.28**	0.56	0.57	0.85	0.39	**1.56**	0.20	**1.09**	0.24	**1.01**	0.52	0.16
7:45 AM	**1.20**	0.55	0.56	0.94	0.54	0.91	0.24	**1.12**	0.38	0.92	0.51	0.21
8:00 AM	**1.03**	0.39	0.39	0.95	0.57	**1.02**	0.29	0.85	0.34	0.81	0.53	0.13
8:15 AM	0.76	0.37	0.37	**1.06**	0.64	0.92	0.26	0.86	0.25	**1.10**	0.48	0.14
8:30 AM	0.79	0.33	0.34	0.89	0.24	**1.06**	0.28	0.86	0.27	0.98	0.55	0.18
8:45 AM	0.52	0.31	0.31	0.76	0.36	0.85	0.24	0.47	0.18	0.54	0.50	0.15
7:45 AM	1.20	0.55	0.56	0.94	0.54	0.91	0.24	1.12	0.38	0.92	0.51	0.21

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**207.9**	42.0	42.2	**81.4**	46.4	**89.4**	25.8	72.0	19.1	**183.1**	36.9	19.0
7:15 AM	**596.1**	44.0	44.4	74.3	46.9	**196.6**	25.6	**157.2**	18.8	**360.6**	29.7	14.0
7:30 AM	**986.9**	44.5	44.9	79.2	56.6	**436.8**	21.7	**267.7**	17.6	**402.7**	26.8	12.4
7:45 AM	**1,207.1**	44.3	44.7	**95.0**	**141.0**	**347.4**	21.2	**358.1**	19.9	**349.2**	26.1	12.9
8:00 AM	**1,327.1**	41.4	41.5	**98.4**	63.8	**220.8**	21.3	**338.4**	19.3	**201.0**	27.4	12.8
8:15 AM	**1,201.5**	41.2	41.4	**129.3**	55.9	**111.3**	20.7	**205.1**	17.9	**187.7**	26.2	12.9
8:30 AM	**998.3**	40.6	40.8	**102.5**	43.9	**120.1**	20.8	**80.7**	18.2	**227.0**	26.8	13.3
8:45 AM	**675.6**	42.8	42.9	67.3	48.8	67.6	17.9	24.3	16.1	23.0	22.4	12.1
7:45 AM	1,207.1	44.3	44.7	95.0	141.0	347.4	21.2	358.1	19.9	349.2	26.1	12.9

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	F	C	F	B	F	D	B
7:15 AM	F	D	D	E	D	F	C	F	B	F	C	B
7:30 AM	F	D	D	E	E	F	C	F	B	F	C	B
7:45 AM	F	D	D	F	F	F	C	F	B	F	C	B
8:00 AM	F	D	D	F	E	F	C	F	B	F	C	B
8:15 AM	F	D	D	F	E	F	C	F	B	F	C	B
8:30 AM	F	D	D	F	D	F	C	F	B	F	C	B
8:45 AM	F	D	D	E	D	E	B	C	B	C	C	B
7:45 AM	F	D	D	F	F	F	C	F	B	F	C	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**4.0**	0.2	0.2	**1.4**	0.3	0.8	0.6	**2.4**	**1.0**	**4.9**	1.0	-
7:15 AM	**8.4**	0.3	0.3	**1.2**	0.4	**1.4**	0.7	**3.7**	0.8	**7.0**	0.8	-
7:30 AM	**11.4**	0.3	0.3	**1.3**	0.4	**2.6**	0.2	**4.8**	0.7	**7.6**	0.7	-
7:45 AM	**13.3**	0.3	0.3	**1.6**	1.0	**1.8**	0.3	**5.9**	**1.1**	**6.9**	0.7	-
8:00 AM	**14.0**	0.2	0.2	**1.6**	0.6	**1.4**	0.4	**5.4**	**1.0**	**4.6**	0.7	-
8:15 AM	**12.7**	0.2	0.2	**2.0**	0.6	0.9	0.4	**3.8**	0.7	**4.8**	0.6	-
8:30 AM	**10.8**	0.2	0.2	**1.6**	0.2	1.0	0.4	**2.3**	0.8	**5.1**	0.6	-
8:45 AM	**7.7**	0.2	0.2	0.8	0.3	0.6	0.3	0.8	0.5	**2.0**	0.6	-
7:45 AM	13.3	0.3	0.3	1.6	1.0	1.8	0.3	5.9	1.1	6.9	0.7	-

Intersection Delay and LOS
Time-Period

7:00 AM	77.3	E
7:15 AM	168.2	F
7:30 AM	275.3	F
7:45 AM	**311.8**	F **X**
8:00 AM	291.9	F
8:15 AM	203.1	F
8:30 AM	141.9	F
8:45 AM	73.6	E
7:45 AM	311.8	F

2030 PM Peak Hour NO BUILD Conditions
Multiple Period Analysis

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61	86	12	105	49	54	18	315	58	54	442	88
4:15 PM	73	66	18	129	64	52	17	277	58	40	466	62
4:30 PM	61	69	10	106	59	60	18	306	61	39	473	62
4:45 PM	62	79	12	119	62	63	17	309	54	39	419	117
5:00 PM	71	87	24	114	68	61	25	262	44	36	417	46
5:15 PM	64	89	25	118	66	54	23	246	38	45	406	46
5:30 PM	53	60	32	89	70	61	25	274	46	36	468	74
5:45 PM	33	45	20	56	33	23	26	134	22	20	170	36
5:45 PM	33	45	20	56	33	23	26	134	22	20	170	36

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.80	0.75	0.77	**1.06**	0.63	0.82	0.56	0.89	0.37	0.76	**1.01**	**1.03**
4:15 PM	0.84	0.60	0.62	**1.31**	0.79	0.83	0.54	0.81	0.38	0.54	**1.10**	**1.11**
4:30 PM	0.80	0.56	0.57	**1.07**	0.70	0.84	0.56	0.90	0.40	0.58	**1.10**	**1.10**
4:45 PM	0.81	0.61	0.62	**1.21**	0.71	0.85	0.54	0.93	0.36	0.61	**1.14**	**1.14**
5:00 PM	0.83	0.72	0.74	**1.16**	0.79	0.84	0.67	0.79	0.30	0.54	**1.17**	**1.17**
5:15 PM	0.81	0.78	0.80	**1.20**	0.75	0.78	0.64	0.75	0.26	0.59	**1.11**	**1.11**
5:30 PM	0.78	0.68	0.71	0.90	0.81	0.83	0.68	0.79	0.30	0.47	**1.13**	**1.13**
5:45 PM	0.70	0.55	0.58	0.57	0.33	0.35	0.71	0.35	0.13	0.38	**1.04**	**1.04**
5:45 PM	0.70	0.55	0.58	0.57	0.33	0.35	0.71	0.35	0.13	0.38	1.04	1.04

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	57.6	48.7	49.5	**111.1**	43.4	52.1	30.1	36.8	22.0	26.5	36.7	43.5
4:15 PM	61.3	44.1	44.6	**260.4**	49.9	54.0	30.1	32.8	23.3	22.8	**93.5**	**95.1**
4:30 PM	57.6	43.4	43.6	**447.4**	44.2	54.7	30.2	38.5	23.7	24.6	**186.7**	**189.7**
4:45 PM	57.9	43.3	43.6	**561.4**	44.1	55.5	30.2	42.7	23.7	25.1	**297.6**	**307.6**
5:00 PM	60.7	46.7	47.9	**726.8**	49.5	55.4	31.2	33.1	22.9	22.7	**450.9**	**457.3**
5:15 PM	58.5	50.5	52.4	**881.4**	46.3	49.0	30.9	31.4	22.4	21.6	**557.2**	**565.2**
5:30 PM	55.2	45.8	47.0	**925.8**	49.1	52.7	31.2	31.2	21.4	21.9	**650.8**	**665.8**
5:45 PM	55.3	45.5	46.3	**665.4**	37.3	37.7	31.8	18.1	15.9	14.3	**694.8**	**714.0**
5:45 PM	55.3	45.5	46.3	665.4	37.3	37.7	31.8	18.1	15.9	14.3	694.8	714.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	D	C	C	F	F
4:15 PM	E	D	D	F	D	D	C	C	C	C	F	F
4:30 PM	E	D	D	F	D	D	C	D	C	C	F	F
4:45 PM	E	D	D	F	D	E	C	D	C	C	F	F
5:00 PM	E	D	D	F	D	E	C	C	C	C	F	F
5:15 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:30 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.0**	0.3	0.3	**2.2**	0.4	0.5	0.3	**1.5**	1.0	**1.0**	**1.3**	**1.3**
4:15 PM	**1.3**	0.2	0.2	**4.0**	0.5	0.5	0.2	**1.3**	1.0	1.0	**2.2**	**2.2**
4:30 PM	**1.0**	0.2	0.2	**5.2**	0.5	0.5	0.3	**1.5**	**1.0**	1.0	**3.3**	**3.3**
4:45 PM	**1.1**	0.2	0.2	**6.5**	0.5	0.5	0.3	**1.6**	0.9	1.0	**4.6**	**4.6**
5:00 PM	**1.3**	0.3	0.3	**7.8**	0.6	0.5	0.4	**1.2**	0.7	0.9	**6.2**	**6.1**
5:15 PM	**1.1**	0.3	0.3	**9.3**	0.5	0.5	0.3	**1.1**	0.6	**1.1**	**7.5**	**7.4**
5:30 PM	0.9	0.2	0.2	**9.2**	0.6	0.5	0.4	**1.2**	0.7	0.9	**8.8**	**8.7**
5:45 PM	0.5	0.2	0.2	**6.9**	0.2	0.2	0.4	0.5	0.3	0.5	**9.6**	**9.5**
5:45 PM	0.5	0.2	0.2	6.9	0.2	0.2	0.4	0.5	0.3	0.5	9.6	9.5

Intersection Delay and LOS
Time-Period

4:00 PM	46.3	D
4:15 PM	82.2	F
4:30 PM	128.2	F
4:45 PM	182.4	F
5:00 PM	248.9	F
5:15 PM	306.1	F
5:30 PM	332.5	F
5:45 PM	**400.0**	F
5:45 PM	400	F

X

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	62	86	12	105	49	58	18	317	58	65	448	91
4:15 PM	74	66	18	129	64	56	17	279	58	51	472	65
4:30 PM	62	69	10	106	59	64	18	308	61	50	479	65
4:45 PM	63	79	12	119	62	67	17	311	54	50	425	120
5:00 PM	72	87	24	114	68	65	25	264	44	47	423	49
5:15 PM	65	89	25	118	66	58	23	248	38	56	412	49
5:30 PM	54	60	32	89	70	65	25	276	46	47	474	77
5:45 PM	34	45	20	56	33	27	26	136	22	31	176	39
5:45 PM	34	45	20	56	33	27	26	136	22	31	176	39

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.81	0.70	0.71	**1.06**	0.60	0.83	0.55	0.98	0.40	0.86	**1.06**	**1.09**
4:15 PM	0.84	0.58	0.60	**1.31**	0.80	0.83	0.54	0.87	0.40	0.66	**1.14**	**1.15**
4:30 PM	0.81	0.52	0.53	**1.07**	0.67	0.86	0.55	0.99	0.44	0.70	**1.16**	**1.16**
4:45 PM	0.81	0.57	0.58	**1.21**	0.68	0.86	0.53	**1.03**	0.40	0.70	**1.19**	**1.20**
5:00 PM	0.84	0.68	0.70	**1.16**	0.76	0.86	0.66	0.84	0.32	0.77	**1.22**	**1.22**
5:15 PM	0.82	0.78	0.80	**1.20**	0.78	0.81	0.63	0.79	0.27	0.71	**1.13**	**1.13**
5:30 PM	0.78	0.64	0.67	0.90	0.77	0.85	0.67	0.85	0.32	0.60	**1.18**	**1.19**
5:45 PM	0.70	0.55	0.58	0.57	0.35	0.39	0.71	0.36	0.13	0.54	**1.04**	**1.04**
5:45 PM	0.70	0.55	0.58	0.57	0.35	0.39	0.71	0.36	0.13	0.54	1.04	1.04

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	57.9	46.3	46.9	**111.1**	42.0	53.8	30.4	52.3	25.3	34.5	56.1	67.0
4:15 PM	61.7	43.3	43.7	**260.4**	50.6	55.0	30.3	38.0	25.5	24.1	**158.7**	**162.6**
4:30 PM	57.9	42.0	42.2	**447.4**	42.6	56.6	30.6	56.5	27.3	29.0	**298.2**	**304.5**
4:45 PM	58.2	41.9	42.1	**561.4**	42.6	57.5	30.7	67.3	27.3	29.5	**461.0**	**479.1**
5:00 PM	61.0	44.7	45.7	**726.8**	47.1	57.6	31.4	40.1	25.5	28.4	**675.3**	**686.8**
5:15 PM	58.8	50.4	52.2	**881.4**	48.2	51.7	31.0	34.4	23.8	23.2	**792.3**	**805.8**
5:30 PM	55.5	44.1	45.1	**925.8**	46.7	54.3	31.2	36.5	23.6	23.9	**938.4**	**962.0**
5:45 PM	55.2	45.5	46.3	**665.4**	37.7	38.2	31.7	19.4	17.0	14.2	**967.8**	**996.6**
5:45 PM	55.2	45.5	46.3	665.4	37.7	38.2	31.7	19.4	17.0	14.2	967.8	996.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	D	C	C	F	F
4:15 PM	E	D	D	F	D	D	C	D	C	C	F	F
4:30 PM	E	D	D	F	D	E	C	E	C	C	F	F
4:45 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:00 PM	E	D	D	F	D	E	C	D	C	C	F	F
5:15 PM	E	D	D	F	D	D	C	C	C	C	F	F
5:30 PM	E	D	D	F	D	D	C	D	C	C	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F
5:45 PM	E	D	D	F	D	D	C	B	B	B	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.1**	0.3	0.3	**2.2**	0.4	0.5	0.3	**1.7**	**1.0**	**1.6**	**1.6**	**1.7**
4:15 PM	**1.3**	0.2	0.2	**4.0**	0.5	0.5	0.3	**1.3**	**1.0**	**1.3**	**3.0**	**3.0**
4:30 PM	**1.1**	0.2	0.2	**5.2**	0.5	0.6	0.3	**1.8**	**1.1**	**1.4**	**4.6**	**4.6**
4:45 PM	**1.1**	0.2	0.2	**6.5**	0.5	0.6	0.3	**1.9**	1.0	**1.5**	**6.5**	**6.5**
5:00 PM	**1.3**	0.3	0.3	**7.8**	0.5	0.6	0.4	**1.3**	0.8	**1.3**	**8.6**	**8.6**
5:15 PM	**1.1**	0.3	0.3	**9.3**	0.5	0.5	0.4	**1.2**	0.6	**1.4**	**10.2**	**10.2**
5:30 PM	0.9	0.2	0.2	**9.2**	0.5	0.6	0.4	**1.3**	0.8	**1.2**	**12.0**	**12.0**
5:45 PM	0.6	0.2	0.2	**6.9**	0.2	0.2	0.4	0.5	0.3	0.8	**13.0**	**12.9**
5:45 PM	0.6	0.2	0.2	6.9	0.2	0.2	0.4	0.5	0.3	0.8	13.0	12.9

Intersection Delay and LOS
Time-Period

4:00 PM	57.6	E
4:15 PM	106.4	F
4:30 PM	172	F
4:45 PM	245.6	F
5:00 PM	327.4	F
5:15 PM	387.8	F
5:30 PM	438.8	F
5:45 PM	**519.2**	F
5:45 PM	519.2	F

X

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	62	86	12	105	49	58	18	317	58	65	448	91
4:15 PM	74	66	18	129	64	56	17	279	58	51	472	65
4:30 PM	62	69	10	106	59	64	18	308	61	50	479	65
4:45 PM	63	79	12	119	62	67	17	311	54	50	425	120
5:00 PM	72	87	24	114	68	65	25	264	44	47	423	49
5:15 PM	65	89	25	118	66	58	23	248	38	56	412	49
5:30 PM	54	60	32	89	70	65	25	276	46	47	474	77
5:45 PM	34	45	20	56	33	27	26	136	22	31	176	39
5:15 PM	65	89	25	118	66	58	23	248	38	56	412	49

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.81	0.70	0.71	**1.06**	0.60	0.83	0.47	0.66	0.30	0.70	0.91	0.34
4:15 PM	0.84	0.58	0.60	**1.31**	0.80	0.83	0.54	0.61	0.31	0.54	**1.05**	0.26
4:30 PM	0.81	0.52	0.53	**1.07**	0.67	0.86	0.55	0.68	0.33	0.56	**1.06**	0.26
4:45 PM	0.81	0.57	0.58	**1.21**	0.68	0.86	0.53	0.70	0.30	0.58	0.96	0.50
5:00 PM	0.84	0.68	0.70	**1.16**	0.76	0.86	0.66	0.60	0.24	0.56	**1.14**	0.24
5:15 PM	0.82	0.78	0.80	**1.20**	0.78	0.81	0.63	0.55	0.21	0.60	**1.05**	0.23
5:30 PM	0.78	0.64	0.67	0.90	0.77	0.85	0.67	0.59	0.24	0.49	**1.06**	0.32
5:45 PM	0.70	0.55	0.58	0.57	0.35	0.39	0.71	0.25	0.10	0.50	0.88	0.39
5:15 PM	0.82	0.78	0.80	1.20	0.78	0.81	0.63	0.55	0.21	0.60	1.05	0.23

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	57.9	46.3	46.9	**111.1**	42.0	53.8	27.7	27.5	14.5	23.0	25.8	10.6
4:15 PM	61.7	43.3	43.7	**260.4**	50.6	55.0	30.3	27.4	15.5	19.5	53.2	12.5
4:30 PM	57.9	42.0	42.2	**447.4**	42.6	56.6	30.5	29.2	16.1	21.5	**101.5**	13.8
4:45 PM	58.2	41.9	42.1	**561.4**	42.6	57.5	30.6	30.6	16.2	22.3	**112.8**	17.6
5:00 PM	61.0	44.7	45.7	**726.8**	47.1	57.6	31.4	28.4	15.6	20.0	**160.8**	14.1
5:15 PM	58.8	50.4	52.2	**881.4**	48.2	51.7	31.0	27.0	14.8	18.8	**236.6**	13.2
5:30 PM	55.5	44.1	45.1	**925.8**	46.7	54.3	31.2	26.8	14.4	19.0	**288.4**	15.6
5:45 PM	55.2	45.5	46.3	**665.4**	37.7	38.2	31.7	17.9	9.8	13.7	**236.5**	13.3
5:15 PM	58.8	50.4	52.2	881.4	48.2	51.7	31.0	27.0	14.8	18.8	236.6	13.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	D	C	C	B	C	C	B
4:15 PM	E	D	D	F	D	D	C	C	B	B	F	B
4:30 PM	E	D	D	F	D	E	C	C	B	C	F	B
4:45 PM	E	D	D	F	D	E	C	C	B	C	F	B
5:00 PM	E	D	D	F	D	E	C	C	B	C	F	B
5:15 PM	E	D	D	F	D	D	C	C	B	B	F	B
5:30 PM	E	D	D	F	D	D	C	C	B	B	F	B
5:45 PM	E	D	D	F	D	D	C	B	A	B	F	B
5:15 PM	E	D	D	F	D	D	C	C	B	B	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.1**	0.3	0.3	**2.2**	0.4	0.5	0.3	0.9	0.7	**1.3**	0.9	-
4:15 PM	**1.3**	0.2	0.2	**4.0**	0.5	0.5	0.3	0.8	0.8	**1.3**	**1.5**	-
4:30 PM	**1.1**	0.2	0.2	**5.2**	0.5	0.6	0.3	0.9	0.8	**1.2**	**2.0**	-
4:45 PM	**1.1**	0.2	0.2	**6.5**	0.5	0.6	0.3	0.9	0.7	**1.3**	**2.0**	-
5:00 PM	**1.3**	0.3	0.3	**7.8**	0.5	0.6	0.4	0.8	0.6	**1.2**	**2.6**	-
5:15 PM	**1.1**	0.3	0.3	**9.3**	0.5	0.5	0.4	0.7	0.5	**1.4**	**3.5**	-
5:30 PM	0.9	0.2	0.2	**9.2**	0.5	0.6	0.4	0.8	0.6	**1.2**	**4.0**	-
5:45 PM	0.6	0.2	0.2	**6.9**	0.2	0.2	0.4	0.3	0.2	0.8	**3.6**	-
5:15 PM	1.1	0.3	0.3	9.3	0.5	0.5	0.4	0.7	0.5	1.4	3.5	-

Intersection Delay and LOS
Time-Period

4:00 PM	37.4	D
4:15 PM	63.8	E
4:30 PM	90.5	F
4:45 PM	105.3	F
5:00 PM	138.9	F
5:15 PM	**181.6**	F **X**
5:30 PM	180.5	F
5:45 PM	148.6	F
5:15 PM	181.6	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	33	-	10	12	1	14	13	602	16	10	153	20
7:15 AM	23	-	11	12	1	14	9	533	16	10	193	19
7:30 AM	30	-	6	12	1	14	14	468	16	10	214	21
7:45 AM	32	-	12	12	1	14	15	495	16	10	215	22
8:00 AM	33	-	14	12	1	14	18	446	16	10	199	22
8:15 AM	35	-	7	12	1	14	8	438	16	10	162	30
8:30 AM	32	-	9	12	1	14	10	517	16	10	166	28
8:45 AM	26	-	2	12	1	14	18	381	16	10	215	28
8:30 AM	32	-	9	12	1	14	10	517	16	10	166	28

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.26	0.09	-	0.09	0.14	-	0.16	**1.61**	0.10	0.39	0.76	0.76
7:15 AM	0.18	0.10	-	0.09	0.14	-	0.10	**1.66**	0.11	0.29	0.69	0.69
7:30 AM	0.24	0.06	-	0.09	0.14	-	0.18	**1.58**	0.12	0.22	0.58	0.58
7:45 AM	0.26	0.11	-	0.09	0.14	-	0.18	**1.56**	0.11	0.21	0.56	0.57
8:00 AM	0.26	0.13	-	0.10	0.14	-	0.24	**1.63**	0.13	0.21	0.52	0.53
8:15 AM	0.28	0.07	-	0.09	0.14	-	0.09	**1.55**	0.13	0.27	0.58	0.59
8:30 AM	0.26	0.08	-	0.09	0.14	-	0.10	**1.55**	0.11	0.29	0.64	0.64
8:45 AM	0.21	0.02	-	0.09	0.14	-	0.19	**1.04**	0.10	0.23	0.64	0.64
8:30 AM	0.26	0.08	-	0.09	0.14	-	0.10	1.55	0.11	0.29	0.64	0.64

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	27.9	33.2	-	25.5	33.9	-	20.8	**304.3**	15.7	31.4	27.5	33.1
7:15 AM	26.7	33.4	-	25.5	33.9	-	20.0	**881.9**	26.5	30.6	32.9	35.6
7:30 AM	27.6	32.6	-	25.4	33.9	-	20.7	**1,439.3**	26.5	29.8	32.8	34.7
7:45 AM	27.8	33.5	-	25.5	33.9	-	20.8	**1,954.3**	26.5	29.7	32.7	34.4
8:00 AM	27.9	33.8	-	25.6	33.9	-	20.8	**2,489.6**	26.5	29.7	32.0	33.6
8:15 AM	28.2	32.8	-	25.5	33.9	-	19.7	**3,017.5**	26.5	30.4	31.6	33.6
8:30 AM	27.8	33.1	-	25.5	33.9	-	19.8	**3,509.2**	26.5	30.8	32.1	34.6
8:45 AM	27.1	32.1	-	25.4	33.9	-	22.0	**3,789.4**	26.7	29.9	33.5	35.8
8:30 AM	27.8	33.1	-	25.5	33.9	-	19.8	3,509.2	26.5	30.8	32.1	34.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	C	F	B	C	C	C
7:15 AM	C	C	-	C	C	-	B	F	C	C	C	D
7:30 AM	C	C	-	C	C	-	C	F	C	C	C	C
7:45 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:00 AM	C	C	-	C	C	-	C	F	C	C	C	C
8:15 AM	C	C	-	C	C	-	B	F	C	C	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	C	C	C
8:45 AM	C	C	-	C	C	-	C	F	C	C	C	D
8:30 AM	C	C	-	C	C	-	B	F	C	C	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.0**	0.2	-	0.2	0.3	-	0.2	**7.0**	0.2	0.4	0.4	0.4
7:15 AM	0.7	0.2	-	0.2	0.3	-	0.2	**15.0**	0.4	0.2	0.3	0.3
7:30 AM	0.9	0.1	-	0.2	0.3	-	0.3	**22.2**	0.4	0.2	0.3	0.3
7:45 AM	**1.0**	0.2	-	0.2	0.3	-	0.3	**29.0**	0.4	0.2	0.3	0.3
8:00 AM	**1.0**	0.3	-	0.2	0.3	-	0.3	**36.4**	0.4	0.2	0.3	0.3
8:15 AM	**1.1**	0.1	-	0.2	0.3	-	0.2	**43.2**	0.4	0.2	0.3	0.3
8:30 AM	**1.0**	0.2	-	0.2	0.3	-	0.2	**49.8**	0.4	0.2	0.3	0.3
8:45 AM	0.8	0.0	-	0.2	0.3	-	0.4	**52.3**	0.5	0.2	0.4	0.4
8:30 AM	1.0	0.2	-	0.2	0.3	-	0.2	49.8	0.4	0.2	0.3	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	168.8	F
7:15 AM	493.3	F
7:30 AM	818.8	F
7:45 AM	1102	F
8:00 AM	1437.6	F
8:15 AM	1679.8	F
8:30 AM	**1899.1**	F X
8:45 AM	1703.4	F
8:30 AM	1899.1	F

2030 AM Peak Hour BUILD Conditions - Phase 3
Multiple Period Analysis

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	33	1	10	17	2	19	13	602	34	29	153	20
7:15 AM	23	1	11	17	2	19	9	533	34	29	193	19
7:30 AM	30	1	6	17	2	19	14	468	34	29	214	21
7:45 AM	32	1	12	17	2	19	15	495	34	29	215	22
8:00 AM	33	1	14	17	2	19	18	446	34	29	199	22
8:15 AM	35	1	7	17	2	19	8	438	34	29	162	30
8:30 AM	32	1	9	17	2	19	10	517	34	29	166	28
8:45 AM	26	1	2	17	2	19	18	381	34	29	215	28
8:30 AM	32	1	9	17	2	19	10	517	34	29	166	28

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.27	0.10	-	0.13	0.19	-	0.16	**1.60**	0.20	**1.08**	0.72	0.72
7:15 AM	0.19	0.11	-	0.13	0.19	-	0.10	**1.60**	0.23	0.81	0.67	0.67
7:30 AM	0.25	0.06	-	0.13	0.19	-	0.17	**1.53**	0.25	0.63	0.57	0.57
7:45 AM	0.27	0.12	-	0.13	0.19	-	0.17	**1.50**	0.23	0.61	0.56	0.56
8:00 AM	0.27	0.14	-	0.14	0.19	-	0.21	**1.48**	0.25	0.60	0.52	0.52
8:15 AM	0.29	0.07	-	0.13	0.19	-	0.09	**1.43**	0.25	0.75	0.56	0.57
8:30 AM	0.27	0.09	-	0.13	0.19	-	0.10	**1.53**	0.23	0.81	0.62	0.62
8:45 AM	0.22	0.03	-	0.12	0.19	-	0.19	**1.06**	0.21	0.67	0.63	0.63
8:30 AM	0.27	0.09	-	0.13	0.19	-	0.10	1.53	0.23	0.81	0.62	0.62

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28.2	33.3	-	26.0	34.8	-	20.3	**300.4**	16.4	**114.3**	26.9	31.5
7:15 AM	26.9	33.5	-	26.0	34.8	-	19.8	**849.0**	24.7	72.0	30.7	33.3
7:30 AM	27.8	32.8	-	25.9	34.8	-	20.7	**1,359.8**	28.0	40.2	32.7	34.5
7:45 AM	28.0	33.6	-	26.1	34.8	-	20.8	**1,824.2**	28.0	39.0	32.6	34.3
8:00 AM	28.2	33.9	-	26.1	34.8	-	20.8	**2,265.6**	28.0	39.1	32.0	33.4
8:15 AM	28.4	32.9	-	26.0	34.8	-	19.7	**2,675.0**	28.0	47.4	31.4	33.3
8:30 AM	28.0	33.2	-	26.0	34.8	-	19.8	**3,106.1**	28.0	53.3	31.8	34.1
8:45 AM	27.3	32.2	-	25.9	34.8	-	21.9	**3,381.1**	28.5	41.5	33.3	35.5
8:30 AM	28.0	33.2	-	26.0	34.8	-	19.8	3,106.1	28.0	53.3	31.8	34.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	C	F	B	F	C	C
7:15 AM	C	C	-	C	C	-	B	F	C	E	C	C
7:30 AM	C	C	-	C	C	-	C	F	C	D	C	C
7:45 AM	C	C	-	C	C	-	C	F	C	D	C	C
8:00 AM	C	C	-	C	C	-	C	F	C	D	C	C
8:15 AM	C	C	-	C	C	-	B	F	C	D	C	C
8:30 AM	C	C	-	C	C	-	B	F	C	D	C	C
8:45 AM	C	C	-	C	C	-	C	F	C	D	C	D
8:30 AM	C	C	-	C	C	-	B	F	C	D	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.1**	0.2	-	0.3	0.4	-	0.2	**6.9**	0.4	**1.8**	0.4	0.4
7:15 AM	0.7	0.2	-	0.3	0.4	-	0.2	**14.4**	0.6	**1.2**	0.3	0.3
7:30 AM	0.9	0.1	-	0.3	0.4	-	0.3	**21.0**	0.7	0.7	0.3	0.3
7:45 AM	**1.0**	0.3	-	0.3	0.4	-	0.3	**27.1**	0.7	0.7	0.3	0.3
8:00 AM	**1.1**	0.3	-	0.3	0.4	-	0.3	**32.9**	0.7	0.7	0.3	0.3
8:15 AM	**1.1**	0.2	-	0.3	0.4	-	0.2	**38.2**	0.7	0.8	0.3	0.3
8:30 AM	**1.0**	0.2	-	0.3	0.4	-	0.2	**44.3**	0.7	0.9	0.3	0.3
8:45 AM	0.8	0.1	-	0.3	0.4	-	0.4	**46.8**	1.0	0.7	0.4	0.4
8:30 AM	1.0	0.2	-	0.3	0.4	-	0.2	44.3	0.7	0.9	0.3	0.3

Intersection Delay and LOS

Time-Period			
7:00 AM	164.7	F	
7:15 AM	449.4	F	
7:30 AM	725.8	F	
7:45 AM	962.3	F	
8:00 AM	1195	F	
8:15 AM	1366.4	F	
8:30 AM	**1593.2**	F	X
8:45 AM	1445.6	F	
8:30 AM	1593.2	F	

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	33	1	10	17	2	19	13	602	34	29	153	20
7:15 AM	23	1	11	17	2	19	9	533	34	29	193	19
7:30 AM	30	1	6	17	2	19	14	468	34	29	214	21
7:45 AM	32	1	12	17	2	19	15	495	34	29	215	22
8:00 AM	33	1	14	17	2	19	18	446	34	29	199	22
8:15 AM	35	1	7	17	2	19	8	438	34	29	162	30
8:30 AM	32	1	9	17	2	19	10	517	34	29	166	28
8:45 AM	26	1	2	17	2	19	18	381	34	29	215	28
8:30 AM	32	1	9	17	2	19	10	517	34	29	166	28

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.27	0.10	-	0.13	0.19	-	0.20	**1.38**	**1.41**	**1.08**	0.72	0.72
7:15 AM	0.19	0.11	-	0.13	0.19	-	0.13	**1.40**	**1.40**	0.81	0.67	0.67
7:30 AM	0.25	0.06	-	0.13	0.19	-	0.22	**1.35**	**1.35**	0.63	0.57	0.57
7:45 AM	0.27	0.12	-	0.13	0.19	-	0.22	**1.33**	**1.32**	0.61	0.56	0.56
8:00 AM	0.27	0.14	-	0.14	0.19	-	0.25	**1.17**	**1.15**	0.60	0.52	0.52
8:15 AM	0.29	0.07	-	0.13	0.19	-	0.10	**1.15**	**1.13**	0.75	0.56	0.57
8:30 AM	0.27	0.09	-	0.13	0.19	-	0.12	**1.21**	**1.19**	0.81	0.62	0.62
8:45 AM	0.22	0.03	-	0.12	0.19	-	0.19	0.74	0.72	0.67	0.63	0.63
8:30 AM	0.27	0.09	-	0.13	0.19	-	0.12	1.21	1.19	0.81	0.62	0.62

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28.2	33.3	-	26.0	34.8	-	19.8	**201.7**	**212.4**	**116.3**	21.5	27.2
7:15 AM	26.9	33.5	-	26.0	34.8	-	19.7	**566.1**	**569.9**	73.3	30.0	32.9
7:30 AM	27.8	32.8	-	25.9	34.8	-	20.7	**901.7**	**908.4**	40.6	32.8	34.6
7:45 AM	28.0	33.6	-	26.1	34.8	-	20.9	**1,206.0**	**1,215.1**	39.4	32.7	34.4
8:00 AM	28.2	33.9	-	26.1	34.8	-	20.8	**1,427.4**	**1,437.3**	39.5	32.0	33.5
8:15 AM	28.4	32.9	-	26.0	34.8	-	19.8	**1,566.4**	**1,579.6**	48.1	31.5	33.4
8:30 AM	28.0	33.2	-	26.0	34.8	-	20.0	**1,721.8**	**1,736.1**	54.0	31.9	34.3
8:45 AM	27.3	32.2	-	25.9	34.8	-	22.2	**1,695.1**	**1,713.9**	42.1	33.4	35.7
8:30 AM	28.0	33.2	-	26.0	34.8	-	20.0	1,721.8	1,736.1	54.0	31.9	34.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	B	F	F	F	C	C
7:15 AM	C	C	-	C	C	-	B	F	F	E	C	C
7:30 AM	C	C	-	C	C	-	C	F	F	D	C	C
7:45 AM	C	C	-	C	C	-	C	F	F	D	C	C
8:00 AM	C	C	-	C	C	-	C	F	F	D	C	C
8:15 AM	C	C	-	C	C	-	B	F	F	D	C	C
8:30 AM	C	C	-	C	C	-	B	F	F	D	C	C
8:45 AM	C	C	-	C	C	-	C	F	F	D	C	D
8:30 AM	C	C	-	C	C	-	B	F	F	D	C	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.1**	0.2	-	0.3	0.4	-	0.2	**5.0**	**5.1**	**1.8**	0.3	0.4
7:15 AM	0.7	0.2	-	0.3	0.4	-	0.2	**10.3**	**10.3**	**1.2**	0.3	0.3
7:30 AM	0.9	0.1	-	0.3	0.4	-	0.3	**14.9**	**14.8**	0.7	0.3	0.3
7:45 AM	**1.0**	0.3	-	0.3	0.4	-	0.3	**19.1**	**19.0**	0.7	0.3	0.3
8:00 AM	**1.1**	0.3	-	0.3	0.4	-	0.4	**21.7**	**21.5**	0.7	0.3	0.3
8:15 AM	**1.1**	0.2	-	0.3	0.4	-	0.2	**23.7**	**23.6**	0.8	0.3	0.3
8:30 AM	**1.0**	0.2	-	0.3	0.4	-	0.2	**26.2**	**26.0**	0.9	0.3	0.3
8:45 AM	0.8	0.1	-	0.3	0.4	-	0.4	**25.4**	**25.3**	0.7	0.4	0.4
8:30 AM	1.0	0.2	-	0.3	0.4	-	0.2	26.2	26.0	0.9	0.3	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	132.5	F
7:15 AM	355.2	F
7:30 AM	572.6	F
7:45 AM	756.6	F
8:00 AM	859.6	F
8:15 AM	926.1	F
8:30 AM	**1010.2**	F X
8:45 AM	799.9	F
8:30 AM	1010.2	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	29	-	23	16	-	11	16	90	14	14	553	46
4:15 PM	40	-	19	16	-	11	15	311	14	14	567	42
4:30 PM	35	-	14	16	-	11	12	298	14	14	539	40
4:45 PM	31	-	18	16	-	11	6	278	14	14	506	41
5:00 PM	37	-	15	16	-	11	14	270	14	14	547	52
5:15 PM	26	-	12	16	-	11	7	339	14	14	594	49
5:30 PM	30	-	15	16	-	11	19	308	14	14	575	48
5:45 PM	35	-	15	16	-	11	13	276	14	14	550	63
5:30 PM	30	-	15	16	-	11	19	308	14	14	575	48

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.21	0.19	-	0.12	0.09	-	**1.32**	**1.31**	0.46	0.23	**1.34**	**1.36**
4:15 PM	0.29	0.16	-	0.12	0.09	-	0.41	**1.49**	0.15	0.22	**1.31**	**1.29**
4:30 PM	0.25	0.11	-	0.11	0.09	-	0.36	**1.59**	0.17	0.23	**1.29**	**1.27**
4:45 PM	0.22	0.15	-	0.12	0.09	-	0.20	**1.64**	0.19	0.23	**1.24**	**1.22**
5:00 PM	0.26	0.12	-	0.11	0.09	-	0.43	**1.45**	0.17	0.20	**1.17**	**1.14**
5:15 PM	0.19	0.10	-	0.11	0.09	-	0.16	**1.39**	0.13	0.21	**1.29**	**1.27**
5:30 PM	0.21	0.12	-	0.11	0.09	-	0.50	**1.42**	0.15	0.21	**1.24**	**1.22**
5:45 PM	0.25	0.12	-	0.11	0.09	-	0.19	0.70	0.08	0.22	**1.31**	**1.28**
5:30 PM	0.21	0.12	-	0.11	0.09	-	0.50	1.42	0.15	0.21	1.24	1.22

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.3	26.0	-	19.7	24.0	-	**188.4**	**184.3**	43.5	24.0	**183.1**	**192.1**
4:15 PM	22.3	25.6	-	19.6	24.0	-	**108.6**	**536.8**	28.8	25.1	**481.9**	**479.8**
4:30 PM	21.8	25.0	-	19.5	24.0	-	29.4	**1,022.4**	27.6	25.0	**743.8**	**744.7**
4:45 PM	21.5	25.4	-	19.6	24.0	-	27.7	**1,576.2**	27.6	25.1	**975.0**	**978.9**
5:00 PM	22.0	25.1	-	19.5	24.0	-	31.0	**2,066.5**	27.7	25.2	**1,152.9**	**1,161.3**
5:15 PM	21.0	24.8	-	19.5	24.0	-	28.1	**2,442.9**	27.7	25.1	**1,347.9**	**1,357.3**
5:30 PM	21.4	25.1	-	19.5	24.0	-	32.7	**2,806.2**	27.7	25.0	**1,578.5**	**1,590.7**
5:45 PM	21.8	25.1	-	19.5	24.0	-	29.5	**2,861.3**	27.7	25.0	**1,816.4**	**1,836.6**
5:30 PM	21.4	25.1	-	19.5	24.0	-	32.7	2,806.2	27.7	25.0	1,578.5	1,590.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	B	C	-	F	F	D	C	F	F
4:15 PM	C	C	-	B	C	-	F	F	C	C	F	F
4:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	B	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.7	0.4	-	0.2	0.1	-	**2.9**	**3.7**	**1.6**	0.2	**1.4**	**1.4**
4:15 PM	**1.0**	0.3	-	0.2	0.1	-	**1.5**	**8.1**	0.4	0.2	**2.8**	**2.8**
4:30 PM	0.9	0.2	-	0.2	0.1	-	0.3	**13.7**	0.4	0.2	**4.0**	**3.9**
4:45 PM	0.8	0.3	-	0.2	0.1	-	0.1	**19.8**	0.4	0.2	**5.0**	**4.9**
5:00 PM	0.9	0.2	-	0.2	0.1	-	0.4	**24.8**	0.4	0.2	**5.7**	**5.7**
5:15 PM	0.6	0.2	-	0.2	0.1	-	0.2	**28.8**	0.4	0.2	**6.7**	**6.7**
5:30 PM	0.7	0.2	-	0.2	0.1	-	0.5	**32.8**	0.4	0.2	**7.7**	**7.6**
5:45 PM	0.9	0.2	-	0.2	0.1	-	0.3	**32.5**	0.4	0.2	**8.8**	**8.7**
5:30 PM	0.7	0.2	-	0.2	0.1	-	0.5	32.8	0.4	0.2	7.7	7.6

Intersection Delay and LOS
Time-Period

4:00 PM	165.4	F
4:15 PM	444.6	F
4:30 PM	763	F
4:45 PM	1099.2	F
5:00 PM	1338.6	F
5:15 PM	1596	F
5:30 PM	**1820.6**	F X
5:45 PM	1808.3	F
5:30 PM	1820.6	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	29	1	23	34	1	30	16	90	20	20	553	46
4:15 PM	40	1	19	34	1	30	15	311	20	20	567	42
4:30 PM	35	1	14	34	1	30	12	298	20	20	539	40
4:45 PM	31	1	18	34	1	30	6	278	20	20	506	41
5:00 PM	37	1	15	34	1	30	14	270	20	20	547	52
5:15 PM	26	1	12	34	1	30	7	339	20	20	594	49
5:30 PM	30	1	15	34	1	30	19	308	20	20	575	48
5:45 PM	35	1	15	34	1	30	13	276	20	20	550	63
5:30 PM	30	1	15	34	1	30	19	308	20	20	575	48

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.24	0.19	-	0.25	0.25	-	**1.27**	**1.27**	0.63	0.33	**1.33**	**1.35**
4:15 PM	0.33	0.16	-	0.25	0.25	-	0.41	**1.49**	0.22	0.32	**1.31**	**1.29**
4:30 PM	0.29	0.12	-	0.24	0.25	-	0.36	**1.59**	0.24	0.33	**1.29**	**1.27**
4:45 PM	0.26	0.15	-	0.25	0.25	-	0.20	**1.60**	0.26	0.34	**1.24**	**1.22**
5:00 PM	0.30	0.13	-	0.24	0.25	-	0.42	**1.44**	0.24	0.29	**1.17**	**1.14**
5:15 PM	0.21	0.11	-	0.24	0.25	-	0.16	**1.39**	0.19	0.30	**1.29**	**1.27**
5:30 PM	0.25	0.13	-	0.24	0.25	-	0.50	**1.42**	0.21	0.30	**1.24**	**1.22**
5:45 PM	0.29	0.13	-	0.24	0.25	-	0.19	0.71	0.12	0.32	**1.31**	**1.28**
5:30 PM	0.25	0.13	-	0.24	0.25	-	0.50	1.42	0.21	0.30	1.24	1.22

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.8	26.1	-	21.3	26.2	-	**165.0**	**163.3**	46.0	24.5	**181.4**	**190.2**
4:15 PM	23.1	25.7	-	21.2	26.2	-	**89.0**	**498.5**	29.6	25.7	**478.6**	**476.3**
4:30 PM	22.5	25.1	-	21.1	26.2	-	28.5	**982.1**	28.1	25.8	**741.3**	**742.1**
4:45 PM	22.1	25.5	-	21.2	26.2	-	27.3	**1,517.6**	28.0	25.9	**972.8**	**976.7**
5:00 PM	22.8	25.2	-	21.1	26.2	-	30.5	**1,990.0**	28.4	25.7	**1,151.0**	**1,158.4**
5:15 PM	21.5	24.9	-	21.0	26.2	-	28.0	**2,366.5**	28.3	25.5	**1,348.2**	**1,357.1**
5:30 PM	22.0	25.2	-	21.1	26.2	-	32.0	**2,731.6**	28.3	25.9	**1,581.7**	**1,594.6**
5:45 PM	22.5	25.2	-	21.1	26.2	-	29.5	**2,792.9**	28.3	25.7	**1,820.3**	**1,840.5**
5:30 PM	22.0	25.2	-	21.1	26.2	-	32.0	2,731.6	28.3	25.9	1,581.7	1,594.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	C	C	-	F	F	D	C	F	F
4:15 PM	C	C	-	C	C	-	F	F	C	C	F	F
4:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.7	0.4	-	0.4	0.4	-	**2.5**	**3.2**	**2.1**	0.2	**1.4**	**1.4**
4:15 PM	**1.0**	0.3	-	0.4	0.4	-	**1.2**	**7.6**	0.6	0.3	**2.8**	**2.7**
4:30 PM	0.9	0.2	-	0.4	0.4	-	0.3	**13.1**	0.5	0.3	**4.0**	**3.9**
4:45 PM	0.8	0.3	-	0.4	0.4	-	0.1	**18.9**	0.4	0.3	**5.0**	**4.9**
5:00 PM	0.9	0.3	-	0.4	0.4	-	0.4	**23.9**	0.5	0.3	**5.7**	**5.6**
5:15 PM	0.6	0.2	-	0.4	0.4	-	0.2	**27.9**	0.5	0.3	**6.7**	**6.6**
5:30 PM	0.8	0.3	-	0.4	0.4	-	0.5	**31.9**	0.5	0.3	**7.7**	**7.7**
5:45 PM	0.9	0.3	-	0.4	0.4	-	0.3	**31.7**	0.5	0.3	**8.9**	**8.8**
5:30 PM	0.8	0.3	-	0.4	0.4	-	0.5	31.9	0.5	0.3	7.7	7.7

Intersection Delay and LOS
Time-Period

4:00 PM	150.1	F
4:15 PM	410.6	F
4:30 PM	713	F
4:45 PM	1021.6	F
5:00 PM	1245.1	F
5:15 PM	1496	F
5:30 PM	**1711**	F X
5:45 PM	1703.6	F
5:30 PM	1711	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	29	1	23	34	1	30	16	90	20	20	553	46
4:15 PM	40	1	19	34	1	30	15	311	20	20	567	42
4:30 PM	35	1	14	34	1	30	12	298	20	20	539	40
4:45 PM	31	1	18	34	1	30	6	278	20	20	506	41
5:00 PM	37	1	15	34	1	30	14	270	20	20	547	52
5:15 PM	26	1	12	34	1	30	7	339	20	20	594	49
5:30 PM	30	1	15	34	1	30	19	308	20	20	575	48
5:45 PM	35	1	15	34	1	30	13	276	20	20	550	63
5:45 PM	35	1	15	34	1	30	13	276	20	20	550	63

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.24	0.19	-	0.25	0.25	-	**1.27**	**1.01**	**1.01**	0.35	**1.40**	**1.43**
4:15 PM	0.33	0.16	-	0.25	0.25	-	0.41	**1.02**	**1.00**	0.32	**1.31**	**1.29**
4:30 PM	0.29	0.12	-	0.24	0.25	-	0.36	**1.09**	**1.06**	0.33	**1.29**	**1.27**
4:45 PM	0.26	0.15	-	0.25	0.25	-	0.20	**1.12**	**1.10**	0.34	**1.24**	**1.22**
5:00 PM	0.30	0.13	-	0.24	0.25	-	0.42	**1.00**	0.97	0.29	**1.17**	**1.14**
5:15 PM	0.21	0.11	-	0.24	0.25	-	0.16	0.95	0.93	0.30	**1.29**	**1.27**
5:30 PM	0.25	0.13	-	0.24	0.25	-	0.50	0.97	0.95	0.30	**1.24**	**1.22**
5:45 PM	0.29	0.13	-	0.24	0.25	-	0.19	0.49	0.49	0.27	**1.31**	**1.28**
5:45 PM	0.29	0.13	-	0.24	0.25	-	0.19	0.49	0.49	0.27	1.31	1.28

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.8	26.1	-	21.3	26.2	-	**180.4**	67.9	**83.7**	25.6	**202.8**	**217.1**
4:15 PM	23.1	25.7	-	21.2	26.2	-	**91.1**	76.7	78.7	26.5	**540.2**	**540.1**
4:30 PM	22.5	25.1	-	21.1	26.2	-	30.8	**107.9**	**107.8**	26.9	**803.4**	**807.0**
4:45 PM	22.1	25.5	-	21.2	26.2	-	28.4	**193.3**	**191.5**	27.0	**1,035.3**	**1,042.2**
5:00 PM	22.8	25.2	-	21.1	26.2	-	32.4	**253.1**	**248.8**	26.5	**1,213.7**	**1,224.6**
5:15 PM	21.5	24.9	-	21.0	26.2	-	28.4	**211.2**	**210.6**	26.6	**1,410.5**	**1,422.5**
5:30 PM	22.0	25.2	-	21.1	26.2	-	34.6	**171.2**	**168.6**	26.5	**1,643.2**	**1,658.2**
5:45 PM	22.5	25.2	-	21.1	26.2	-	29.9	48.6	52.1	24.4	**1,882.4**	**1,905.7**
5:45 PM	22.5	25.2	-	21.1	26.2	-	29.9	48.6	52.1	24.4	1,882.4	1,905.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	C	C	-	F	F	F	C	F	F
4:15 PM	C	C	-	C	C	-	F	F	E	C	F	F
4:30 PM	C	C	-	C	C	-	C	F	F	C	F	F
4:45 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:00 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:15 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:45 PM	C	C	-	C	C	-	C	D	D	C	F	F
5:45 PM	C	C	-	C	C	-	C	D	D	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.7	0.4	-	0.4	0.4	-	**3.0**	**1.9**	**1.9**	0.3	**1.6**	**1.6**
4:15 PM	**1.0**	0.3	-	0.4	0.4	-	**1.3**	**2.0**	**2.0**	0.3	**3.1**	**3.1**
4:30 PM	0.9	0.2	-	0.4	0.4	-	0.3	**2.5**	**2.4**	0.3	**4.3**	**4.3**
4:45 PM	0.8	0.3	-	0.4	0.4	-	0.2	**3.5**	**3.4**	0.3	**5.3**	**5.3**
5:00 PM	0.9	0.3	-	0.4	0.4	-	0.4	**4.0**	**3.9**	0.3	**6.0**	**6.0**
5:15 PM	0.6	0.2	-	0.4	0.4	-	0.2	**3.5**	**3.5**	0.3	**7.1**	**7.0**
5:30 PM	0.8	0.3	-	0.4	0.4	-	0.5	**3.1**	**3.0**	0.3	**8.1**	**8.0**
5:45 PM	0.9	0.3	-	0.4	0.4	-	0.3	**1.1**	**1.2**	0.3	**9.2**	**9.1**
5:45 PM	0.9	0.3	-	0.4	0.4	-	0.3	1.1	1.2	0.3	9.2	9.1

Intersection Delay and LOS
Time-Period

4:00 PM	141.1	F
4:15 PM	304.4	F
4:30 PM	441.3	F
4:45 PM	577	F
5:00 PM	685.9	F
5:15 PM	825.7	F
5:30 PM	896.8	F
5:45 PM	**1202.4**	F
5:45 PM	1202.4	F

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	153	-	-	19	111	-	-	222	-
7:15 AM	-	-	-	168	1	-	19	147	-	-	168	-
7:30 AM	-	-	-	127	-	-	26	173	-	-	155	-
7:45 AM	-	-	-	139	-	-	26	197	-	-	135	-
8:00 AM	-	-	-	127	-	-	10	136	-	-	128	-
8:15 AM	-	-	-	136	-	-	16	120	-	-	147	-
8:30 AM	-	-	-	131	-	-	22	173	-	-	179	-
8:45 AM	-	-	-	152	-	-	15	92	-	-	157	-
7:15 AM	-	-	-	168	1	-	19	147	-	-	168	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.87	-	-	0.47	0.54	-	-	0.31	-
7:15 AM	-	-	-	0.88	0.01	-	0.32	0.56	-	-	0.24	-
7:30 AM	-	-	-	0.86	-	-	0.32	0.52	-	-	0.20	-
7:45 AM	-	-	-	0.87	-	-	0.28	0.54	-	-	0.18	-
8:00 AM	-	-	-	0.86	-	-	0.16	0.56	-	-	0.16	-
8:15 AM	-	-	-	0.86	-	-	0.30	0.54	-	-	0.19	-
8:30 AM	-	-	-	0.86	-	-	0.31	0.53	-	-	0.23	-
8:45 AM	-	-	-	0.87	-	-	0.36	0.53	-	-	0.22	-
7:15 AM	-	-	-	0.88	0.01	-	0.32	0.56	-	-	0.24	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.9	-	-	10.5	4.8	-	-	14.4	-
7:15 AM	-	-	-	52.7	37.0	-	10.5	4.3	-	-	14.2	-
7:30 AM	-	-	-	54.6	-	-	7.7	3.9	-	-	10.7	-
7:45 AM	-	-	-	53.4	-	-	8.3	4.5	-	-	11.3	-
8:00 AM	-	-	-	54.6	-	-	6.9	4.2	-	-	9.3	-
8:15 AM	-	-	-	53.7	-	-	8.1	4.7	-	-	11.2	-
8:30 AM	-	-	-	54.2	-	-	7.9	4.3	-	-	11.0	-
8:45 AM	-	-	-	52.9	-	-	9.7	4.6	-	-	13.2	-
7:15 AM	-	-	-	52.7	37.0	-	10.5	4.3	-	-	14.2	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.7	-	-	0.9	0.1	-	-	0.4	-
7:15 AM	-	-	-	0.8	0.0	-	0.7	0.1	-	-	0.3	-
7:30 AM	-	-	-	0.6	-	-	0.7	0.1	-	-	0.2	-
7:45 AM	-	-	-	0.7	-	-	0.6	0.1	-	-	0.2	-
8:00 AM	-	-	-	0.6	-	-	0.4	0.1	-	-	0.2	-
8:15 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.2	-
8:30 AM	-	-	-	0.6	-	-	0.6	0.1	-	-	0.3	-
8:45 AM	-	-	-	0.7	-	-	0.9	0.1	-	-	0.3	-
7:15 AM	-	-	-	0.8	0.0	-	0.7	0.1	-	-	0.3	-

Intersection Delay and LOS
Time-Period

7:00 AM	18.4	B
7:15 AM	19.2	B
7:30 AM	16.1	B
7:45 AM	17.2	B
8:00 AM	16	B
8:15 AM	16.9	B
8:30 AM	16.3	B
8:45 AM	18.3	B
7:15 AM	19.2	B

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	166	-	-	20	113	-	-	226	-
7:15 AM	-	-	-	181	1	-	20	149	-	-	172	-
7:30 AM	-	-	-	140	-	-	27	175	-	-	159	-
7:45 AM	-	-	-	152	-	-	27	199	-	-	139	-
8:00 AM	-	-	-	140	-	-	11	138	-	-	132	-
8:15 AM	-	-	-	149	-	-	17	122	-	-	151	-
8:30 AM	-	-	-	144	-	-	23	175	-	-	183	-
8:45 AM	-	-	-	165	-	-	16	94	-	-	161	-
7:15 AM	-	-	-	181	1	-	20	149	-	-	172	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.88	-	-	0.50	0.56	-	-	0.32	-
7:15 AM	-	-	-	0.89	0.01	-	0.34	0.58	-	-	0.25	-
7:30 AM	-	-	-	0.87	-	-	0.35	0.53	-	-	0.21	-
7:45 AM	-	-	-	0.87	-	-	0.30	0.56	-	-	0.19	-
8:00 AM	-	-	-	0.87	-	-	0.18	0.58	-	-	0.17	-
8:15 AM	-	-	-	0.87	-	-	0.32	0.56	-	-	0.20	-
8:30 AM	-	-	-	0.87	-	-	0.34	0.55	-	-	0.24	-
8:45 AM	-	-	-	0.88	-	-	0.39	0.55	-	-	0.23	-
7:15 AM	-	-	-	0.89	0.01	-	0.34	0.58	-	-	0.25	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.7	-	-	11.9	5.6	-	-	16.0	-
7:15 AM	-	-	-	52.5	35.4	-	11.7	5.1	-	-	15.7	-
7:30 AM	-	-	-	53.3	-	-	8.7	4.4	-	-	12.0	-
7:45 AM	-	-	-	52.9	-	-	9.3	5.2	-	-	12.6	-
8:00 AM	-	-	-	53.3	-	-	7.8	4.9	-	-	10.5	-
8:15 AM	-	-	-	53.0	-	-	9.2	5.4	-	-	12.5	-
8:30 AM	-	-	-	53.0	-	-	8.9	5.0	-	-	12.3	-
8:45 AM	-	-	-	52.7	-	-	10.8	5.1	-	-	14.7	-
7:15 AM	-	-	-	52.5	35.4	-	11.7	5.1	-	-	15.7	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.8	-	-	1.0	0.1	-	-	0.4	-
7:15 AM	-	-	-	0.8	0.0	-	0.8	0.1	-	-	0.3	-
7:30 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.2	-
7:45 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.2	-
8:00 AM	-	-	-	0.7	-	-	0.4	0.1	-	-	0.2	-
8:15 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.2	-
8:30 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.3	-
8:45 AM	-	-	-	0.8	-	-	1.0	0.1	-	-	0.3	-
7:15 AM	-	-	-	0.8	0.0	-	0.8	0.1	-	-	0.3	-

Intersection Delay and LOS
Time-Period

7:00 AM	19.7	B	
7:15 AM	20.4	C	X
7:30 AM	17.1	B	
7:45 AM	18.3	B	
8:00 AM	17	B	
8:15 AM	18.1	B	
8:30 AM	17.4	B	
8:45 AM	19.5	B	
7:15 AM	C	20.4	

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	3	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	166	-	-	20	113	-	-	226	-
7:15 AM	-	-	-	181	1	-	20	149	-	-	172	-
7:30 AM	-	-	-	140	-	-	27	175	-	-	159	-
7:45 AM	-	-	-	152	-	-	27	199	-	-	139	-
8:00 AM	-	-	-	140	-	-	11	138	-	-	132	-
8:15 AM	-	-	-	149	-	-	17	122	-	-	151	-
8:30 AM	-	-	-	144	-	-	23	175	-	-	183	-
8:45 AM	-	-	-	165	-	-	16	94	-	-	161	-
8:45 AM	-	-	-	165	-	-	16	94	-	-	161	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.81	-	-	0.63	0.71	-	-	0.30	-
7:15 AM	-	-	-	0.82	0.01	-	0.45	0.77	-	-	0.23	-
7:30 AM	-	-	-	0.79	-	-	0.46	0.72	-	-	0.20	-
7:45 AM	-	-	-	0.80	-	-	0.40	0.75	-	-	0.17	-
8:00 AM	-	-	-	0.79	-	-	0.24	0.78	-	-	0.16	-
8:15 AM	-	-	-	0.80	-	-	0.42	0.75	-	-	0.19	-
8:30 AM	-	-	-	0.80	-	-	0.44	0.75	-	-	0.22	-
8:45 AM	-	-	-	0.81	-	-	0.38	0.52	-	-	0.20	-
8:45 AM	-	-	-	0.81	-	-	0.38	0.52	-	-	0.20	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	53.4	-	-	9.1	4.5	-	-	12.3	-
7:15 AM	-	-	-	52.3	42.7	-	8.3	4.5	-	-	11.8	-
7:30 AM	-	-	-	55.3	-	-	6.5	3.9	-	-	9.5	-
7:45 AM	-	-	-	54.4	-	-	6.7	4.6	-	-	9.7	-
8:00 AM	-	-	-	55.3	-	-	5.6	4.6	-	-	7.9	-
8:15 AM	-	-	-	54.6	-	-	6.7	4.8	-	-	9.7	-
8:30 AM	-	-	-	55.0	-	-	6.6	4.4	-	-	9.6	-
8:45 AM	-	-	-	53.4	-	-	7.5	3.4	-	-	10.3	-
8:45 AM	-	-	-	53.4	-	-	7.5	3.4	-	-	10.3	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	A	A	-	-	B	-
7:30 AM	-	-	-	E	-	-	A	A	-	-	A	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:00 AM	-	-	-	E	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.5	-	-	**1.1**	0.2	-	-	0.3	-
7:15 AM	-	-	-	0.6	0.0	-	0.9	0.1	-	-	0.3	-
7:30 AM	-	-	-	0.5	-	-	0.9	0.1	-	-	0.2	-
7:45 AM	-	-	-	0.5	-	-	0.8	0.2	-	-	0.2	-
8:00 AM	-	-	-	0.5	-	-	0.5	0.2	-	-	0.2	-
8:15 AM	-	-	-	0.5	-	-	0.8	0.2	-	-	0.2	-
8:30 AM	-	-	-	0.5	-	-	0.8	0.2	-	-	0.2	-
8:45 AM	-	-	-	0.5	-	-	1.0	0.1	-	-	0.2	-
8:45 AM	-	-	-	0.5	-	-	1.0	0.1	-	-	0.2	-

Intersection Delay and LOS
Time-Period

7:00 AM	16	B
7:15 AM	16.3	B
7:30 AM	14.1	B
7:45 AM	15	B
8:00 AM	14.2	B
8:15 AM	14.9	B
8:30 AM	14.3	B
8:45 AM	17.3	B
8:45 AM	B	17.3

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	424	-	-	29	98	-	-	194	-
4:15 PM	-	-	-	463	1	-	26	100	-	-	113	-
4:30 PM	-	-	-	466	-	-	19	101	-	-	103	-
4:45 PM	-	-	-	430	-	-	26	86	-	-	116	-
5:00 PM	-	-	-	386	-	-	28	105	-	-	128	-
5:15 PM	-	-	-	420	2	-	17	112	-	-	146	-
5:30 PM	-	-	-	419	-	-	28	110	-	-	127	-
5:45 PM	-	-	-	459	1	-	22	103	-	-	114	-
4:30 PM	-	-	-	466	-	-	19	101	-	-	103	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	0.98	0.87	-	-	**1.17**	-
4:15 PM	-	-	-	0.96	0.00	-	**1.40**	**1.06**	-	-	0.65	-
4:30 PM	-	-	-	0.96	-	-	0.74	**1.11**	-	-	0.62	-
4:45 PM	-	-	-	0.93	-	-	0.91	0.89	-	-	0.70	-
5:00 PM	-	-	-	0.91	-	-	0.74	0.81	-	-	0.59	-
5:15 PM	-	-	-	0.93	0.01	-	0.58	0.96	-	-	0.68	-
5:30 PM	-	-	-	0.93	-	-	0.77	0.89	-	-	0.77	-
5:45 PM	-	-	-	0.95	0.00	-	0.61	0.80	-	-	0.69	-
4:30 PM	-	-	-	0.96	-	-	0.74	1.11	-	-	0.62	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.8	-	-	53.2	44.8	-	-	**139.5**	-
4:15 PM	-	-	-	30.6	7.8	-	**220.8**	61.1	-	-	**83.1**	-
4:30 PM	-	-	-	30.9	-	-	**178.5**	**143.0**	-	-	49.5	-
4:45 PM	-	-	-	28.9	-	-	47.4	**125.9**	-	-	51.7	-
5:00 PM	-	-	-	29.0	-	-	35.3	44.4	-	-	45.0	-
5:15 PM	-	-	-	28.7	9.6	-	35.9	48.1	-	-	47.3	-
5:30 PM	-	-	-	28.7	-	-	40.3	45.1	-	-	54.3	-
5:45 PM	-	-	-	30.2	7.9	-	42.5	44.6	-	-	51.3	-
4:30 PM	-	-	-	30.9	-	-	178.5	143.0	-	-	49.5	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	D	D	-	-	F	-
4:15 PM	-	-	-	C	A	-	F	F	-	-	F	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	D	-
4:45 PM	-	-	-	C	-	-	D	F	-	-	D	-
5:00 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:15 PM	-	-	-	C	A	-	D	D	-	-	D	-
5:30 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:45 PM	-	-	-	C	A	-	D	D	-	-	D	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	D	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.3**	-	-	0.7	0.4	-	-	0.9	-
4:15 PM	-	-	-	**1.4**	-	-	**4.1**	0.3	-	-	0.5	-
4:30 PM	-	-	-	**1.4**	-	-	**3.6**	0.8	-	-	0.3	-
4:45 PM	-	-	-	**1.3**	-	-	0.7	0.8	-	-	0.4	-
5:00 PM	-	-	-	**1.2**	-	-	**1.8**	0.4	-	-	0.4	-
5:15 PM	-	-	-	**1.3**	0.0	-	**1.2**	0.5	-	-	0.4	-
5:30 PM	-	-	-	**1.3**	-	-	**2.0**	0.4	-	-	0.4	-
5:45 PM	-	-	-	**1.4**	-	-	**1.9**	0.4	-	-	0.4	-
4:30 PM	-	-	-	1.4	-	-	3.6	0.8	-	-	0.3	-

Intersection Delay and LOS
Time-Period

4:00 PM	58.2	E
4:15 PM	58.9	E
4:30 PM	73.1	E
4:45 PM	59.3	E
5:00 PM	36.4	D
5:15 PM	37.8	D
5:30 PM	37.9	D
5:45 PM	37.1	D
4:30 PM	E	73.1

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	428	-	-	32	102	-	-	196	-
4:15 PM	-	-	-	467	1	-	29	104	-	-	115	-
4:30 PM	-	-	-	470	-	-	22	105	-	-	105	-
4:45 PM	-	-	-	434	-	-	29	90	-	-	118	-
5:00 PM	-	-	-	390	-	-	31	109	-	-	130	-
5:15 PM	-	-	-	424	2	-	20	116	-	-	148	-
5:30 PM	-	-	-	423	-	-	31	114	-	-	129	-
5:45 PM	-	-	-	463	1	-	25	107	-	-	116	-
4:45 PM	-	-	-	434	-	-	29	90	-	-	118	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	**1.12**	0.93	-	-	**1.18**	-
4:15 PM	-	-	-	0.96	0.00	-	**1.36**	**1.12**	-	-	0.69	-
4:30 PM	-	-	-	0.96	-	-	0.88	**1.18**	-	-	0.63	-
4:45 PM	-	-	-	0.94	-	-	**1.05**	0.95	-	-	0.71	-
5:00 PM	-	-	-	0.92	-	-	0.79	0.86	-	-	0.78	-
5:15 PM	-	-	-	0.93	0.01	-	0.66	**1.02**	-	-	0.84	-
5:30 PM	-	-	-	0.93	-	-	**1.01**	0.95	-	-	0.57	-
5:45 PM	-	-	-	0.96	0.00	-	0.75	0.87	-	-	0.70	-
4:45 PM	-	-	-	0.94	-	-	1.05	0.95	-	-	0.71	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.8	-	-	**100.5**	47.9	-	-	**144.3**	-
4:15 PM	-	-	-	31.0	7.6	-	**344.4**	**89.0**	-	-	**101.1**	-
4:30 PM	-	-	-	31.3	-	-	**378.3**	**229.8**	-	-	49.8	-
4:45 PM	-	-	-	28.9	-	-	**309.1**	**257.2**	-	-	52.1	-
5:00 PM	-	-	-	28.9	-	-	**169.1**	**140.6**	-	-	55.2	-
5:15 PM	-	-	-	28.7	9.4	-	41.7	**97.8**	-	-	58.1	-
5:30 PM	-	-	-	28.7	-	-	49.1	79.9	-	-	43.6	-
5:45 PM	-	-	-	30.6	7.8	-	50.5	52.9	-	-	51.7	-
4:45 PM	-	-	-	28.9	-	-	309.1	257.2	-	-	52.1	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	F	D	-	-	F	-
4:15 PM	-	-	-	C	A	-	F	F	-	-	F	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	D	-
4:45 PM	-	-	-	C	-	-	F	F	-	-	D	-
5:00 PM	-	-	-	C	-	-	F	F	-	-	E	-
5:15 PM	-	-	-	C	A	-	D	F	-	-	E	-
5:30 PM	-	-	-	C	-	-	F	E	-	-	D	-
5:45 PM	-	-	-	C	A	-	D	D	-	-	D	-
4:45 PM	-	-	-	C	-	-	F	F	-	-	D	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.3**	-	-	**1.9**	0.4	-	-	0.9	-
4:15 PM	-	-	-	**1.4**	-	-	**6.1**	0.4	-	-	0.6	-
4:30 PM	-	-	-	**1.4**	-	-	**7.4**	**1.1**	-	-	0.3	-
4:45 PM	-	-	-	**1.3**	-	-	**6.9**	**1.3**	-	-	0.4	-
5:00 PM	-	-	-	**1.2**	-	-	**4.3**	0.9	-	-	0.4	-
5:15 PM	-	-	-	**1.3**	-	-	**1.5**	0.7	-	-	0.5	-
5:30 PM	-	-	-	**1.3**	-	-	**1.3**	0.6	-	-	0.4	-
5:45 PM	-	-	-	**1.4**	-	-	0.6	0.5	-	-	0.4	-
4:45 PM	-	-	-	1.3	-	-	6.9	1.3	-	-	0.4	-

Intersection Delay and LOS
Time-Period

4:00 PM	63.6	E
4:15 PM	79.9	E
4:30 PM	112.3	F
4:45 PM	118.4	F
5:00 PM	77.4	E
5:15 PM	54.7	D
5:30 PM	46.9	D
5:45 PM	39.9	D
4:45 PM F	118.4	

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	3	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	428	-	-	32	102	-	-	196	-
4:15 PM	-	-	-	467	1	-	29	104	-	-	115	-
4:30 PM	-	-	-	470	-	-	22	105	-	-	105	-
4:45 PM	-	-	-	434	-	-	29	90	-	-	118	-
5:00 PM	-	-	-	390	-	-	31	109	-	-	130	-
5:15 PM	-	-	-	424	2	-	20	116	-	-	148	-
5:30 PM	-	-	-	423	-	-	31	114	-	-	129	-
5:45 PM	-	-	-	463	1	-	25	107	-	-	116	-
4:45 PM	-	-	-	434	-	-	29	90	-	-	118	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.83	-	-	0.87	0.76	-	-	0.71	-
4:15 PM	-	-	-	0.84	0.01	-	0.83	**1.01**	-	-	0.57	-
4:30 PM	-	-	-	0.84	-	-	0.85	**1.09**	-	-	0.27	-
4:45 PM	-	-	-	0.83	-	-	**1.11**	0.91	-	-	0.28	-
5:00 PM	-	-	-	0.83	-	-	0.73	0.83	-	-	0.43	-
5:15 PM	-	-	-	0.83	0.01	-	0.59	0.92	-	-	0.41	-
5:30 PM	-	-	-	0.83	-	-	0.75	0.87	-	-	0.45	-
5:45 PM	-	-	-	0.84	0.01	-	0.47	0.57	-	-	0.34	-
4:45 PM	-	-	-	0.83	-	-	1.11	0.91	-	-	0.28	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	28.3	-	-	35.3	39.4	-	-	43.5	-
4:15 PM	-	-	-	26.5	14.9	-	39.4	62.8	-	-	45.7	-
4:30 PM	-	-	-	26.4	-	-	24.9	**83.2**	-	-	28.9	-
4:45 PM	-	-	-	28.1	-	-	75.2	74.7	-	-	27.5	-
5:00 PM	-	-	-	30.2	-	-	39.3	41.7	-	-	36.7	-
5:15 PM	-	-	-	28.5	17.4	-	25.9	47.2	-	-	32.8	-
5:30 PM	-	-	-	28.6	-	-	31.0	43.8	-	-	38.1	-
5:45 PM	-	-	-	26.7	15.1	-	26.9	28.8	-	-	33.0	-
4:45 PM	-	-	-	28.1	-	-	75.2	74.7	-	-	27.5	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	D	D	-	-	D	-
4:15 PM	-	-	-	C	B	-	D	F	-	-	D	-
4:30 PM	-	-	-	C	-	-	C	F	-	-	C	-
4:45 PM	-	-	-	C	-	-	F	E	-	-	C	-
5:00 PM	-	-	-	C	-	-	D	D	-	-	D	-
5:15 PM	-	-	-	C	B	-	C	D	-	-	C	-
5:30 PM	-	-	-	C	-	-	C	D	-	-	D	-
5:45 PM	-	-	-	C	B	-	C	C	-	-	C	-
4:45 PM	-	-	-	C	-	-	F	E	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.9	-	-	**3.0**	0.5	-	-	0.5	-
4:15 PM	-	-	-	0.9	-	-	**3.6**	0.8	-	-	0.3	-
4:30 PM	-	-	-	0.9	-	-	0.8	0.9	-	-	0.2	-
4:45 PM	-	-	-	0.9	-	-	**2.9**	0.9	-	-	0.3	-
5:00 PM	-	-	-	0.8	-	-	**3.8**	0.7	-	-	0.3	-
5:15 PM	-	-	-	0.9	0.0	-	**2.0**	0.7	-	-	0.4	-
5:30 PM	-	-	-	0.9	-	-	**3.0**	0.7	-	-	0.3	-
5:45 PM	-	-	-	0.9	-	-	**1.8**	0.4	-	-	0.3	-
4:45 PM	-	-	-	0.9	-	-	2.9	0.9	-	-	0.3	-

Intersection Delay and LOS
Time-Period

4:00 PM	35.1	D
4:15 PM	42	D
4:30 PM	47	D
4:45 PM	48.7	D
5:00 PM	36	D
5:15 PM	35.5	D
5:30 PM	35.2	D
5:45 PM	28.1	C
4:45 PM	D	48.7

X

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	952	948	0
Future Vol, veh/h	16	0	0	952	948	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	952	948	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1424	-	-	0	-	0
Stage 1	948	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	112	0	0	-	-	0
Stage 1	308	0	0	-	-	0
Stage 2	555	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	112	-	-	-	-	-
Mov Cap-2 Maneuver	112	-	-	-	-	-
Stage 1	308	-	-	-	-	-
Stage 2	555	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	42.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	112	-
HCM Lane V/C Ratio	-	0.143	-
HCM Control Delay (s)	-	42.4	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	0.5	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	960	1016	0
Future Vol, veh/h	16	0	0	960	1016	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	960	1016	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1496	-	-	0	-	0
Stage 1	1016	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	100	0	0	-	-	0
Stage 1	282	0	0	-	-	0
Stage 2	552	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	100	-	-	-	-	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	282	-	-	-	-	-
Stage 2	552	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.7	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	100	-
HCM Lane V/C Ratio	-	0.16	-
HCM Control Delay (s)	-	47.7	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	0.5	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	472	2500	0
Future Vol, veh/h	16	0	0	472	2500	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	472	2500	0

Major/Minor	Minor2			Major1		Major2
Conflicting Flow All	2736	-	-	0	-	0
Stage 1	2500	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	~ 13	0	0	-	-	0
Stage 1	39	0	0	-	-	0
Stage 2	743	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 13	-	-	-	-	-
Mov Cap-2 Maneuver	~ 13	-	-	-	-	-
Stage 1	39	-	-	-	-	-
Stage 2	743	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 728.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	13	-
HCM Lane V/C Ratio	-	1.231	-
HCM Control Delay (s)	-	$ 728.9	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	2.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	500	2524	0
Future Vol, veh/h	16	0	0	500	2524	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	500	2524	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2774	-	-	0	-	0
Stage 1	2524	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	~ 12	0	0	-	-	0
Stage 1	38	0	0	-	-	0
Stage 2	731	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 12	-	-	-	-	-
Mov Cap-2 Maneuver	~ 12	-	-	-	-	-
Stage 1	38	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 810.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	12	-
HCM Lane V/C Ratio	-	1.333	-
HCM Control Delay (s)	-	$ 810.8	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	2.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCS7 Two-Way Stop-Control Report

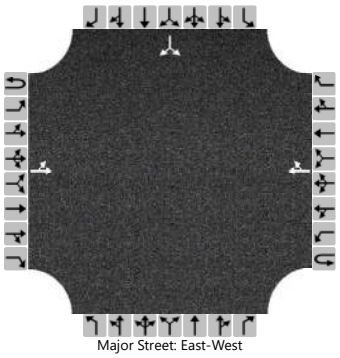
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 3

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		139	240				252	37						33		9
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		139													42	
Capacity, c (veh/h)		1202													340	
v/c Ratio		0.12													0.12	
95% Queue Length, Q_{95} (veh)		0.4													0.4	
Control Delay (s/veh)		8.4													17.1	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)		3.8												17.1		
Approach LOS														C		

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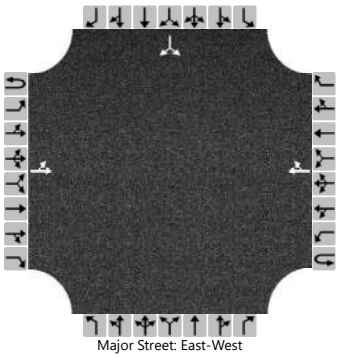
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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
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Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 3

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		41	251				241	12						128		37
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		41													165	
Capacity, c (veh/h)		1240													484	
v/c Ratio		0.03													0.34	
95% Queue Length, Q_{95} (veh)		0.1													1.5	
Control Delay (s/veh)		8.0													16.2	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)		1.4												16.2		
Approach LOS														C		

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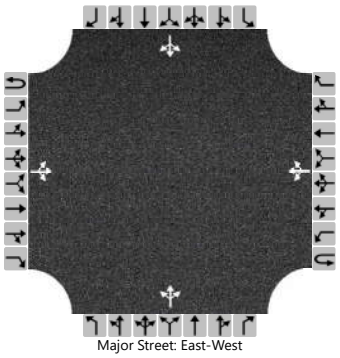
General Information

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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 3

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		17	251	6		12	156	16		19	1	38		4	1	4
Percent Heavy Vehicles (%)		15				3				3	3	3		15	3	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.13				7.13	6.53	6.23		7.25	6.53	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.53	4.03	3.33		3.64	4.03	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17				12					58				9	
Capacity, c (veh/h)		1330				1302					644				559	
v/c Ratio		0.01				0.01					0.09				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.3				0.0	
Control Delay (s/veh)		7.7				7.8					11.1				11.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)		0.6				0.6				11.1				11.5		
Approach LOS										B				B		

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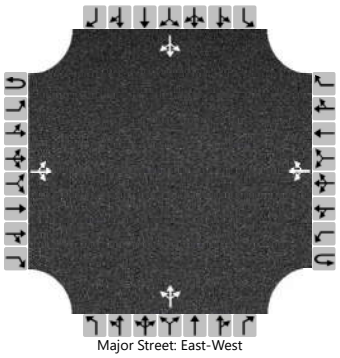
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Phase 3

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	164	19		32	251	5		10	1	19		15	1	17
Percent Heavy Vehicles (%)		15				3				3	3	3		15	3	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.13				7.13	6.53	6.23		7.25	6.53	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.53	4.03	3.33		3.64	4.03	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				32					30				33	
Capacity, c (veh/h)		1237				1386					647				555	
v/c Ratio		0.00				0.02					0.05				0.06	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.1				0.2	
Control Delay (s/veh)		7.9				7.7					10.8				11.9	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.2				1.0				10.8				11.9			
Approach LOS									B				B			

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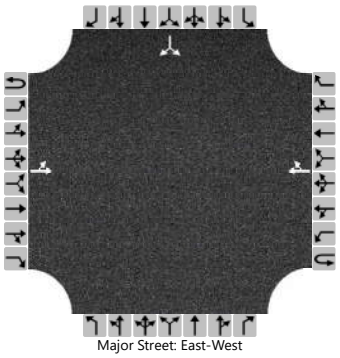
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	140				188	13						3		0
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													3	
Capacity, c (veh/h)		1297													624	
v/c Ratio		0.00													0.00	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8													10.8	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.3												10.8		
Approach LOS														B		

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HCS7 Two-Way Stop-Control Report

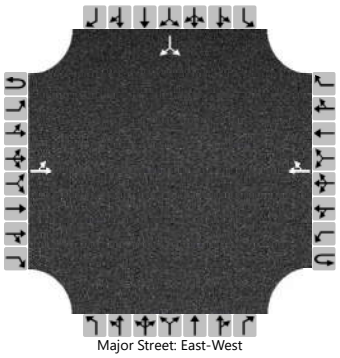
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	188				144	4						13		5
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													18	
Capacity, c (veh/h)		1358													677	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.7													10.5	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.2												10.5		
Approach LOS														B		

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HCS7 Two-Way Stop-Control Report

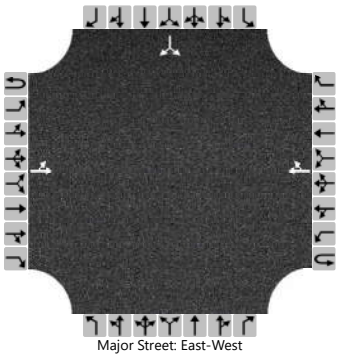
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "B"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "B"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		15	140				188	5						5		4
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		15													9	
Capacity, c (veh/h)		1306													685	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8													10.3	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.8												10.3		
Approach LOS														B		

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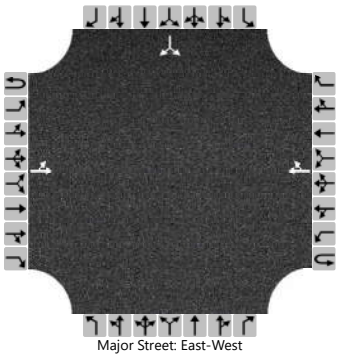
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "C"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "C"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	185				156	3						8		9
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													17	
Capacity, c (veh/h)		1345													722	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.7													10.1	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.3												10.1		
Approach LOS														B		

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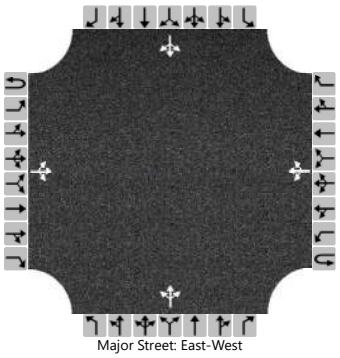
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		64	139	87		28	144	8		22	1	10		3	1	14
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		64				28					33				18	
Capacity, c (veh/h)		1353				1269					485				693	
v/c Ratio		0.05				0.02					0.07				0.03	
95% Queue Length, Q_{95} (veh)		0.1				0.1					0.2				0.1	
Control Delay (s/veh)		7.8				7.9					13.0				10.3	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	2.1				1.4				13.0				10.3			
Approach LOS									B				B			

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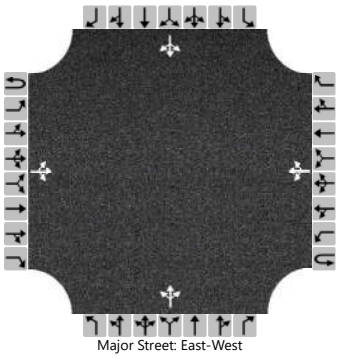
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Phase 3

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		20	129	28		9	130	3		87	1	38		12	1	55
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				9					126				68	
Capacity, c (veh/h)		1375				1347					598				790	
v/c Ratio		0.01				0.01					0.21				0.09	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.8				0.3	
Control Delay (s/veh)		7.7				7.7					12.6				10.0	
Level of Service (LOS)		A				A					B				A	
Approach Delay (s/veh)		1.0				0.5				12.6				10.0		
Approach LOS										B				A		

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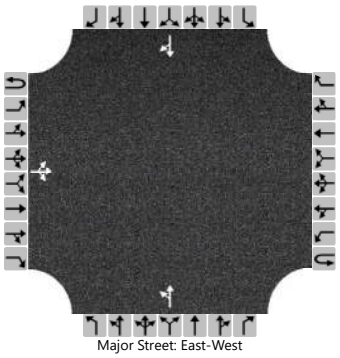
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Phase 3

Site Information

Intersection	Driveway "E"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "E"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		1	1	1						5	291				178	8
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1								296						186
Capacity, c (veh/h)		1113								865						867
v/c Ratio		0.00								0.34						0.21
95% Queue Length, Q_{95} (veh)		0.0								1.5						0.8
Control Delay (s/veh)		8.2								11.3						10.3
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		2.8								11.3				10.3		
Approach LOS										B				B		

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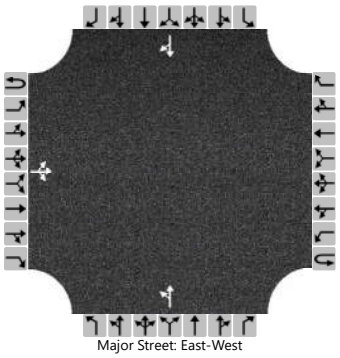
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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Phase 3

Site Information

Intersection	Driveway "E"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "E"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		3	1	3						5	179				293	3
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3								184						296
Capacity, c (veh/h)		1113								854						858
v/c Ratio		0.00								0.22						0.35
95% Queue Length, Q_{95} (veh)		0.0								0.8						1.5
Control Delay (s/veh)		8.2								10.4						11.4
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		3.5								10.4				11.4		
Approach LOS										B				B		

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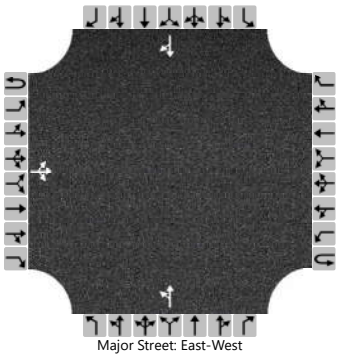
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Phase 3

Site Information

Intersection	Driveway "F"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "F"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		1	1	1						5	290				170	8
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1								295						178
Capacity, c (veh/h)		1113								865						867
v/c Ratio		0.00								0.34						0.21
95% Queue Length, Q_{95} (veh)		0.0								1.5						0.8
Control Delay (s/veh)		8.2								11.3						10.2
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		2.8								11.3				10.2		
Approach LOS										B				B		

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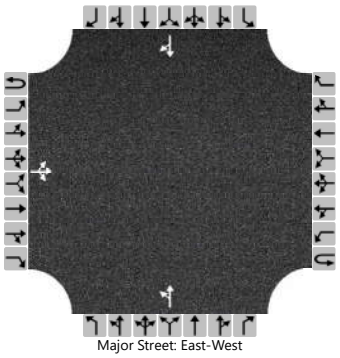
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2030
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Phase 3

Site Information

Intersection	Driveway "F"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "F"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		3	1	3						5	176				290	3
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3								181						293
Capacity, c (veh/h)		1113								854						858
v/c Ratio		0.00								0.21						0.34
95% Queue Length, Q_{95} (veh)		0.0								0.8						1.5
Control Delay (s/veh)		8.2								10.3						11.4
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		3.5								10.3				11.4		
Approach LOS										B				B		

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Horizon Analysis

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (1)

N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018

Horizon Year **2040** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting		
	276	**70**	A.M.	100% IP Development
	87	**275**	P.M.	

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

		Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	7:00 AM	15	7	6	4	2	7	10	291	27	19	87	19
Existing Volumes (Demand) - Period 2-	7:15 AM	18	10	12	3	0	12	7	388	18	31	135	12
Existing Volumes (Demand) - Period 3-	7:30 AM	28	13	10	6	6	7	3	381	32	25	174	13
Existing Volumes (Demand) - Period 4-	7:45 AM	26	10	7	13	5	18	6	320	23	29	173	8
Existing Volumes (Demand) - Period 5-	8:00 AM	18	7	8	7	8	11	5	286	6	20	140	19
Existing Volumes (Demand) - Period 6-	8:15 AM	14	4	2	6	5	13	4	275	8	24	156	10
Existing Volumes (Demand) - Period 7-	8:30 AM	16	6	9	3	7	4	5	257	10	23	135	6
Existing Volumes (Demand) - Period 8-	8:45 AM	23	12	5	6	3	9	2	236	14	22	138	11
Maximum Existing AM Volumes		**28**	**13**	**10**	**6**	**6**	**7**	**3**	**381**	**32**	**25**	**174**	**13**
Background Traffic Growth		12	6	4	3	3	3	1	168	14	11	77	6
BEK		0	0	0	0	0	0	0	3	0	0	1	0
Maverik C-Store		5	0	0	0	0	2	0	13	0	2	12	4
AM Pk Hr. NO BUILD Volumes - Preiod 1		**32**	**13**	**10**	**7**	**5**	**12**	**11**	**475**	**41**	**32**	**177**	**29**
AM Pk Hr. NO BUILD Volumes - Period 2		**35**	**16**	**16**	**6**	**3**	**17**	**8**	**572**	**32**	**44**	**225**	**22**
AM Pk Hr. NO BUILD Volumes - Preiod 3		**45**	**19**	**14**	**9**	**9**	**12**	**4**	**565**	**46**	**38**	**264**	**23**
AM Pk Hr. NO BUILD Volumes - Period 4		**43**	**16**	**11**	**16**	**8**	**23**	**7**	**504**	**37**	**42**	**263**	**18**
AM Pk Hr. NO BUILD Volumes - Preiod 5		**35**	**13**	**12**	**10**	**11**	**16**	**6**	**470**	**20**	**33**	**230**	**29**
AM Pk Hr. NO BUILD Volumes - Period 6		**31**	**10**	**6**	**9**	**8**	**18**	**5**	**459**	**22**	**37**	**246**	**20**
AM Pk Hr. NO BUILD Volumes - Preiod 7		**33**	**12**	**13**	**6**	**10**	**9**	**6**	**441**	**24**	**36**	**225**	**16**
AM Pk Hr. NO BUILD Volumes - Period 8		**40**	**18**	**9**	**9**	**6**	**14**	**3**	**420**	**28**	**35**	**228**	**21**
Maximum AM NO BUILD Volumes		**45**	**19**	**14**	**9**	**9**	**12**	**4**	**565**	**46**	**38**	**264**	**23**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.44%***	***0.16%***	***14.16%***	***1.57%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)		***3.54%***	***1.44%***	***14.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.16%***	***1.57%***	*0.00%*
Total Primary Trips Generated		1	1	3	0	1	1	10	2	0	1	1	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1		**33**	**14**	**13**	**7**	**6**	**13**	**21**	**477**	**41**	**33**	**178**	**29**
AM Pk Hr. BUILD Volumes - Period 2		**36**	**17**	**19**	**6**	**4**	**18**	**18**	**574**	**32**	**45**	**226**	**22**
AM Pk Hr. BUILD Volumes - Preiod 3		**46**	**20**	**17**	**9**	**10**	**13**	**14**	**567**	**46**	**39**	**265**	**23**
AM Pk Hr. BUILD Volumes - Preiod 4		**44**	**17**	**14**	**16**	**9**	**24**	**17**	**506**	**37**	**43**	**264**	**18**
AM Pk Hr. BUILD Volumes - Period 5		**36**	**14**	**15**	**10**	**12**	**17**	**16**	**472**	**20**	**34**	**231**	**29**
AM Pk Hr. BUILD Volumes - Preiod 6		**32**	**11**	**9**	**9**	**9**	**19**	**15**	**461**	**22**	**38**	**247**	**20**
AM Pk Hr. BUILD Volumes - Preiod 7		**34**	**13**	**16**	**6**	**11**	**10**	**16**	**443**	**24**	**37**	**226**	**16**
AM Pk Hr. BUILD Volumes - Period 8		**41**	**19**	**12**	**9**	**7**	**15**	**13**	**422**	**28**	**36**	**229**	**21**
Maximum AM BUILD Volumes (Demand)		**46**	**20**	**17**	**9**	**10**	**13**	**14**	**567**	**46**	**39**	**265**	**23**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

		Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	4:00 PM	23	9	8	25	26	40	7	180	10	19	318	14
Existing Volumes (Demand) - Period 2-	4:15 PM	15	6	8	15	16	39	10	191	13	12	331	34
Existing Volumes (Demand) - Period 3-	4:30 PM	14	4	9	12	27	46	7	215	15	23	288	32
Existing Volumes (Demand) - Period 4-	4:45 PM	26	9	16	22	15	36	7	211	55	12	303	27
Existing Volumes (Demand) - Period 5-	5:00 PM	26	19	8	22	31	52	12	238	8	11	349	23
Existing Volumes (Demand) - Period 6-	5:15 PM	16	11	8	23	24	35	7	224	13	16	301	38
Existing Volumes (Demand) - Period 7-	5:30 PM	24	11	7	20	22	33	9	245	13	22	318	16
Existing Volumes (Demand) - Period 8-	5:45 PM	16	6	9	25	26	43	5	208	10	23	335	28
Maximum Existing PM Volumes		**26**	**19**	**8**	**22**	**31**	**52**	**12**	**238**	**8**	**11**	**349**	**23**
Background Traffic Growth		11	8	4	10	14	23	5	105	4	5	154	10
BEK		0	0	0	0	0	0	0	2	0	1	4	0
Maverik C-Store		4	0	0	0	0	2	0	13	0	2	12	4
PM Pk Hr. NO BUILD Volumes - Preiod 1		**38**	**17**	**12**	**35**	**40**	**65**	**12**	**300**	**14**	**27**	**488**	**28**
PM Pk Hr. NO BUILD Volumes - Period 2		**30**	**14**	**12**	**25**	**30**	**64**	**15**	**311**	**17**	**20**	**501**	**48**
PM Pk Hr. NO BUILD Volumes - Preiod 3		**29**	**12**	**13**	**22**	**41**	**71**	**12**	**335**	**19**	**31**	**458**	**46**
PM Pk Hr. NO BUILD Volumes - Period 4		**41**	**17**	**20**	**32**	**29**	**61**	**12**	**331**	**59**	**20**	**473**	**41**
PM Pk Hr. NO BUILD Volumes - Preiod 5		**41**	**27**	**12**	**32**	**45**	**77**	**17**	**358**	**12**	**19**	**519**	**37**
PM Pk Hr. NO BUILD Volumes - Period 6		**31**	**19**	**12**	**33**	**38**	**60**	**12**	**344**	**17**	**24**	**471**	**52**
PM Pk Hr. NO BUILD Volumes - Preiod 7		**39**	**19**	**11**	**30**	**36**	**58**	**14**	**365**	**17**	**30**	**488**	**30**
PM Pk Hr. NO BUILD Volumes - Period 8		**31**	**14**	**13**	**35**	**40**	**68**	**10**	**328**	**14**	**31**	**505**	**42**
Maximum PM NO BUILD Volumes		**41**	**27**	**12**	**32**	**45**	**77**	**17**	**358**	**12**	**19**	**519**	**37**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.44%***	***0.16%***	***14.16%***	***1.57%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)		***3.54%***	***1.44%***	***14.16%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.16%***	***1.57%***	*0.00%*
Total Primary Trips Generated		3	1	10	0	1	1	4	1	0	1	2	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1		**41**	**18**	**22**	**35**	**41**	**66**	**16**	**301**	**14**	**28**	**490**	**28**
PM Pk Hr. BUILD Volumes - Period 2		**33**	**15**	**22**	**25**	**31**	**65**	**19**	**312**	**17**	**21**	**503**	**48**
PM Pk Hr. BUILD Volumes - Preiod 3		**32**	**13**	**23**	**22**	**42**	**72**	**16**	**336**	**19**	**32**	**460**	**46**
PM Pk Hr. BUILD Volumes - Preiod 4		**44**	**18**	**30**	**32**	**30**	**62**	**16**	**332**	**59**	**21**	**475**	**41**
PM Pk Hr. BUILD Volumes - Period 5		**44**	**28**	**22**	**32**	**46**	**78**	**21**	**359**	**12**	**20**	**521**	**37**
PM Pk Hr. BUILD Volumes - Preiod 6		**34**	**20**	**22**	**33**	**39**	**61**	**16**	**345**	**17**	**25**	**473**	**52**
PM Pk Hr. BUILD Volumes - Preiod 7		**42**	**20**	**21**	**30**	**37**	**59**	**18**	**366**	**17**	**31**	**490**	**30**
PM Pk Hr. BUILD Volumes - Period 8		**34**	**15**	**23**	**35**	**41**	**69**	**14**	**329**	**14**	**32**	**507**	**42**
Maximum PM BUILD Volumes		**44**	**28**	**22**	**32**	**46**	**78**	**21**	**359**	**12**	**20**	**521**	**37**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Los Volcanes Rd.** (2)
N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018
Horizon Year **2040** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd.			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	111	27	3	15	47	61	19	459	52	103	275	45
Existing Volumes (Demand) - Period 2- 7:15 AM	74	32	3	28	14	48	4	324	90	72	169	18
Existing Volumes (Demand) - Period 3- 7:30 AM	42	11	1	32	9	40	5	334	40	65	173	24
Existing Volumes (Demand) - Period 4- 7:45 AM	56	11	6	13	6	44	1	289	27	45	159	22
Existing Volumes (Demand) - Period 5- 8:00 AM	78	12	10	10	2	30	6	267	21	44	164	28
Existing Volumes (Demand) - Period 6- 8:15 AM	63	13	10	8	2	35	4	258	23	32	143	18
Existing Volumes (Demand) - Period 7- 8:30 AM	39	8	8	5	7	25	7	237	23	43	160	14
Existing Volumes (Demand) - Period 8- 8:45 AM	17	3	2	8	6	18	7	93	13	26	66	6
Maximum Existing AM Volumes	**111**	**27**	**3**	**15**	**47**	**61**	**19**	**459**	**52**	**103**	**275**	**45**
Background Traffic Growth	49	12	1	7	21	27	8	202	23	45	121	20
BEK	0	0	0	1	0	1	0	0	4	7	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**160**	**40**	**4**	**41**	**69**	**99**	**27**	**661**	**98**	**166**	**396**	**65**
AM Pk Hr. NO BUILD Volumes - Period 2	**123**	**45**	**4**	**54**	**36**	**86**	**12**	**526**	**136**	**135**	**290**	**38**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**91**	**24**	**2**	**58**	**31**	**78**	**13**	**536**	**86**	**128**	**294**	**44**
AM Pk Hr. NO BUILD Volumes - Period 4	**105**	**24**	**7**	**39**	**28**	**82**	**9**	**491**	**73**	**108**	**280**	**42**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**127**	**25**	**11**	**36**	**24**	**68**	**14**	**469**	**67**	**107**	**285**	**48**
AM Pk Hr. NO BUILD Volumes - Period 6	**112**	**26**	**11**	**34**	**24**	**73**	**12**	**460**	**69**	**95**	**264**	**38**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**88**	**21**	**9**	**31**	**29**	**63**	**15**	**439**	**69**	**106**	**281**	**34**
AM Pk Hr. NO BUILD Volumes - Period 8	**66**	**16**	**3**	**34**	**28**	**56**	**15**	**295**	**59**	**89**	**187**	**26**
Maximum AM NO BUILD Volumes	**160**	**40**	**4**	**41**	**69**	**99**	**27**	**661**	**98**	**166**	**396**	**65**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***0.35%***	***2.58%***	*0.00%*	***1.73%***	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***23.42%***
Percent IP Trips Generated(Exiting)	***23.42%***	***2.58%***	***1.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***0.35%***	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	5	1	1	1	2	0	2	1	1	0	3	17
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**165**	**41**	**5**	**42**	**71**	**99**	**29**	**662**	**99**	**166**	**399**	**82**
AM Pk Hr. BUILD Volumes - Period 2	**128**	**46**	**5**	**55**	**38**	**86**	**14**	**527**	**137**	**135**	**293**	**55**
AM Pk Hr. BUILD Volumes - Preiod 3	**96**	**25**	**3**	**59**	**33**	**78**	**15**	**537**	**87**	**128**	**297**	**61**
AM Pk Hr. BUILD Volumes - Preiod 4	**110**	**25**	**8**	**40**	**30**	**82**	**11**	**492**	**74**	**108**	**283**	**59**
AM Pk Hr. BUILD Volumes - Period 5	**132**	**26**	**12**	**37**	**26**	**68**	**16**	**470**	**68**	**107**	**288**	**65**
AM Pk Hr. BUILD Volumes - Preiod 6	**117**	**27**	**12**	**35**	**26**	**73**	**14**	**461**	**70**	**95**	**267**	**55**
AM Pk Hr. BUILD Volumes - Preiod 7	**93**	**22**	**10**	**32**	**31**	**63**	**17**	**440**	**70**	**106**	**284**	**51**
AM Pk Hr. BUILD Volumes - Period 8	**71**	**17**	**4**	**35**	**30**	**56**	**17**	**296**	**60**	**89**	**190**	**43**
Maximum AM BUILD Volumes (Demand)	**165**	**41**	**5**	**42**	**71**	**99**	**29**	**662**	**99**	**166**	**399**	**82**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Los Volcanes Rd			Westbound (Los Volcanes Rd.			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	23	10	7	30	11	53	3	221	21	33	305	27
Existing Volumes (Demand) - Period 2- 4:15 PM	19	6	6	21	10	44	4	218	17	47	349	22
Existing Volumes (Demand) - Period 3- 4:30 PM	48	5	7	34	10	64	5	234	31	43	286	20
Existing Volumes (Demand) - Period 4- 4:45 PM	40	14	4	23	6	45	4	275	25	61	313	24
Existing Volumes (Demand) - Period 5- 5:00 PM	48	14	16	59	33	74	7	277	44	55	288	22
Existing Volumes (Demand) - Period 6- 5:15 PM	39	12	6	26	14	55	5	256	16	40	321	36
Existing Volumes (Demand) - Period 7- 5:30 PM	32	11	4	24	18	47	5	264	29	36	309	26
Existing Volumes (Demand) - Period 8- 5:45 PM	28	10	4	20	6	36	4	234	25	43	368	39
Maximum Existing PM Volumes	**48**	**14**	**16**	**59**	**33**	**74**	**7**	**277**	**44**	**55**	**288**	**22**
Background Traffic Growth	21	6	7	26	15	33	3	122	19	24	127	10
BEK	0	0	0	4	0	9	0	0	2	4	0	0
Maverik C-Store	0	1	0	18	1	10	0	0	19	11	0	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**44**	**17**	**14**	**78**	**27**	**105**	**6**	**343**	**61**	**72**	**432**	**37**
PM Pk Hr. NO BUILD Volumes - Period 2	**40**	**13**	**13**	**69**	**26**	**96**	**7**	**340**	**57**	**86**	**476**	**32**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**69**	**12**	**14**	**82**	**26**	**116**	**8**	**356**	**71**	**82**	**413**	**30**
PM Pk Hr. NO BUILD Volumes - Period 4	**61**	**21**	**11**	**71**	**22**	**97**	**7**	**397**	**65**	**100**	**440**	**34**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**69**	**21**	**23**	**107**	**49**	**126**	**10**	**399**	**84**	**94**	**415**	**32**
PM Pk Hr. NO BUILD Volumes - Period 6	**60**	**19**	**13**	**74**	**30**	**107**	**8**	**378**	**56**	**79**	**448**	**46**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**53**	**18**	**11**	**72**	**34**	**99**	**8**	**386**	**69**	**75**	**436**	**36**
PM Pk Hr. NO BUILD Volumes - Period 8	**49**	**17**	**11**	**68**	**22**	**88**	**7**	**356**	**65**	**82**	**495**	**49**
Maximum PM NO BUILD Volumes	**69**	**21**	**23**	**107**	**49**	**126**	**10**	**399**	**84**	**94**	**415**	**32**
Percent IP Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***0.35%***	***2.58%***	*0.00%*	***1.73%***	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***23.42%***
Percent IP Trips Generated(Exiting)	***23.42%***	***2.58%***	***1.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.19%***	***0.35%***	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	17	2	2	1	1	0	1	3	1	0	1	6
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**61**	**19**	**16**	**79**	**28**	**105**	**7**	**346**	**62**	**72**	**433**	**43**
PM Pk Hr. BUILD Volumes - Period 2	**57**	**15**	**15**	**70**	**27**	**96**	**8**	**343**	**58**	**86**	**477**	**38**
PM Pk Hr. BUILD Volumes - Preiod 3	**86**	**14**	**16**	**83**	**27**	**116**	**9**	**359**	**72**	**82**	**414**	**36**
PM Pk Hr. BUILD Volumes - Preiod 4	**78**	**23**	**13**	**72**	**23**	**97**	**8**	**400**	**66**	**100**	**441**	**40**
PM Pk Hr. BUILD Volumes - Period 5	**86**	**23**	**25**	**108**	**50**	**126**	**11**	**402**	**85**	**94**	**416**	**38**
PM Pk Hr. BUILD Volumes - Preiod 6	**77**	**21**	**15**	**75**	**31**	**107**	**9**	**381**	**57**	**79**	**449**	**52**
PM Pk Hr. BUILD Volumes - Preiod 7	**70**	**20**	**13**	**73**	**35**	**99**	**9**	**389**	**70**	**75**	**437**	**42**
PM Pk Hr. BUILD Volumes - Period 8	**66**	**19**	**13**	**69**	**23**	**88**	**8**	**359**	**66**	**82**	**496**	**55**
Maximum PM BUILD Volumes	**86**	**23**	**25**	**108**	**50**	**126**	**11**	**402**	**85**	**94**	**416**	**38**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (3)
N-S Street: **Unser Blvd.**

NOTES

Year of Existing Counts 2018
Horizon Year **2040** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

		Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	7:00 AM	0	0	0	70	0	35	7	166	0	0	559	37
Existing Volumes (Demand) - Period 2-	7:15 AM	0	0	0	79	0	39	7	195	0	0	553	44
Existing Volumes (Demand) - Period 3-	7:30 AM	0	0	0	80	0	33	6	242	0	0	518	38
Existing Volumes (Demand) - Period 4-	7:45 AM	0	0	0	93	1	45	5	222	0	0	510	42
Existing Volumes (Demand) - Period 5-	8:00 AM	0	0	0	81	1	38	13	229	0	0	358	37
Existing Volumes (Demand) - Period 6-	8:15 AM	0	0	0	84	0	73	16	157	0	0	335	35
Existing Volumes (Demand) - Period 7-	8:30 AM	0	0	0	86	0	50	5	158	0	0	330	25
Existing Volumes (Demand) - Period 8-	8:45 AM	0	0	0	85	0	60	11	138	0	0	351	25
Maximum Existing AM Volumes		**0**	**0**	**0**	**93**	**1**	**45**	**5**	**222**	**0**	**0**	**510**	**42**
Background Traffic Growth		0	0	0	41	0	20	2	98	0	0	224	18
BEK		0	0	0	5	0	0	0	1	0	0	2	0
Maverik C-Store		0	0	0	2	0	0	3	7	0	0	7	0
AM Pk Hr. NO BUILD Volumes - Preiod 1		**0**	**0**	**0**	**118**	**0**	**55**	**12**	**272**	**0**	**0**	**792**	**55**
AM Pk Hr. NO BUILD Volumes - Period 2		**0**	**0**	**0**	**127**	**0**	**59**	**12**	**301**	**0**	**0**	**786**	**62**
AM Pk Hr. NO BUILD Volumes - Preiod 3		**0**	**0**	**0**	**128**	**0**	**53**	**11**	**348**	**0**	**0**	**751**	**56**
AM Pk Hr. NO BUILD Volumes - Period 4		**0**	**0**	**0**	**141**	**1**	**65**	**10**	**328**	**0**	**0**	**743**	**60**
AM Pk Hr. NO BUILD Volumes - Preiod 5		**0**	**0**	**0**	**129**	**1**	**58**	**18**	**335**	**0**	**0**	**591**	**55**
AM Pk Hr. NO BUILD Volumes - Period 6		**0**	**0**	**0**	**132**	**0**	**93**	**21**	**263**	**0**	**0**	**568**	**53**
AM Pk Hr. NO BUILD Volumes - Preiod 7		**0**	**0**	**0**	**134**	**0**	**70**	**10**	**264**	**0**	**0**	**563**	**43**
AM Pk Hr. NO BUILD Volumes - Period 8		**0**	**0**	**0**	**133**	**0**	**80**	**16**	**244**	**0**	**0**	**584**	**43**
Maximum AM NO BUILD Volumes		**0**	**0**	**0**	**141**	**1**	**65**	**10**	**328**	**0**	**0**	**743**	**60**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated		0	0	0	13	0	0	1	2	0	0	6	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1		**0**	**0**	**0**	**131**	**0**	**55**	**13**	**274**	**0**	**0**	**798**	**55**
AM Pk Hr. BUILD Volumes - Period 2		**0**	**0**	**0**	**140**	**0**	**59**	**13**	**303**	**0**	**0**	**792**	**62**
AM Pk Hr. BUILD Volumes - Preiod 3		**0**	**0**	**0**	**141**	**0**	**53**	**12**	**350**	**0**	**0**	**757**	**56**
AM Pk Hr. BUILD Volumes - Preiod 4		**0**	**0**	**0**	**154**	**1**	**65**	**11**	**330**	**0**	**0**	**749**	**60**
AM Pk Hr. BUILD Volumes - Period 5		**0**	**0**	**0**	**142**	**1**	**58**	**19**	**337**	**0**	**0**	**597**	**55**
AM Pk Hr. BUILD Volumes - Preiod 6		**0**	**0**	**0**	**145**	**0**	**93**	**22**	**265**	**0**	**0**	**574**	**53**
AM Pk Hr. BUILD Volumes - Preiod 7		**0**	**0**	**0**	**147**	**0**	**70**	**11**	**266**	**0**	**0**	**569**	**43**
AM Pk Hr. BUILD Volumes - Period 8		**0**	**0**	**0**	**146**	**0**	**80**	**17**	**246**	**0**	**0**	**590**	**43**
Maximum AM BUILD Volumes (Demand)		**0**	**0**	**0**	**154**	**1**	**65**	**11**	**330**	**0**	**0**	**749**	**60**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

		Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	4:00 PM	0	0	0	164	0	272	8	250	0	0	264	41
Existing Volumes (Demand) - Period 2-	4:15 PM	0	0	0	198	2	303	9	246	0	0	288	59
Existing Volumes (Demand) - Period 3-	4:30 PM	0	0	0	166	1	321	17	219	0	0	261	47
Existing Volumes (Demand) - Period 4-	4:45 PM	0	0	0	172	1	357	10	192	0	0	274	52
Existing Volumes (Demand) - Period 5-	5:00 PM	0	0	0	144	3	359	8	204	0	0	274	48
Existing Volumes (Demand) - Period 6-	5:15 PM	0	0	0	204	0	355	11	148	0	0	250	52
Existing Volumes (Demand) - Period 7-	5:30 PM	0	0	0	156	1	330	9	154	0	0	273	41
Existing Volumes (Demand) - Period 8-	5:45 PM	0	0	0	168	2	1	16	103	0	0	278	55
Maximum Existing PM Volumes		**0**	**0**	**0**	**198**	**2**	**303**	**9**	**246**	**0**	**0**	**288**	**59**
Background Traffic Growth		0	0	0	87	1	133	4	108	0	0	127	26
BEK		0	0	0	3	0	0	1	3	0	0	1	0
Maverik C-Store		0	0	0	2	0	0	2	7	0	0	7	0
PM Pk Hr. NO BUILD Volumes - Preiod 1		**0**	**0**	**0**	**256**	**1**	**405**	**15**	**368**	**0**	**0**	**399**	**67**
PM Pk Hr. NO BUILD Volumes - Period 2		**0**	**0**	**0**	**290**	**3**	**436**	**16**	**364**	**0**	**0**	**423**	**85**
PM Pk Hr. NO BUILD Volumes - Preiod 3		**0**	**0**	**0**	**258**	**2**	**454**	**24**	**337**	**0**	**0**	**396**	**73**
PM Pk Hr. NO BUILD Volumes - Period 4		**0**	**0**	**0**	**264**	**2**	**490**	**17**	**310**	**0**	**0**	**409**	**78**
PM Pk Hr. NO BUILD Volumes - Preiod 5		**0**	**0**	**0**	**236**	**4**	**492**	**15**	**322**	**0**	**0**	**409**	**74**
PM Pk Hr. NO BUILD Volumes - Period 6		**0**	**0**	**0**	**296**	**1**	**488**	**18**	**266**	**0**	**0**	**385**	**78**
PM Pk Hr. NO BUILD Volumes - Preiod 7		**0**	**0**	**0**	**248**	**2**	**463**	**16**	**272**	**0**	**0**	**408**	**67**
PM Pk Hr. NO BUILD Volumes - Period 8		**0**	**0**	**0**	**260**	**3**	**134**	**23**	**221**	**0**	**0**	**413**	**81**
Maximum PM NO BUILD Volumes		**0**	**0**	**0**	**290**	**3**	**436**	**16**	**364**	**0**	**0**	**423**	**85**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	***18.79%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.39%***	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.43%***	***7.39%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated		0	0	0	5	0	0	1	6	0	0	2	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1		**0**	**0**	**0**	**261**	**1**	**405**	**16**	**374**	**0**	**0**	**401**	**67**
PM Pk Hr. BUILD Volumes - Period 2		**0**	**0**	**0**	**295**	**3**	**436**	**17**	**370**	**0**	**0**	**425**	**85**
PM Pk Hr. BUILD Volumes - Preiod 3		**0**	**0**	**0**	**263**	**2**	**454**	**25**	**343**	**0**	**0**	**398**	**73**
PM Pk Hr. BUILD Volumes - Preiod 4		**0**	**0**	**0**	**269**	**2**	**490**	**18**	**316**	**0**	**0**	**411**	**78**
PM Pk Hr. BUILD Volumes - Period 5		**0**	**0**	**0**	**241**	**4**	**492**	**16**	**328**	**0**	**0**	**411**	**74**
PM Pk Hr. BUILD Volumes - Preiod 6		**0**	**0**	**0**	**301**	**1**	**488**	**19**	**272**	**0**	**0**	**387**	**78**
PM Pk Hr. BUILD Volumes - Preiod 7		**0**	**0**	**0**	**253**	**2**	**463**	**17**	**278**	**0**	**0**	**410**	**67**
PM Pk Hr. BUILD Volumes - Period 8		**0**	**0**	**0**	**265**	**3**	**134**	**24**	**227**	**0**	**0**	**415**	**81**
Maximum PM BUILD Volumes		**0**	**0**	**0**	**295**	**3**	**436**	**17**	**370**	**0**	**0**	**425**	**85**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (4)
N-S Street: **Unser Blvd.**

Year of Existing Counts 2018
Horizon Year **2040 (Horizon)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***132***	***0***	***64***	***0***	***0***	***0***	***0***	***816***	***948***	***0***	***1,188***	***976***
Background Traffic Growth	60	0	28	0	0	0	0	360	416	0	524	428
Subtotal	192	0	92	0	0	0	0	1,176	1,364	0	1,712	1,404
BEK	0	0	4	0	0	0	0	4	4	0	28	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	36	0
Subtotal (NO BUILD - A.M.)	***192***	***0***	***108***	***0***	***0***	***0***	***0***	***1,216***	***1,376***	***0***	***1,776***	***1,404***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	8	0	0	76	0
Total AM Peak Hour BUILD Volumes	**192**	**0**	**112**	**0**	**0**	**0**	**0**	**1,224**	**1,376**	**0**	**1,852**	**1,404**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***80***	***0***	***56***	***0***	***0***	***0***	***0***	***944***	***696***	***0***	***1,248***	***464***
Background Traffic Growth	36	0	24	0	0	0	0	416	308	0	548	204
Subtotal	116	0	80	0	0	0	0	1,360	1,004	0	1,796	668
BEK	0	0	4	0	0	0	0	12	24	0	20	0
Maverik C-Store	0	0	12	0	0	0	0	36	8	0	32	0
Subtotal (NO BUILD - A.M.)	***116***	***0***	***96***	***0***	***0***	***0***	***0***	***1,408***	***1,036***	***0***	***1,848***	***668***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.18%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.82%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	24	0	0	24	0
Total PM Peak Hour BUILD Volumes	**116**	**0**	**100**	**0**	**0**	**0**	**0**	**1,432**	**1,036**	**0**	**1,872**	**668**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Daytona Rd

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **Los Volcanes Rd.** (5)
N-S Street: **Daytona Rd**

Year of Existing Counts 2013
Horizon Year **2040 (Phase 3)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***0***	***396***	***0***	***8***	***292***	***88***	***0***	***0***	***4***	***80***	***0***	***4***
Background Traffic Growth	0	136	0	4	100	28	0	0	0	28	0	0
Subtotal	0	532	0	12	392	116	0	0	4	108	0	4
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***548***	***0***	***12***	***408***	***116***	***0***	***0***	***4***	***108***	***0***	***4***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	80	0	0	0	20	0	4
Total AM Peak Hour BUILD Volumes	**4**	**548**	**0**	**12**	**408**	**196**	**0**	**0**	**4**	**128**	**0**	**8**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Daytona Rd)			Southbound (Daytona Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***4***	***220***	***0***	***0***	***152***	***52***	***0***	***0***	***0***	***36***	***0***	***0***
Background Traffic Growth	0	76	0	0	52	16	0	0	0	12	0	0
Subtotal	4	296	0	0	204	68	0	0	0	48	0	0
BEK	0	8	0	0	8	0	0	0	0	0	0	0
Maverik C-Store	0	8	0	0	8	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***4***	***312***	***0***	***0***	***220***	***68***	***0***	***0***	***0***	***48***	***0***	***0***
Percent Office Trips Generated(Entering)	***0.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.73%***	*0.00%*	***0.24%***
Total Trips Generated	4	0	0	0	0	28	0	0	0	80	0	4
Total PM Peak Hour BUILD Volumes	**8**	**312**	**0**	**0**	**220**	**96**	**0**	**0**	**0**	**128**	**0**	**4**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Central Ave. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Central Ave.** (6)
N-S Street: **98th St.**

NOTES: Base volumes (2022) are from NICO TIS.

Year of Existing Counts 2022
Horizon Year **2040 (Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

		Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	7:00 AM	109	51	9	36	34	41	25	424	53	22	110	31
Existing Volumes (Demand) - Period 2-	7:15 AM	138	77	15	27	37	64	32	474	41	23	152	31
Existing Volumes (Demand) - Period 3-	7:30 AM	107	69	16	35	31	89	5	442	35	27	150	27
Existing Volumes (Demand) - Period 4-	7:45 AM	98	70	14	41	43	43	9	457	61	21	131	34
Existing Volumes (Demand) - Period 5-	8:00 AM	80	47	4	42	46	51	13	323	55	17	133	18
Existing Volumes (Demand) - Period 6-	8:15 AM	51	37	9	50	54	44	13	329	38	25	109	18
Existing Volumes (Demand) - Period 7-	8:30 AM	54	32	7	38	18	49	14	331	42	18	112	23
Existing Volumes (Demand) - Period 8-	8:45 AM	25	27	2	13	24	27	13	161	25	12	60	10
Maximum Existing AM Volumes		**138**	**77**	**15**	**27**	**37**	**64**	**32**	**474**	**41**	**23**	**152**	**31**
Background Traffic Growth		50	28	5	10	13	23	12	171	15	8	55	11
Maverik C-Store Trips		1	0	0	0	0	5	0	4	0	5	4	1
Mercado el Milagro Trips		4	14	0	22	***-4***	0	4	7	2	0	13	0
AM Pk Hr. NO BUILD Volumes - Preiod 1		**164**	**93**	**14**	**68**	**43**	**69**	**41**	**606**	**70**	**35**	**182**	**43**
AM Pk Hr. NO BUILD Volumes - Period 2		**193**	**119**	**20**	**59**	**46**	**92**	**48**	**656**	**58**	**36**	**224**	**43**
AM Pk Hr. NO BUILD Volumes - Preiod 3		**162**	**111**	**21**	**67**	**40**	**117**	**21**	**624**	**52**	**40**	**222**	**39**
AM Pk Hr. NO BUILD Volumes - Period 4		**153**	**112**	**19**	**73**	**52**	**71**	**25**	**639**	**78**	**34**	**203**	**46**
AM Pk Hr. NO BUILD Volumes - Preiod 5		**135**	**89**	**9**	**74**	**55**	**79**	**29**	**505**	**72**	**30**	**205**	**30**
AM Pk Hr. NO BUILD Volumes - Period 6		**106**	**79**	**14**	**82**	**63**	**72**	**29**	**511**	**55**	**38**	**181**	**30**
AM Pk Hr. NO BUILD Volumes - Preiod 7		**109**	**74**	**12**	**70**	**27**	**77**	**30**	**513**	**59**	**31**	**184**	**35**
AM Pk Hr. NO BUILD Volumes - Period 8		**80**	**69**	**7**	**45**	**33**	**55**	**29**	**343**	**42**	**25**	**132**	**22**
Maximum AM NO BUILD Volumes		**193**	**119**	**20**	**59**	**46**	**92**	**48**	**656**	**58**	**36**	**224**	**43**
Percent IP Trips Generated(Entering)		***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated		3	0	0	0	0	11	0	6	0	3	2	1
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1		**167**	**93**	**14**	**68**	**43**	**80**	**41**	**612**	**70**	**38**	**184**	**44**
AM Pk Hr. BUILD Volumes - Period 2		**196**	**119**	**20**	**59**	**46**	**103**	**48**	**662**	**58**	**39**	**226**	**44**
AM Pk Hr. BUILD Volumes - Preiod 3		**165**	**111**	**21**	**67**	**40**	**128**	**21**	**630**	**52**	**43**	**224**	**40**
AM Pk Hr. BUILD Volumes - Preiod 4		**156**	**112**	**19**	**73**	**52**	**82**	**25**	**645**	**78**	**37**	**205**	**47**
AM Pk Hr. BUILD Volumes - Period 5		**138**	**89**	**9**	**74**	**55**	**90**	**29**	**511**	**72**	**33**	**207**	**31**
AM Pk Hr. BUILD Volumes - Preiod 6		**109**	**79**	**14**	**82**	**63**	**83**	**29**	**517**	**55**	**41**	**183**	**31**
AM Pk Hr. BUILD Volumes - Preiod 7		**112**	**74**	**12**	**70**	**27**	**88**	**30**	**519**	**59**	**34**	**186**	**36**
AM Pk Hr. BUILD Volumes - Period 8		**83**	**69**	**7**	**45**	**33**	**66**	**29**	**349**	**42**	**28**	**134**	**23**
Maximum AM BUILD Volumes (Demand)		**196**	**119**	**20**	**59**	**46**	**103**	**48**	**662**	**58**	**39**	**226**	**44**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

		Eastbound (Central Ave.)			Westbound (Central Ave.)			Northbound (98th St.)			Southbound (98th St.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	4:00 PM	48	62	10	70	45	40	12	262	49	44	370	71
Existing Volumes (Demand) - Period 2-	4:15 PM	60	42	16	94	60	38	11	224	49	30	394	45
Existing Volumes (Demand) - Period 3-	4:30 PM	48	45	8	71	55	46	12	253	52	29	401	45
Existing Volumes (Demand) - Period 4-	4:45 PM	49	55	10	84	58	49	11	256	45	29	347	100
Existing Volumes (Demand) - Period 5-	5:00 PM	58	63	22	79	64	47	19	209	35	26	345	29
Existing Volumes (Demand) - Period 6-	5:15 PM	51	65	23	83	62	40	17	193	29	35	334	29
Existing Volumes (Demand) - Period 7-	5:30 PM	40	36	30	54	66	47	19	221	37	26	396	57
Existing Volumes (Demand) - Period 8-	5:45 PM	20	21	18	21	29	9	20	81	13	10	98	19
Maximum Existing PM Volumes		**49**	**55**	**10**	**84**	**58**	**49**	**11**	**256**	**45**	**29**	**347**	**100**
Background Traffic Growth		18	20	4	30	21	18	4	92	16	10	125	36
Maverik C-Store Trips		1	0	0	0	0	6	0	4	0	5	4	1
Mercado el Milagro Trips		4	15	0	22	***-5***	0	4	8	2	0	12	0
PM Pk Hr. NO BUILD Volumes - Preiod 1		**71**	**97**	**14**	**122**	**61**	**64**	**20**	**366**	**67**	**59**	**511**	**108**
PM Pk Hr. NO BUILD Volumes - Period 2		**83**	**77**	**20**	**146**	**76**	**62**	**19**	**328**	**67**	**45**	**535**	**82**
PM Pk Hr. NO BUILD Volumes - Preiod 3		**71**	**80**	**12**	**123**	**71**	**70**	**20**	**357**	**70**	**44**	**542**	**82**
PM Pk Hr. NO BUILD Volumes - Period 4		**72**	**90**	**14**	**136**	**74**	**73**	**19**	**360**	**63**	**44**	**488**	**137**
PM Pk Hr. NO BUILD Volumes - Preiod 5		**81**	**98**	**26**	**131**	**80**	**71**	**27**	**313**	**53**	**41**	**486**	**66**
PM Pk Hr. NO BUILD Volumes - Period 6		**74**	**100**	**27**	**135**	**78**	**64**	**25**	**297**	**47**	**50**	**475**	**66**
PM Pk Hr. NO BUILD Volumes - Preiod 7		**63**	**71**	**34**	**106**	**82**	**71**	**27**	**325**	**55**	**41**	**537**	**94**
PM Pk Hr. NO BUILD Volumes - Period 8		**43**	**56**	**22**	**73**	**45**	**33**	**28**	**185**	**31**	**25**	**239**	**56**
Maximum PM NO BUILD Volumes		**72**	**90**	**14**	**136**	**74**	**73**	**19**	**360**	**63**	**44**	**488**	**137**
Percent IP Trips Generated(Entering)		***3.30%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	*0.00%*	***7.54%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.65%***	***7.54%***	***3.30%***
Total Primary Trips Generated		1	0	0	0	0	4	0	2	0	11	6	3
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1		**72**	**97**	**14**	**122**	**61**	**68**	**20**	**368**	**67**	**70**	**517**	**111**
PM Pk Hr. BUILD Volumes - Period 2		**84**	**77**	**20**	**146**	**76**	**66**	**19**	**330**	**67**	**56**	**541**	**85**
PM Pk Hr. BUILD Volumes - Preiod 3		**72**	**80**	**12**	**123**	**71**	**74**	**20**	**359**	**70**	**55**	**548**	**85**
PM Pk Hr. BUILD Volumes - Preiod 4		**73**	**90**	**14**	**136**	**74**	**77**	**19**	**362**	**63**	**55**	**494**	**140**
PM Pk Hr. BUILD Volumes - Period 5		**82**	**98**	**26**	**131**	**80**	**75**	**27**	**315**	**53**	**52**	**492**	**69**
PM Pk Hr. BUILD Volumes - Preiod 6		**75**	**100**	**27**	**135**	**78**	**68**	**25**	**299**	**47**	**61**	**481**	**69**
PM Pk Hr. BUILD Volumes - Preiod 7		**64**	**71**	**34**	**106**	**82**	**75**	**27**	**327**	**55**	**52**	**543**	**97**
PM Pk Hr. BUILD Volumes - Period 8		**44**	**56**	**22**	**73**	**45**	**37**	**28**	**187**	**31**	**36**	**245**	**59**
Maximum PM BUILD Volumes		**73**	**90**	**14**	**136**	**74**	**77**	**19**	**362**	**63**	**55**	**494**	**140**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

Bluewater Rd. / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **Bluewater Rd.** (7)

N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019

Horizon Year **2040** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 7:00 AM	27	0	8	0	0	0	11	491	0	0	120	16
Existing Volumes (Demand) - Period 2- 7:15 AM	17	0	9	0	0	0	7	422	0	0	160	15
Existing Volumes (Demand) - Period 3- 7:30 AM	24	0	4	0	0	0	12	357	0	0	181	17
Existing Volumes (Demand) - Period 4- 7:45 AM	26	0	10	0	0	0	13	384	0	0	182	18
Existing Volumes (Demand) - Period 5- 8:00 AM	27	0	12	0	0	0	16	335	0	0	166	18
Existing Volumes (Demand) - Period 6- 8:15 AM	29	0	5	0	0	0	6	327	0	0	129	26
Existing Volumes (Demand) - Period 7- 8:30 AM	26	0	7	0	0	0	8	406	0	0	133	24
Existing Volumes (Demand) - Period 8- 8:45 AM	20	0	0	0	0	0	16	270	0	0	182	24
Maximum Existing AM Volumes	**27**	**0**	**8**	**0**	**0**	**0**	**11**	**491**	**0**	**0**	**120**	**16**
Background Traffic Growth	11	0	3	0	0	0	5	206	0	0	50	7
Maverik C-Store Trips	0	0	0	12	1	14	0	***-7***	16	10	***-3***	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1	**38**	**0**	**11**	**12**	**1**	**14**	**16**	**700**	**16**	**10**	**177**	**23**
AM Pk Hr. NO BUILD Volumes - Period 2	**28**	**0**	**12**	**12**	**1**	**14**	**12**	**631**	**16**	**10**	**217**	**22**
AM Pk Hr. NO BUILD Volumes - Preiod 3	**35**	**0**	**7**	**12**	**1**	**14**	**17**	**566**	**16**	**10**	**238**	**24**
AM Pk Hr. NO BUILD Volumes - Period 4	**37**	**0**	**13**	**12**	**1**	**14**	**18**	**593**	**16**	**10**	**239**	**25**
AM Pk Hr. NO BUILD Volumes - Preiod 5	**38**	**0**	**15**	**12**	**1**	**14**	**21**	**544**	**16**	**10**	**223**	**25**
AM Pk Hr. NO BUILD Volumes - Period 6	**40**	**0**	**8**	**12**	**1**	**14**	**11**	**536**	**16**	**10**	**186**	**33**
AM Pk Hr. NO BUILD Volumes - Preiod 7	**37**	**0**	**10**	**12**	**1**	**14**	**13**	**615**	**16**	**10**	**190**	**31**
AM Pk Hr. NO BUILD Volumes - Period 8	**31**	**0**	**3**	**12**	**1**	**14**	**21**	**479**	**16**	**10**	**239**	**31**
Maximum AM NO BUILD Volumes	**38**	**0**	**11**	**12**	**1**	**14**	**16**	**700**	**16**	**10**	**177**	**23**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	5	1	5	0	0	18	19	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1	**38**	**1**	**11**	**17**	**2**	**19**	**16**	**700**	**34**	**29**	**177**	**23**
AM Pk Hr. BUILD Volumes - Period 2	**28**	**1**	**12**	**17**	**2**	**19**	**12**	**631**	**34**	**29**	**217**	**22**
AM Pk Hr. BUILD Volumes - Preiod 3	**35**	**1**	**7**	**17**	**2**	**19**	**17**	**566**	**34**	**29**	**238**	**24**
AM Pk Hr. BUILD Volumes - Preiod 4	**37**	**1**	**13**	**17**	**2**	**19**	**18**	**593**	**34**	**29**	**239**	**25**
AM Pk Hr. BUILD Volumes - Period 5	**38**	**1**	**15**	**17**	**2**	**19**	**21**	**544**	**34**	**29**	**223**	**25**
AM Pk Hr. BUILD Volumes - Preiod 6	**40**	**1**	**8**	**17**	**2**	**19**	**11**	**536**	**34**	**29**	**186**	**33**
AM Pk Hr. BUILD Volumes - Preiod 7	**37**	**1**	**10**	**17**	**2**	**19**	**13**	**615**	**34**	**29**	**190**	**31**
AM Pk Hr. BUILD Volumes - Period 8	**31**	**1**	**3**	**17**	**2**	**19**	**21**	**479**	**34**	**29**	**239**	**31**
Maximum AM BUILD Volumes (Demand)	**38**	**1**	**11**	**17**	**2**	**19**	**16**	**700**	**34**	**29**	**177**	**23**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1- 4:00 PM	24	0	21	0	0	0	15	23	0	0	443	37
Existing Volumes (Demand) - Period 2- 4:15 PM	35	0	17	0	0	0	14	244	0	0	457	33
Existing Volumes (Demand) - Period 3- 4:30 PM	30	0	12	0	0	0	11	231	0	0	429	31
Existing Volumes (Demand) - Period 4- 4:45 PM	26	0	16	0	0	0	5	211	0	0	396	32
Existing Volumes (Demand) - Period 5- 5:00 PM	32	0	13	0	0	0	13	203	0	0	437	43
Existing Volumes (Demand) - Period 6- 5:15 PM	21	0	10	0	0	0	6	272	0	0	484	40
Existing Volumes (Demand) - Period 7- 5:30 PM	25	0	13	0	0	0	18	241	0	0	465	39
Existing Volumes (Demand) - Period 8- 5:45 PM	30	0	13	0	0	0	12	209	0	0	440	54
Maximum Existing PM Volumes	**21**	**0**	**10**	**0**	**0**	**0**	**6**	**272**	**0**	**0**	**484**	**40**
Background Traffic Growth	9	0	4	0	0	0	3	114	0	0	203	17
Maverik C-Store Trips	0	0	0	16	0	11	0	***-3***	14	14	***-6***	0
Mercado el Milagro Trips	0	0	0	0	0	0	0	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1	**33**	**0**	**25**	**16**	**0**	**11**	**18**	**144**	**14**	**14**	**650**	**54**
PM Pk Hr. NO BUILD Volumes - Period 2	**44**	**0**	**21**	**16**	**0**	**11**	**17**	**365**	**14**	**14**	**664**	**50**
PM Pk Hr. NO BUILD Volumes - Preiod 3	**39**	**0**	**16**	**16**	**0**	**11**	**14**	**352**	**14**	**14**	**636**	**48**
PM Pk Hr. NO BUILD Volumes - Period 4	**35**	**0**	**20**	**16**	**0**	**11**	**8**	**332**	**14**	**14**	**603**	**49**
PM Pk Hr. NO BUILD Volumes - Preiod 5	**41**	**0**	**17**	**16**	**0**	**11**	**16**	**324**	**14**	**14**	**644**	**60**
PM Pk Hr. NO BUILD Volumes - Period 6	**30**	**0**	**14**	**16**	**0**	**11**	**9**	**393**	**14**	**14**	**691**	**57**
PM Pk Hr. NO BUILD Volumes - Preiod 7	**34**	**0**	**17**	**16**	**0**	**11**	**21**	**362**	**14**	**14**	**672**	**56**
PM Pk Hr. NO BUILD Volumes - Period 8	**39**	**0**	**17**	**16**	**0**	**11**	**15**	**330**	**14**	**14**	**647**	**71**
Maximum PM NO BUILD Volumes	**30**	**0**	**14**	**16**	**0**	**11**	**9**	**393**	**14**	**14**	**691**	**57**
Percent IP Trips Generated(Entering)	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***26.95%***	*0.00%*	*0.00%*
Percent IP Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***25.49%***	***0.40%***	***26.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated	0	1	0	18	1	19	0	0	6	6	0	0
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1	**33**	**1**	**25**	**34**	**1**	**30**	**18**	**144**	**20**	**20**	**650**	**54**
PM Pk Hr. BUILD Volumes - Period 2	**44**	**1**	**21**	**34**	**1**	**30**	**17**	**365**	**20**	**20**	**664**	**50**
PM Pk Hr. BUILD Volumes - Preiod 3	**39**	**1**	**16**	**34**	**1**	**30**	**14**	**352**	**20**	**20**	**636**	**48**
PM Pk Hr. BUILD Volumes - Preiod 4	**35**	**1**	**20**	**34**	**1**	**30**	**8**	**332**	**20**	**20**	**603**	**49**
PM Pk Hr. BUILD Volumes - Period 5	**41**	**1**	**17**	**34**	**1**	**30**	**16**	**324**	**20**	**20**	**644**	**60**
PM Pk Hr. BUILD Volumes - Preiod 6	**30**	**1**	**14**	**34**	**1**	**30**	**9**	**393**	**20**	**20**	**691**	**57**
PM Pk Hr. BUILD Volumes - Preiod 7	**34**	**1**	**17**	**34**	**1**	**30**	**21**	**362**	**20**	**20**	**672**	**56**
PM Pk Hr. BUILD Volumes - Period 8	**39**	**1**	**17**	**34**	**1**	**30**	**15**	**330**	**20**	**20**	**647**	**71**
Maximum PM BUILD Volumes	**30**	**1**	**14**	**34**	**1**	**30**	**9**	**393**	**20**	**20**	**691**	**57**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 N. Ramp / 98th St.

MULTIPLE PERIOD ANALYSIS WORKSHEET

INTERSECTION: E-W Street: **I-40 N. Ramp** (8)
N-S Street: **98th St.**

NOTES:

Year of Existing Counts 2019
Horizon Year **2040** **(Phase 3)**

IP Trip Generation Rate (Hourly)	Entering	Exiting	
	276	**70**	A.M.
	87	**275**	P.M.

100% IP Development

Growth Rates **2.00%** **2.00%** **2.00%** **2.00%**

AM Peak

(Hourly Demand Volumes - AM Peak)

		Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	7:00 AM	0	0	0	123	0	0	14	79	0	0	169	0
Existing Volumes (Demand) - Period 2-	7:15 AM	0	0	0	138	1	1	14	115	0	0	115	0
Existing Volumes (Demand) - Period 3-	7:30 AM	0	0	0	97	0	0	21	141	0	0	102	0
Existing Volumes (Demand) - Period 4-	7:45 AM	0	0	0	109	0	0	21	165	7	0	82	0
Existing Volumes (Demand) - Period 5-	8:00 AM	0	0	0	97	0	0	5	104	0	0	75	0
Existing Volumes (Demand) - Period 6-	8:15 AM	0	0	0	106	0	0	11	88	0	0	94	0
Existing Volumes (Demand) - Period 7-	8:30 AM	0	0	0	101	0	0	17	141	0	0	126	0
Existing Volumes (Demand) - Period 8-	8:45 AM	0	0	0	122	0	0	10	60	0	0	104	0
Maximum Existing AM Volumes		**0**	**0**	**0**	**123**	**0**	**0**	**14**	**79**	**0**	**0**	**169**	**0**
Background Traffic Growth		0	0	0	52	0	0	6	33	0	0	71	0
Maverik C-Store Trips		0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips		0	0	0	1	0	0	1	9	0	0	10	0
AM Pk Hr. NO BUILD Volumes - Preiod 1		**0**	**0**	**0**	**178**	**0**	**0**	**22**	**127**	**0**	**0**	**256**	**0**
AM Pk Hr. NO BUILD Volumes - Period 2		**0**	**0**	**0**	**193**	**1**	**1**	**22**	**163**	**0**	**0**	**202**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 3		**0**	**0**	**0**	**152**	**0**	**0**	**29**	**189**	**0**	**0**	**189**	**0**
AM Pk Hr. NO BUILD Volumes - Period 4		**0**	**0**	**0**	**164**	**0**	**0**	**29**	**213**	**7**	**0**	**169**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 5		**0**	**0**	**0**	**152**	**0**	**0**	**13**	**152**	**0**	**0**	**162**	**0**
AM Pk Hr. NO BUILD Volumes - Period 6		**0**	**0**	**0**	**161**	**0**	**0**	**19**	**136**	**0**	**0**	**181**	**0**
AM Pk Hr. NO BUILD Volumes - Preiod 7		**0**	**0**	**0**	**156**	**0**	**0**	**25**	**189**	**0**	**0**	**213**	**0**
AM Pk Hr. NO BUILD Volumes - Period 8		**0**	**0**	**0**	**177**	**0**	**0**	**18**	**108**	**0**	**0**	**191**	**0**
Maximum AM NO BUILD Volumes		**0**	**0**	**0**	**178**	**0**	**0**	**22**	**127**	**0**	**0**	**256**	**0**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated		0	0	0	13	0	0	1	2	0	0	4	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM Pk Hr. BUILD Volumes - Preiod 1		**0**	**0**	**0**	**191**	**0**	**0**	**23**	**129**	**0**	**0**	**260**	**0**
AM Pk Hr. BUILD Volumes - Period 2		**0**	**0**	**0**	**206**	**1**	**1**	**23**	**165**	**0**	**0**	**206**	**0**
AM Pk Hr. BUILD Volumes - Preiod 3		**0**	**0**	**0**	**165**	**0**	**0**	**30**	**191**	**0**	**0**	**193**	**0**
AM Pk Hr. BUILD Volumes - Preiod 4		**0**	**0**	**0**	**177**	**0**	**0**	**30**	**215**	**7**	**0**	**173**	**0**
AM Pk Hr. BUILD Volumes - Period 5		**0**	**0**	**0**	**165**	**0**	**0**	**14**	**154**	**0**	**0**	**166**	**0**
AM Pk Hr. BUILD Volumes - Preiod 6		**0**	**0**	**0**	**174**	**0**	**0**	**20**	**138**	**0**	**0**	**185**	**0**
AM Pk Hr. BUILD Volumes - Preiod 7		**0**	**0**	**0**	**169**	**0**	**0**	**26**	**191**	**0**	**0**	**217**	**0**
AM Pk Hr. BUILD Volumes - Period 8		**0**	**0**	**0**	**190**	**0**	**0**	**19**	**110**	**0**	**0**	**195**	**0**
Maximum AM BUILD Volumes (Demand)		**0**	**0**	**0**	**191**	**0**	**0**	**23**	**129**	**0**	**0**	**260**	**0**

2.00% **2.00%** **2.00%** **2.00%**

PM Peak

(Hourly Demand Volumes - PM Peak)

		Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (Demand) - Period 1-	4:00 PM	0	0	0	345	0	0	22	67	0	0	146	1
Existing Volumes (Demand) - Period 2-	4:15 PM	0	0	0	384	1	0	19	69	0	0	65	0
Existing Volumes (Demand) - Period 3-	4:30 PM	0	0	0	387	0	0	12	70	0	0	55	0
Existing Volumes (Demand) - Period 4-	4:45 PM	0	0	0	351	0	0	19	55	0	0	68	0
Existing Volumes (Demand) - Period 5-	5:00 PM	0	0	0	307	0	0	21	74	0	0	80	0
Existing Volumes (Demand) - Period 6-	5:15 PM	0	0	0	341	2	0	10	81	0	0	98	0
Existing Volumes (Demand) - Period 7-	5:30 PM	0	0	0	340	0	0	21	79	0	0	79	0
Existing Volumes (Demand) - Period 8-	5:45 PM	0	0	0	380	1	0	15	72	0	0	66	0
Maximum Existing PM Volumes		**0**	**0**	**0**	**345**	**0**	**0**	**22**	**67**	**0**	**0**	**146**	**1**
Background Traffic Growth		0	0	0	145	0	0	9	28	0	0	61	0
Maverik C-Store Trips		0	0	0	2	0	0	1	6	0	0	6	0
Mercado el Milagro Trips		0	0	0	1	0	0	1	10	0	0	10	0
PM Pk Hr. NO BUILD Volumes - Preiod 1		**0**	**0**	**0**	**493**	**0**	**0**	**33**	**111**	**0**	**0**	**223**	**1**
PM Pk Hr. NO BUILD Volumes - Period 2		**0**	**0**	**0**	**532**	**1**	**0**	**30**	**113**	**0**	**0**	**142**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 3		**0**	**0**	**0**	**535**	**0**	**0**	**23**	**114**	**0**	**0**	**132**	**0**
PM Pk Hr. NO BUILD Volumes - Period 4		**0**	**0**	**0**	**499**	**0**	**0**	**30**	**99**	**0**	**0**	**145**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 5		**0**	**0**	**0**	**455**	**0**	**0**	**32**	**118**	**0**	**0**	**157**	**0**
PM Pk Hr. NO BUILD Volumes - Period 6		**0**	**0**	**0**	**489**	**2**	**0**	**21**	**125**	**0**	**0**	**175**	**0**
PM Pk Hr. NO BUILD Volumes - Preiod 7		**0**	**0**	**0**	**488**	**0**	**0**	**32**	**123**	**0**	**0**	**156**	**0**
PM Pk Hr. NO BUILD Volumes - Period 8		**0**	**0**	**0**	**528**	**1**	**0**	**26**	**116**	**0**	**0**	**143**	**0**
Maximum PM NO BUILD Volumes		**0**	**0**	**0**	**493**	**0**	**0**	**33**	**111**	**0**	**0**	**223**	**1**
Percent IP Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	***17.52%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.76%***	*0.00%*
Percent IP Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.67%***	***5.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Primary Trips Generated		0	0	0	4	0	0	3	4	0	0	2	0
Pass-by Trip Adjustments		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM Pk Hr. BUILD Volumes - Preiod 1		**0**	**0**	**0**	**497**	**0**	**0**	**36**	**115**	**0**	**0**	**225**	**1**
PM Pk Hr. BUILD Volumes - Period 2		**0**	**0**	**0**	**536**	**1**	**0**	**33**	**117**	**0**	**0**	**144**	**0**
PM Pk Hr. BUILD Volumes - Preiod 3		**0**	**0**	**0**	**539**	**0**	**0**	**26**	**118**	**0**	**0**	**134**	**0**
PM Pk Hr. BUILD Volumes - Preiod 4		**0**	**0**	**0**	**503**	**0**	**0**	**33**	**103**	**0**	**0**	**147**	**0**
PM Pk Hr. BUILD Volumes - Period 5		**0**	**0**	**0**	**459**	**0**	**0**	**35**	**122**	**0**	**0**	**159**	**0**
PM Pk Hr. BUILD Volumes - Preiod 6		**0**	**0**	**0**	**493**	**2**	**0**	**24**	**129**	**0**	**0**	**177**	**0**
PM Pk Hr. BUILD Volumes - Preiod 7		**0**	**0**	**0**	**492**	**0**	**0**	**35**	**127**	**0**	**0**	**158**	**0**
PM Pk Hr. BUILD Volumes - Period 8		**0**	**0**	**0**	**532**	**1**	**0**	**29**	**120**	**0**	**0**	**145**	**0**
Maximum PM BUILD Volumes		**0**	**0**	**0**	**497**	**0**	**0**	**36**	**115**	**0**	**0**	**225**	**1**

Westpointe 40 (I-40 / 98th St.)

Projected Turning Movements Worksheet

I-40 S. Ramp / 98th St.

Turning Movemement Worksheet w/o Multi-period Analysis

INTERSECTION: E-W Street: **I-40 S. Ramp** (9)
N-S Street: **98th St.**

Year of Existing Counts 2019
Horizon Year **2040 (Phase 3)**

AM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing AM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***732***	***0***	***0***	***716***	***0***
Background Traffic Growth	4	0	0	0	0	0	0	160	0	0	156	0
Subtotal	16	0	0	0	0	0	0	892	0	0	872	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	36	8	0	44	0
Subtotal (NO BUILD - A.M.)	***16***	***0***	***8***	***0***	***0***	***0***	***0***	***952***	***16***	***0***	***948***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	12	0	0	0	0	8	0	0	68	0
Total AM Peak Hour BUILD Volumes	**16**	**0**	**20**	**0**	**0**	**0**	**0**	**960**	**16**	**0**	**1,016**	**0**

PM Peak

Growth Rates	2.00%			2.00%			2.00%			2.00%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (98th St.)			Southbound (98th St.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing PM Peak Hour Volumes	***12***	***0***	***0***	***0***	***0***	***0***	***0***	***336***	***0***	***0***	***1,988***	***0***
Background Traffic Growth	4	0	0	0	0	0	0	72	0	0	436	0
Subtotal	16	0	0	0	0	0	0	408	0	0	2,424	0
Maverik C-Store Trips	0	0	4	0	0	0	0	24	8	0	32	0
Mercado el Milagro Trips	0	0	4	0	0	0	0	40	4	0	44	0
Subtotal (NO BUILD - A.M.)	***16***	***0***	***8***	***0***	***0***	***0***	***0***	***472***	***12***	***0***	***2,500***	***0***
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***3.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***23.26%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***9.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	4	0	0	0	0	28	0	0	24	0
Total PM Peak Hour BUILD Volumes	**16**	**0**	**12**	**0**	**0**	**0**	**0**	**500**	**12**	**0**	**2,524**	**0**

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	32	13	10	7	5	12	11	475	41	32	177	29
7:15 AM	35	16	16	6	3	17	8	572	32	44	225	22
7:30 AM	45	19	14	9	9	12	4	565	46	38	264	23
7:45 AM	43	16	11	16	8	23	7	504	37	42	263	18
8:00 AM	35	13	12	10	11	16	6	470	20	33	230	29
8:15 AM	31	10	6	9	8	18	5	459	22	37	246	20
8:30 AM	33	12	13	6	10	9	6	441	24	36	225	16
8:45 AM	40	18	9	9	6	14	3	420	28	35	228	21
8:30 AM	33	12	13	6	10	9	6	441	24	36	225	16

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.50	0.34	-	0.20	0.18	0.51	0.15	**1.00**	0.19	0.86	0.50	0.19
7:15 AM	0.53	0.47	-	0.17	0.10	0.68	0.08	**1.18**	0.15	**1.24**	0.60	0.13
7:30 AM	0.74	0.48	-	0.27	0.32	0.51	0.07	**1.83**	0.27	0.73	0.65	0.13
7:45 AM	0.63	0.35	-	0.40	0.22	0.73	0.09	**1.07**	0.18	**1.13**	0.66	0.10
8:00 AM	0.59	0.37	-	0.29	0.39	0.66	0.10	**1.52**	0.12	0.78	0.64	0.18
8:15 AM	0.49	0.23	-	0.25	0.27	0.71	0.06	0.93	0.10	**1.21**	0.65	0.12
8:30 AM	0.55	0.37	-	0.18	0.36	0.38	0.10	**1.42**	0.14	0.77	0.67	0.11
8:45 AM	0.63	0.39	-	0.26	0.22	0.59	0.03	0.83	0.13	**1.35**	0.67	0.14
8:30 AM	0.55	0.37	-	0.18	0.36	0.38	0.10	1.42	0.14	0.77	0.67	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.3	44.1	-	54.3	53.7	58.3	11.6	45.2	11.7	44.2	20.3	15.5
7:15 AM	47.7	45.4	-	53.6	52.6	62.4	9.2	**112.7**	10.6	**148.2**	8.7	6.6
7:30 AM	60.1	45.9	-	55.0	55.1	58.2	18.4	**670.5**	20.9	**92.4**	12.7	8.2
7:45 AM	50.1	42.3	-	54.3	51.5	61.2	10.3	**721.6**	11.6	**97.8**	10.3	7.2
8:00 AM	49.9	44.4	-	55.1	55.7	62.2	17.9	**1,367.0**	18.1	63.7	12.7	8.8
8:15 AM	46.6	42.4	-	54.2	53.9	63.0	8.8	**970.4**	9.4	**134.9**	8.9	6.4
8:30 AM	48.6	44.6	-	54.0	55.5	56.1	18.4	**1,683.3**	19.0	72.8	12.7	8.1
8:45 AM	52.5	44.7	-	55.0	54.0	60.2	8.3	**1,075.3**	9.1	**197.5**	8.2	6.1
8:30 AM	48.6	44.6	-	54.0	55.5	56.1	18.4	1,683.3	19.0	72.8	12.7	8.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	F	B	D	C	B
7:15 AM	D	D	-	D	D	E	A	F	B	F	A	A
7:30 AM	E	D	-	E	E	E	B	F	C	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	B	F	B	A
8:00 AM	D	D	-	E	E	E	B	F	B	E	B	A
8:15 AM	D	D	-	D	D	E	A	F	A	F	A	A
8:30 AM	D	D	-	D	E	E	B	F	B	E	B	A
8:45 AM	D	D	-	D	D	E	A	F	A	F	A	A
8:30 AM	D	D	-	D	E	E	B	F	B	E	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**2.0**	1.0	-	0.3	0.1	0.6	0.2	**2.2**	0.4	**1.3**	0.8	**1.1**
7:15 AM	**2.2**	**1.4**	-	0.3	0.1	0.9	0.2	**3.8**	0.3	**2.5**	0.3	0.2
7:30 AM	**1.1**	**1.4**	-	0.4	0.2	0.6	0.1	**10.0**	0.7	**2.3**	0.6	0.4
7:45 AM	0.6	**1.1**	-	0.7	0.2	**1.2**	0.1	**12.3**	0.4	**1.8**	0.4	0.2
8:00 AM	**2.3**	**1.0**	-	0.5	0.2	0.8	0.2	**15.7**	0.3	**1.7**	0.6	0.5
8:15 AM	**1.9**	0.6	-	0.4	0.2	0.9	0.1	**16.5**	0.2	**2.0**	0.4	0.2
8:30 AM	**2.1**	**1.0**	-	0.3	0.2	0.4	0.2	**18.4**	0.3	**2.2**	0.6	0.3
8:45 AM	**2.7**	**1.1**	-	0.4	0.1	0.7	0.1	**18.4**	0.2	**2.7**	0.3	0.2
8:30 AM	2.1	1.0	-	0.3	0.2	0.4	0.2	18.4	0.3	2.2	0.6	0.3

Intersection Delay and LOS
Time-Period

7:00 AM	35.3	D
7:15 AM	72.8	E
7:30 AM	339.7	F
7:45 AM	347	F
8:00 AM	630.9	F
8:15 AM	457.2	F
8:30 AM	**754.1**	F **X**
8:45 AM	466.9	F
8:30 AM	754.1	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	33	14	13	7	6	13	21	477	41	33	178	29
7:15 AM	36	17	19	6	4	18	18	574	32	45	226	22
7:30 AM	46	20	17	9	10	13	14	567	46	39	265	23
7:45 AM	44	17	14	16	9	24	17	506	37	43	264	18
8:00 AM	36	14	15	10	12	17	16	472	20	34	231	29
8:15 AM	32	11	9	9	9	19	15	461	22	38	247	20
8:30 AM	34	13	16	6	11	10	16	443	24	37	226	16
8:45 AM	41	19	12	9	7	15	13	422	28	36	229	21
8:30 AM	34	13	16	6	11	10	16	443	24	37	226	16

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.52	0.40	-	0.21	0.22	0.55	0.28	**1.01**	0.20	0.86	0.51	0.19
7:15 AM	0.54	0.52	-	0.17	0.13	0.69	0.18	**1.20**	0.15	**1.22**	0.61	0.13
7:30 AM	0.77	0.55	-	0.27	0.36	0.55	0.21	**1.83**	0.27	0.73	0.66	0.13
7:45 AM	0.64	0.40	-	0.39	0.23	0.73	0.21	**1.08**	0.18	**1.11**	0.67	0.10
8:00 AM	0.60	0.42	-	0.28	0.40	0.67	0.23	**1.53**	0.12	0.79	0.66	0.19
8:15 AM	0.50	0.28	-	0.24	0.29	0.71	0.17	0.94	0.10	**1.20**	0.67	0.12
8:30 AM	0.57	0.43	-	0.18	0.39	0.42	0.23	**1.43**	0.14	0.78	0.68	0.11
8:45 AM	0.66	0.45	-	0.27	0.25	0.63	0.13	0.84	0.13	**1.34**	0.68	0.14
8:30 AM	0.57	0.43	-	0.18	0.39	0.42	0.23	1.43	0.14	0.78	0.68	0.11

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.9	44.9	-	54.3	54.0	59.1	12.2	47.5	11.8	44.2	21.7	16.6
7:15 AM	47.8	45.8	-	53.2	52.5	62.0	9.3	**127.6**	11.0	**141.3**	9.8	7.4
7:30 AM	62.8	46.9	-	55.1	55.5	59.1	18.3	**704.9**	20.9	**89.3**	14.0	9.2
7:45 AM	50.4	42.5	-	53.9	51.3	60.7	10.8	**759.2**	11.9	**92.0**	11.6	8.1
8:00 AM	50.2	44.7	-	54.7	55.4	61.8	18.0	**1,427.2**	18.2	61.3	14.3	9.9
8:15 AM	46.5	42.7	-	53.7	53.6	62.5	9.1	**1,027.4**	9.7	**129.0**	10.0	7.2
8:30 AM	49.4	45.3	-	54.0	55.9	56.7	18.4	**1,769.2**	19.1	71.5	14.0	9.0
8:45 AM	53.8	45.5	-	55.0	54.3	61.4	8.3	**1,138.5**	9.2	**191.6**	9.1	6.7
8:30 AM	49.4	45.3	-	54.0	55.9	56.7	18.4	1,769.2	19.1	71.5	14.0	9.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	E	B	F	B	D	C	B
7:15 AM	D	D	-	D	D	E	A	F	B	F	A	A
7:30 AM	E	D	-	E	E	E	B	F	C	F	B	A
7:45 AM	D	D	-	D	D	E	B	F	B	F	B	A
8:00 AM	D	D	-	D	E	E	B	F	B	E	B	A
8:15 AM	D	D	-	D	D	E	A	F	A	F	A	A
8:30 AM	D	D	-	D	E	E	B	F	B	E	B	A
8:45 AM	D	D	-	E	D	E	A	F	A	F	A	A
8:30 AM	D	D	-	D	E	E	B	F	B	E	B	A

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**2.1**	**1.1**	-	0.3	0.1	0.6	0.4	**2.2**	0.4	**1.3**	0.8	**1.1**
7:15 AM	**2.3**	**1.5**	-	0.3	0.1	0.9	0.3	**4.1**	0.3	**2.5**	0.4	0.2
7:30 AM	**1.2**	**1.6**	-	0.4	0.2	0.6	0.4	**10.4**	0.7	**2.2**	0.7	0.4
7:45 AM	0.7	**1.3**	-	0.7	0.2	**1.2**	0.3	**12.8**	0.4	**1.7**	0.5	0.2
8:00 AM	**2.3**	**1.2**	-	0.5	0.3	0.9	0.4	**16.3**	0.3	**1.7**	0.6	0.5
8:15 AM	**2.0**	0.8	-	0.4	0.2	0.1	0.3	**17.2**	0.2	**2.0**	0.4	0.2
8:30 AM	**2.2**	**1.2**	-	0.3	0.2	0.5	0.4	**19.3**	0.3	**2.2**	0.6	0.3
8:45 AM	**2.8**	**1.3**	-	0.4	0.2	0.8	0.2	**19.3**	0.2	**2.7**	0.4	0.2
8:30 AM	2.2	1.2	-	0.3	0.2	0.5	0.4	19.3	0.3	2.2	0.6	0.3

Intersection Delay and LOS

Time-Period		
7:00 AM	36.9	D
7:15 AM	79.9	E
7:30 AM	353.8	F
7:45 AM	361.2	F
8:00 AM	652	F
8:15 AM	478.4	F
8:30 AM	**784.2**	F X
8:45 AM	488.6	F
8:30 AM	784.2	F

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	33	14	13	7	6	13	21	477	41	33	178	29
7:15 AM	36	17	19	6	4	18	18	574	32	45	226	22
7:30 AM	46	20	17	9	10	13	14	567	46	39	265	23
7:45 AM	44	17	14	16	9	24	17	506	37	43	264	18
8:00 AM	36	14	15	10	12	17	16	472	20	34	231	29
8:15 AM	32	11	9	9	9	19	15	461	22	38	247	20
8:30 AM	34	13	16	6	11	10	16	443	24	37	226	16
8:45 AM	41	19	12	9	7	15	13	422	28	36	229	21
7:15 AM	36	17	19	6	4	18	18	574	32	45	226	22

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.52	0.40	-	0.21	0.22	0.28	0.28	0.65	0.18	0.84	0.51	0.19
7:15 AM	0.56	0.54	-	0.18	0.14	0.25	0.29	0.89	0.16	0.88	0.61	0.13
7:30 AM	0.77	0.55	-	0.27	0.36	0.23	0.26	0.82	0.21	0.86	0.66	0.13
7:45 AM	0.66	0.41	-	0.41	0.25	0.37	0.32	0.76	0.18	0.87	0.67	0.10
8:00 AM	0.61	0.43	-	0.29	0.42	0.36	0.29	0.65	0.09	0.85	0.65	0.18
8:15 AM	0.51	0.29	-	0.25	0.30	0.38	0.28	0.64	0.10	0.86	0.66	0.12
8:30 AM	0.57	0.43	-	0.18	0.39	0.20	0.30	0.62	0.11	0.87	0.67	0.11
8:45 AM	0.66	0.45	-	0.27	0.25	0.31	0.26	0.59	0.13	0.83	0.68	0.14
7:15 AM	0.56	0.54	-	0.18	0.14	0.25	0.29	0.89	0.16	0.88	0.61	0.13

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	47.9	44.9	-	54.3	54.0	48.1	11.7	14.7	9.3	23.6	21.5	16.4
7:15 AM	49.0	46.7	-	54.0	53.3	40.8	14.1	27.8	12.9	43.2	20.0	13.2
7:30 AM	62.8	46.9	-	55.1	55.5	44.3	14.7	21.4	11.3	38.0	19.7	12.2
7:45 AM	52.1	43.3	-	54.8	52.2	44.1	16.3	20.5	11.9	34.5	22.6	13.3
8:00 AM	50.9	45.1	-	55.1	56.0	48.7	14.5	14.8	8.7	23.8	19.4	12.7
8:15 AM	47.1	43.1	-	54.2	54.2	48.1	15.1	15.1	9.1	24.2	20.4	12.2
8:30 AM	49.4	45.3	-	54.0	55.9	46.0	15.3	14.8	9.3	24.1	19.7	11.4
8:45 AM	53.8	45.5	-	55.0	54.3	47.7	15.2	13.9	9.2	21.2	19.8	11.6
7:15 AM	49.0	46.7	-	54.0	53.3	40.8	14.1	27.8	12.9	43.2	20.0	13.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	D	D	-	D	D	D	B	B	A	C	C	B
7:15 AM	D	D	-	D	D	D	B	C	B	D	B	B
7:30 AM	E	D	-	E	E	D	B	C	B	D	B	B
7:45 AM	D	D	-	D	D	D	B	C	B	C	C	B
8:00 AM	D	D	-	E	E	D	B	B	A	C	B	B
8:15 AM	D	D	-	D	D	D	B	B	A	C	C	B
8:30 AM	D	D	-	D	E	D	B	B	A	C	B	B
8:45 AM	D	D	-	E	D	D	B	B	A	C	B	B
7:15 AM	D	D	-	D	D	D	B	C	B	D	B	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**2.1**	**1.1**	-	0.3	0.1	0.6	0.3	0.9	0.4	0.9	0.8	**1.1**
7:15 AM	**2.3**	**1.6**	-	0.3	0.1	0.7	0.4	**1.4**	0.3	**1.7**	0.9	0.7
7:30 AM	**1.2**	**1.6**	-	0.4	0.2	0.5	0.3	**1.3**	0.5	**1.4**	1.0	0.7
7:45 AM	0.7	**1.3**	-	0.8	0.2	1.0	0.3	**1.1**	0.4	**1.5**	1.0	0.5
8:00 AM	**2.4**	**1.2**	-	0.5	0.3	0.7	0.3	0.9	0.2	0.9	0.9	0.9
8:15 AM	**2.0**	0.8	-	0.4	0.2	0.8	0.3	0.8	0.2	0.9	1.0	0.6
8:30 AM	**2.2**	**1.2**	-	0.3	0.2	0.4	0.3	0.8	0.2	1.0	1.0	0.5
8:45 AM	**2.8**	**1.3**	-	0.4	0.2	0.6	0.2	0.7	0.2	**1.0**	**1.0**	0.7
7:15 AM	2.3	1.6	-	0.3	0.1	0.7	0.4	1.4	0.3	1.7	0.9	0.7

Intersection Delay and LOS
Time-Period

7:00 AM	19.7	B
7:15 AM	**27.1**	C X
7:30 AM	24.1	C
7:45 AM	24.5	C
8:00 AM	20	B
8:15 AM	20	C
8:30 AM	19.9	B
8:45 AM	19.9	B
7:15 AM	27.1	C

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	38	17	12	35	40	65	12	300	14	27	488	28
4:15 PM	30	14	12	25	30	64	15	311	17	20	501	48
4:30 PM	29	12	13	22	41	71	12	335	19	31	458	46
4:45 PM	41	17	20	32	29	61	12	331	59	20	473	41
5:00 PM	41	27	12	32	45	77	17	358	12	19	519	37
5:15 PM	31	19	12	33	38	60	12	344	17	24	471	52
5:30 PM	39	19	11	30	36	58	14	365	17	30	488	30
5:45 PM	31	14	13	35	40	68	10	328	14	31	505	42
5:00 PM	41	27	12	32	45	77	17	358	12	19	519	37

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.48	0.24	-	0.48	0.46	0.89	0.46	0.71	0.07	0.40	0.93	0.12
4:15 PM	0.36	0.22	-	0.35	0.35	0.89	0.52	0.71	0.09	0.30	0.91	0.20
4:30 PM	0.37	0.21	-	0.28	0.44	0.90	0.39	0.80	0.10	0.52	0.85	0.19
4:45 PM	0.48	0.32	-	0.47	0.35	0.88	0.44	0.76	0.30	0.35	0.91	0.18
5:00 PM	0.49	0.29	-	0.41	0.46	0.93	0.63	0.87	0.07	0.44	**1.01**	0.16
5:15 PM	0.41	0.27	-	0.48	0.47	0.87	0.35	0.78	0.09	0.39	0.80	0.20
5:30 PM	0.51	0.26	-	0.45	0.46	0.87	0.47	0.84	0.09	0.55	0.89	0.12
5:45 PM	0.39	0.22	-	0.46	0.45	0.89	0.41	0.78	0.08	0.51	0.94	0.18
5:00 PM	0.49	0.29	-	0.41	0.46	0.93	0.63	0.87	0.07	0.44	1.01	0.16

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	36.8	33.3	-	47.9	46.3	70.9	34.2	25.4	15.1	19.1	45.6	27.6
4:15 PM	36.5	34.2	-	46.0	45.1	69.9	34.3	23.7	13.9	17.7	44.0	28.3
4:30 PM	35.3	32.7	-	43.2	44.6	72.1	29.9	29.5	15.8	23.4	42.8	30.6
4:45 PM	37.9	35.3	-	48.8	45.8	69.1	33.4	25.6	16.8	19.3	44.3	28.0
5:00 PM	34.5	31.5	-	44.0	43.6	77.9	36.9	34.8	16.1	27.9	55.2	31.3
5:15 PM	37.7	35.3	-	49.1	47.5	67.5	27.3	26.0	13.7	20.0	40.0	28.2
5:30 PM	38.9	35.2	-	49.1	48.0	67.9	33.1	29.5	14.3	24.1	43.4	26.3
5:45 PM	35.7	33.1	-	46.8	45.3	70.9	34.0	28.4	15.4	22.6	45.3	27.5
5:00 PM	34.5	31.5	-	44.0	43.6	77.9	36.9	34.8	16.1	27.9	55.2	31.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	C	-	D	D	E	C	C	B	B	D	C
4:15 PM	D	C	-	D	D	E	C	C	B	B	D	C
4:30 PM	D	C	-	D	D	E	C	C	B	C	D	C
4:45 PM	D	D	-	D	D	E	C	C	B	B	D	C
5:00 PM	C	C	-	D	D	E	D	C	B	C	F	C
5:15 PM	D	D	-	D	D	E	C	C	B	C	D	C
5:30 PM	D	D	-	D	D	E	C	C	B	C	D	C
5:45 PM	D	C	-	D	D	E	C	C	B	C	D	C
5:00 PM	C	C	-	D	D	E	D	C	B	C	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**2.1**	**1.1**	-	**1.6**	0.8	**3.2**	0.4	**1.1**	0.2	0.3	**1.7**	0.8
4:15 PM	**1.7**	1.0	-	**1.1**	0.6	**3.2**	0.5	**1.1**	0.2	0.2	**1.6**	0.9
4:30 PM	**1.6**	0.9	-	0.9	0.8	**3.5**	0.4	**1.3**	0.2	0.3	**1.5**	0.9
4:45 PM	**2.4**	**1.4**	-	**1.5**	0.6	**3.0**	0.4	**1.2**	0.8	0.2	**1.6**	**1.2**
5:00 PM	**2.2**	**1.4**	-	**1.4**	0.9	**3.9**	0.6	**1.6**	0.2	0.2	**1.8**	**1.0**
5:15 PM	**1.8**	**1.2**	-	**1.6**	0.8	**2.9**	0.3	**1.3**	0.2	0.2	**1.4**	1.0
5:30 PM	**2.3**	**1.1**	-	**1.4**	0.8	**2.9**	0.5	**1.5**	0.2	0.4	**1.6**	0.9
5:45 PM	**1.7**	1.0	-	**1.6**	0.8	**3.4**	0.3	**1.3**	0.2	0.3	**1.7**	**1.1**
5:00 PM	2.2	1.4	-	1.4	0.9	3.9	0.6	1.6	0.2	0.2	1.8	1.0

Intersection Delay and LOS

Time-Period		
4:00 PM	38.9	D
4:15 PM	37.1	D
4:30 PM	38.4	D
4:45 PM	36.9	D
5:00 PM	**45.8**	D **X**
5:15 PM	35.7	D
5:30 PM	38.3	D
5:45 PM	39.3	D
5:00 PM	45.8	D

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	2	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	41	18	22	35	41	66	16	301	14	28	490	28
4:15 PM	33	15	22	25	31	65	19	312	17	21	503	48
4:30 PM	32	13	23	22	42	72	16	336	19	32	460	46
4:45 PM	44	18	30	32	30	62	16	332	59	21	475	41
5:00 PM	44	28	22	32	46	78	21	359	12	20	521	37
5:15 PM	34	20	22	33	39	61	16	345	17	25	473	52
5:30 PM	42	20	21	30	37	59	18	366	17	31	490	30
5:45 PM	34	15	23	35	41	69	14	329	14	32	507	42
5:00 PM	44	28	22	32	46	78	21	359	12	20	521	37

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.51	0.33	-	0.49	0.47	0.89	0.57	0.72	0.08	0.42	0.95	0.12
4:15 PM	0.39	0.32	-	0.35	0.36	0.89	0.61	0.72	0.09	0.34	0.93	0.20
4:30 PM	0.40	0.30	-	0.29	0.45	0.91	0.50	0.82	0.10	0.55	0.87	0.20
4:45 PM	0.52	0.42	-	0.48	0.36	0.88	0.55	0.76	0.31	0.37	0.92	0.18
5:00 PM	0.52	0.37	-	0.42	0.46	0.93	0.71	0.88	0.07	0.46	**1.03**	0.16
5:15 PM	0.44	0.36	-	0.49	0.47	0.87	0.47	0.79	0.09	0.42	0.82	0.20
5:30 PM	0.54	0.36	-	0.45	0.46	0.87	0.58	0.85	0.09	0.57	0.91	0.12
5:45 PM	0.42	0.31	-	0.47	0.45	0.90	0.54	0.80	0.08	0.53	0.96	0.18
5:00 PM	0.52	0.37	-	0.42	0.46	0.93	0.71	0.88	0.07	0.46	1.03	0.16

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	37.1	34.3	-	47.9	46.0	70.7	35.6	26.1	15.4	19.6	46.8	28.4
4:15 PM	36.0	34.6	-	45.8	44.9	70.8	35.3	25.0	14.5	19.3	46.0	29.8
4:30 PM	34.9	33.1	-	43.1	44.4	73.4	32.4	31.1	16.5	24.8	44.2	31.9
4:45 PM	38.7	36.4	-	48.7	45.6	68.9	35.0	26.3	17.2	20.3	45.0	28.6
5:00 PM	35.2	32.5	-	44.0	43.4	78.5	38.3	35.8	16.4	28.7	61.7	32.1
5:15 PM	37.2	35.8	-	49.1	47.3	68.2	30.3	27.6	14.4	21.9	41.7	28.3
5:30 PM	39.8	36.2	-	49.0	47.7	67.7	34.7	30.5	14.6	25.3	44.7	27.3
5:45 PM	35.3	33.5	-	46.9	45.1	72.1	35.6	29.9	16.0	23.9	47.2	28.5
5:00 PM	35.2	32.5	-	44.0	43.4	78.5	38.3	35.8	16.4	28.7	61.7	32.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	C	-	D	D	E	D	C	B	B	D	C
4:15 PM	D	C	-	D	D	E	D	C	B	B	D	C
4:30 PM	C	C	-	D	D	E	C	C	B	C	D	C
4:45 PM	D	D	-	D	D	E	C	C	B	C	D	C
5:00 PM	D	C	-	D	D	E	D	D	B	C	F	C
5:15 PM	D	D	-	D	D	E	C	C	B	C	D	C
5:30 PM	D	D	-	D	D	E	C	C	B	C	D	C
5:45 PM	D	C	-	D	D	E	D	C	B	C	D	C
5:00 PM	D	C	-	D	D	E	D	D	B	C	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**2.3**	**1.5**	-	**1.6**	0.8	**3.3**	0.5	**1.1**	0.2	0.3	**1.7**	0.8
4:15 PM	**1.8**	**1.4**	-	**1.1**	0.6	**3.2**	0.6	**1.2**	0.2	0.2	**1.7**	0.9
4:30 PM	**1.7**	**1.3**	-	0.9	0.8	**3.6**	0.5	**1.4**	0.3	0.4	**1.5**	0.9
4:45 PM	**2.5**	**1.8**	-	**1.5**	0.6	**3.1**	0.5	**1.3**	0.8	0.2	**1.6**	**1.2**
5:00 PM	**2.4**	**1.8**	-	**1.4**	0.9	**4.0**	0.7	**1.6**	0.2	0.2	**1.9**	**1.0**
5:15 PM	**1.9**	**1.6**	-	**1.6**	0.8	**3.0**	0.5	**1.3**	0.2	0.3	**1.5**	1.0
5:30 PM	**2.4**	**1.6**	-	**1.4**	0.8	**2.9**	0.6	**1.5**	0.2	0.4	**1.6**	0.9
5:45 PM	**1.9**	**1.4**	-	**1.6**	0.8	**3.4**	0.5	**1.3**	0.2	0.4	**1.7**	**1.1**
5:00 PM	2.4	1.8	-	1.4	0.9	4.0	0.7	1.6	0.2	0.2	1.9	1.0

Intersection Delay and LOS
Time-Period

4:00 PM	39.6	D
4:15 PM	38.4	D
4:30 PM	39.6	D
4:45 PM	37.5	D
5:00 PM	**48.5**	D **X**
5:15 PM	37	D
5:30 PM	39.3	D
5:45 PM	40.7	D
5:00 PM	48.5	D

Intersection # 1
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	90	130	-	130	280	130	110	500	250	160	500	170
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	41	18	22	35	41	66	16	301	14	28	490	28
4:15 PM	33	15	22	25	31	65	19	312	17	21	503	48
4:30 PM	32	13	23	22	42	72	16	336	19	32	460	46
4:45 PM	44	18	30	32	30	62	16	332	59	21	475	41
5:00 PM	44	28	22	32	46	78	21	359	12	20	521	37
5:15 PM	34	20	22	33	39	61	16	345	17	25	473	52
5:30 PM	42	20	21	30	37	59	18	366	17	31	490	30
5:45 PM	34	15	23	35	41	69	14	329	14	32	507	42
5:15 PM	34	20	22	33	39	61	16	345	17	25	473	52

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.53	0.34	-	0.50	0.48	0.76	0.61	0.50	0.07	0.36	**0.99**	0.11
4:15 PM	0.39	0.32	-	0.36	0.37	0.78	0.66	0.50	0.09	0.28	0.98	0.18
4:30 PM	0.41	0.30	-	0.30	0.47	0.77	0.54	0.57	0.10	0.44	0.91	0.18
4:45 PM	0.53	0.42	-	0.49	0.37	0.76	0.62	0.53	0.30	0.33	**1.06**	0.18
5:00 PM	0.53	0.38	-	0.43	0.48	0.82	0.71	0.62	0.07	0.32	**1.05**	0.14
5:15 PM	0.45	0.37	-	0.50	0.49	0.74	0.61	0.56	0.09	0.38	0.98	0.21
5:30 PM	0.56	0.37	-	0.47	0.48	0.71	0.66	0.59	0.09	0.44	0.94	0.11
5:45 PM	0.43	0.32	-	0.49	0.47	0.75	0.56	0.56	0.08	0.42	**1.00**	0.16
5:15 PM	0.45	0.37	-	0.50	0.49	0.74	0.61	0.56	0.09	0.38	0.98	0.21

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	38.1	35.0	-	48.8	46.9	52.0	36.9	20.1	15.1	14.7	50.4	18.2
4:15 PM	36.6	35.2	-	46.5	45.6	54.9	37.5	19.1	14.3	14.7	47.0	19.0
4:30 PM	35.7	33.9	-	44.0	45.4	51.9	34.2	22.2	16.1	16.7	44.4	21.2
4:45 PM	39.6	37.0	-	49.5	46.3	53.0	37.3	19.7	17.1	14.5	70.5	17.9
5:00 PM	36.1	33.1	-	44.8	44.2	57.0	38.4	24.1	16.4	19.1	**110.9**	12.3
5:15 PM	38.0	36.5	-	50.0	48.2	51.5	37.2	20.3	14.4	15.4	**116.1**	10.1
5:30 PM	41.1	37.1	-	50.0	48.7	49.9	38.0	21.0	14.5	16.6	79.3	9.2
5:45 PM	36.2	34.4	-	48.0	46.2	50.4	36.1	22.2	16.0	16.6	58.1	10.6
5:15 PM	38.0	36.5	-	50.0	48.2	51.5	37.2	20.3	14.4	15.4	116.1	10.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	D	D	C	B	B	D	B
4:15 PM	D	D	-	D	D	D	D	B	B	B	D	B
4:30 PM	D	C	-	D	D	D	C	C	B	B	D	C
4:45 PM	D	D	-	D	D	D	D	B	B	B	F	B
5:00 PM	D	C	-	D	D	E	D	C	B	B	F	B
5:15 PM	D	D	-	D	D	D	D	C	B	B	F	B
5:30 PM	D	D	-	D	D	D	D	C	B	B	E	A
5:45 PM	D	C	-	D	D	D	D	C	B	B	E	B
5:15 PM	D	D	-	D	D	D	D	C	B	B	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**2.4**	**1.5**	-	**1.6**	0.8	**2.9**	0.6	0.7	0.2	0.3	**1.8**	0.7
4:15 PM	**1.8**	**1.4**	-	**1.1**	0.6	**2.9**	0.7	0.7	0.2	0.2	**1.8**	**1.1**
4:30 PM	**1.8**	**1.4**	-	1.0	0.8	**3.1**	0.5	0.8	0.2	0.4	**1.6**	**1.2**
4:45 PM	**2.5**	**1.9**	-	**1.5**	0.6	**2.7**	0.6	0.7	0.8	0.3	**2.3**	**1.1**
5:00 PM	**2.4**	**1.8**	-	**1.4**	0.9	**3.4**	0.7	0.9	0.2	0.3	**2.6**	0.4
5:15 PM	**1.9**	**1.7**	-	**1.6**	0.8	**2.7**	0.6	0.8	0.2	0.3	**2.8**	0.5
5:30 PM	**2.5**	**1.6**	-	**1.4**	0.8	**2.5**	0.6	0.8	0.2	0.4	**2.3**	0.3
5:45 PM	**1.9**	**1.4**	-	**1.6**	0.8	**2.9**	0.5	0.8	0.2	0.4	**2.0**	0.5
5:15 PM	1.9	1.7	-	1.6	0.8	2.7	0.6	0.8	0.2	0.3	2.8	0.5

Intersection Delay and LOS
Time-Period

4:00 PM	38.1	D
4:15 PM	35.8	D
4:30 PM	34.8	C
4:45 PM	45	D
5:00 PM	61.6	E
5:15 PM	**62.9**	E **X**
5:30 PM	48.1	D
5:45 PM	40.7	D
5:15 PM	62.9	E

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	160	40	4	41	69	99	27	661	98	166	396	65
7:15 AM	123	45	4	54	36	86	12	526	136	135	290	38
7:30 AM	91	24	2	58	31	78	13	536	86	128	294	44
7:45 AM	105	24	7	39	28	82	9	491	73	108	280	42
8:00 AM	127	25	11	36	24	68	14	469	67	107	285	48
8:15 AM	112	26	11	34	24	73	12	460	69	95	264	38
8:30 AM	88	21	9	31	29	63	15	439	69	106	281	34
8:45 AM	66	16	3	34	28	56	15	295	59	89	187	26
8:30 AM	88	21	9	31	29	63	15	439	69	106	281	34

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.85**	0.35	-	0.37	0.54	0.91	0.79	**1.50**	0.72	**1.53**	**1.80**	0.66
7:15 AM	**1.23**	0.50	-	0.55	0.32	0.90	0.63	**1.44**	**1.20**	**1.43**	**1.57**	0.46
7:30 AM	0.94	0.31	-	0.53	0.30	0.90	0.48	**1.07**	0.55	**1.18**	**1.46**	0.49
7:45 AM	**1.03**	0.30	-	0.37	0.26	0.90	0.77	**1.59**	0.76	**1.13**	**1.51**	0.51
8:00 AM	**1.29**	0.42	-	0.43	0.26	0.88	0.52	**1.06**	0.49	0.78	**1.17**	0.44
8:15 AM	**1.09**	0.39	-	0.39	0.25	0.89	0.75	**1.49**	0.72	0.78	**1.18**	0.38
8:30 AM	0.98	0.35	-	0.37	0.34	0.87	0.53	**1.02**	0.51	0.74	**1.14**	0.31
8:45 AM	0.78	0.25	-	0.39	0.37	0.87	**1.01**	**1.31**	0.84	0.84	**1.04**	0.33
8:30 AM	0.98	0.35	-	0.37	0.34	0.87	0.53	1.02	0.51	0.74	1.14	0.31

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**432.8**	32.9	-	25.7	35.5	58.8	62.3	**263.4**	33.9	**284.4**	**391.6**	30.1
7:15 AM	**825.1**	40.3	-	29.5	35.5	57.4	58.3	**694.0**	**135.3**	**648.0**	**920.0**	20.6
7:30 AM	**946.1**	41.2	-	31.1	37.4	57.2	57.9	**922.2**	75.0	**852.6**	**1,331.0**	19.6
7:45 AM	**889.8**	36.6	-	29.5	35.9	57.8	60.6	**1,215.2**	43.4	**1,035.6**	**1,756.9**	19.4
8:00 AM	**1,044.5**	41.2	-	33.4	39.4	54.9	57.3	**1,508.6**	41.9	**850.8**	**1,975.3**	18.5
8:15 AM	**1,180.0**	39.2	-	32.2	37.9	55.9	63.3	**1,753.5**	45.8	**687.6**	**2,162.3**	18.2
8:30 AM	**1,382.0**	40.8	-	34.7	41.5	54.4	57.1	**1,983.5**	42.3	**419.5**	**2,226.7**	16.5
8:45 AM	**1,331.0**	42.4	-	36.1	43.7	56.1	**93.4**	**2,125.7**	51.1	**212.8**	**2,223.2**	14.8
8:30 AM	1,382.0	40.8	-	34.7	41.5	54.4	57.1	1,983.5	42.3	419.5	2,226.7	16.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	C	-	C	D	E	E	F	C	F	F	C
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	C
7:30 AM	F	D	-	C	D	E	E	F	E	F	F	B
7:45 AM	F	D	-	C	D	E	E	F	D	F	F	B
8:00 AM	F	D	-	C	D	D	E	F	D	F	F	B
8:15 AM	F	D	-	C	D	E	E	F	D	F	F	B
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B
8:45 AM	F	D	-	D	D	E	F	F	D	F	F	B
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**12.2**	0.8	-	0.7	**1.4**	**1.3**	0.2	**1.5**	1.0	**2.4**	**3.8**	**2.1**
7:15 AM	**19.5**	1.0	-	1.0	0.8	**1.1**	0.1	**2.9**	**4.6**	**4.8**	**7.2**	0.8
7:30 AM	**20.4**	0.5	-	**1.1**	0.7	**1.0**	0.1	**3.4**	**2.1**	**6.2**	**10.1**	1.0
7:45 AM	**20.6**	0.6	-	0.7	0.6	**1.1**	0.1	**4.7**	**1.8**	**7.0**	**13.0**	0.8
8:00 AM	**23.9**	0.8	-	0.7	0.5	0.9	0.1	**5.3**	**1.6**	**6.7**	**14.6**	**1.0**
8:15 AM	**27.1**	0.8	-	0.7	0.5	0.9	0.1	**6.6**	**2.0**	**5.3**	**15.6**	0.9
8:30 AM	**27.2**	0.6	-	0.6	0.7	0.8	0.1	**6.9**	**1.7**	**3.8**	**16.6**	0.7
8:45 AM	**24.4**	0.4	-	0.7	0.7	0.8	0.2	**7.7**	**1.9**	**2.5**	**17.1**	0.5
8:30 AM	27.2	0.6	-	0.6	0.7	0.8	0.1	6.9	1.7	3.8	16.6	0.7

Intersection Delay and LOS

Time-Period			
7:00 AM	268.6	F	
7:15 AM	621.6	F	
7:30 AM	869.3	F	
7:45 AM	1117.8	F	
8:00 AM	1223.3	F	
8:15 AM	1360	F	
8:30 AM	**1416.7**	F	X
8:45 AM	1390.5	F	
8:30 AM	1416.7	F	

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	165	41	5	42	71	99	29	662	99	166	399	82
7:15 AM	128	46	5	55	38	86	14	527	137	135	293	55
7:30 AM	96	25	3	59	33	78	15	537	87	128	297	61
7:45 AM	110	25	8	40	30	82	11	492	74	108	283	59
8:00 AM	132	26	12	37	26	68	16	470	68	107	288	65
8:15 AM	117	27	12	35	26	73	14	461	70	95	267	55
8:30 AM	93	22	10	32	31	63	17	440	70	106	284	51
8:45 AM	71	17	4	35	30	56	17	296	60	89	190	43
8:30 AM	93	22	10	32	31	63	17	440	70	106	284	51

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.94**	0.37	-	0.39	0.55	0.91	0.79	**1.50**	0.72	**1.52**	**1.81**	0.84
7:15 AM	**1.30**	0.52	-	0.57	0.34	0.90	0.62	**1.43**	**1.19**	**1.41**	**1.58**	0.67
7:30 AM	**1.01**	0.34	-	0.54	0.32	0.90	0.48	**1.07**	0.56	**1.16**	**1.46**	0.67
7:45 AM	**1.09**	0.33	-	0.39	0.28	0.90	0.75	**1.57**	0.76	**1.11**	**1.51**	0.71
8:00 AM	**1.43**	0.44	-	0.42	0.29	0.88	0.52	**1.06**	0.49	0.76	**1.17**	0.60
8:15 AM	**1.16**	0.42	-	0.41	0.27	0.89	0.74	**1.49**	0.73	0.76	**1.19**	0.55
8:30 AM	**1.05**	0.38	-	0.39	0.36	0.87	0.53	**1.02**	0.52	0.73	**1.14**	0.46
8:45 AM	0.91	0.28	-	0.39	0.39	0.86	**1.01**	**1.31**	0.85	0.82	**1.03**	0.53
8:30 AM	1.05	0.38	-	0.39	0.36	0.87	0.53	1.02	0.52	0.73	1.14	0.46

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**472.2**	33.3	-	25.8	35.8	58.6	61.8	**260.8**	33.6	**277.3**	**398.0**	35.1
7:15 AM	**920.7**	40.8	-	29.8	35.6	57.2	57.6	**683.2**	**133.2**	**624.0**	**935.9**	22.8
7:30 AM	**1,123.6**	41.7	-	31.3	37.6	57.0	57.4	**905.8**	73.6	**809.0**	**1,350.6**	22.1
7:45 AM	**1,092.4**	37.0	-	29.6	36.1	57.6	59.4	**1,192.1**	43.6	**968.2**	**1,780.6**	21.8
8:00 AM	**1,414.1**	41.7	-	33.2	39.6	54.7	56.8	**1,478.4**	42.1	**776.2**	**1,999.2**	20.9
8:15 AM	**1,546.8**	39.6	-	32.2	38.1	55.7	61.6	**1,725.2**	45.9	**595.7**	**2,192.4**	20.5
8:30 AM	**1,873.8**	41.3	-	34.7	41.7	54.2	56.6	**1,957.2**	42.5	**323.6**	**2,257.5**	18.5
8:45 AM	**2,084.9**	42.8	-	35.8	44.0	55.9	**89.9**	**2,100.0**	50.9	**113.3**	**2,250.5**	16.9
8:30 AM	1,873.8	41.3	-	34.7	41.7	54.2	56.6	1,957.2	42.5	323.6	2,257.5	18.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	C	-	C	D	E	E	F	C	F	F	D
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	C
7:30 AM	F	D	-	C	D	E	E	F	E	F	F	C
7:45 AM	F	D	-	C	D	E	E	F	D	F	F	C
8:00 AM	F	D	-	C	D	D	E	F	D	F	F	C
8:15 AM	F	D	-	C	D	E	E	F	D	F	F	C
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B
8:45 AM	F	D	-	D	D	E	F	F	D	F	F	B
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**13.0**	0.9	-	0.7	**1.4**	**1.3**	0.2	**1.5**	1.0	**2.3**	**3.8**	**2.8**
7:15 AM	**21.5**	**1.0**	-	**1.0**	0.8	**1.1**	0.1	**2.8**	**4.5**	**4.6**	**7.2**	**1.1**
7:30 AM	**23.7**	0.6	-	**1.1**	0.7	**1.0**	0.1	**3.3**	**2.1**	**5.9**	**10.1**	**1.3**
7:45 AM	**24.8**	0.6	-	0.8	0.6	**1.1**	0.1	**4.6**	**1.8**	**6.5**	**13.0**	**1.2**
8:00 AM	**30.0**	0.8	-	0.8	0.6	0.9	0.1	**5.2**	**1.6**	**6.1**	**14.5**	**1.4**
8:15 AM	**34.6**	0.8	-	0.7	0.6	0.9	0.1	**6.5**	**2.0**	**4.6**	**15.6**	**1.2**
8:30 AM	**36.0**	0.7	-	0.7	0.7	0.8	0.1	**6.8**	**1.7**	**3.1**	**16.6**	**1.1**
8:45 AM	**34.9**	0.4	-	0.7	0.7	0.8	0.2	**7.6**	**1.9**	**1.6**	**17.1**	0.9
8:30 AM	36.0	0.7	-	0.7	0.7	0.8	0.1	6.8	1.7	3.1	16.6	1.1

Intersection Delay and LOS
Time-Period

7:00 AM	269.3	F
7:15 AM	614.4	F
7:30 AM	856.3	F
7:45 AM	1095.9	F
8:00 AM	1220.7	F
8:15 AM	1346.8	F
8:30 AM	**1408.4**	F X
8:45 AM	1372.9	F
8:30 AM	1408.4	F

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	4	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	4	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	165	41	5	42	71	99	29	662	99	166	399	82
7:15 AM	128	46	5	55	38	86	14	527	137	135	293	55
7:30 AM	96	25	3	59	33	78	15	537	87	128	297	61
7:45 AM	110	25	8	40	30	82	11	492	74	108	283	59
8:00 AM	132	26	12	37	26	68	16	470	68	107	288	65
8:15 AM	117	27	12	35	26	73	14	461	70	95	267	55
8:30 AM	93	22	10	32	31	63	17	440	70	106	284	51
8:45 AM	71	17	4	35	30	56	17	296	60	89	190	43
8:30 AM	93	22	10	32	31	63	17	440	70	106	284	51

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.94**	0.37	-	0.39	0.55	0.91	0.80	**1.13**	0.73	**1.52**	**1.81**	0.84
7:15 AM	**1.30**	0.52	-	0.57	0.34	0.90	0.74	**1.26**	**1.40**	**1.41**	**1.58**	0.67
7:30 AM	**1.01**	0.34	-	0.54	0.32	0.90	0.78	**1.36**	0.94	**1.16**	**1.46**	0.68
7:45 AM	**1.09**	0.33	-	0.39	0.28	0.90	0.80	**1.26**	0.82	**1.11**	**1.51**	0.71
8:00 AM	**1.43**	0.44	-	0.42	0.29	0.88	0.75	**1.15**	0.66	0.76	**1.17**	0.59
8:15 AM	**1.16**	0.42	-	0.41	0.27	0.89	0.74	**1.12**	0.73	0.76	**1.19**	0.55
8:30 AM	**1.05**	0.38	-	0.39	0.36	0.87	0.73	**1.05**	0.72	0.73	**1.14**	0.46
8:45 AM	0.91	0.28	-	0.39	0.39	0.86	**1.01**	0.98	0.85	0.82	**1.03**	0.53
8:30 AM	1.05	0.38	-	0.39	0.36	0.87	0.73	1.05	0.72	0.73	1.14	0.46

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**472.2**	33.3	-	25.8	35.8	58.6	69.2	**103.4**	41.5	**276.7**	**398.9**	34.8
7:15 AM	**920.7**	40.8	-	29.8	35.6	57.2	62.8	**282.9**	**233.6**	**623.9**	**936.8**	22.7
7:30 AM	**1,123.6**	41.7	-	31.3	37.6	57.0	64.7	**561.4**	**405.3**	**808.9**	**1,351.4**	22.0
7:45 AM	**1,092.4**	37.0	-	29.6	36.1	57.6	72.1	**842.7**	**286.0**	**968.0**	**1,781.4**	21.8
8:00 AM	**1,414.1**	41.7	-	33.2	39.6	54.7	66.4	**1,031.6**	75.9	**776.1**	**2,000.0**	20.9
8:15 AM	**1,546.8**	39.6	-	32.2	38.1	55.7	67.6	**1,153.7**	51.1	**595.6**	**2,193.1**	20.4
8:30 AM	**1,873.8**	41.3	-	34.7	41.7	54.2	64.8	**1,234.3**	51.0	**323.6**	**2,258.3**	18.4
8:45 AM	**2,084.9**	42.8	-	35.8	44.0	55.9	**99.0**	**1,251.3**	57.2	**113.2**	**2,251.1**	16.8
8:30 AM	1,873.8	41.3	-	34.7	41.7	54.2	64.8	1,234.3	51.0	323.6	2,258.3	18.4

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	C	-	C	D	E	E	F	D	F	F	C
7:15 AM	F	D	-	C	D	E	E	F	F	F	F	C
7:30 AM	F	D	-	C	D	E	E	F	F	F	F	C
7:45 AM	F	D	-	C	D	E	E	F	F	F	F	C
8:00 AM	F	D	-	C	D	D	E	F	E	F	F	C
8:15 AM	F	D	-	C	D	E	E	F	D	F	F	C
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B
8:45 AM	F	D	-	D	D	E	F	F	E	F	F	B
8:30 AM	F	D	-	C	D	D	E	F	D	F	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**13.0**	0.9	-	0.7	**1.4**	**1.3**	0.2	0.8	**1.5**	**2.3**	**3.8**	**2.7**
7:15 AM	**21.5**	**1.0**	-	**1.0**	0.8	**1.1**	0.2	**1.4**	**7.9**	**4.6**	**7.2**	**1.1**
7:30 AM	**23.7**	0.6	-	**1.1**	0.7	**1.0**	0.2	**2.5**	**9.5**	**5.9**	**10.1**	**1.2**
7:45 AM	**24.8**	0.6	-	0.8	0.6	**1.1**	0.1	**3.4**	**7.3**	**6.5**	**13.0**	**1.2**
8:00 AM	**30.0**	0.8	-	0.8	0.6	0.9	0.2	**3.9**	**2.9**	**6.1**	**14.5**	**1.5**
8:15 AM	**34.6**	0.8	-	0.7	0.6	0.9	0.2	**4.3**	**2.4**	**4.6**	**15.6**	**1.2**
8:30 AM	**36.0**	0.7	-	0.7	0.7	0.8	0.2	**4.5**	**2.4**	**3.1**	**16.6**	**1.1**
8:45 AM	**34.9**	0.4	-	0.7	0.7	0.8	0.3	**4.6**	**2.2**	**1.6**	**17.1**	0.9
8:30 AM	36.0	0.7	-	0.7	0.7	0.8	0.2	4.5	2.4	3.1	16.6	1.1

Intersection Delay and LOS
Time-Period

7:00 AM	233	F	
7:15 AM	516.7	F	
7:30 AM	760.6	F	
7:45 AM	1008.3	F	
8:00 AM	1099.4	F	
8:15 AM	1184.6	F	
8:30 AM	**1228.4**	F	X
8:45 AM	1148	F	
8:30 AM	1228.4	F	

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	44	17	14	78	27	105	6	343	61	72	432	37
4:15 PM	40	13	13	69	26	96	7	340	57	86	476	32
4:30 PM	69	12	14	82	26	116	8	356	71	82	413	30
4:45 PM	61	21	11	71	22	97	7	397	65	100	440	34
5:00 PM	69	21	23	107	49	126	10	399	84	94	415	32
5:15 PM	60	19	13	74	30	107	8	378	56	79	448	46
5:30 PM	53	18	11	72	34	99	8	386	69	75	436	36
5:45 PM	49	17	11	68	22	88	7	356	65	82	495	49
5:45 PM	49	17	11	68	22	88	7	356	65	82	495	49

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.38	0.27	-	0.65	0.21	0.94	0.85	0.89	0.51	0.83	**1.46**	0.28
4:15 PM	0.36	0.25	-	0.59	0.21	0.93	0.84	0.84	0.45	**1.00**	**1.53**	0.23
4:30 PM	0.55	0.21	-	0.62	0.18	0.97	0.82	0.99	0.63	**1.04**	**1.54**	0.25
4:45 PM	0.53	0.29	-	0.63	0.18	0.93	0.79	**1.41**	0.67	0.84	**1.39**	0.24
5:00 PM	0.63	0.35	-	0.91	0.34	**1.04**	0.78	**1.14**	0.77	**1.02**	**1.52**	0.26
5:15 PM	0.50	0.26	-	0.59	0.22	0.93	0.82	**1.44**	0.59	0.82	**1.61**	0.36
5:30 PM	0.49	0.26	-	0.62	0.27	0.93	0.82	0.93	0.53	0.98	**1.43**	0.27
5:45 PM	0.45	0.28	-	0.63	0.20	0.92	0.83	0.81	0.48	0.89	**1.36**	0.30
5:45 PM	0.45	0.28	-	0.63	0.20	0.92	0.83	0.81	0.48	0.89	1.36	0.30

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	29.1	35.1	-	35.6	32.9	69.5	**96.9**	43.6	29.0	60.8	**252.2**	22.3
4:15 PM	30.8	36.9	-	34.7	35.1	67.4	**90.7**	41.7	33.8	68.7	**665.3**	20.5
4:30 PM	31.6	32.2	-	32.2	30.5	74.0	**82.6**	58.5	41.4	**87.5**	**1,253.8**	24.6
4:45 PM	34.6	37.3	-	36.1	34.4	67.5	**84.7**	**239.8**	48.0	61.6	**1,516.2**	21.3
5:00 PM	35.2	33.7	-	60.1	32.2	**93.0**	73.1	**397.8**	47.6	**82.1**	**2,166.6**	25.8
5:15 PM	30.6	33.3	-	31.6	31.4	74.5	**82.9**	**784.5**	42.2	63.4	**2,636.4**	26.9
5:30 PM	33.0	36.3	-	35.0	35.1	67.7	**80.9**	**592.8**	34.5	68.5	**2,829.7**	21.9
5:45 PM	34.6	39.4	-	37.9	36.8	65.9	**87.0**	**444.5**	31.9	59.1	**2,982.7**	20.2
5:45 PM	34.6	39.4	-	37.9	36.8	65.9	87.0	444.5	31.9	59.1	2,982.7	20.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	C	E	F	D	C	E	F	C
4:15 PM	C	D	-	C	D	E	F	D	C	E	F	C
4:30 PM	C	C	-	C	C	E	F	E	D	F	F	C
4:45 PM	C	D	-	D	C	E	F	F	D	E	F	C
5:00 PM	D	C	-	E	C	F	E	F	D	F	F	C
5:15 PM	C	C	-	C	C	E	F	F	D	E	F	C
5:30 PM	C	D	-	D	D	E	F	F	C	E	F	C
5:45 PM	C	D	-	D	D	E	F	F	C	E	F	C
5:45 PM	C	D	-	D	D	E	F	F	C	E	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.3**	0.6	-	0.7	0.6	**1.5**	0.1	0.6	**1.1**	0.5	**3.0**	**1.0**
4:15 PM	**1.2**	0.5	-	0.5	0.6	**1.4**	0.1	0.6	**1.7**	0.5	**5.9**	0.8
4:30 PM	0.9	0.5	-	0.7	0.5	**1.7**	0.1	0.7	**2.1**	0.6	**8.7**	0.8
4:45 PM	0.7	0.7	-	0.6	0.5	**1.4**	0.1	**1.4**	**2.0**	0.7	**11.1**	0.9
5:00 PM	**1.1**	0.9	-	**2.0**	**1.0**	**2.0**	0.1	**2.1**	**2.6**	0.6	**13.6**	0.9
5:15 PM	0.5	0.6	-	0.5	0.6	**1.6**	0.1	**3.0**	**1.5**	0.6	**16.6**	**1.3**
5:30 PM	0.4	0.6	-	0.6	0.8	**1.4**	0.1	**3.3**	**1.9**	0.5	**19.2**	0.9
5:45 PM	0.2	0.6	-	0.5	0.5	**1.2**	0.1	**2.8**	**1.8**	0.5	**21.5**	**1.1**
5:45 PM	0.2	0.6	-	0.5	0.5	1.2	0.1	2.8	1.8	0.5	21.5	1.1

Intersection Delay and LOS
Time-Period

4:00 PM	125.5	F
4:15 PM	303.1	F
4:30 PM	493.2	F
4:45 PM	644.2	F
5:00 PM	833.5	F
5:15 PM	1212.2	F
5:30 PM	1232.2	F
5:45 PM	**1303.4**	F
5:45 PM	1303.4	F

X

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	3	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61	19	16	79	28	105	7	346	62	72	433	43
4:15 PM	57	15	15	70	27	96	8	343	58	86	477	38
4:30 PM	86	14	16	83	27	116	9	359	72	82	414	36
4:45 PM	78	23	13	72	23	97	8	400	66	100	441	40
5:00 PM	86	23	25	108	50	126	11	402	85	94	416	38
5:15 PM	77	21	15	75	31	107	9	381	57	79	449	52
5:30 PM	70	20	13	73	35	99	9	389	70	75	437	42
5:45 PM	66	19	13	69	23	88	8	359	66	82	496	55
5:45 PM	66	19	13	69	23	88	8	359	66	82	496	55

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.52	0.30	-	0.68	0.21	0.94	0.84	0.90	0.52	0.83	**1.47**	0.33
4:15 PM	0.52	0.28	-	0.62	0.22	0.93	0.82	0.84	0.46	**1.00**	**1.54**	0.28
4:30 PM	0.69	0.24	-	0.65	0.19	0.97	0.82	**1.00**	0.64	**1.04**	**1.55**	0.30
4:45 PM	0.68	0.33	-	0.66	0.19	0.93	0.78	**1.43**	0.68	0.84	**1.40**	0.28
5:00 PM	0.79	0.38	-	0.95	0.35	**1.04**	0.78	**1.15**	0.78	**1.01**	**1.53**	0.32
5:15 PM	0.64	0.29	-	0.62	0.22	0.93	0.81	**1.45**	0.60	0.82	**1.62**	0.41
5:30 PM	0.66	0.30	-	0.64	0.28	0.93	0.81	0.94	0.54	0.98	**1.44**	0.31
5:45 PM	0.62	0.32	-	0.66	0.20	0.92	0.82	0.82	0.48	0.88	**1.37**	0.34
5:45 PM	0.62	0.32	-	0.66	0.20	0.92	0.82	0.82	0.48	0.88	1.37	0.34

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	32.8	35.6	-	37.0	33.0	69.3	**89.6**	43.4	28.3	61.7	**258.0**	23.7
4:15 PM	34.4	37.4	-	35.8	35.2	67.2	**85.6**	42.0	34.0	68.0	**680.9**	21.3
4:30 PM	37.4	32.6	-	33.3	30.6	74.0	79.0	60.1	41.5	**86.3**	**1,283.2**	25.5
4:45 PM	40.8	37.7	-	37.5	34.5	67.3	**80.6**	**245.0**	47.9	62.3	**1,552.5**	22.2
5:00 PM	46.4	34.1	-	68.4	32.3	**93.0**	71.5	**409.8**	47.8	**81.2**	**2,220.1**	26.7
5:15 PM	36.1	33.7	-	32.7	31.5	74.3	79.4	**810.8**	41.7	63.4	**2,700.9**	28.1
5:30 PM	39.6	36.8	-	36.3	35.1	67.5	77.7	**617.1**	34.6	68.0	**2,898.8**	22.7
5:45 PM	39.8	39.8	-	39.3	36.9	65.6	**82.3**	**474.2**	32.0	59.0	**3,056.5**	21.0
5:45 PM	39.8	39.8	-	39.3	36.9	65.6	82.3	474.2	32.0	59.0	3,056.5	21.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	D	-	D	C	E	F	D	C	E	F	C
4:15 PM	C	D	-	D	D	E	F	D	C	E	F	C
4:30 PM	D	C	-	C	C	E	E	E	D	F	F	C
4:45 PM	D	D	-	D	C	E	F	F	D	E	F	C
5:00 PM	D	C	-	E	C	F	E	F	D	F	F	C
5:15 PM	D	C	-	C	C	E	E	F	D	E	F	C
5:30 PM	D	D	-	D	D	E	E	F	C	E	F	C
5:45 PM	D	D	-	D	D	E	F	F	C	E	F	C
5:45 PM	D	D	-	D	D	E	F	F	C	E	F	C

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.6	0.7	-	0.8	0.6	**1.5**	0.1	0.6	**1.0**	0.5	**3.0**	**1.2**
4:15 PM	0.5	0.6	-	0.5	0.6	**1.4**	0.1	0.6	**1.7**	0.5	**5.9**	0.9
4:30 PM	**1.7**	0.6	-	0.8	0.5	**1.7**	0.1	0.7	**2.2**	0.6	**8.8**	1.0
4:45 PM	**1.6**	0.7	-	0.7	0.5	**1.4**	0.1	**1.4**	**1.9**	0.7	**11.2**	**1.0**
5:00 PM	**2.1**	0.9	-	**2.3**	**1.0**	**2.0**	0.1	**2.1**	**2.6**	0.6	**13.8**	**1.0**
5:15 PM	**1.4**	0.7	-	0.6	0.6	**1.6**	0.1	**3.1**	**1.5**	0.6	**16.9**	**1.5**
5:30 PM	**1.3**	0.7	-	0.6	0.8	**1.4**	0.1	**3.4**	**1.9**	0.5	**19.5**	**1.0**
5:45 PM	**1.1**	0.7	-	0.6	0.5	**1.2**	0.1	**2.9**	**1.8**	0.5	**21.9**	**1.2**
5:45 PM	1.1	0.7	-	0.6	0.5	1.2	0.1	2.9	1.8	0.5	21.9	1.2

Intersection Delay and LOS

Time-Period		
4:00 PM	125.6	F
4:15 PM	303	F
4:30 PM	493.2	F
4:45 PM	644.9	F
5:00 PM	837.7	F
5:15 PM	1216.4	F
5:30 PM	1236.4	F
5:45 PM	**1310**	F X
5:45 PM	1310	F

Intersection # 2
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	1	1	4	1	2	2	1
Shared Lane	No	-	Yes	No	-	No	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	1	-	-	4	-	-	2	-
Lane Width (ft)	12	12	-	12	12	12	12	12	12	12	12	12
Turn Bay Length (ft)	150	250	-	225	225	425	580	900	150	500	900	150
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61	19	16	79	28	105	7	346	62	72	433	43
4:15 PM	57	15	15	70	27	96	8	343	58	86	477	38
4:30 PM	86	14	16	83	27	116	9	359	72	82	414	36
4:45 PM	78	23	13	72	23	97	8	400	66	100	441	40
5:00 PM	86	23	25	108	50	126	11	402	85	94	416	38
5:15 PM	77	21	15	75	31	107	9	381	57	79	449	52
5:30 PM	70	20	13	73	35	99	9	389	70	75	437	42
5:45 PM	66	19	13	69	23	88	8	359	66	82	496	55
5:45 PM	66	19	13	69	23	88	8	359	66	82	496	55

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.58	0.35	-	0.75	0.24	0.71	0.83	0.61	0.37	0.82	**1.36**	0.26
4:15 PM	0.57	0.32	-	0.68	0.25	0.69	0.82	0.58	0.34	**0.99**	**1.43**	0.22
4:30 PM	0.75	0.27	-	0.71	0.21	0.76	0.81	0.68	0.46	**1.03**	**1.43**	0.24
4:45 PM	0.86	0.45	-	0.83	0.25	0.53	0.78	**1.06**	0.47	0.83	**1.17**	0.21
5:00 PM	0.85	0.41	-	**1.00**	0.37	0.76	0.78	0.84	0.57	**1.01**	**1.46**	0.25
5:15 PM	0.80	0.39	-	0.72	0.29	0.61	0.81	**1.08**	0.41	0.82	**1.27**	0.30
5:30 PM	0.72	0.34	-	0.71	0.31	0.71	0.81	0.67	0.41	0.90	**1.35**	0.25
5:45 PM	0.68	0.37	-	0.72	0.23	0.67	0.82	0.58	0.37	0.85	**1.29**	0.28
5:45 PM	0.68	0.37	-	0.72	0.23	0.67	0.82	0.58	0.37	0.85	1.29	0.28

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	37.8	39.4	-	45.0	36.7	34.6	**97.1**	37.3	22.4	63.5	**208.0**	15.8
4:15 PM	39.3	41.1	-	42.0	38.7	34.9	**91.2**	32.1	21.6	66.8	**539.2**	13.3
4:30 PM	44.7	36.0	-	39.6	33.9	35.0	**86.2**	37.4	26.9	79.0	**1,011.5**	16.6
4:45 PM	61.8	46.6	-	57.2	42.5	22.7	**86.6**	**91.0**	34.8	62.1	**1,056.3**	11.6
5:00 PM	55.1	36.5	-	**85.9**	34.5	32.6	77.9	54.5	32.1	76.2	**1,678.5**	18.2
5:15 PM	52.8	42.2	-	42.5	39.5	26.5	**85.5**	**96.7**	30.1	62.1	**1,652.5**	15.6
5:30 PM	46.8	40.4	-	42.7	38.6	35.5	**85.5**	37.9	21.2	62.9	**2,078.7**	14.8
5:45 PM	45.7	43.5	-	46.2	40.2	35.7	**90.4**	25.9	16.9	60.4	**2,225.6**	14.2
5:45 PM	45.7	43.5	-	46.2	40.2	35.7	90.4	25.9	16.9	60.4	2,225.6	14.2

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	D	D	-	D	D	C	F	D	C	E	F	B
4:15 PM	D	D	-	D	D	C	F	C	C	E	F	B
4:30 PM	D	D	-	D	C	D	F	D	C	F	F	B
4:45 PM	E	D	-	E	D	C	F	F	C	E	F	B
5:00 PM	E	D	-	F	C	C	E	D	C	F	F	B
5:15 PM	D	D	-	D	D	C	F	F	C	E	F	B
5:30 PM	D	D	-	D	D	D	F	D	C	E	F	B
5:45 PM	D	D	-	D	D	D	F	C	B	E	F	B
5:45 PM	D	D	-	D	D	D	F	C	B	E	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.8	0.7	-	**1.0**	0.6	**1.1**	0.1	0.4	**1.4**	0.5	**2.7**	**1.1**
4:15 PM	0.7	0.7	-	0.7	0.6	**1.0**	0.1	0.4	**1.4**	0.5	**5.2**	0.7
4:30 PM	**2.0**	0.6	-	1.0	0.6	**1.2**	0.1	0.5	**1.9**	0.6	**7.6**	0.0
4:45 PM	**2.1**	0.8	-	**1.1**	0.6	0.8	0.1	0.7	**1.9**	0.7	**9.1**	0.8
5:00 PM	**2.4**	1.0	-	**2.5**	**1.1**	**1.3**	0.1	0.6	**2.3**	0.6	**11.2**	0.9
5:15 PM	**1.9**	0.8	-	0.9	0.7	1.0	0.1	0.7	**1.5**	0.5	**13.1**	**1.1**
5:30 PM	**1.5**	0.7	-	0.8	0.8	**1.1**	0.1	0.5	**1.4**	0.5	**15.2**	0.9
5:45 PM	**1.3**	0.7	-	0.8	0.5	1.0	0.1	0.4	**1.3**	0.5	**17.1**	**1.2**
5:45 PM	1.3	0.7	-	0.8	0.5	1.0	0.1	0.4	1.3	0.5	17.1	1.2

Intersection Delay and LOS
Time-Period

4:00 PM	102.9	F
4:15 PM	240.7	F
4:30 PM	387	F
4:45 PM	423.6	F
5:00 PM	571.5	F
5:15 PM	645.5	F
5:30 PM	779.9	F
5:45 PM	**874**	F X
5:45 PM	874	F

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	118	-	-	12	272	-	-	792	-
7:15 AM	-	-	-	127	-	-	12	301	-	-	786	-
7:30 AM	-	-	-	128	-	-	11	348	-	-	751	-
7:45 AM	-	-	-	141	-	-	10	328	-	-	743	-
8:00 AM	-	-	-	129	-	-	18	335	-	-	591	-
8:15 AM	-	-	-	132	-	-	21	263	-	-	568	-
8:30 AM	-	-	-	134	-	-	10	264	-	-	563	-
8:45 AM	-	-	-	133	-	-	16	244	-	-	584	-
7:15 AM	-	-	-	127	-	-	12	301	-	-	786	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.88	-	-	0.69	0.76	-	-	0.92	-
7:15 AM	-	-	-	0.88	-	-	0.64	0.78	-	-	0.92	-
7:30 AM	-	-	-	0.89	-	-	0.50	0.76	-	-	0.88	-
7:45 AM	-	-	-	0.89	-	-	0.50	0.80	-	-	0.89	-
8:00 AM	-	-	-	0.89	-	-	0.56	0.74	-	-	0.70	-
8:15 AM	-	-	-	0.89	-	-	0.74	0.74	-	-	0.69	-
8:30 AM	-	-	-	0.89	-	-	0.40	0.73	-	-	0.67	-
8:45 AM	-	-	-	0.89	-	-	0.60	0.67	-	-	0.70	-
7:15 AM	-	-	-	0.88	-	-	0.64	0.78	-	-	0.92	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	51.7	-	-	34.7	9.0	-	-	20.7	-
7:15 AM	-	-	-	52.5	-	-	34.2	9.9	-	-	21.9	-
7:30 AM	-	-	-	52.6	-	-	31.8	8.5	-	-	18.6	-
7:45 AM	-	-	-	53.7	-	-	31.8	10.4	-	-	20.5	-
8:00 AM	-	-	-	52.7	-	-	22.3	7.4	-	-	13.6	-
8:15 AM	-	-	-	52.9	-	-	25.5	7.6	-	-	14.2	-
8:30 AM	-	-	-	53.1	-	-	14.2	6.7	-	-	12.8	-
8:45 AM	-	-	-	53.0	-	-	23.2	4.5	-	-	14.0	-
7:15 AM	-	-	-	52.5	-	-	34.2	9.9	-	-	21.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	C	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	C	-
7:30 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	C	B	-	-	C	-
8:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	A	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.4	-	-	0.2	0.4	-	-	**1.7**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	**1.7**	-
7:30 AM	-	-	-	0.5	-	-	0.1	0.4	-	-	**1.5**	-
7:45 AM	-	-	-	0.5	-	-	0.1	0.4	-	-	**1.6**	-
8:00 AM	-	-	-	0.5	-	-	0.2	0.3	-	-	1.0	-
8:15 AM	-	-	-	0.5	-	-	0.3	0.3	-	-	1.0	-
8:30 AM	-	-	-	0.5	-	-	0.1	0.3	-	-	0.9	-
8:45 AM	-	-	-	0.5	-	-	0.2	0.2	-	-	**1.0**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	1.7	-

Intersection Delay and LOS
Time-Period

7:00 AM	19.7	B
7:15 AM	20.9	C
7:30 AM	18.6	B
7:45 AM	20.6	C
8:00 AM	15.7	B
8:15 AM	16.5	B
8:30 AM	15.3	B
8:45 AM	15.5	B
7:15 AM	20.9	C

X

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	131	-	-	13	274	-	-	798	-
7:15 AM	-	-	-	140	-	-	13	303	-	-	792	-
7:30 AM	-	-	-	141	-	-	12	350	-	-	757	-
7:45 AM	-	-	-	154	-	-	11	330	-	-	749	-
8:00 AM	-	-	-	142	-	-	19	337	-	-	597	-
8:15 AM	-	-	-	145	-	-	22	265	-	-	574	-
8:30 AM	-	-	-	147	-	-	11	266	-	-	569	-
8:45 AM	-	-	-	146	-	-	17	246	-	-	590	-
7:15 AM	-	-	-	140	-	-	13	303	-	-	792	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.89	-	-	0.74	0.78	-	-	0.95	-
7:15 AM	-	-	-	0.89	-	-	0.69	0.79	-	-	0.96	-
7:30 AM	-	-	-	0.89	-	-	0.55	0.78	-	-	0.91	-
7:45 AM	-	-	-	0.90	-	-	0.55	0.82	-	-	0.92	-
8:00 AM	-	-	-	0.90	-	-	0.60	0.75	-	-	0.73	-
8:15 AM	-	-	-	0.90	-	-	0.78	0.75	-	-	0.72	-
8:30 AM	-	-	-	0.90	-	-	0.44	0.75	-	-	0.69	-
8:45 AM	-	-	-	0.90	-	-	0.65	0.69	-	-	0.73	-
7:15 AM	-	-	-	0.89	-	-	0.69	0.79	-	-	0.96	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.9	-	-	34.7	9.5	-	-	25.4	-
7:15 AM	-	-	-	53.6	-	-	34.2	10.3	-	-	27.0	-
7:30 AM	-	-	-	53.7	-	-	32.8	9.0	-	-	21.9	-
7:45 AM	-	-	-	54.8	-	-	32.5	10.8	-	-	24.2	-
8:00 AM	-	-	-	53.8	-	-	24.6	7.3	-	-	15.3	-
8:15 AM	-	-	-	54.0	-	-	27.0	8.0	-	-	16.0	-
8:30 AM	-	-	-	54.2	-	-	17.3	7.0	-	-	14.5	-
8:45 AM	-	-	-	54.1	-	-	25.5	4.6	-	-	15.9	-
7:15 AM	-	-	-	53.6	-	-	34.2	10.3	-	-	27.0	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	C	A	-	-	C	-
7:15 AM	-	-	-	D	-	-	C	B	-	-	C	-
7:30 AM	-	-	-	D	-	-	C	A	-	-	C	-
7:45 AM	-	-	-	D	-	-	C	B	-	-	C	-
8:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	C	B	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	**1.9**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	**1.9**	-
7:30 AM	-	-	-	0.5	-	-	0.1	0.4	-	-	**1.7**	-
7:45 AM	-	-	-	0.6	-	-	0.1	0.4	-	-	**1.7**	-
8:00 AM	-	-	-	0.5	-	-	0.2	0.3	-	-	**1.1**	-
8:15 AM	-	-	-	0.5	-	-	0.3	0.3	-	-	**1.1**	-
8:30 AM	-	-	-	0.5	-	-	0.1	0.3	-	-	1.0	-
8:45 AM	-	-	-	0.5	-	-	0.2	0.2	-	-	**1.1**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.4	-	-	1.9	-

Intersection Delay and LOS
Time-Period

7:00 AM	23	C	
7:15 AM	24.3	C	X
7:30 AM	21.1	C	
7:45 AM	23.3	C	
8:00 AM	17.2	B	
8:15 AM	18.1	B	
8:30 AM	16.8	B	
8:45 AM	17.1	B	
7:15 AM	C	24.3	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	131	-	-	13	274	-	-	798	-
7:15 AM	-	-	-	140	-	-	13	303	-	-	792	-
7:30 AM	-	-	-	141	-	-	12	350	-	-	757	-
7:45 AM	-	-	-	154	-	-	11	330	-	-	749	-
8:00 AM	-	-	-	142	-	-	19	337	-	-	597	-
8:15 AM	-	-	-	145	-	-	22	265	-	-	574	-
8:30 AM	-	-	-	147	-	-	11	266	-	-	569	-
8:45 AM	-	-	-	146	-	-	17	246	-	-	590	-
7:15 AM	-	-	-	140	-	-	13	303	-	-	792	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.89	-	-	0.79	0.94	-	-	0.96	-
7:15 AM	-	-	-	0.89	-	-	0.78	0.96	-	-	0.96	-
7:30 AM	-	-	-	0.89	-	-	0.64	0.95	-	-	0.91	-
7:45 AM	-	-	-	0.90	-	-	0.63	0.99	-	-	0.93	-
8:00 AM	-	-	-	0.90	-	-	0.69	0.91	-	-	0.73	-
8:15 AM	-	-	-	0.90	-	-	0.84	0.91	-	-	0.74	-
8:30 AM	-	-	-	0.90	-	-	0.52	0.91	-	-	0.70	-
8:45 AM	-	-	-	0.90	-	-	0.75	0.83	-	-	0.74	-
7:15 AM	-	-	-	0.89	-	-	0.78	0.96	-	-	0.96	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.9	-	-	37.7	11.4	-	-	28.2	-
7:15 AM	-	-	-	53.6	-	-	35.0	12.9	-	-	28.5	-
7:30 AM	-	-	-	53.7	-	-	33.2	11.3	-	-	22.6	-
7:45 AM	-	-	-	54.8	-	-	32.8	15.9	-	-	25.0	-
8:00 AM	-	-	-	53.8	-	-	26.6	7.7	-	-	15.8	-
8:15 AM	-	-	-	54.0	-	-	31.9	9.7	-	-	17.5	-
8:30 AM	-	-	-	54.2	-	-	20.5	7.9	-	-	14.9	-
8:45 AM	-	-	-	54.1	-	-	28.1	5.8	-	-	16.4	-
7:15 AM	-	-	-	53.6	-	-	35.0	12.9	-	-	28.5	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	D	B	-	-	C	-
7:15 AM	-	-	-	D	-	-	D	B	-	-	C	-
7:30 AM	-	-	-	D	-	-	C	B	-	-	C	-
7:45 AM	-	-	-	D	-	-	C	B	-	-	C	-
8:00 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	C	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	C	A	-	-	B	-
7:15 AM	-	-	-	D	-	-	D	B	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.5	-	-	0.2	0.6	-	-	**2.0**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.6	-	-	**2.0**	-
7:30 AM	-	-	-	0.5	-	-	0.2	0.5	-	-	**1.7**	-
7:45 AM	-	-	-	0.6	-	-	0.2	0.7	-	-	**1.8**	-
8:00 AM	-	-	-	0.5	-	-	0.3	0.3	-	-	**1.1**	-
8:15 AM	-	-	-	0.5	-	-	0.3	0.4	-	-	**1.1**	-
8:30 AM	-	-	-	0.5	-	-	0.2	0.3	-	-	**1.0**	-
8:45 AM	-	-	-	0.5	-	-	0.3	0.2	-	-	**1.1**	-
7:15 AM	-	-	-	0.5	-	-	0.2	0.6	-	-	2.0	-

Intersection Delay and LOS
Time-Period

7:00 AM	24.4	C	
7:15 AM	25.3	C	X
7:30 AM	21.5	C	
7:45 AM	24.8	C	
8:00 AM	17	B	
8:15 AM	19	B	
8:30 AM	16.7	B	
8:45 AM	17.1	B	
7:15 AM	C	25.3	

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	256	-	-	15	368	-	-	399	-
4:15 PM	-	-	-	290	-	-	16	364	-	-	423	-
4:30 PM	-	-	-	258	-	-	24	337	-	-	396	-
4:45 PM	-	-	-	264	-	-	17	310	-	-	409	-
5:00 PM	-	-	-	236	-	-	15	322	-	-	409	-
5:15 PM	-	-	-	296	-	-	18	266	-	-	385	-
5:30 PM	-	-	-	248	-	-	16	272	-	-	408	-
5:45 PM	-	-	-	260	-	-	23	221	-	-	413	-
5:45 PM	-	-	-	260	-	-	23	221	-	-	413	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	0.39	**1.02**	-	-	0.62	-
4:15 PM	-	-	-	0.94	-	-	0.50	**1.08**	-	-	0.72	-
4:30 PM	-	-	-	0.93	-	-	0.71	**1.11**	-	-	0.63	-
4:45 PM	-	-	-	0.93	-	-	0.48	0.88	-	-	0.65	-
5:00 PM	-	-	-	0.93	-	-	0.50	**1.06**	-	-	0.60	-
5:15 PM	-	-	-	0.94	-	-	0.60	0.96	-	-	0.67	-
5:30 PM	-	-	-	0.93	-	-	0.64	**1.09**	-	-	0.62	-
5:45 PM	-	-	-	0.93	-	-	0.97	0.99	-	-	0.66	-
5:45 PM	-	-	-	0.93	-	-	0.97	0.99	-	-	0.66	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	46.8	-	-	18.8	60.6	-	-	24.1	-
4:15 PM	-	-	-	46.1	-	-	24.0	**95.5**	-	-	29.6	-
4:30 PM	-	-	-	46.8	-	-	20.6	**169.6**	-	-	25.1	-
4:45 PM	-	-	-	46.7	-	-	19.6	**167.5**	-	-	25.3	-
5:00 PM	-	-	-	47.1	-	-	16.3	**133.6**	-	-	21.2	-
5:15 PM	-	-	-	46.0	-	-	22.2	**167.3**	-	-	29.2	-
5:30 PM	-	-	-	46.9	-	-	18.7	**175.4**	-	-	22.8	-
5:45 PM	-	-	-	46.7	-	-	35.2	**223.6**	-	-	25.9	-
5:45 PM	-	-	-	46.7	-	-	35.2	223.6	-	-	25.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	F	-	-	C	-
4:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:30 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:45 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:00 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	D	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	D	F	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.9	-	-	0.2	**1.3**	-	-	1.0	-
4:15 PM	-	-	-	1.0	-	-	0.1	**1.6**	-	-	**1.1**	-
4:30 PM	-	-	-	0.9	-	-	0.2	**2.2**	-	-	1.0	-
4:45 PM	-	-	-	0.9	-	-	0.1	**2.0**	-	-	**1.0**	-
5:00 PM	-	-	-	0.8	-	-	0.1	**1.9**	-	-	0.9	-
5:15 PM	-	-	-	1.0	-	-	0.1	**1.8**	-	-	**1.0**	-
5:30 PM	-	-	-	0.8	-	-	0.1	**2.3**	-	-	1.0	-
5:45 PM	-	-	-	0.9	-	-	0.3	**2.5**	-	-	**1.0**	-
5:45 PM	-	-	-	0.9	-	-	0.3	2.5	-	-	1.0	-

Intersection Delay and LOS
Time-Period

4:00 PM	44	D
4:15 PM	58.8	E
4:30 PM	90.7	F
4:45 PM	81.9	F
5:00 PM	74.7	E
5:15 PM	83.3	F
5:30 PM	92.6	F
5:45 PM	106.5	F X
5:45 PM F		106.5

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	261	-	-	16	374	-	-	401	-
4:15 PM	-	-	-	295	-	-	17	370	-	-	425	-
4:30 PM	-	-	-	263	-	-	25	343	-	-	398	-
4:45 PM	-	-	-	269	-	-	18	316	-	-	411	-
5:00 PM	-	-	-	241	-	-	16	328	-	-	411	-
5:15 PM	-	-	-	301	-	-	19	272	-	-	387	-
5:30 PM	-	-	-	253	-	-	17	278	-	-	410	-
5:45 PM	-	-	-	265	-	-	24	227	-	-	415	-
5:45 PM	-	-	-	265	-	-	24	227	-	-	415	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	0.43	**1.08**	-	-	0.64	-
4:15 PM	-	-	-	0.94	-	-	0.55	**1.14**	-	-	0.73	-
4:30 PM	-	-	-	0.93	-	-	0.75	**1.16**	-	-	0.65	-
4:45 PM	-	-	-	0.93	-	-	0.52	0.93	-	-	0.66	-
5:00 PM	-	-	-	0.93	-	-	0.54	**1.10**	-	-	0.61	-
5:15 PM	-	-	-	0.94	-	-	0.65	**1.01**	-	-	0.69	-
5:30 PM	-	-	-	0.93	-	-	0.69	**1.14**	-	-	0.63	-
5:45 PM	-	-	-	0.93	-	-	**1.03**	**1.04**	-	-	0.68	-
5:45 PM	-	-	-	0.93	-	-	1.03	1.04	-	-	0.68	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	46.7	-	-	20.0	78.6	-	-	25.2	-
4:15 PM	-	-	-	46.0	-	-	25.1	**170.7**	-	-	30.7	-
4:30 PM	-	-	-	46.7	-	-	21.6	**287.5**	-	-	26.1	-
4:45 PM	-	-	-	46.6	-	-	20.4	**332.6**	-	-	26.2	-
5:00 PM	-	-	-	47.1	-	-	17.1	**326.2**	-	-	22.0	-
5:15 PM	-	-	-	45.9	-	-	23.1	**436.9**	-	-	30.3	-
5:30 PM	-	-	-	46.9	-	-	19.7	**454.6**	-	-	23.8	-
5:45 PM	-	-	-	46.6	-	-	49.6	**555.3**	-	-	26.9	-
5:45 PM	-	-	-	46.6	-	-	49.6	555.3	-	-	26.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	B	F	-	-	C	-
4:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:30 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:45 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:00 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:30 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	F	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	F	F	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.9	-	-	0.2	**1.5**	-	-	1.0	-
4:15 PM	-	-	-	1.0	-	-	0.2	**2.2**	-	-	**1.2**	-
4:30 PM	-	-	-	0.9	-	-	0.2	**3.2**	-	-	1.0	-
4:45 PM	-	-	-	0.9	-	-	0.1	**3.2**	-	-	**1.0**	-
5:00 PM	-	-	-	0.8	-	-	0.1	**3.5**	-	-	1.0	-
5:15 PM	-	-	-	1.0	-	-	0.1	**3.7**	-	-	**1.1**	-
5:30 PM	-	-	-	0.9	-	-	0.1	**4.6**	-	-	1.0	-
5:45 PM	-	-	-	0.9	-	-	0.4	**5.1**	-	-	**1.1**	-
5:45 PM	-	-	-	0.9	-	-	0.4	5.1	-	-	1.1	-

Intersection Delay and LOS
Time-Period

4:00 PM	52.1	D
4:15 PM	89	F
4:30 PM	142.2	F
4:45 PM	144	F
5:00 PM	159.1	F
5:15 PM	183.2	F
5:30 PM	213.8	F
5:45 PM	237.5	F
5:45 PM	F	237.5

X

Intersection # 3
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	-	1	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	No	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	-	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	-	12	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	750	-	-	350	900	-	-	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	261	-	-	16	374	-	-	401	-
4:15 PM	-	-	-	295	-	-	17	370	-	-	425	-
4:30 PM	-	-	-	263	-	-	25	343	-	-	398	-
4:45 PM	-	-	-	269	-	-	18	316	-	-	411	-
5:00 PM	-	-	-	241	-	-	16	328	-	-	411	-
5:15 PM	-	-	-	301	-	-	19	272	-	-	387	-
5:30 PM	-	-	-	253	-	-	17	278	-	-	410	-
5:45 PM	-	-	-	265	-	-	24	227	-	-	415	-
5:45 PM	-	-	-	265	-	-	24	227	-	-	415	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.93	-	-	0.43	**1.08**	-	-	0.64	-
4:15 PM	-	-	-	0.94	-	-	0.55	**1.14**	-	-	0.73	-
4:30 PM	-	-	-	0.93	-	-	0.75	**1.16**	-	-	0.65	-
4:45 PM	-	-	-	0.93	-	-	0.63	**1.12**	-	-	0.66	-
5:00 PM	-	-	-	0.93	-	-	0.59	**1.21**	-	-	0.61	-
5:15 PM	-	-	-	0.94	-	-	0.78	**1.21**	-	-	0.69	-
5:30 PM	-	-	-	0.93	-	-	0.69	**1.14**	-	-	0.63	-
5:45 PM	-	-	-	0.93	-	-	**1.03**	**1.04**	-	-	0.68	-
5:45 PM	-	-	-	0.93	-	-	1.03	1.04	-	-	0.68	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	46.7	-	-	21.0	**84.6**	-	-	25.2	-
4:15 PM	-	-	-	46.0	-	-	26.0	**173.0**	-	-	30.7	-
4:30 PM	-	-	-	46.7	-	-	23.9	**290.3**	-	-	26.1	-
4:45 PM	-	-	-	46.6	-	-	21.0	**418.4**	-	-	26.2	-
5:00 PM	-	-	-	47.1	-	-	18.2	**536.1**	-	-	22.0	-
5:15 PM	-	-	-	45.9	-	-	24.3	**820.0**	-	-	30.3	-
5:30 PM	-	-	-	46.9	-	-	21.3	**883.1**	-	-	23.8	-
5:45 PM	-	-	-	46.6	-	-	54.9	**996.7**	-	-	26.9	-
5:45 PM	-	-	-	46.6	-	-	54.9	996.7	-	-	26.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:30 PM	-	-	-	D	-	-	C	F	-	-	C	-
4:45 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:00 PM	-	-	-	D	-	-	B	F	-	-	C	-
5:15 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:30 PM	-	-	-	D	-	-	C	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	F	F	-	-	C	-
5:45 PM	-	-	-	D	-	-	F	F	-	-	C	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.9	-	-	0.2	**1.6**	-	-	1.0	-
4:15 PM	-	-	-	1.0	-	-	0.2	**2.2**	-	-	**1.2**	-
4:30 PM	-	-	-	0.9	-	-	0.2	**3.3**	-	-	1.0	-
4:45 PM	-	-	-	0.9	-	-	0.2	**4.1**	-	-	**1.0**	-
5:00 PM	-	-	-	0.8	-	-	0.1	**5.6**	-	-	1.0	-
5:15 PM	-	-	-	1.0	-	-	0.2	**6.8**	-	-	**1.1**	-
5:30 PM	-	-	-	0.9	-	-	0.2	**8.1**	-	-	1.0	-
5:45 PM	-	-	-	0.9	-	-	0.5	**8.6**	-	-	**1.1**	-
5:45 PM	-	-	-	0.9	-	-	0.5	8.6	-	-	1.1	-

Intersection Delay and LOS
Time-Period

4:00 PM	54.6	D
4:15 PM	89.9	F
4:30 PM	143.5	F
4:45 PM	191.9	F
5:00 PM	261.7	F
5:15 PM	355.7	F
5:30 PM	398.3	F
5:45 PM	409.2	F
5:45 PM F	409.2	

X

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	192	0	0	1216	1776	0
Future Vol, veh/h	192	0	0	1216	1776	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	192	0	0	1216	1776	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2384	-	-	0	-	0
Stage 1	1776	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 34	0	0	-	-	0
Stage 1	*527	0	0	-	-	0
Stage 2	*515	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 34	-	-	-	-	-
Mov Cap-2 Maneuver	*253	-	-	-	-	-
Stage 1	*527	-	-	-	-	-
Stage 2	*515	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	53.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	253	-
HCM Lane V/C Ratio	-	0.759	-
HCM Control Delay (s)	-	53.3	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	5.5	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	192	0	0	1224	1852	0
Future Vol, veh/h	192	0	0	1224	1852	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	192	0	0	1224	1852	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2464	-	-	0	-	0
Stage 1	1852	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 30	0	0	-	-	0
Stage 1	*507	0	0	-	-	0
Stage 2	*515	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	*~ 30	-	-	-	-	-
Mov Cap-2 Maneuver	*247	-	-	-	-	-
Stage 1	*507	-	-	-	-	-
Stage 2	*515	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	56.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	247	-
HCM Lane V/C Ratio	-	0.777	-
HCM Control Delay (s)	-	56.7	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	5.7	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	116	0	0	1408	1848	0
Future Vol, veh/h	116	0	0	1408	1848	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	116	0	0	1408	1848	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2552	-	-	0	-	0
Stage 1	1848	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*349	0	0	-	-	0
Stage 1	*507	0	0	-	-	0
Stage 2	*445	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*349	-	-	-	-	-
Mov Cap-2 Maneuver	*373	-	-	-	-	-
Stage 1	*507	-	-	-	-	-
Stage 2	*445	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	373	-
HCM Lane V/C Ratio	-	0.311	-
HCM Control Delay (s)	-	18.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	116	0	0	1432	1872	0
Future Vol, veh/h	116	0	0	1432	1872	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	116	0	0	1432	1872	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2588	-	-	0	-	0
Stage 1	1872	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Critical Hdwy	6.55	-	-	-	-	-
Critical Hdwy Stg 1	6.9	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.8	-	-	-	-	-
Pot Cap-1 Maneuver	*328	0	0	-	-	0
Stage 1	*507	0	0	-	-	0
Stage 2	*424	0	0	-	-	0
Platoon blocked, %	1			-	-	
Mov Cap-1 Maneuver	*328	-	-	-	-	-
Mov Cap-2 Maneuver	*356	-	-	-	-	-
Stage 1	*507	-	-	-	-	-
Stage 2	*424	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	356	-
HCM Lane V/C Ratio	-	0.326	-
HCM Control Delay (s)	-	19.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	624	464	136	124	8
Future Vol, veh/h	1	624	464	136	124	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	1	624	464	136	124	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	600	0	-	0	1158	532
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	626	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	917	-	-	-	204	523
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	917	-	-	-	204	523
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	44.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	917	-	-	-	204	523
HCM Lane V/C Ratio	0.001	-	-	-	0.608	0.015
HCM Control Delay (s)	8.9	0	-	-	46.7	12
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0	-	-	-	3.5	0

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	624	464	216	144	12
Future Vol, veh/h	1	624	464	216	144	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	1	624	464	216	144	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	680	0	-	0	1198	572
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	626	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	854	-	-	-	193	496
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	854	-	-	-	193	496
Mov Cap-2 Maneuver	-	-	-	-	193	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	60.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	854	-	-	-	193	496
HCM Lane V/C Ratio	0.001	-	-	-	0.746	0.024
HCM Control Delay (s)	9.2	0	-	-	64.1	12.4
HCM Lane LOS	A	A	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	4.9	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	356	252	80	56	1
Future Vol, veh/h	8	356	252	80	56	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	8	356	252	80	56	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	332	0	-	0	664	292
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	372	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1158	-	-	-	406	717
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1158	-	-	-	402	717
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	669	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1158	-	-	-	402	717
HCM Lane V/C Ratio	0.007	-	-	-	0.139	0.001
HCM Control Delay (s)	8.1	0	-	-	15.4	10
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	356	252	108	136	4
Future Vol, veh/h	8	356	252	108	136	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	8	356	252	108	136	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	360	0	-	0	678	306
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	372	-
Critical Hdwy	4.25	-	-	-	6.55	6.35
Critical Hdwy Stg 1	-	-	-	-	5.55	-
Critical Hdwy Stg 2	-	-	-	-	5.55	-
Follow-up Hdwy	2.335	-	-	-	3.635	3.435
Pot Cap-1 Maneuver	1130	-	-	-	398	704
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1130	-	-	-	394	704
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	669	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	18.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1130	-	-	-	394	704
HCM Lane V/C Ratio	0.007	-	-	-	0.345	0.006
HCM Control Delay (s)	8.2	0	-	-	18.9	10.1
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	1.5	0

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	164	93	14	68	43	69	41	606	70	35	182	43
7:15 AM	193	119	20	59	46	92	48	656	58	36	224	43
7:30 AM	162	111	21	67	40	117	21	624	52	40	222	39
7:45 AM	153	112	19	73	52	71	25	639	78	34	203	46
8:00 AM	135	89	9	74	55	79	29	505	72	30	205	30
8:15 AM	106	79	14	82	63	72	29	511	55	38	181	30
8:30 AM	109	74	12	70	27	77	30	513	59	31	184	35
8:45 AM	80	69	7	45	33	55	29	343	42	25	132	22
8:30 AM	109	74	12	70	27	77	30	513	59	31	184	35

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.54**	0.53	0.53	0.95	0.51	0.97	**1.05**	**1.76**	0.46	**1.36**	0.96	0.97
7:15 AM	**1.81**	0.68	0.69	0.84	0.55	**1.29**	**1.06**	**1.91**	0.38	**1.14**	0.92	0.93
7:30 AM	**1.52**	0.65	0.66	0.94	0.48	**1.58**	0.45	**1.81**	0.34	**1.10**	0.77	0.77
7:45 AM	**1.43**	0.65	0.66	**1.02**	0.62	0.93	0.45	**1.86**	0.51	0.99	0.77	0.77
8:00 AM	**1.26**	0.48	0.49	**1.03**	0.66	**1.04**	0.48	**1.47**	0.47	0.88	0.74	0.74
8:15 AM	**0.99**	0.46	0.47	**1.15**	0.75	0.94	0.43	**1.49**	0.36	**1.18**	0.71	0.71
8:30 AM	**1.02**	0.42	0.43	0.98	0.32	**1.04**	0.47	**1.49**	0.39	**1.05**	0.80	0.80
8:45 AM	0.75	0.39	0.39	0.70	0.44	0.86	0.39	**1.00**	0.27	**1.20**	0.76	0.76
8:30 AM	1.02	0.42	0.43	0.98	0.32	1.04	0.47	1.49	0.39	1.05	0.80	0.80

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**308.5**	43.7	43.9	**98.4**	47.7	**96.8**	**122.5**	**382.7**	28.7	**208.1**	55.5	58.6
7:15 AM	**910.2**	48.8	49.3	77.5	48.6	**208.0**	**159.0**	**1,133.3**	26.9	**458.3**	45.1	46.4
7:30 AM	**1,508.4**	47.7	48.2	**95.0**	61.8	**456.6**	37.6	**1,907.8**	26.2	**575.2**	38.5	39.0
7:45 AM	**1,936.8**	47.4	47.9	**117.3**	**175.1**	**376.4**	25.3	**2,659.9**	30.0	**625.5**	34.9	35.3
8:00 AM	**2,254.6**	42.7	42.9	**138.6**	76.0	**244.0**	25.3	**3,257.6**	29.0	**540.3**	34.9	35.2
8:15 AM	**2,393.8**	42.4	42.6	**204.9**	71.8	**146.1**	23.5	**3,686.6**	26.6	**571.5**	32.9	33.1
8:30 AM	**2,397.8**	41.9	42.1	**274.0**	45.3	**130.2**	25.8	**4,126.1**	27.1	**688.5**	36.0	36.5
8:45 AM	**2,261.6**	42.2	42.3	**124.6**	49.6	73.0	22.6	**4,365.5**	24.3	**773.9**	32.8	33.2
8:30 AM	2,397.8	41.9	42.1	274.0	45.3	130.2	25.8	4,126.1	27.1	688.5	36.0	36.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	F	F	F	C	F	E	E
7:15 AM	F	D	D	E	D	F	F	F	C	F	D	D
7:30 AM	F	D	D	F	E	F	D	F	C	F	D	D
7:45 AM	F	D	D	F	F	F	C	F	C	F	C	D
8:00 AM	F	D	D	F	E	F	C	F	C	F	C	D
8:15 AM	F	D	D	F	E	F	C	F	C	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	F	D	D
8:45 AM	F	D	D	F	D	E	C	F	C	F	C	C
8:30 AM	F	D	D	F	D	F	C	F	C	F	D	D

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**5.6**	0.3	0.3	**1.6**	0.4	0.8	**1.4**	**8.9**	**1.4**	**5.1**	**1.7**	**1.6**
7:15 AM	**11.9**	0.4	0.4	**1.3**	0.4	**1.5**	**1.8**	**18.9**	**1.1**	**8.5**	**1.3**	**1.2**
7:30 AM	**16.9**	0.4	0.4	**1.6**	0.5	**2.7**	0.5	**28.1**	**1.0**	**10.3**	**1.2**	**1.1**
7:45 AM	**20.8**	0.4	0.4	**1.8**	**1.2**	**1.9**	0.4	**37.7**	**1.5**	**10.8**	**1.1**	**1.0**
8:00 AM	**23.4**	0.3	0.3	**2.0**	0.7	**1.5**	0.5	**43.6**	**1.4**	**9.5**	**1.0**	1.0
8:15 AM	**24.1**	0.3	0.3	**2.6**	0.7	**1.1**	0.5	**49.0**	**1.1**	**10.5**	0.9	0.9
8:30 AM	**24.2**	0.2	0.2	**2.8**	0.3	**1.0**	0.5	**54.5**	**1.1**	**11.8**	1.0	1.0
8:45 AM	**22.8**	0.2	0.2	**1.5**	0.3	0.6	0.5	**55.8**	0.8	**13.4**	0.9	0.8
8:30 AM	24.2	0.2	0.2	2.8	0.3	1.0	0.5	54.5	1.1	11.8	1.0	1.0

Intersection Delay and LOS
Time-Period

7:00 AM	218.2	F
7:15 AM	600.2	F
7:30 AM	1005.3	F
7:45 AM	1354.9	F
8:00 AM	1499.7	F
8:15 AM	1688.5	F
8:30 AM	**1891.7**	F **X**
8:45 AM	1685.2	F
8:30 AM	1891.7	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	167	93	14	68	43	80	41	612	70	38	184	44
7:15 AM	196	119	20	59	46	103	48	662	58	39	226	44
7:30 AM	165	111	21	67	40	128	21	630	52	43	224	40
7:45 AM	156	112	19	73	52	82	25	645	78	37	205	47
8:00 AM	138	89	9	74	55	90	29	511	72	33	207	31
8:15 AM	109	79	14	82	63	83	29	517	55	41	183	31
8:30 AM	112	74	12	70	27	88	30	519	59	34	186	36
8:45 AM	83	69	7	45	33	66	29	349	42	28	134	23
8:30 AM	112	74	12	70	27	88	30	519	59	34	186	36

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.56**	0.53	0.53	0.95	0.51	**1.13**	**1.00**	**1.78**	0.46	**1.40**	0.92	0.93
7:15 AM	**1.84**	0.68	0.69	0.84	0.55	**1.38**	0.92	**1.92**	0.38	**1.19**	0.90	0.91
7:30 AM	**1.55**	0.65	0.66	0.94	0.48	**1.74**	0.41	**1.83**	0.34	**1.16**	0.74	0.74
7:45 AM	**1.46**	0.65	0.66	**1.02**	0.62	**1.09**	0.45	**1.88**	0.51	**1.05**	0.76	0.77
8:00 AM	**1.29**	0.48	0.49	**1.03**	0.66	**1.19**	0.48	**1.49**	0.47	0.95	0.73	0.73
8:15 AM	**1.02**	0.46	0.47	**1.15**	0.75	**1.09**	0.43	**1.50**	0.36	**1.23**	0.69	0.69
8:30 AM	**1.05**	0.42	0.43	0.98	0.32	**1.19**	0.47	**1.51**	0.39	**1.11**	0.78	0.78
8:45 AM	0.78	0.37	0.38	0.70	0.39	0.88	0.37	**1.02**	0.27	**1.29**	0.77	0.77
8:30 AM	1.05	0.42	0.43	0.98	0.32	1.19	0.47	1.51	0.39	1.11	0.78	0.78

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**320.8**	43.7	43.9	**98.4**	47.7	**143.4**	**101.4**	**390.5**	28.7	**226.6**	52.9	55.3
7:15 AM	**948.0**	48.8	49.3	77.5	52.0	**296.6**	76.7	**1,156.8**	26.9	**513.7**	44.4	45.5
7:30 AM	**1,571.2**	47.7	48.2	**95.0**	**82.3**	**597.0**	25.9	**1,947.1**	26.2	**677.2**	34.9	35.3
7:45 AM	**2,024.8**	47.4	47.9	**117.3**	**263.4**	**549.2**	25.4	**2,714.8**	30.0	**783.5**	34.8	35.1
8:00 AM	**2,367.3**	42.7	42.9	**138.6**	**150.6**	**436.2**	25.1	**3,328.2**	29.0	**777.3**	34.3	34.6
8:15 AM	**2,531.0**	42.4	42.6	**204.9**	**149.4**	**349.7**	23.2	**3,772.8**	26.6	**842.3**	31.9	32.1
8:30 AM	**2,557.4**	41.9	42.1	**274.0**	62.0	**322.9**	25.4	**4,228.0**	27.1	**1,003.2**	35.4	35.8
8:45 AM	**2,452.8**	41.1	41.1	**124.6**	66.2	**184.9**	22.2	**4,481.0**	25.0	**1,166.9**	33.2	33.7
8:30 AM	2,557.4	41.9	42.1	274.0	62.0	322.9	25.4	4,228.0	27.1	1,003.2	35.4	35.8

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	F	F	F	C	F	D	E
7:15 AM	F	D	D	E	D	F	E	F	C	F	D	D
7:30 AM	F	D	D	F	F	F	C	F	C	F	C	D
7:45 AM	F	D	D	F	F	F	C	F	C	F	C	D
8:00 AM	F	D	D	F	F	F	C	F	C	F	C	C
8:15 AM	F	D	D	F	F	F	C	F	C	F	C	C
8:30 AM	F	D	D	F	E	F	C	F	C	F	D	D
8:45 AM	F	D	D	F	E	F	C	F	C	F	C	C
8:30 AM	F	D	D	F	E	F	C	F	C	F	D	D

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**5.7**	0.3	0.3	**1.6**	0.4	**1.1**	**1.3**	**9.1**	**1.4**	**5.6**	**1.6**	**1.6**
7:15 AM	**12.4**	0.4	0.4	**1.3**	0.5	**2.0**	**1.3**	**19.2**	**1.1**	**9.5**	**1.3**	**1.3**
7:30 AM	**17.6**	0.4	0.4	**1.6**	0.7	**3.4**	0.3	**28.7**	**1.0**	**12.2**	**1.1**	**1.1**
7:45 AM	**21.7**	0.4	0.4	**1.8**	**1.6**	**2.7**	0.4	**38.4**	**1.5**	**13.3**	**1.1**	**1.0**
8:00 AM	**24.5**	0.3	0.3	**2.0**	**1.1**	**2.3**	0.5	**44.5**	**1.4**	**13.1**	**1.0**	1.0
8:15 AM	**25.5**	0.3	0.3	**2.6**	**1.1**	**1.9**	0.5	**50.1**	**1.1**	**14.7**	0.9	0.9
8:30 AM	**25.8**	0.2	0.2	**2.8**	0.4	**1.9**	0.5	**55.8**	**1.1**	**16.7**	1.0	0.9
8:45 AM	**24.6**	0.2	0.2	**1.5**	0.5	**1.2**	0.5	**57.3**	0.8	**19.6**	0.8	0.8
8:30 AM	25.8	0.2	0.2	2.8	0.4	1.9	0.5	55.8	1.1	16.7	1.0	0.9

Intersection Delay and LOS
Time-Period

7:00 AM	225.8	F
7:15 AM	620.8	F
7:30 AM	1043.8	F
7:45 AM	1402.7	F
8:00 AM	1559.5	F
8:15 AM	1762.3	F
8:30 AM	**1974.0**	F **X**
8:45 AM	1769.7	F
8:30 AM	1974	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	167	93	14	68	43	80	41	612	70	38	184	44
7:15 AM	196	119	20	59	46	103	48	662	58	39	226	44
7:30 AM	165	111	21	67	40	128	21	630	52	43	224	40
7:45 AM	156	112	19	73	52	82	25	645	78	37	205	47
8:00 AM	138	89	9	74	55	90	29	511	72	33	207	31
8:15 AM	109	79	14	82	63	83	29	517	55	41	183	31
8:30 AM	112	74	12	70	27	88	30	519	59	34	186	36
8:45 AM	83	69	7	45	33	66	29	349	42	28	134	23
8:30 AM	112	74	12	70	27	88	30	519	59	34	186	36

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.56**	0.53	0.53	0.95	0.51	**1.13**	0.77	**1.24**	0.38	**1.40**	0.76	0.31
7:15 AM	**1.84**	0.68	0.69	0.84	0.55	**1.38**	0.77	**1.35**	0.31	**1.19**	0.77	0.26
7:30 AM	**1.55**	0.65	0.66	0.94	0.48	**1.74**	0.35	**1.28**	0.28	**1.16**	0.64	0.20
7:45 AM	**1.46**	0.65	0.66	**1.02**	0.62	**1.09**	0.36	**1.31**	0.42	**1.05**	0.63	0.25
8:00 AM	**1.29**	0.48	0.49	**1.03**	0.66	**1.19**	0.42	**1.04**	0.39	0.95	0.65	0.17
8:15 AM	**1.02**	0.46	0.47	**1.15**	0.75	**1.09**	0.38	**1.05**	0.30	**1.23**	0.61	0.18
8:30 AM	**1.05**	0.42	0.43	0.98	0.32	**1.19**	0.40	**1.06**	0.32	**1.11**	0.67	0.22
8:45 AM	0.78	0.37	0.38	0.70	0.39	0.88	0.33	0.71	0.23	**1.29**	0.68	0.20
8:30 AM	1.05	0.42	0.43	0.98	0.32	1.19	0.40	1.06	0.32	1.11	0.67	0.22

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**320.8**	43.7	43.9	**98.4**	47.7	**143.4**	42.9	**151.1**	19.9	**226.6**	39.3	19.0
7:15 AM	**948.0**	48.8	49.3	77.5	52.0	**296.6**	46.0	**414.9**	18.9	**513.7**	33.5	15.1
7:30 AM	**1,571.2**	47.7	48.2	**95.0**	**82.3**	**597.0**	23.4	**696.8**	18.3	**677.2**	29.8	13.3
7:45 AM	**2,024.8**	47.4	47.9	**117.3**	**263.4**	**549.2**	22.5	**962.3**	20.7	**783.5**	28.7	13.7
8:00 AM	**2,367.3**	42.7	42.9	**138.6**	**150.6**	**436.2**	23.0	**1,129.3**	20.1	**777.3**	29.9	13.3
8:15 AM	**2,531.0**	42.4	42.6	**204.9**	**149.4**	**349.7**	21.8	**1,167.8**	18.5	**842.3**	28.2	13.3
8:30 AM	**2,557.4**	41.9	42.1	**274.0**	62.0	**322.9**	22.4	**1,214.6**	18.8	**1,003.2**	29.7	14.1
8:45 AM	**2,452.8**	41.1	41.1	**124.6**	66.2	**184.9**	21.1	**1,098.5**	17.8	**1,160.9**	28.5	13.9
8:30 AM	2,557.4	41.9	42.1	274.0	62.0	322.9	22.4	1,214.6	18.8	1,003.2	29.7	14.1

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	F	D	D	F	D	F	D	F	B	F	D	B
7:15 AM	F	D	D	E	D	F	D	F	B	F	C	B
7:30 AM	F	D	D	F	F	F	C	F	B	F	C	B
7:45 AM	F	D	D	F	F	F	C	F	C	F	C	B
8:00 AM	F	D	D	F	F	F	C	F	C	F	C	B
8:15 AM	F	D	D	F	F	F	C	F	B	F	C	B
8:30 AM	F	D	D	F	E	F	C	F	B	F	C	B
8:45 AM	F	D	D	F	E	F	C	F	B	F	C	B
8:30 AM	F	D	D	F	E	F	C	F	B	F	C	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**5.7**	0.3	0.3	**1.6**	0.4	**1.1**	0.8	**3.9**	**1.1**	**5.6**	**1.1**	-
7:15 AM	**12.4**	0.4	0.4	**1.3**	0.5	**2.0**	**1.0**	**7.4**	1.0	**9.5**	0.9	-
7:30 AM	**17.6**	0.4	0.4	**1.6**	0.7	**3.4**	0.3	**10.5**	0.8	**12.2**	0.9	-
7:45 AM	**21.7**	0.4	0.4	**1.8**	**1.6**	**2.7**	0.4	**13.7**	**1.3**	**13.3**	0.8	-
8:00 AM	**24.5**	0.3	0.3	**2.0**	**1.1**	**2.3**	0.5	**14.9**	**1.2**	**13.1**	0.8	-
8:15 AM	**25.5**	0.3	0.3	**2.6**	**1.1**	**1.9**	0.5	**15.4**	0.9	**14.7**	0.7	-
8:30 AM	**25.8**	0.2	0.2	**2.8**	0.4	**1.9**	0.5	**15.9**	1.0	**16.7**	0.8	-
8:45 AM	**24.6**	0.2	0.2	**1.5**	0.5	**1.2**	0.5	**14.4**	0.7	**19.5**	0.6	-
8:30 AM	25.8	0.2	0.2	2.8	0.4	1.9	0.5	15.9	1.0	16.7	0.8	-

Intersection Delay and LOS
Time-Period

7:00 AM	126.4	F
7:15 AM	323.4	F
7:30 AM	534.6	F
7:45 AM	674.8	F
8:00 AM	734.8	F
8:15 AM	744.6	F
8:30 AM	**779.1**	F **X**
8:45 AM	643.7	F
8:30 AM	779.1	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	71	97	14	122	61	64	20	366	67	59	511	108
4:15 PM	83	77	20	146	76	62	19	328	67	45	535	82
4:30 PM	71	80	12	123	71	70	20	357	70	44	542	82
4:45 PM	72	90	14	136	74	73	19	360	63	44	488	137
5:00 PM	81	98	26	131	80	71	27	313	53	41	486	66
5:15 PM	74	100	27	135	78	64	25	297	47	50	475	66
5:30 PM	63	71	34	106	82	71	27	325	55	41	537	94
5:45 PM	43	56	22	73	45	33	28	185	31	25	239	56
5:30 PM	63	71	34	106	82	71	27	325	55	41	537	94

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.83	0.69	0.70	**1.24**	0.69	0.85	0.59	**1.13**	0.47	0.83	**1.12**	**1.15**
4:15 PM	0.87	0.58	0.59	**1.48**	0.84	0.86	0.57	**1.09**	0.50	0.60	**1.22**	**1.22**
4:30 PM	0.83	0.54	0.55	**1.25**	0.76	0.88	0.58	**1.18**	0.52	0.59	**1.22**	**1.22**
4:45 PM	0.84	0.58	0.59	**1.38**	0.76	0.89	0.56	**1.22**	0.48	0.60	**1.25**	**1.26**
5:00 PM	0.86	0.69	0.70	**1.33**	0.85	0.89	0.68	**1.05**	0.40	0.65	**1.29**	**1.29**
5:15 PM	0.84	0.76	0.78	**1.37**	0.83	0.86	0.65	**1.01**	0.36	0.68	**1.21**	**1.21**
5:30 PM	0.81	0.64	0.66	**1.07**	0.85	0.87	0.69	**1.05**	0.40	0.58	**1.25**	**1.26**
5:45 PM	0.74	0.66	0.69	0.74	0.49	0.52	0.74	0.49	0.18	0.98	**1.07**	**1.07**
5:30 PM	0.81	0.64	0.66	1.07	0.85	0.87	0.69	1.05	0.40	0.58	1.25	1.26

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	60.7	45.1	45.6	**174.2**	43.7	57.2	30.6	**102.9**	26.7	29.8	**81.2**	**92.9**
4:15 PM	65.0	40.8	41.4	**488.8**	55.0	60.1	30.9	**215.4**	29.6	27.4	**248.9**	**253.7**
4:30 PM	60.7	40.1	40.3	**821.3**	46.6	60.9	31.0	**329.9**	30.1	27.0	**448.4**	**457.2**
4:45 PM	61.0	40.5	40.9	**1,097.4**	47.0	62.7	31.0	**514.7**	29.6	26.8	**668.3**	**691.9**
5:00 PM	64.2	44.1	45.0	**1,415.7**	55.4	63.6	31.9	**643.9**	27.8	26.4	**948.5**	**966.2**
5:15 PM	61.7	48.7	50.2	**1,727.0**	53.2	57.7	31.6	**686.6**	27.3	29.1	**1,119.5**	**1,141.0**
5:30 PM	58.2	42.7	43.9	**1,943.1**	53.8	58.3	31.7	**670.0**	26.4	25.8	**1,329.0**	**1,362.6**
5:45 PM	54.5	47.4	48.4	**1,833.0**	40.4	41.0	32.3	**318.7**	17.0	31.8	**1,285.4**	**1,327.2**
5:30 PM	58.2	42.7	43.9	1,943.1	53.8	58.3	31.7	670.0	26.4	25.8	1,329.0	1,362.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	E	C	F	C	C	F	F
4:15 PM	E	D	D	F	E	E	C	F	C	C	F	F
4:30 PM	E	D	D	F	D	E	C	F	C	C	F	F
4:45 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:00 PM	E	D	D	F	E	E	C	F	C	C	F	F
5:15 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:30 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:45 PM	D	D	D	F	D	D	C	F	B	C	F	F
5:30 PM	E	D	D	F	D	E	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.3**	0.3	0.3	**3.1**	0.5	0.6	0.3	**2.7**	**1.2**	**1.1**	**1.9**	**1.9**
4:15 PM	**1.5**	0.2	0.2	**6.4**	0.6	0.6	0.3	**3.6**	**1.2**	**1.3**	**4.0**	**3.9**
4:30 PM	**1.3**	0.2	0.2	**8.8**	0.6	0.6	0.3	**5.1**	**1.3**	**1.2**	**6.1**	**6.1**
4:45 PM	**1.3**	0.3	0.3	**11.5**	0.6	0.7	0.3	**7.1**	**1.2**	**1.2**	**8.5**	**8.4**
5:00 PM	**1.4**	0.3	0.3	**14.2**	0.7	0.6	0.4	**8.1**	1.0	**1.1**	**11.0**	**11.0**
5:15 PM	**1.3**	0.3	0.3	**17.1**	0.6	0.6	0.4	**8.4**	0.9	**1.5**	**13.2**	**13.2**
5:30 PM	**1.1**	0.3	0.3	**18.3**	0.7	0.6	0.4	**8.8**	1.0	**1.1**	**15.5**	**15.5**
5:45 PM	0.7	0.2	0.2	**17.1**	0.3	0.3	0.4	**5.7**	0.4	0.7	**16.9**	**16.8**
5:30 PM	1.1	0.3	0.3	18.3	0.7	0.6	0.4	8.8	1.0	1.1	15.5	15.5

Intersection Delay and LOS
Time-Period

4:00 PM	85.5	F
4:15 PM	202.1	F
4:30 PM	323.8	F
4:45 PM	474.9	F
5:00 PM	610.3	F
5:15 PM	713.2	F
5:30 PM	**790.0**	F
5:45 PM	773.1	F
5:30 PM	790	F

X

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	2	1	1	2	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	2	-	-	2	-	-	2	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	72	97	14	122	61	68	20	368	67	70	517	111
4:15 PM	84	77	20	146	76	66	19	330	67	56	541	85
4:30 PM	72	80	12	123	71	74	20	359	70	55	548	85
4:45 PM	73	90	14	136	74	77	19	362	63	55	494	140
5:00 PM	82	98	26	131	80	75	27	315	53	52	492	69
5:15 PM	75	100	27	135	78	68	25	299	47	61	481	69
5:30 PM	64	71	34	106	82	75	27	327	55	52	543	97
5:45 PM	44	56	22	73	45	37	28	187	31	36	245	59
5:30 PM	64	71	34	106	82	75	27	327	55	52	543	97

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.84	0.66	0.67	**1.24**	0.66	0.87	0.58	**1.23**	0.50	0.86	**1.18**	**1.21**
4:15 PM	0.87	0.56	0.58	**1.48**	0.85	0.87	0.56	**1.17**	0.53	0.67	**1.26**	**1.27**
4:30 PM	0.84	0.51	0.52	**1.25**	0.73	0.90	0.58	**1.27**	0.56	0.67	**1.28**	**1.29**
4:45 PM	0.84	0.56	0.57	**1.38**	0.74	0.91	0.56	**1.28**	0.50	0.71	**1.31**	**1.32**
5:00 PM	0.86	0.67	0.68	**1.33**	0.82	0.91	0.68	**1.11**	0.42	0.76	**1.35**	**1.35**
5:15 PM	0.84	0.74	0.76	**1.37**	0.84	0.87	0.65	**1.06**	0.37	0.79	**1.25**	**1.25**
5:30 PM	0.81	0.61	0.63	**1.07**	0.82	0.89	0.67	**1.16**	0.44	0.61	**1.32**	**1.33**
5:45 PM	0.75	0.66	0.69	0.74	0.52	0.56	0.73	0.51	0.19	**1.15**	**1.08**	**1.08**
5:30 PM	0.81	0.61	0.63	1.07	0.82	0.89	0.67	1.16	0.44	0.61	1.32	1.33

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61.0	43.4	43.8	**174.2**	42.3	59.6	31.0	**144.0**	29.8	34.6	**107.8**	**122.2**
4:15 PM	65.4	40.2	40.7	**488.8**	56.3	61.8	31.4	**336.1**	32.3	31.0	**321.8**	**329.8**
4:30 PM	61.0	39.0	39.2	**821.3**	44.8	63.9	31.4	**528.4**	33.0	31.1	**574.9**	**588.2**
4:45 PM	61.3	39.5	39.8	**1,097.4**	45.2	66.3	31.4	**774.2**	31.4	31.4	**848.6**	**881.6**
5:00 PM	64.6	42.7	43.5	**1,415.7**	52.6	67.9	32.6	**955.8**	29.5	31.2	**1,191.9**	**1,216.5**
5:15 PM	62.0	47.3	48.6	**1,727.0**	54.1	59.3	31.8	**1,036.7**	28.5	33.4	**1,387.5**	**1,416.5**
5:30 PM	58.5	41.4	42.4	**1,943.1**	50.7	61.0	32.0	**1,124.3**	29.9	29.2	**1,668.5**	**1,713.3**
5:45 PM	54.4	47.4	48.4	**1,833.0**	40.9	41.7	32.1	**695.7**	18.2	**92.6**	**1,571.1**	**1,624.2**
5:30 PM	58.5	41.4	42.4	1,943.1	50.7	61.0	32.0	1,124.3	29.9	29.2	1,668.5	1,713.3

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	E	C	F	C	C	F	F
4:15 PM	E	D	D	F	E	E	C	F	C	C	F	F
4:30 PM	E	D	D	F	D	E	C	F	C	C	F	F
4:45 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:00 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:15 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:30 PM	E	D	D	F	D	E	C	F	C	C	F	F
5:45 PM	D	D	D	F	D	D	C	F	B	F	F	F
5:30 PM	E	D	D	F	D	E	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.3**	0.3	0.3	**3.1**	0.5	0.6	0.3	**3.2**	**1.2**	**1.6**	**2.2**	**2.3**
4:15 PM	**1.5**	0.2	0.2	**6.4**	0.6	0.6	0.3	**4.8**	**1.3**	**1.8**	**4.8**	**4.8**
4:30 PM	**1.3**	0.2	0.2	**8.8**	0.5	0.7	0.3	**7.1**	**1.3**	**1.7**	**7.5**	**7.4**
4:45 PM	**1.3**	0.3	0.2	**11.5**	0.6	0.7	0.3	**9.6**	**1.2**	**1.7**	**10.3**	**10.3**
5:00 PM	**1.4**	0.3	0.3	**14.2**	0.7	0.7	0.5	**11.1**	**1.0**	**1.6**	**13.4**	**13.3**
5:15 PM	**1.3**	0.3	0.3	**17.1**	0.6	0.6	0.4	**11.8**	0.9	**2.0**	**16.0**	**15.9**
5:30 PM	**1.1**	0.3	0.3	**18.3**	0.7	0.7	0.4	**12.9**	**1.1**	**1.6**	**18.8**	**18.8**
5:45 PM	0.7	0.2	0.2	**17.1**	0.3	0.3	0.4	**10.5**	0.4	**2.3**	**20.4**	**20.3**
5:30 PM	1.1	0.3	0.3	18.3	0.7	0.7	0.4	12.9	1.1	1.6	18.8	18.8

Intersection Delay and LOS

Time-Period		
4:00 PM	105.1	F
4:15 PM	254.6	F
4:30 PM	416.4	F
4:45 PM	599.1	F
5:00 PM	758	F
5:15 PM	875.3	F
5:30 PM	**1014.8**	F **X**
5:45 PM	957	F
5:30 PM	1014.8	F

Intersection # 6
Geometric Data

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	2	2	-	2	2	-	1	3	1	1	2	1
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	No
Receiving Lanes	-	2	-	-	2	-	-	3	-	-	2	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	12
Turn Bay Length (ft)	175	999	-	175	625	-	220	430	220	80	500	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	72	97	14	122	61	68	20	368	67	70	517	111
4:15 PM	84	77	20	146	76	66	19	330	67	56	541	85
4:30 PM	72	80	12	123	71	74	20	359	70	55	548	85
4:45 PM	73	90	14	136	74	77	19	362	63	55	494	140
5:00 PM	82	98	26	131	80	75	27	315	53	52	492	69
5:15 PM	75	100	27	135	78	68	25	299	47	61	481	69
5:30 PM	64	71	34	106	82	75	27	327	55	52	543	97
5:45 PM	44	56	22	73	45	37	28	187	31	36	245	59
5:30 PM	64	71	34	106	82	75	27	327	55	52	543	97

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.84	0.66	0.67	**1.24**	0.66	0.87	0.58	0.84	0.37	0.80	**1.00**	0.38
4:15 PM	0.87	0.56	0.58	**1.48**	0.85	0.87	0.56	0.81	0.39	0.59	**1.14**	0.31
4:30 PM	0.84	0.51	0.52	**1.25**	0.73	0.90	0.58	0.89	0.41	0.61	**1.15**	0.32
4:45 PM	0.84	0.56	0.57	**1.38**	0.74	0.91	0.56	0.89	0.37	0.65	**1.06**	0.53
5:00 PM	0.86	0.67	0.68	**1.33**	0.82	0.91	0.68	0.78	0.31	0.63	**1.23**	0.29
5:15 PM	0.84	0.74	0.76	**1.37**	0.84	0.87	0.65	0.74	0.27	0.64	**1.14**	0.29
5:30 PM	0.81	0.61	0.63	**1.07**	0.82	0.89	0.68	0.79	0.32	0.55	**1.16**	0.37
5:45 PM	0.75	0.66	0.69	0.74	0.52	0.56	0.73	0.36	0.15	0.50	0.90	0.42
5:30 PM	0.81	0.61	0.63	1.07	0.82	0.89	0.68	0.79	0.32	0.55	1.16	0.37

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	61.0	43.4	43.8	**174.2**	42.3	59.6	30.9	35.8	17.6	27.9	34.3	11.3
4:15 PM	65.4	40.2	40.7	**488.8**	56.3	61.8	31.3	36.2	19.7	24.5	**94.7**	15.2
4:30 PM	61.0	39.0	39.2	**821.3**	44.8	63.9	31.4	41.0	20.3	25.4	**227.6**	16.7
4:45 PM	61.3	39.5	39.8	**1,097.4**	45.2	66.3	31.4	41.5	19.5	26.1	**326.5**	21.5
5:00 PM	64.6	42.7	43.5	**1,415.7**	52.6	67.9	32.6	35.4	18.5	25.2	**470.2**	16.6
5:15 PM	62.0	47.3	48.6	**1,727.0**	54.1	59.3	31.8	34.1	18.0	24.0	**604.9**	15.7
5:30 PM	58.5	41.4	42.4	**1,943.1**	50.7	61.0	31.9	35.2	18.2	24.3	**749.7**	18.9
5:45 PM	54.4	47.4	48.4	**1,833.0**	40.9	41.7	32.1	19.6	10.6	14.4	**651.3**	13.6
5:30 PM	58.5	41.4	42.4	1,943.1	50.7	61.0	31.9	35.2	18.2	24.3	749.7	18.9

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	E	D	D	F	D	E	C	D	B	C	C	B
4:15 PM	E	D	D	F	E	E	C	D	B	C	F	B
4:30 PM	E	D	D	F	D	E	C	D	C	C	F	B
4:45 PM	E	D	D	F	D	E	C	D	B	C	F	C
5:00 PM	E	D	D	F	D	E	C	D	B	C	F	B
5:15 PM	E	D	D	F	D	E	C	C	B	C	F	B
5:30 PM	E	D	D	F	D	E	C	D	B	C	F	B
5:45 PM	D	D	D	F	D	D	C	B	B	B	F	B
5:30 PM	E	D	D	F	D	E	C	D	B	C	F	B

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	**1.3**	0.3	0.3	**3.1**	0.5	0.6	0.3	**1.2**	1.0	**1.3**	**1.1**	-
4:15 PM	**1.5**	0.2	0.2	**6.4**	0.6	0.6	0.3	**1.1**	**1.0**	**1.5**	**1.9**	-
4:30 PM	**1.3**	0.2	0.2	**8.8**	0.5	0.7	0.3	**1.2**	**1.1**	**1.5**	**3.3**	-
4:45 PM	**1.3**	0.3	0.2	**11.5**	0.6	0.7	0.3	**1.2**	1.0	**1.5**	**4.1**	-
5:00 PM	**1.4**	0.3	0.3	**14.2**	0.7	0.7	0.5	1.0	0.8	**1.4**	**5.6**	-
5:15 PM	**1.3**	0.3	0.3	**17.1**	0.6	0.6	0.4	0.9	0.7	**1.6**	**7.1**	-
5:30 PM	**1.1**	0.3	0.3	**18.3**	0.7	0.7	0.4	**1.0**	0.8	**1.4**	**8.4**	-
5:45 PM	0.7	0.2	0.2	**17.1**	0.3	0.3	0.4	0.5	0.3	0.9	**8.5**	-
5:30 PM	1.1	0.3	0.3	18.3	0.7	0.7	0.4	1.0	0.8	1.4	8.4	-

Intersection Delay and LOS
Time-Period

4:00 PM	48.9	D
4:15 PM	103.3	F
4:30 PM	163.5	F
4:45 PM	215.1	F
5:00 PM	293.1	F
5:15 PM	369.9	F
5:30 PM	**393.1**	F X
5:45 PM	373.1	F
5:30 PM	393.1	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	38	-	11	12	1	14	16	700	16	10	177	23
7:15 AM	28	-	12	12	1	14	12	631	16	10	217	22
7:30 AM	35	-	7	12	1	14	17	566	16	10	238	24
7:45 AM	37	-	13	12	1	14	18	593	16	10	239	25
8:00 AM	38	-	15	12	1	14	21	544	16	10	223	25
8:15 AM	40	-	8	12	1	14	11	536	16	10	186	33
8:30 AM	37	-	10	12	1	14	13	615	16	10	190	31
8:45 AM	31	-	3	12	1	14	21	479	16	10	239	31
8:45 AM	31	-	3	12	1	14	21	479	16	10	239	31

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.30	0.10	-	0.09	0.14	-	0.20	**1.65**	0.09	0.40	0.89	0.89
7:15 AM	0.22	0.11	-	0.09	0.14	-	0.12	**1.66**	0.10	0.30	0.81	0.81
7:30 AM	0.28	0.07	-	0.09	0.14	-	0.19	**1.59**	0.10	0.24	0.70	0.70
7:45 AM	0.29	0.12	-	0.09	0.14	-	0.19	**1.55**	0.09	0.23	0.69	0.69
8:00 AM	0.30	0.14	-	0.10	0.14	-	0.23	**1.54**	0.10	0.23	0.65	0.65
8:15 AM	0.32	0.08	-	0.09	0.14	-	0.11	**1.55**	0.10	0.29	0.71	0.71
8:30 AM	0.29	0.09	-	0.09	0.14	-	0.12	**1.60**	0.09	0.31	0.76	0.76
8:45 AM	0.25	0.03	-	0.09	0.14	-	0.26	**1.47**	0.11	0.25	0.76	0.76
8:45 AM	0.25	0.03	-	0.09	0.14	-	0.26	1.47	0.11	0.25	0.76	0.76

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28.6	33.4	-	25.5	33.9	-	24.2	**325.4**	15.8	31.0	37.4	45.5
7:15 AM	27.3	33.5	-	25.5	33.9	-	20.6	**924.2**	26.5	30.6	35.8	40.4
7:30 AM	28.2	32.8	-	25.5	33.9	-	21.5	**1,486.1**	26.5	30.0	34.8	37.7
7:45 AM	28.4	33.6	-	25.5	33.9	-	21.6	**2,000.2**	26.5	29.9	34.6	37.3
8:00 AM	28.6	33.9	-	25.6	33.9	-	21.5	**2,493.3**	26.5	29.9	33.7	36.1
8:15 AM	28.8	32.9	-	25.5	33.9	-	20.3	**2,985.5**	26.5	30.5	33.5	36.7
8:30 AM	28.4	33.2	-	25.5	33.9	-	20.4	**3,506.0**	26.5	30.9	34.4	38.5
8:45 AM	27.7	32.2	-	25.4	33.9	-	22.4	**3,991.8**	26.5	30.0	35.8	39.6
8:45 AM	27.7	32.2	-	25.4	33.9	-	22.4	3,991.8	26.5	30.0	35.8	39.6

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	C	F	B	C	D	D
7:15 AM	C	C	-	C	C	-	C	F	C	C	D	D
7:30 AM	C	C	-	C	C	-	C	F	C	C	C	D
7:45 AM	C	C	-	C	C	-	C	F	C	C	C	D
8:00 AM	C	C	-	C	C	-	C	F	C	C	C	D
8:15 AM	C	C	-	C	C	-	C	F	C	C	C	D
8:30 AM	C	C	-	C	C	-	C	F	C	C	C	D
8:45 AM	C	C	-	C	C	-	C	F	C	C	D	D
8:45 AM	C	C	-	C	C	-	C	F	C	C	D	D

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.2**	0.2	-	0.2	0.3	-	0.2	**7.5**	0.2	0.4	0.6	0.6
7:15 AM	0.9	0.2	-	0.2	0.3	-	0.2	**15.6**	0.4	0.2	0.4	0.4
7:30 AM	**1.1**	0.1	-	0.2	0.3	-	0.3	**22.9**	0.4	0.2	0.4	0.4
7:45 AM	**1.2**	0.3	-	0.2	0.3	-	0.3	**29.6**	0.4	0.2	0.4	0.4
8:00 AM	**1.2**	0.3	-	0.2	0.3	-	0.4	**36.2**	0.4	0.2	0.4	0.4
8:15 AM	**1.3**	0.2	-	0.2	0.3	-	0.2	**42.8**	0.4	0.2	0.3	0.3
8:30 AM	**1.2**	0.2	-	0.2	0.3	-	0.3	**49.9**	0.4	0.2	0.3	0.3
8:45 AM	1.0	0.1	-	0.2	0.3	-	0.4	**56.1**	0.4	0.2	0.4	0.4
8:45 AM	1.0	0.1	-	0.2	0.3	-	0.4	56.1	0.4	0.2	0.4	0.4

Intersection Delay and LOS

Time-Period		
7:00 AM	176.4	F
7:15 AM	486.8	F
7:30 AM	791.8	F
7:45 AM	1050.6	F
8:00 AM	1316.1	F
8:15 AM	1552.7	F
8:30 AM	1801.2	F
8:45 AM	**1970.7**	F **X**
8:45 AM	1970.7	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	38	1	11	17	2	19	16	700	34	29	177	23
7:15 AM	28	1	12	17	2	19	12	631	34	29	217	22
7:30 AM	35	1	7	17	2	19	17	566	34	29	238	24
7:45 AM	37	1	13	17	2	19	18	593	34	29	239	25
8:00 AM	38	1	15	17	2	19	21	544	34	29	223	25
8:15 AM	40	1	8	17	2	19	11	536	34	29	186	33
8:30 AM	37	1	10	17	2	19	13	615	34	29	190	31
8:45 AM	31	1	3	17	2	19	21	479	34	29	239	31
8:45 AM	31	1	3	17	2	19	21	479	34	29	239	31

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.32	0.11	-	0.13	0.19	-	0.19	**1.62**	0.18	**1.09**	0.85	0.85
7:15 AM	0.23	0.12	-	0.13	0.19	-	0.12	**1.56**	0.19	0.85	0.79	0.79
7:30 AM	0.29	0.07	-	0.13	0.19	-	0.19	**1.55**	0.21	0.68	0.69	0.69
7:45 AM	0.31	0.13	-	0.13	0.19	-	0.18	**1.52**	0.20	0.66	0.68	0.68
8:00 AM	0.32	0.15	-	0.14	0.19	-	0.22	**1.50**	0.21	0.66	0.64	0.64
8:15 AM	0.33	0.08	-	0.13	0.19	-	0.11	**1.51**	0.22	0.80	0.69	0.69
8:30 AM	0.31	0.10	-	0.13	0.19	-	0.12	**1.57**	0.19	0.86	0.74	0.74
8:45 AM	0.26	0.04	-	0.13	0.19	-	0.25	**1.42**	0.23	0.72	0.75	0.75
8:45 AM	0.26	0.04	-	0.13	0.19	-	0.25	1.42	0.23	0.72	0.75	0.75

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28.8	33.5	-	26.0	34.8	-	23.1	**310.8**	16.3	**117.2**	35.2	41.4
7:15 AM	27.5	33.6	-	26.1	34.8	-	20.8	**847.4**	25.9	**89.9**	34.7	38.8
7:30 AM	28.4	32.9	-	26.0	34.8	-	21.5	**1,342.8**	28.0	42.5	34.5	37.3
7:45 AM	28.7	33.8	-	26.1	34.8	-	21.6	**1,821.3**	28.0	41.2	34.4	36.9
8:00 AM	28.8	34.1	-	26.1	34.8	-	21.5	**2,280.2**	28.0	41.4	33.6	35.8
8:15 AM	29.1	33.0	-	26.0	34.8	-	20.3	**2,737.3**	28.0	51.2	33.2	36.0
8:30 AM	28.7	33.3	-	26.0	34.8	-	20.4	**3,223.2**	28.0	57.5	33.9	37.4
8:45 AM	27.9	32.4	-	25.9	34.8	-	22.1	**3,667.3**	28.0	43.7	35.5	39.0
8:45 AM	27.9	32.4	-	25.9	34.8	-	22.1	3,667.3	28.0	43.7	35.5	39.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	C	F	B	F	D	D
7:15 AM	C	C	-	C	C	-	C	F	C	F	C	D
7:30 AM	C	C	-	C	C	-	C	F	C	D	C	D
7:45 AM	C	C	-	C	C	-	C	F	C	D	C	D
8:00 AM	C	C	-	C	C	-	C	F	C	D	C	D
8:15 AM	C	C	-	C	C	-	C	F	C	D	C	D
8:30 AM	C	C	-	C	C	-	C	F	C	E	C	D
8:45 AM	C	C	-	C	C	-	C	F	C	D	D	D
8:45 AM	C	C	-	C	C	-	C	F	C	D	D	D

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.2**	0.2	-	0.3	0.4	-	0.2	**7.1**	0.3	**1.8**	0.5	0.6
7:15 AM	0.9	0.3	-	0.3	0.4	-	0.2	**14.2**	0.6	**1.4**	0.4	0.4
7:30 AM	**1.1**	0.2	-	0.3	0.4	-	0.3	**20.8**	0.7	0.7	0.4	0.4
7:45 AM	**1.2**	0.3	-	0.3	0.4	-	0.3	**27.1**	0.7	0.7	0.4	0.4
8:00 AM	**1.2**	0.3	-	0.3	0.4	-	0.4	**33.2**	0.7	0.7	0.4	0.4
8:15 AM	**1.3**	0.2	-	0.3	0.4	-	0.2	**39.3**	0.7	0.8	0.3	0.3
8:30 AM	**1.2**	0.2	-	0.3	0.4	-	0.3	**46.0**	0.7	0.9	0.3	0.3
8:45 AM	1.0	0.1	-	0.3	0.4	-	0.4	**51.4**	0.7	0.7	0.4	0.4
8:45 AM	1.0	0.1	-	0.3	0.4	-	0.4	51.4	0.7	0.7	0.4	0.4

Intersection Delay and LOS

Time-Period		
7:00 AM	166	F
7:15 AM	420	F
7:30 AM	677.6	F
7:45 AM	906.5	F
8:00 AM	1136.3	F
8:15 AM	1344.8	F
8:30 AM	1569.5	F
8:45 AM	**1697.1**	F X
8:45 AM	1697.1	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	38	1	11	17	2	19	16	700	34	29	177	23
7:15 AM	28	1	12	17	2	19	12	631	34	29	217	22
7:30 AM	35	1	7	17	2	19	17	566	34	29	238	24
7:45 AM	37	1	13	17	2	19	18	593	34	29	239	25
8:00 AM	38	1	15	17	2	19	21	544	34	29	223	25
8:15 AM	40	1	8	17	2	19	11	536	34	29	186	33
8:30 AM	37	1	10	17	2	19	13	615	34	29	190	31
8:45 AM	31	1	3	17	2	19	21	479	34	29	239	31
8:30 AM	37	1	10	17	2	19	13	615	34	29	190	31

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	0.32	0.11	-	0.13	0.19	-	0.24	**1.39**	**1.41**	**1.09**	0.85	0.85
7:15 AM	0.23	0.12	-	0.13	0.19	-	0.15	**1.35**	**1.35**	0.85	0.79	0.79
7:30 AM	0.29	0.07	-	0.13	0.19	-	0.24	**1.35**	**1.35**	0.68	0.69	0.69
7:45 AM	0.31	0.13	-	0.13	0.19	-	0.24	**1.33**	**1.32**	0.66	0.68	0.68
8:00 AM	0.32	0.15	-	0.14	0.19	-	0.29	**1.32**	**1.31**	0.66	0.64	0.64
8:15 AM	0.33	0.08	-	0.13	0.19	-	0.15	**1.34**	**1.33**	0.80	0.69	0.69
8:30 AM	0.31	0.10	-	0.13	0.19	-	0.15	**1.36**	**1.36**	0.86	0.74	0.74
8:45 AM	0.26	0.04	-	0.13	0.19	-	0.26	0.99	0.97	0.72	0.75	0.75
8:30 AM	0.31	0.10	-	0.13	0.19	-	0.15	1.36	1.36	0.86	0.74	0.74

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	28.8	33.5	-	26.0	34.8	-	22.5	**204.5**	**214.1**	**119.8**	27.6	35.5
7:15 AM	27.5	33.6	-	26.1	34.8	-	20.6	**551.5**	**553.5**	**91.6**	34.1	38.4
7:30 AM	28.4	32.9	-	26.0	34.8	-	21.6	**865.4**	**870.6**	43.1	34.7	37.5
7:45 AM	28.7	33.8	-	26.1	34.8	-	21.7	**1,168.1**	**1,175.5**	41.8	34.5	37.2
8:00 AM	28.8	34.1	-	26.1	34.8	-	21.6	**1,457.7**	**1,468.5**	42.0	33.6	36.0
8:15 AM	29.1	33.0	-	26.0	34.8	-	20.3	**1,749.8**	**1,764.3**	52.2	33.3	36.3
8:30 AM	28.7	33.3	-	26.0	34.8	-	20.4	**2,059.9**	**2,076.3**	58.6	34.1	37.7
8:45 AM	27.9	32.4	-	25.9	34.8	-	23.0	**2,228.6**	**2,248.5**	44.6	35.7	39.3
8:30 AM	28.7	33.3	-	26.0	34.8	-	20.4	2,059.9	2,076.3	58.6	34.1	37.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	C	C	-	C	C	-	C	F	F	F	C	D
7:15 AM	C	C	-	C	C	-	C	F	F	F	C	D
7:30 AM	C	C	-	C	C	-	C	F	F	D	C	D
7:45 AM	C	C	-	C	C	-	C	F	F	D	C	D
8:00 AM	C	C	-	C	C	-	C	F	F	D	C	D
8:15 AM	C	C	-	C	C	-	C	F	F	D	C	D
8:30 AM	C	C	-	C	C	-	C	F	F	E	C	D
8:45 AM	C	C	-	C	C	-	C	F	F	D	D	D
8:30 AM	C	C	-	C	C	-	C	F	F	E	C	D

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	**1.2**	0.2	-	0.3	0.4	-	0.3	**5.1**	**5.1**	**1.9**	0.4	0.5
7:15 AM	0.9	0.3	-	0.3	0.4	-	0.2	**10.0**	**9.9**	**1.4**	0.4	0.4
7:30 AM	**1.1**	0.2	-	0.3	0.4	-	0.3	**14.4**	**14.3**	0.7	0.4	0.4
7:45 AM	**1.2**	0.3	-	0.3	0.4	-	0.3	**18.6**	**18.5**	0.7	0.4	0.4
8:00 AM	**1.2**	0.3	-	0.3	0.4	-	0.4	**22.6**	**22.5**	0.7	0.4	0.4
8:15 AM	**1.3**	0.2	-	0.3	0.4	-	0.2	**26.8**	**26.7**	0.8	0.3	0.3
8:30 AM	**1.2**	0.2	-	0.3	0.4	-	0.3	**31.2**	**31.1**	0.9	0.3	0.3
8:45 AM	1.0	0.1	-	0.3	0.4	-	0.5	**32.8**	**32.7**	0.7	0.4	0.4
8:30 AM	1.2	0.2	-	0.3	0.4	-	0.3	31.2	31.1	0.9	0.3	0.3

Intersection Delay and LOS

Time-Period			
7:00 AM	130.6	F	
7:15 AM	326.4	F	
7:30 AM	519.4	F	
7:45 AM	691.6	F	
8:00 AM	866	F	
8:15 AM	1030.5	F	
8:30 AM	**1192.6**	F	X
8:45 AM	1119.1	F	
8:30 AM	1192.6	F	

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	33	-	25	16	-	11	18	144	14	14	650	54
4:15 PM	44	-	21	16	-	11	17	365	14	14	664	50
4:30 PM	39	-	16	16	-	11	14	352	14	14	636	48
4:45 PM	35	-	20	16	-	11	8	332	14	14	603	49
5:00 PM	41	-	17	16	-	11	16	324	14	14	644	60
5:15 PM	30	-	14	16	-	11	9	393	14	14	691	57
5:30 PM	34	-	17	16	-	11	21	362	14	14	672	56
5:45 PM	39	-	17	16	-	11	15	330	14	14	647	71
5:45 PM	39	-	17	16	-	11	15	330	14	14	647	71

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.24	0.20	-	0.12	0.09	-	**1.07**	**1.52**	0.33	0.22	**1.49**	**1.53**
4:15 PM	0.31	0.17	-	0.12	0.09	-	0.44	**1.67**	0.14	0.21	**1.46**	**1.45**
4:30 PM	0.28	0.13	-	0.11	0.09	-	0.38	**1.66**	0.15	0.22	**1.44**	**1.43**
4:45 PM	0.25	0.16	-	0.12	0.09	-	0.23	**1.68**	0.16	0.23	**1.46**	**1.45**
5:00 PM	0.29	0.14	-	0.11	0.09	-	0.47	**1.67**	0.16	0.21	**1.39**	**1.38**
5:15 PM	0.21	0.11	-	0.11	0.09	-	0.21	**1.65**	0.13	0.21	**1.49**	**1.48**
5:30 PM	0.24	0.14	-	0.11	0.09	-	0.54	**1.64**	0.14	0.21	**1.46**	**1.46**
5:45 PM	0.28	0.14	-	0.11	0.09	-	0.25	0.97	0.09	0.21	**1.47**	**1.45**
5:45 PM	0.28	0.14	-	0.11	0.09	-	0.25	0.97	0.09	0.21	1.47	1.45

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	21.7	26.3	-	19.7	24.0	-	75.0	**275.5**	39.6	24.3	**256.3**	**273.0**
4:15 PM	22.9	25.8	-	19.6	24.0	-	33.1	**805.5**	29.3	24.5	**690.7**	**693.4**
4:30 PM	22.2	25.2	-	19.6	24.0	-	27.9	**1,405.4**	27.4	24.5	**1,089.2**	**1,096.1**
4:45 PM	21.8	25.7	-	19.6	24.0	-	27.3	**2,009.0**	27.4	24.7	**1,487.8**	**1,501.7**
5:00 PM	22.5	25.3	-	19.6	24.0	-	28.4	**2,612.8**	27.4	24.8	**1,867.9**	**1,887.5**
5:15 PM	21.4	25.0	-	19.5	24.0	-	27.6	**3,206.0**	27.4	24.5	**2,256.3**	**2,281.7**
5:30 PM	21.8	25.3	-	19.6	24.0	-	29.3	**3,788.9**	27.4	24.6	**2,680.7**	**2,711.6**
5:45 PM	22.2	25.3	-	19.6	24.0	-	30.3	**4,085.3**	27.7	24.5	**3,093.4**	**3,139.7**
5:45 PM	22.2	25.3	-	19.6	24.0	-	30.3	4,085.3	27.7	24.5	3,093.4	3,139.7

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	B	C	-	F	F	D	C	F	F
4:15 PM	C	C	-	B	C	-	C	F	C	C	F	F
4:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	B	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	B	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.8	0.4	-	0.2	0.1	-	**1.2**	**5.0**	**1.2**	0.2	**1.9**	**2.0**
4:15 PM	**1.1**	0.3	-	0.2	0.1	-	0.4	**11.2**	0.4	0.2	**3.9**	**3.8**
4:30 PM	1.0	0.3	-	0.2	0.1	-	0.3	**17.8**	0.3	0.2	**5.6**	**5.6**
4:45 PM	0.9	0.3	-	0.2	0.1	-	0.2	**24.4**	0.3	0.2	**7.5**	**7.4**
5:00 PM	**1.0**	0.3	-	0.2	0.1	-	0.3	**31.0**	0.3	0.2	**9.2**	**9.1**
5:15 PM	0.7	0.2	-	0.2	0.1	-	0.2	**37.6**	0.3	0.2	**11.0**	**10.9**
5:30 PM	0.9	0.3	-	0.2	0.1	-	0.4	**43.9**	0.3	0.2	**12.9**	**12.8**
5:45 PM	1.0	0.3	-	0.2	0.1	-	0.4	**45.9**	0.4	0.2	**14.7**	**14.6**
5:45 PM	1.0	0.3	-	0.2	0.1	-	0.4	45.9	0.4	0.2	14.7	14.6

Intersection Delay and LOS
Time-Period

4:00 PM	232.6	F
4:15 PM	652.7	F
4:30 PM	1085.4	F
4:45 PM	1520.9	F
5:00 PM	1921.2	F
5:15 PM	2389.4	F
5:30 PM	2776.9	F
5:45 PM	**2982.3**	F X
5:45 PM	2982.3	F

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	2	1	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	No	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	12	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	150	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	33	1	25	34	1	30	18	144	20	20	650	54
4:15 PM	44	1	21	34	1	30	17	365	20	20	664	50
4:30 PM	39	1	16	34	1	30	14	352	20	20	636	48
4:45 PM	35	1	20	34	1	30	8	332	20	20	603	49
5:00 PM	41	1	17	34	1	30	16	324	20	20	644	60
5:15 PM	30	1	14	34	1	30	9	393	20	20	691	57
5:30 PM	34	1	17	34	1	30	21	362	20	20	672	56
5:45 PM	39	1	17	34	1	30	15	330	20	20	647	71
5:45 PM	39	1	17	34	1	30	15	330	20	20	647	71

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.27	0.21	-	0.26	0.25	-	**1.00**	**1.41**	0.44	0.32	**1.49**	**1.53**
4:15 PM	0.36	0.18	-	0.25	0.25	-	0.42	**1.59**	0.20	0.30	**1.45**	**1.44**
4:30 PM	0.32	0.14	-	0.24	0.25	-	0.36	**1.59**	0.20	0.31	**1.43**	**1.42**
4:45 PM	0.29	0.17	-	0.25	0.25	-	0.22	**1.62**	0.22	0.33	**1.46**	**1.45**
5:00 PM	0.34	0.15	-	0.24	0.25	-	0.45	**1.61**	0.22	0.29	**1.40**	**1.38**
5:15 PM	0.25	0.12	-	0.24	0.25	-	0.21	**1.61**	0.18	0.30	**1.49**	**1.48**
5:30 PM	0.28	0.15	-	0.24	0.25	-	0.51	**1.54**	0.19	0.30	**1.47**	**1.46**
5:45 PM	0.32	0.15	-	0.24	0.25	-	0.25	0.98	0.13	0.30	**1.46**	**1.45**
5:45 PM	0.32	0.15	-	0.24	0.25	-	0.25	0.98	0.13	0.30	1.46	1.45

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	22.3	26.4	-	21.4	26.2	-	51.2	**225.9**	40.9	24.8	**255.0**	**271.6**
4:15 PM	24.0	25.9	-	21.2	26.2	-	28.2	**674.6**	27.9	24.9	**684.5**	**686.8**
4:30 PM	23.0	25.3	-	21.1	26.2	-	27.9	**1,205.1**	27.9	24.9	**1,076.2**	**1,082.6**
4:45 PM	22.5	25.8	-	21.2	26.2	-	27.3	**1,746.7**	27.9	25.1	**1,469.1**	**1,482.5**
5:00 PM	23.3	25.4	-	21.1	26.2	-	28.2	**2,297.1**	27.9	25.4	**1,847.9**	**1,867.1**
5:15 PM	22.0	25.1	-	21.1	26.2	-	27.4	**2,842.8**	27.9	24.9	**2,236.2**	**2,261.2**
5:30 PM	22.4	25.4	-	21.1	26.2	-	28.7	**3,357.5**	27.9	25.1	**2,660.1**	**2,690.6**
5:45 PM	23.0	25.4	-	21.1	26.2	-	30.2	**3,611.9**	28.3	24.9	**3,070.5**	**3,116.0**
5:45 PM	23.0	25.4	-	21.1	26.2	-	30.2	3,611.9	28.3	24.9	3,070.5	3,116.0

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	C	C	-	D	F	D	C	F	F
4:15 PM	C	C	-	C	C	-	C	F	C	C	F	F
4:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
4:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:00 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:15 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	C	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	C	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.8	0.4	-	0.4	0.4	-	0.9	**4.1**	**1.2**	0.2	**1.9**	**2.0**
4:15 PM	**1.2**	0.4	-	0.4	0.4	-	0.3	**9.6**	0.4	0.3	**3.8**	**3.8**
4:30 PM	1.0	0.3	-	0.4	0.4	-	0.3	**15.4**	0.4	0.3	**5.6**	**5.5**
4:45 PM	0.9	0.3	-	0.4	0.4	-	0.2	**21.4**	0.4	0.3	**7.4**	**7.3**
5:00 PM	**1.1**	0.3	-	0.4	0.4	-	0.3	**27.4**	0.4	0.3	**9.1**	**9.0**
5:15 PM	0.8	0.2	-	0.4	0.4	-	0.2	**33.4**	0.4	0.3	**10.9**	**10.8**
5:30 PM	0.9	0.3	-	0.4	0.4	-	0.4	**38.8**	0.4	0.3	**12.8**	**12.7**
5:45 PM	1.0	0.3	-	0.4	0.4	-	0.4	**40.7**	0.5	0.3	**14.6**	**14.5**
5:45 PM	1.0	0.3	-	0.4	0.4	-	0.4	40.7	0.5	0.3	14.6	14.5

Intersection Delay and LOS
Time-Period

4:00 PM	207.1	F
4:15 PM	578.9	F
4:30 PM	962.9	F
4:45 PM	1354.6	F
5:00 PM	1716.2	F
5:15 PM	2152.5	F
5:30 PM	2494.9	F
5:45 PM	**2720.4**	F **X**
5:45 PM	2720.4	F

2040 PM Peak Hour BUILD Conditions [MITIGATED]
Multiple Period Analysis

Intersection # 7
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	1	1	-	1	1	-	1	3	-	1	3	-
Shared Lane	No	-	Yes	No	-	Yes	No	-	Yes	No	-	Yes
Receiving Lanes	-	1	-	-	1	-	-	3	-	-	3	-
Lane Width (ft)	12	12	-	12	12	-	12	12	-	12	12	-
Turn Bay Length (ft)	140	240	-	280	280	-	150	350	-	200	999	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	33	1	25	34	1	30	18	144	20	20	650	54
4:15 PM	44	1	21	34	1	30	17	365	20	20	664	50
4:30 PM	39	1	16	34	1	30	14	352	20	20	636	48
4:45 PM	35	1	20	34	1	30	8	332	20	20	603	49
5:00 PM	41	1	17	34	1	30	16	324	20	20	644	60
5:15 PM	30	1	14	34	1	30	9	393	20	20	691	57
5:30 PM	34	1	17	34	1	30	21	362	20	20	672	56
5:45 PM	39	1	17	34	1	30	15	330	20	20	647	71
5:45 PM	39	1	17	34	1	30	15	330	20	20	647	71

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.27	0.21	-	0.26	0.25	-	**1.15**	**1.20**	**1.21**	0.32	**1.50**	**1.54**
4:15 PM	0.36	0.18	-	0.25	0.25	-	0.47	**1.19**	**1.17**	0.32	**1.53**	**1.53**
4:30 PM	0.32	0.14	-	0.24	0.25	-	0.42	**1.26**	**1.24**	0.33	**1.51**	**1.51**
4:45 PM	0.29	0.17	-	0.25	0.25	-	0.26	**1.30**	**1.28**	0.33	**1.46**	**1.45**
5:00 PM	0.34	0.15	-	0.24	0.25	-	0.48	**1.17**	**1.15**	0.29	**1.40**	**1.38**
5:15 PM	0.25	0.12	-	0.24	0.25	-	0.22	**1.12**	**1.10**	0.30	**1.49**	**1.48**
5:30 PM	0.28	0.15	-	0.24	0.25	-	0.56	**1.15**	**1.13**	0.30	**1.47**	**1.46**
5:45 PM	0.32	0.15	-	0.24	0.25	-	0.25	0.67	0.66	0.32	**1.53**	**1.52**
5:45 PM	0.32	0.15	-	0.24	0.25	-	0.25	0.67	0.66	0.32	1.53	1.52

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	22.3	26.4	-	21.4	26.2	-	**124.9**	**137.4**	**147.0**	24.8	**250.1**	**267.4**
4:15 PM	24.0	25.9	-	21.2	26.2	-	53.0	**307.7**	**305.4**	26.3	**730.5**	**738.1**
4:30 PM	23.0	25.3	-	21.1	26.2	-	30.0	**504.0**	**501.3**	26.2	**1,196.0**	**1,208.5**
4:45 PM	22.5	25.8	-	21.2	26.2	-	28.2	**749.1**	**748.2**	26.1	**1,630.6**	**1,647.6**
5:00 PM	23.3	25.4	-	21.1	26.2	-	32.0	**956.1**	**960.5**	25.8	**2,011.1**	**2,033.5**
5:15 PM	22.0	25.1	-	21.1	26.2	-	28.6	**1,082.9**	**1,090.7**	25.6	**2,399.8**	**2,428.1**
5:30 PM	22.4	25.4	-	21.1	26.2	-	33.9	**1,195.9**	**1,203.5**	25.8	**2,823.8**	**2,857.7**
5:45 PM	23.0	25.4	-	21.1	26.2	-	30.5	**1,102.3**	**1,112.1**	26.2	**3,265.0**	**3,319.5**
5:45 PM	23.0	25.4	-	21.1	26.2	-	30.5	1,102.3	1,112.1	26.2	3,265.0	3,319.5

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	C	C	-	C	C	-	F	F	F	C	F	F
4:15 PM	C	C	-	C	C	-	D	F	F	C	F	F
4:30 PM	C	C	-	C	C	-	C	F	F	C	F	F
4:45 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:00 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:15 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:30 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	F	C	F	F
5:45 PM	C	C	-	C	C	-	C	F	F	C	F	F

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	0.8	0.4	-	0.4	0.4	-	**2.1**	**3.0**	**3.0**	0.2	**1.8**	**1.9**
4:15 PM	**1.2**	0.4	-	0.4	0.4	-	0.9	**5.0**	**4.9**	0.3	**4.3**	**4.2**
4:30 PM	1.0	0.3	-	0.4	0.4	-	0.4	**7.4**	**7.2**	0.3	**6.3**	**6.3**
4:45 PM	0.9	0.3	-	0.4	0.4	-	0.2	**10.3**	**10.1**	0.3	**8.2**	**8.2**
5:00 PM	**1.1**	0.3	-	0.4	0.4	-	0.4	**12.4**	**12.3**	0.3	**9.8**	**9.8**
5:15 PM	0.8	0.2	-	0.4	0.4	-	0.2	**13.8**	**13.7**	0.3	**11.7**	**11.7**
5:30 PM	0.9	0.3	-	0.4	0.4	-	0.6	**15.1**	**15.0**	0.3	**13.6**	**13.6**
5:45 PM	1.0	0.3	-	0.4	0.4	-	0.4	**13.8**	**13.8**	0.3	**15.7**	**15.7**
5:45 PM	1.0	0.3	-	0.4	0.4	-	0.4	13.8	13.8	0.3	15.7	15.7

Intersection Delay and LOS
Time-Period

4:00 PM	184.7	F
4:15 PM	488.5	F
4:30 PM	795.6	F
4:45 PM	1099.3	F
5:00 PM	1358.2	F
5:15 PM	1667.2	F
5:30 PM	1887.1	F
5:45 PM	**2296.3**	F X
5:45 PM	2296.3	F

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	178	-	-	22	127	-	-	256	-
7:15 AM	-	-	-	193	1	-	22	163	-	-	202	-
7:30 AM	-	-	-	152	-	-	29	189	-	-	189	-
7:45 AM	-	-	-	164	-	-	29	213	-	-	169	-
8:00 AM	-	-	-	152	-	-	13	152	-	-	162	-
8:15 AM	-	-	-	161	-	-	19	136	-	-	181	-
8:30 AM	-	-	-	156	-	-	25	189	-	-	213	-
8:45 AM	-	-	-	177	-	-	18	108	-	-	191	-
7:15 AM	-	-	-	193	1	-	22	163	-	-	202	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.89	-	-	0.55	0.57	-	-	0.38	-
7:15 AM	-	-	-	0.89	0.01	-	0.39	0.59	-	-	0.30	-
7:30 AM	-	-	-	0.87	-	-	0.39	0.55	-	-	0.26	-
7:45 AM	-	-	-	0.88	-	-	0.34	0.57	-	-	0.24	-
8:00 AM	-	-	-	0.87	-	-	0.22	0.59	-	-	0.21	-
8:15 AM	-	-	-	0.88	-	-	0.36	0.57	-	-	0.25	-
8:30 AM	-	-	-	0.87	-	-	0.38	0.57	-	-	0.29	-
8:45 AM	-	-	-	0.89	-	-	0.43	0.56	-	-	0.28	-
7:15 AM	-	-	-	0.89	0.01	-	0.39	0.59	-	-	0.30	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.6	-	-	13.6	5.9	-	-	17.8	-
7:15 AM	-	-	-	52.4	33.9	-	13.0	5.5	-	-	17.4	-
7:30 AM	-	-	-	52.9	-	-	9.8	5.1	-	-	13.5	-
7:45 AM	-	-	-	52.8	-	-	10.4	5.5	-	-	14.1	-
8:00 AM	-	-	-	52.9	-	-	8.9	5.2	-	-	11.9	-
8:15 AM	-	-	-	52.8	-	-	10.3	5.7	-	-	14.1	-
8:30 AM	-	-	-	52.9	-	-	10.1	5.3	-	-	13.9	-
8:45 AM	-	-	-	52.6	-	-	12.0	5.5	-	-	16.3	-
7:15 AM	-	-	-	52.4	33.9	-	13.0	5.5	-	-	17.4	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	C	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	C	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.8	-	-	1.0	0.1	-	-	0.5	-
7:15 AM	-	-	-	0.9	0.0	-	0.8	0.1	-	-	0.4	-
7:30 AM	-	-	-	0.7	-	-	0.8	0.1	-	-	0.3	-
7:45 AM	-	-	-	0.8	-	-	0.7	0.1	-	-	0.3	-
8:00 AM	-	-	-	0.7	-	-	0.5	0.1	-	-	0.2	-
8:15 AM	-	-	-	0.7	-	-	0.8	0.1	-	-	0.3	-
8:30 AM	-	-	-	0.7	-	-	0.7	0.1	-	-	0.4	-
8:45 AM	-	-	-	0.8	-	-	0.9	0.1	-	-	0.3	-
7:15 AM	-	-	-	0.9	0.0	-	0.8	0.1	-	-	0.4	-

Intersection Delay and LOS
Time-Period

7:00 AM	20.9	C
7:15 AM	21.5	C
7:30 AM	18.3	B
7:45 AM	19.2	B
8:00 AM	17.8	B
8:15 AM	19.1	B
8:30 AM	18.4	B
8:45 AM	20.5	C
7:15 AM	21.5	C

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	191	-	-	23	129	-	-	260	-
7:15 AM	-	-	-	206	1	-	23	165	-	-	206	-
7:30 AM	-	-	-	165	-	-	30	191	-	-	193	-
7:45 AM	-	-	-	177	-	-	30	215	-	-	173	-
8:00 AM	-	-	-	165	-	-	14	154	-	-	166	-
8:15 AM	-	-	-	174	-	-	20	138	-	-	185	-
8:30 AM	-	-	-	169	-	-	26	191	-	-	217	-
8:45 AM	-	-	-	190	-	-	19	110	-	-	195	-
7:15 AM	-	-	-	206	1	-	23	165	-	-	206	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.89	-	-	0.59	0.59	-	-	0.40	-
7:15 AM	-	-	-	0.90	0.01	-	0.42	0.61	-	-	0.32	-
7:30 AM	-	-	-	0.88	-	-	0.42	0.57	-	-	0.27	-
7:45 AM	-	-	-	0.89	-	-	0.37	0.59	-	-	0.25	-
8:00 AM	-	-	-	0.88	-	-	0.25	0.61	-	-	0.23	-
8:15 AM	-	-	-	0.88	-	-	0.39	0.59	-	-	0.27	-
8:30 AM	-	-	-	0.88	-	-	0.41	0.59	-	-	0.31	-
8:45 AM	-	-	-	0.89	-	-	0.47	0.58	-	-	0.30	-
7:15 AM	-	-	-	0.90	0.01	-	0.42	0.61	-	-	0.32	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	52.4	-	-	15.2	6.8	-	-	19.6	-
7:15 AM	-	-	-	52.4	32.4	-	14.3	6.1	-	-	19.0	-
7:30 AM	-	-	-	52.7	-	-	11.0	5.9	-	-	15.0	-
7:45 AM	-	-	-	52.6	-	-	11.5	6.3	-	-	15.6	-
8:00 AM	-	-	-	52.7	-	-	9.9	5.9	-	-	13.3	-
8:15 AM	-	-	-	52.6	-	-	11.5	6.6	-	-	15.6	-
8:30 AM	-	-	-	52.7	-	-	11.3	6.1	-	-	15.4	-
8:45 AM	-	-	-	52.4	-	-	13.4	6.3	-	-	18.0	-
7:15 AM	-	-	-	52.4	32.4	-	14.3	6.1	-	-	19.0	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	C	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:15 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	B	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	C	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.9	-	-	**1.1**	0.2	-	-	0.5	-
7:15 AM	-	-	-	0.9	0.0	-	0.9	0.1	-	-	0.4	-
7:30 AM	-	-	-	0.8	-	-	0.9	0.1	-	-	0.3	-
7:45 AM	-	-	-	0.8	-	-	0.8	0.2	-	-	0.3	-
8:00 AM	-	-	-	0.8	-	-	0.5	0.2	-	-	0.3	-
8:15 AM	-	-	-	0.8	-	-	0.8	0.2	-	-	0.3	-
8:30 AM	-	-	-	0.8	-	-	0.8	0.2	-	-	0.4	-
8:45 AM	-	-	-	0.9	-	-	**1.0**	0.1	-	-	0.4	-
7:15 AM	-	-	-	0.9	0.0	-	0.9	0.1	-	-	0.4	-

Intersection Delay and LOS
Time-Period

7:00 AM	22.2	C	
7:15 AM	22.6	C	X
7:30 AM	19.5	B	
7:45 AM	20.5	C	
8:00 AM	19.1	B	
8:15 AM	20.3	C	
8:30 AM	19.7	B	
8:45 AM	21.8	C	
7:15 AM	C	22.6	

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	3	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	191	-	-	23	129	-	-	260	-
7:15 AM	-	-	-	206	1	-	23	165	-	-	206	-
7:30 AM	-	-	-	165	-	-	30	191	-	-	193	-
7:45 AM	-	-	-	177	-	-	30	215	-	-	173	-
8:00 AM	-	-	-	165	-	-	14	154	-	-	166	-
8:15 AM	-	-	-	174	-	-	20	138	-	-	185	-
8:30 AM	-	-	-	169	-	-	26	191	-	-	217	-
8:45 AM	-	-	-	190	-	-	19	110	-	-	195	-
7:00 AM	-	-	-	191	-	-	23	129	-	-	260	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.82	-	-	0.72	0.75	-	-	0.36	-
7:15 AM	-	-	-	0.83	0.01	-	0.53	0.80	-	-	0.28	-
7:30 AM	-	-	-	0.81	-	-	0.54	0.75	-	-	0.25	-
7:45 AM	-	-	-	0.81	-	-	0.47	0.78	-	-	0.23	-
8:00 AM	-	-	-	0.81	-	-	0.32	0.80	-	-	0.21	-
8:15 AM	-	-	-	0.81	-	-	0.50	0.78	-	-	0.24	-
8:30 AM	-	-	-	0.81	-	-	0.52	0.78	-	-	0.28	-
8:45 AM	-	-	-	0.82	-	-	0.56	0.72	-	-	0.27	-
7:00 AM	-	-	-	0.82	-	-	0.72	0.75	-	-	0.36	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	51.6	-	-	12.4	5.4	-	-	14.9	-
7:15 AM	-	-	-	50.5	40.2	-	10.3	5.4	-	-	14.2	-
7:30 AM	-	-	-	53.4	-	-	8.2	5.1	-	-	11.6	-
7:45 AM	-	-	-	52.6	-	-	8.3	5.5	-	-	11.8	-
8:00 AM	-	-	-	53.4	-	-	6.9	5.5	-	-	9.8	-
8:15 AM	-	-	-	52.8	-	-	8.3	5.7	-	-	11.9	-
8:30 AM	-	-	-	53.1	-	-	8.3	5.3	-	-	11.7	-
8:45 AM	-	-	-	51.6	-	-	9.9	5.4	-	-	13.4	-
7:00 AM	-	-	-	51.6	-	-	12.4	5.4	-	-	14.9	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-
7:15 AM	-	-	-	D	D	-	B	A	-	-	B	-
7:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:00 AM	-	-	-	D	-	-	A	A	-	-	A	-
8:15 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:30 AM	-	-	-	D	-	-	A	A	-	-	B	-
8:45 AM	-	-	-	D	-	-	A	A	-	-	B	-
7:00 AM	-	-	-	D	-	-	B	A	-	-	B	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
7:00 AM	-	-	-	0.6	-	-	**1.2**	0.2	-	-	0.4	-
7:15 AM	-	-	-	0.6	0.0	-	**1.0**	0.2	-	-	0.3	-
7:30 AM	-	-	-	0.5	-	-	1.0	0.2	-	-	0.3	-
7:45 AM	-	-	-	0.6	-	-	0.9	0.2	-	-	0.3	-
8:00 AM	-	-	-	0.5	-	-	0.6	0.2	-	-	0.2	-
8:15 AM	-	-	-	0.6	-	-	1.0	0.2	-	-	0.3	-
8:30 AM	-	-	-	0.5	-	-	0.9	0.2	-	-	0.3	-
8:45 AM	-	-	-	0.6	-	-	**1.4**	0.2	-	-	0.3	-
7:00 AM	-	-	-	0.6	-	-	1.2	0.2	-	-	0.4	-

Intersection Delay and LOS
Time-Period

7:00 AM	17.8	B	X
7:15 AM	17.8	B	X
7:30 AM	15.9	B	
7:45 AM	16.5	B	
8:00 AM	15.7	B	
8:15 AM	16.5	B	
8:30 AM	16	B	
8:45 AM	17.7	B	
7:00 AM	B	17.8	

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	493	-	-	33	111	-	-	223	1
4:15 PM	-	-	-	532	1	-	30	113	-	-	142	-
4:30 PM	-	-	-	535	-	-	23	114	-	-	132	-
4:45 PM	-	-	-	499	-	-	30	99	-	-	145	-
5:00 PM	-	-	-	455	-	-	32	118	-	-	157	-
5:15 PM	-	-	-	489	2	-	21	125	-	-	175	-
5:30 PM	-	-	-	488	-	-	32	123	-	-	156	-
5:45 PM	-	-	-	528	1	-	26	116	-	-	143	-
5:45 PM	-	-	-	528	1	-	26	116	-	-	143	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.99	-	-	**1.52**	**1.08**	-	-	**1.35**	**1.35**
4:15 PM	-	-	-	**1.06**	0.00	-	**1.45**	**1.15**	-	-	0.86	-
4:30 PM	-	-	-	**1.07**	-	-	**1.14**	**1.19**	-	-	0.80	-
4:45 PM	-	-	-	**1.00**	-	-	**1.56**	**1.09**	-	-	0.87	-
5:00 PM	-	-	-	0.91	-	-	**1.42**	**1.14**	-	-	0.95	-
5:15 PM	-	-	-	0.98	0.01	-	0.95	**1.19**	-	-	**1.06**	-
5:30 PM	-	-	-	0.98	-	-	**1.38**	**1.12**	-	-	0.94	-
5:45 PM	-	-	-	**1.06**	0.00	-	**1.12**	**1.15**	-	-	0.86	-
5:45 PM	-	-	-	1.06	0.00	-	1.12	1.15	-	-	0.86	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	35.9	-	-	**279.2**	**84.7**	-	-	**220.2**	**232.9**
4:15 PM	-	-	-	58.6	6.9	-	**716.5**	**182.7**	-	-	**312.6**	-
4:30 PM	-	-	-	**117.0**	-	-	**988.2**	**338.4**	-	-	**152.1**	-
4:45 PM	-	-	-	**155.1**	-	-	**1,301.3**	**465.5**	-	-	61.8	-
5:00 PM	-	-	-	**99.9**	-	-	**1,693.7**	**564.8**	-	-	71.4	-
5:15 PM	-	-	-	56.6	6.9	-	**1,925.8**	**711.7**	-	-	**98.1**	-
5:30 PM	-	-	-	37.6	-	-	**2,067.7**	**851.9**	-	-	**93.7**	-
5:45 PM	-	-	-	55.8	6.9	-	**2,137.4**	**975.4**	-	-	60.6	-
5:45 PM	-	-	-	55.8	6.9	-	2,137.4	975.4	-	-	60.6	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	F	F	-	-	F	F
4:15 PM	-	-	-	F	A	-	F	F	-	-	F	-
4:30 PM	-	-	-	F	-	-	F	F	-	-	F	-
4:45 PM	-	-	-	F	-	-	F	F	-	-	E	-
5:00 PM	-	-	-	F	-	-	F	F	-	-	E	-
5:15 PM	-	-	-	E	A	-	F	F	-	-	F	-
5:30 PM	-	-	-	D	-	-	F	F	-	-	F	-
5:45 PM	-	-	-	F	A	-	F	F	-	-	E	-
5:45 PM	-	-	-	F	A	-	F	F	-	-	E	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.6**	-	-	**4.8**	0.5	-	-	**1.2**	**1.3**
4:15 PM	-	-	-	**2.1**	-	-	**10.6**	0.9	-	-	**1.2**	-
4:30 PM	-	-	-	**2.8**	-	-	**13.6**	**1.4**	-	-	0.8	-
4:45 PM	-	-	-	**3.2**	-	-	**18.7**	**1.8**	-	-	0.5	-
5:00 PM	-	-	-	**2.4**	-	-	**24.6**	**2.1**	-	-	0.5	-
5:15 PM	-	-	-	**1.9**	0.0	-	**26.2**	**2.6**	-	-	0.7	-
5:30 PM	-	-	-	**1.6**	-	-	**28.7**	**3.0**	-	-	0.6	-
5:45 PM	-	-	-	**2.0**	-	-	**32.3**	**3.5**	-	-	0.5	-
5:45 PM	-	-	-	2.0	-	-	32.3	3.5	-	-	0.5	-

Intersection Delay and LOS
Time-Period

4:00 PM	104.8	F
4:15 PM	168.4	F
4:30 PM	223.6	F
4:45 PM	298.5	F
5:00 PM	326.5	F
5:15 PM	314.5	F
5:30 PM	379.2	F
5:45 PM	397.8	F
5:45 PM F	397.8	

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	2	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	497	-	-	36	115	-	-	225	1
4:15 PM	-	-	-	536	1	-	33	117	-	-	144	-
4:30 PM	-	-	-	539	-	-	26	118	-	-	134	-
4:45 PM	-	-	-	503	-	-	33	103	-	-	147	-
5:00 PM	-	-	-	459	-	-	35	122	-	-	159	-
5:15 PM	-	-	-	493	2	-	24	129	-	-	177	-
5:30 PM	-	-	-	492	-	-	35	127	-	-	158	-
5:45 PM	-	-	-	532	1	-	29	120	-	-	145	-
5:45 PM	-	-	-	532	1	-	29	120	-	-	145	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**0.99**	-	-	**1.69**	**1.14**	-	-	**1.36**	**1.36**
4:15 PM	-	-	-	**1.07**	0.00	-	**1.62**	**1.21**	-	-	0.87	-
4:30 PM	-	-	-	**1.08**	-	-	**1.31**	**1.25**	-	-	0.81	-
4:45 PM	-	-	-	**1.01**	-	-	**1.74**	**1.14**	-	-	0.89	-
5:00 PM	-	-	-	0.92	-	-	**1.59**	**1.19**	-	-	0.96	-
5:15 PM	-	-	-	0.99	0.01	-	**1.10**	**1.25**	-	-	**1.07**	-
5:30 PM	-	-	-	0.98	-	-	**1.54**	**1.18**	-	-	0.95	-
5:45 PM	-	-	-	**1.06**	0.00	-	**1.39**	**1.21**	-	-	0.87	-
5:45 PM	-	-	-	1.06	0.00	-	1.39	1.21	-	-	0.87	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	37.6	-	-	**359.5**	**111.7**	-	-	**225.4**	**237.8**
4:15 PM	-	-	-	61.5	6.9	-	**948.1**	**262.5**	-	-	**329.8**	-
4:30 PM	-	-	-	**127.2**	-	-	**1,366.6**	**469.6**	-	-	**179.9**	-
4:45 PM	-	-	-	**173.0**	-	-	**1,834.5**	**646.7**	-	-	69.5	-
5:00 PM	-	-	-	**125.6**	-	-	**2,376.6**	**797.1**	-	-	73.6	-
5:15 PM	-	-	-	**90.6**	6.9	-	**2,758.2**	**996.7**	-	-	**102.0**	-
5:30 PM	-	-	-	75.4	-	-	**3,042.4**	**1,189.6**	-	-	**111.9**	-
5:45 PM	-	-	-	**90.6**	6.9	-	**3,473.5**	**1,368.9**	-	-	63.3	-
5:45 PM	-	-	-	90.6	6.9	-	3,473.5	1,368.9	-	-	63.3	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	D	-	-	F	F	-	-	F	F
4:15 PM	-	-	-	F	A	-	F	F	-	-	F	-
4:30 PM	-	-	-	F	-	-	F	F	-	-	F	-
4:45 PM	-	-	-	F	-	-	F	F	-	-	E	-
5:00 PM	-	-	-	F	-	-	F	F	-	-	E	-
5:15 PM	-	-	-	F	A	-	F	F	-	-	F	-
5:30 PM	-	-	-	E	-	-	F	F	-	-	F	-
5:45 PM	-	-	-	F	A	-	F	F	-	-	E	-
5:45 PM	-	-	-	F	A	-	F	F	-	-	E	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	**1.6**	-	-	**6.2**	0.7	-	-	**1.2**	**1.3**
4:15 PM	-	-	-	**2.1**	-	-	**14.1**	**1.2**	-	-	**1.3**	-
4:30 PM	-	-	-	**3.0**	-	-	**19.1**	**1.9**	-	-	0.9	-
4:45 PM	-	-	-	**3.4**	-	-	**26.4**	**2.4**	-	-	0.5	-
5:00 PM	-	-	-	**2.8**	-	-	**34.3**	**2.9**	-	-	0.6	-
5:15 PM	-	-	-	**2.3**	-	-	**37.6**	**3.6**	-	-	0.7	-
5:30 PM	-	-	-	**2.1**	-	-	**42.3**	**4.1**	-	-	0.7	-
5:45 PM	-	-	-	**2.5**	-	-	**48.4**	**4.8**	-	-	0.5	-
5:45 PM	-	-	-	2.5	-	-	48.4	4.8	-	-	0.5	-

Intersection Delay and LOS
Time-Period

4:00 PM	119.5	F
4:15 PM	212.7	F
4:30 PM	295.4	F
4:45 PM	404.2	F
5:00 PM	464.4	F
5:15 PM	463.1	F
5:30 PM	571.4	F
5:45 PM	617.7	F
5:45 PM F	617.7	

X

Intersection # 8
Geometric Data

0	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes	-	-	-	3	1	-	1	2	-	-	3	-
Shared Lane	-	-	-	No	-	-	No	-	-	-	-	Yes
Receiving Lanes	-	-	-	-	1	-	-	2	-	-	3	-
Lane Width (ft)	-	-	-	12	12	-	12	12	-	-	12	-
Turn Bay Length (ft)	-	-	-	600	600	-	100	999	-	-	600	-
Grade (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Demand (veh/p)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	497	-	-	36	115	-	-	225	1
4:15 PM	-	-	-	536	1	-	33	117	-	-	144	-
4:30 PM	-	-	-	539	-	-	26	118	-	-	134	-
4:45 PM	-	-	-	503	-	-	33	103	-	-	147	-
5:00 PM	-	-	-	459	-	-	35	122	-	-	159	-
5:15 PM	-	-	-	493	2	-	24	129	-	-	177	-
5:30 PM	-	-	-	492	-	-	35	127	-	-	158	-
5:45 PM	-	-	-	532	1	-	29	120	-	-	145	-
5:30 PM	-	-	-	492	-	-	35	127	-	-	158	-

V/C Ratio (X)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	0.84	-	-	0.96	0.95	-	-	**1.34**	**1.34**
4:15 PM	-	-	-	0.86	0.00	-	**2.07**	**1.22**	-	-	0.67	-
4:30 PM	-	-	-	0.86	-	-	0.89	**1.27**	-	-	0.81	-
4:45 PM	-	-	-	0.85	-	-	**1.08**	**1.07**	-	-	0.89	-
5:00 PM	-	-	-	0.84	-	-	0.88	**1.02**	-	-	0.96	-
5:15 PM	-	-	-	0.84	0.01	-	0.69	**1.16**	-	-	**1.07**	-
5:30 PM	-	-	-	0.84	-	-	0.95	**1.08**	-	-	0.95	-
5:45 PM	-	-	-	0.85	0.00	-	0.72	0.85	-	-	0.70	-
5:30 PM	-	-	-	0.84	-	-	0.95	1.08	-	-	0.95	-

Delay (s/veh)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	25.3	-	-	46.5	47.2	-	-	**216.6**	**229.2**
4:15 PM	-	-	-	24.0	11.7	-	**515.2**	**123.4**	-	-	**147.7**	-
4:30 PM	-	-	-	23.9	-	-	**503.5**	**351.5**	-	-	56.6	-
4:45 PM	-	-	-	25.1	-	-	**449.9**	**472.3**	-	-	63.0	-
5:00 PM	-	-	-	26.9	-	-	**371.9**	**470.4**	-	-	73.5	-
5:15 PM	-	-	-	25.4	13.7	-	**217.5**	**581.6**	-	-	**101.9**	-
5:30 PM	-	-	-	25.5	-	-	61.7	**690.5**	-	-	**111.6**	-
5:45 PM	-	-	-	24.1	11.9	-	39.4	**731.0**	-	-	48.8	-
5:30 PM	-	-	-	25.5	-	-	61.7	690.5	-	-	111.6	-

Level of Service (LOS)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	C	-	-	D	D	-	-	F	F
4:15 PM	-	-	-	C	B	-	F	F	-	-	F	-
4:30 PM	-	-	-	C	-	-	F	F	-	-	E	-
4:45 PM	-	-	-	C	-	-	F	F	-	-	E	-
5:00 PM	-	-	-	C	-	-	F	F	-	-	E	-
5:15 PM	-	-	-	C	B	-	F	F	-	-	F	-
5:30 PM	-	-	-	C	-	-	E	F	-	-	F	-
5:45 PM	-	-	-	C	B	-	D	F	-	-	D	-
5:30 PM	-	-	-	C	-	-	E	F	-	-	F	-

Queue Storage Ratio (QSR)

Time-Period	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
4:00 PM	-	-	-	1.0	-	-	**3.3**	0.6	-	-	**1.2**	**1.3**
4:15 PM	-	-	-	1.0	-	-	**11.4**	0.7	-	-	0.9	-
4:30 PM	-	-	-	1.0	-	-	**16.0**	**2.1**	-	-	0.4	-
4:45 PM	-	-	-	1.0	-	-	**16.2**	**2.7**	-	-	0.5	-
5:00 PM	-	-	-	0.9	-	-	**15.3**	**2.9**	-	-	0.6	-
5:15 PM	-	-	-	1.0	0.0	-	**8.8**	**3.4**	-	-	0.7	-
5:30 PM	-	-	-	1.0	-	-	**3.9**	**3.9**	-	-	0.7	-
5:45 PM	-	-	-	1.0	-	-	**2.7**	**3.8**	-	-	0.4	-
5:30 PM	-	-	-	1.0	-	-	3.9	3.9	-	-	0.7	-

Intersection Delay and LOS
Time-Period

4:00 PM	72.5	E
4:15 PM	114	F
4:30 PM	170	F
4:45 PM	209.8	F
5:00 PM	211.7	F
5:15 PM	235.5	F
5:30 PM	253	F
5:45 PM	207.8	F
5:30 PM	F	253

X

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	1100	1092	0
Future Vol, veh/h	16	0	0	1100	1092	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	1100	1092	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1642	-	-	0	-	0
Stage 1	1092	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	79	0	0	-	-	0
Stage 1	256	0	0	-	-	0
Stage 2	507	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	79	-	-	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-
Stage 1	256	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	61.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	79	-
HCM Lane V/C Ratio	-	0.203	-
HCM Control Delay (s)	-	61.8	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	0.7	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	1108	1160	0
Future Vol, veh/h	16	0	0	1108	1160	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	1108	1160	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1714	-	-	0	-	0
Stage 1	1160	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	71	0	0	-	-	0
Stage 1	235	0	0	-	-	0
Stage 2	504	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	71	-	-	-	-	-
Mov Cap-2 Maneuver	71	-	-	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	504	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	69.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	71	-
HCM Lane V/C Ratio	-	0.225	-
HCM Control Delay (s)	-	69.9	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	0.8	-

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	540	2900	0
Future Vol, veh/h	16	0	0	540	2900	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	540	2900	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3170	-	-	0	-	0
Stage 1	2900	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	~ 6	0	0	-	-	0
Stage 1	22	0	0	-	-	0
Stage 2	714	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 6	-	-	-	-	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	22	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	1907.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	6	-
HCM Lane V/C Ratio	-	2.667	-
HCM Control Delay (s)	-	$ 1907.7	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	3.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	568	2924	0
Future Vol, veh/h	16	0	0	568	2924	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	15	15	15	15
Mvmt Flow	16	0	0	568	2924	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3208	-	-	0	-	0
Stage 1	2924	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	7.1	-	-	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.65	-	-	-	-	-
Pot Cap-1 Maneuver	~ 6	0	0	-	-	0
Stage 1	22	0	0	-	-	0
Stage 2	702	0	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 6	-	-	-	-	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	22	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	1907.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	6	-
HCM Lane V/C Ratio	-	2.667	-
HCM Control Delay (s)	-	$ 1907.7	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	3.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCS7 Two-Way Stop-Control Report

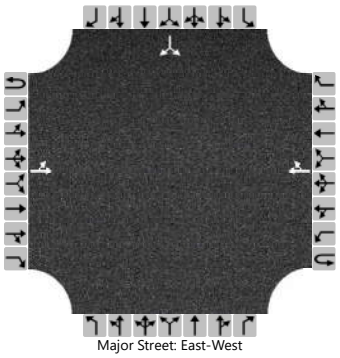
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Horizon Year

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		129	280				292	37						33		9
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		129													42	
Capacity, c (veh/h)		1161													315	
v/c Ratio		0.11													0.13	
95% Queue Length, Q_{95} (veh)		0.4													0.5	
Control Delay (s/veh)		8.5													18.2	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)		3.4												18.2		
Approach LOS														C		

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HCS7 Two-Way Stop-Control Report

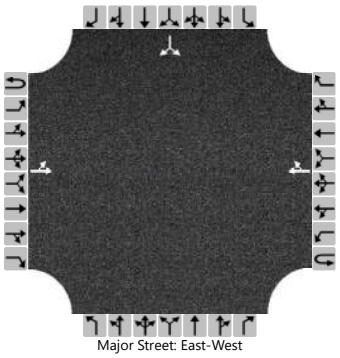
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Project Description	Westpointe 40 Development - Horizon Year

Site Information

Intersection	Bluewater / Daytona
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		41	291				281	12						128		37
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		41													165	
Capacity, c (veh/h)		1198													436	
v/c Ratio		0.03													0.38	
95% Queue Length, Q_{95} (veh)		0.1													1.7	
Control Delay (s/veh)		8.1													18.2	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)		1.3												18.2		
Approach LOS														C		

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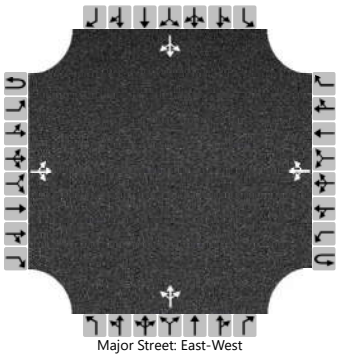
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Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Horizon

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		17	271	7		14	176	16		22	1	44		4	1	4
Percent Heavy Vehicles (%)		15				3				3	3	3		15	3	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.13				7.13	6.53	6.23		7.25	6.53	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.53	4.03	3.33		3.64	4.03	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17				14					67				9	
Capacity, c (veh/h)		1307				1279					615				524	
v/c Ratio		0.01				0.01					0.11				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.4				0.1	
Control Delay (s/veh)		7.8				7.8					11.6				12.0	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)		0.6				0.6				11.6				12.0		
Approach LOS										B				B		

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HCS7 Two-Way Stop-Control Report

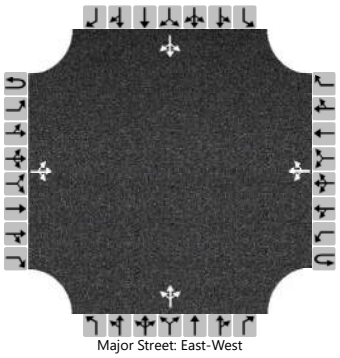
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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
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Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 Development - Horizon

Site Information

Intersection	Bluewater / Adonai
Jurisdiction	City of Albuquerque
East/West Street	Bluewater Rd.
North/South Street	Adonai
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	184	22		37	271	5		12	1	22		15	1	17
Percent Heavy Vehicles (%)		15				3				3	3	3		15	3	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.13				7.13	6.53	6.23		7.25	6.53	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.53	4.03	3.33		3.64	4.03	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5				37					35				33	
Capacity, c (veh/h)		1216				1359					609				519	
v/c Ratio		0.00				0.03					0.06				0.06	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.2				0.2	
Control Delay (s/veh)		8.0				7.7					11.3				12.4	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.2				1.1				11.3				12.4			
Approach LOS									B				B			

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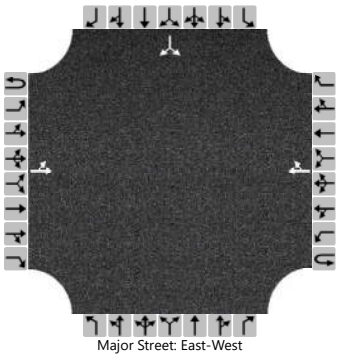
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	160				208	13						3		5
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													8	
Capacity, c (veh/h)		1275													703	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8													10.2	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.3												10.2		
Approach LOS														B		

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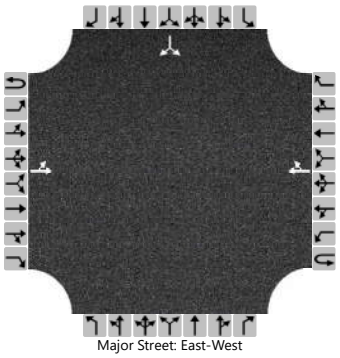
General Information

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Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "A"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "A"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	208				164	4						13		5
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													18	
Capacity, c (veh/h)		1335													645	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.7													10.7	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.2												10.7			
Approach LOS													B			

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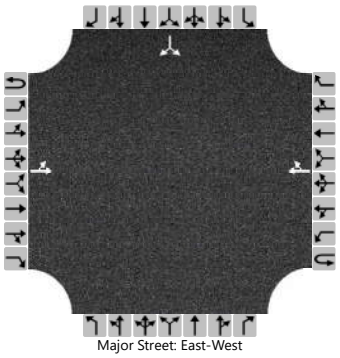
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Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "B"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "B"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		15	160				208	5						5		4
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		15													9	
Capacity, c (veh/h)		1284													656	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8													10.6	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.8												10.6		
Approach LOS														B		

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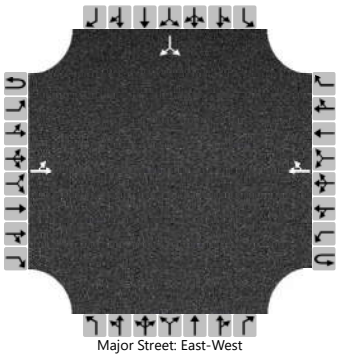
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Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "B"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "B"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	208				164	5						5		15
Percent Heavy Vehicles (%)		15												5		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.45		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.55		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													20	
Capacity, c (veh/h)		1333													771	
v/c Ratio		0.00													0.03	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.7													9.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.2												9.8			
Approach LOS													A			

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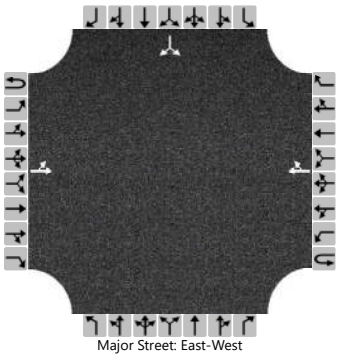
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Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "C"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "C"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		19	173				203	9						2		2
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		19													4	
Capacity, c (veh/h)		1285													658	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8													10.5	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.9												10.5		
Approach LOS														B		

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HCS7 Two-Way Stop-Control Report

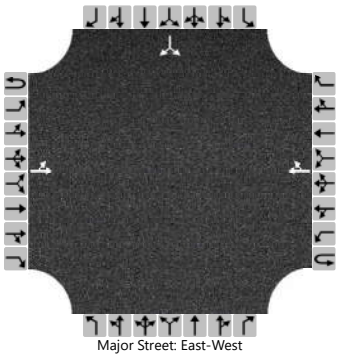
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "C"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "C"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	185				156	3						8		9
Percent Heavy Vehicles (%)		15												15		15
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.25												6.55		6.35
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.64		3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													17	
Capacity, c (veh/h)		1345													722	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.7													10.1	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)		0.3												10.1		
Approach LOS														B		

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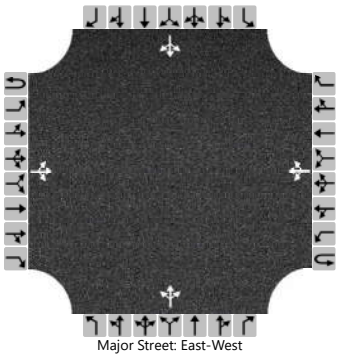
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		64	159	87		28	164	8		22	1	10		3	1	14
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		64				28					33				18	
Capacity, c (veh/h)		1330				1248					458				666	
v/c Ratio		0.05				0.02					0.07				0.03	
95% Queue Length, Q_{95} (veh)		0.2				0.1					0.2				0.1	
Control Delay (s/veh)		7.8				8.0					13.5				10.6	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	2.0				1.3				13.5				10.6			
Approach LOS									B				B			

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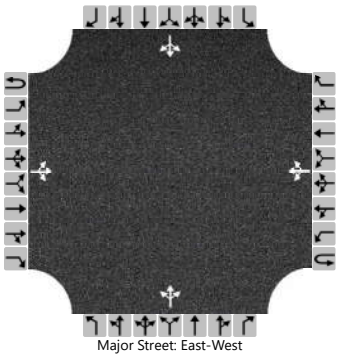
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe Development - Horizon

Site Information

Intersection	Driveway "D"
Jurisdiction	City of Albuquerque
East/West Street	Daytona Rd.
North/South Street	Driveway "D"
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		20	149	28		9	150	3		87	1	38		12	1	55
Percent Heavy Vehicles (%)		15				15				15	15	15		15	15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.25				4.25				7.25	6.65	6.35		7.25	6.65	6.35
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.34				3.64	4.14	3.44		3.64	4.14	3.44

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				9					126				68	
Capacity, c (veh/h)		1352				1324					565				761	
v/c Ratio		0.01				0.01					0.22				0.09	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.8				0.3	
Control Delay (s/veh)		7.7				7.7					13.2				10.2	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)		0.9				0.5				13.2				10.2		
Approach LOS										B				B		

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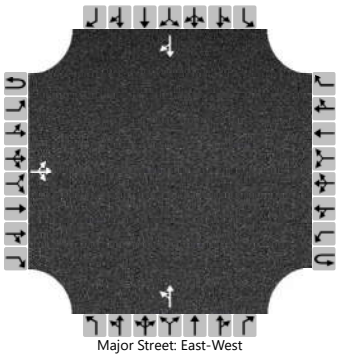
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Horizon

Site Information

Intersection	Driveway "E"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "E"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		1	1	1						5	311				198	8
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1								316						206
Capacity, c (veh/h)		1113								865						866
v/c Ratio		0.00								0.37						0.24
95% Queue Length, Q_{95} (veh)		0.0								1.7						0.9
Control Delay (s/veh)		8.2								11.5						10.4
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		2.8								11.5				10.4		
Approach LOS										B				B		

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HCS7 Two-Way Stop-Control Report

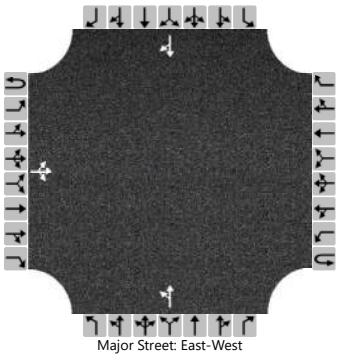
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Horizon

Site Information

Intersection	Driveway "E"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "E"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		3	1	3						5	199				313	3
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3								204						316
Capacity, c (veh/h)		1113								854						858
v/c Ratio		0.00								0.24						0.37
95% Queue Length, Q_{95} (veh)		0.0								0.9						1.7
Control Delay (s/veh)		8.2								10.5						11.6
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		3.5								10.5				11.6		
Approach LOS										B				B		

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HCS7 Two-Way Stop-Control Report

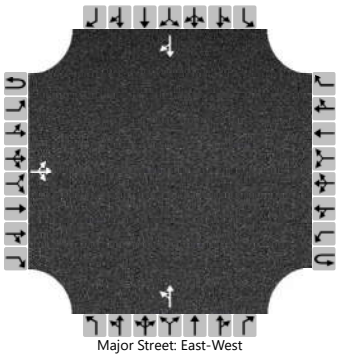
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	AM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Horizon

Site Information

Intersection	Driveway "F"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "F"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		1	1	1						5	310				190	8
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1								315						198
Capacity, c (veh/h)		1113								865						866
v/c Ratio		0.00								0.36						0.23
95% Queue Length, Q_{95} (veh)		0.0								1.7						0.9
Control Delay (s/veh)		8.2								11.5						10.4
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		2.8								11.5				10.4		
Approach LOS										B				B		

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HCS7 Two-Way Stop-Control Report

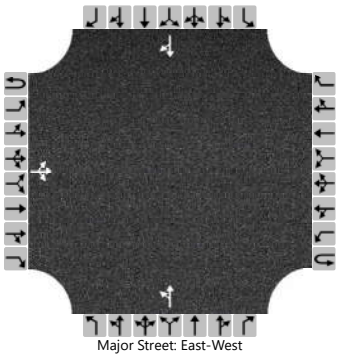
General Information

Analyst	tob
Agency/Co.	Terry O. Brown, P.E.
Date Performed	3/10/2021
Analysis Year	2040
Time Analyzed	PM Peak Hour BUILD Cond.
Intersection Orientation	East-West
Project Description	Westpointe 40 - Horizon

Site Information

Intersection	Driveway "F"
Jurisdiction	City of Albuquerque
East/West Street	Driveway "F"
North/South Street	Daytona Rd.
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		3	1	3						5	196				310	3
Percent Heavy Vehicles (%)		15								15	15				15	15
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.45								7.25	6.65				6.65	7.25
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.24								3.64	4.14				4.14	4.04

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3								201						313
Capacity, c (veh/h)		1113								854						858
v/c Ratio		0.00								0.24						0.36
95% Queue Length, Q_{95} (veh)		0.0								0.9						1.7
Control Delay (s/veh)		8.2								10.5						11.6
Level of Service (LOS)		A								B						B
Approach Delay (s/veh)		3.5								10.5				11.6		
Approach LOS										B				B		

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Freeway Segment Analysis
(I-40 : West of Atrisco Vista to East of Unser Blvd.)

HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2022 No Build
Jurisdiction		Time Analyzed	
Project Description	2022 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	7.68		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco	5000	2
2	Diverge	Diverge	Atrisco Diverge	1500	2
3	Basic	Basic	Between Atrisco Ramps	2300	2
4	Merge	Merge	Atrisco Merge	1500	2
5	Basic	Basic	West of Arroyo	10000	2
6	Diverge	Diverge	Arroyo Diverge	1500	2
7	Basic	Basic	Before Arroyo Merge	1750	2
8	Merge	Merge	Arroyo Merge	1500	2
9	Basic	Basic	Between Arroyo Ramps	1100	2
10	Weaving	Weaving	Arroyo Merge Unser Diverge	2850	3
11	Basic	Basic	Before Unser Merge	1900	2
12	Merge	Basic	Unser Merge	1500	3
13	Basic	Basic	Between Unser Ramps	1200	3
14	Merge	Merge	Unser Merge	1500	3
15	Basic	Basic	East of Unser	5450	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	992	4646	0.21	73.5	6.7	A
2	1.00	0.521	1228	4646	0.26	73.5	8.4	A
3	1.00	0.521	1010	4646	0.22	73.5	6.9	A
4	1.00	0.521	1123	4646	0.24	73.5	7.6	A
5	1.00	0.521	1269	4646	0.27	73.5	8.6	A
6	1.00	0.521	1180	4646	0.25	73.5	8.0	A

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.521	0.641	992	128	4646	1936	0.21	0.07	59.3	59.3	8.4	5.6	A
2	1.00	1.00	0.521	0.641	1228	101	4646	1936	0.26	0.05	59.4	59.4	10.3	7.6	A
3	1.00	1.00	0.521	0.641	1010	75	4646	1936	0.22	0.04	59.5	59.5	8.5	5.7	A
4	1.00	1.00	0.521	0.641	1123	128	4646	1936	0.24	0.07	59.3	59.3	9.5	6.7	A
5	1.00	1.00	0.521	0.641	1269	154	4646	1936	0.27	0.08	59.2	59.2	10.7	8.0	A
6	1.00	1.00	0.521	0.641	1180	148	4646	1936	0.25	0.08	59.2	59.2	10.0	7.2	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.505	861	4646	0.19	69.9	6.1	A
2	1.00	0.505	1139	4646	0.25	69.9	8.1	A
3	1.00	0.505	947	4646	0.20	69.9	6.7	A
4	1.00	0.505	996	4646	0.21	69.9	7.1	A
5	1.00	0.505	1113	4646	0.24	69.9	7.9	A
6	1.00	0.505	1030	4646	0.22	69.9	7.3	A

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.505	0.794	1231	370	4646	1936	0.26	0.19	65.3	65.3	9.4	8.2	A
2	1.00	1.00	0.505	0.794	1737	598	4646	1936	0.37	0.31	65.0	65.0	13.4	12.0	B
3	1.00	1.00	0.505	0.794	1447	500	4646	1936	0.31	0.26	65.2	65.2	11.1	9.8	A
4	1.00	1.00	0.505	0.794	1388	392	4646	1936	0.30	0.20	65.2	65.2	10.6	9.4	A
5	1.00	1.00	0.505	0.794	1418	305	4646	1936	0.31	0.16	65.2	65.2	10.9	9.7	A
6	1.00	1.00	0.505	0.794	1318	288	4646	1936	0.28	0.15	65.2	65.2	10.1	8.9	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.595	1225	4646	0.26	70.4	8.7	A
2	1.00	0.595	1765	4646	0.38	70.4	12.5	B
3	1.00	0.595	1471	4646	0.32	70.4	10.5	A
4	1.00	0.595	1368	4646	0.29	70.4	9.7	A
5	1.00	0.595	1351	4646	0.29	70.4	9.6	A
6	1.00	0.595	1259	4646	0.27	70.4	8.9	A

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.595	0.725	1225	59	4646	1936	0.26	0.03	59.5	59.5	10.3	6.5	A
2	1.00	1.00	0.595	0.725	1765	66	4646	1936	0.38	0.03	59.5	59.5	14.8	11.2	B

3	1.00	1.00	0.595	0.725	1471	59	4646	1936	0.32	0.03	59.5	59.5	12.4	8.6	A
4	1.00	1.00	0.595	0.725	1368	167	4646	1936	0.29	0.09	59.2	59.2	11.6	7.7	A
5	1.00	1.00	0.595	0.725	1351	83	4646	1936	0.29	0.04	59.4	59.4	11.4	7.6	A
6	1.00	1.00	0.595	0.725	1259	83	4646	1936	0.27	0.04	59.4	59.4	10.6	6.8	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.588	1167	4646	0.25	69.6	8.3	A
2	1.00	0.588	1704	4646	0.37	69.6	12.1	B
3	1.00	0.588	1415	4646	0.30	69.6	10.1	A
4	1.00	0.588	1179	4646	0.25	69.6	8.4	A
5	1.00	0.588	1265	4646	0.27	69.6	9.0	A
6	1.00	0.588	1172	4646	0.25	69.6	8.3	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.588	0.980	1507	340	4646	1936	0.32	0.18	64.6	64.6	11.7	12.1	B
2	1.00	1.00	0.588	0.980	2295	591	4646	1936	0.49	0.31	63.9	63.9	18.0	18.2	B
3	1.00	1.00	0.588	0.980	1776	361	4646	1936	0.38	0.19	64.4	64.4	13.8	14.2	B
4	1.00	1.00	0.588	0.980	1553	374	4646	1936	0.33	0.19	64.5	64.5	12.0	12.5	B
5	1.00	1.00	0.588	0.980	1481	216	4646	1936	0.32	0.11	64.6	64.6	11.5	12.0	B
6	1.00	1.00	0.588	0.980	1362	190	4646	1936	0.29	0.10	64.6	64.6	10.5	11.1	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	1507	4646	0.32	69.7	10.7	A
2	1.00	0.676	2339	4646	0.50	69.6	16.6	B
3	1.00	0.676	1754	4646	0.38	69.7	12.5	B
4	1.00	0.676	1568	4646	0.34	69.7	11.1	B
5	1.00	0.676	1414	4646	0.30	69.7	10.0	A
6	1.00	0.676	1294	4646	0.28	69.7	9.2	A

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.806	3046	3546	0.86	57.5	17.7	B
2	1.00	0.806	3923	4026	0.98	54.9	23.8	C
3	1.00	0.806	3423	3670	0.93	56.2	20.3	C
4	1.00	0.806	2399	4141	0.58	60.8	13.2	B
5	1.00	0.806	2591	3630	0.71	59.3	14.6	B
6	1.00	0.806	2029	3741	0.54	61.6	11.0	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.794	3214	4646	0.69	67.2	23.9	C
2	1.00	0.794	4067	4646	0.88	59.5	34.2	D
3	1.00	0.794	3626	4646	0.78	64.1	28.3	D
4	1.00	0.794	2395	4646	0.52	70.2	17.0	B
5	1.00	0.794	2656	4646	0.57	69.8	19.0	C
6	1.00	0.794	1951	4646	0.42	70.2	13.9	B

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.794	0.980	3514	300	6970	1936	0.50	0.15	73.1	73.1	16.0	16.0	B
2	1.00	1.00	0.794	0.980	4499	432	6970	1936	0.65	0.22	70.3	70.3	21.3	21.3	C
3	1.00	1.00	0.794	0.980	4711	1085	6970	1936	0.68	0.56	69.4	69.4	22.6	22.6	C
4	1.00	1.00	0.794	0.980	3471	1076	6970	1936	0.50	0.56	73.2	73.2	15.8	15.8	B
5	1.00	1.00	0.794	0.980	3617	961	6970	1936	0.52	0.50	72.9	72.9	16.5	16.5	B
6	1.00	1.00	0.794	0.980	2802	851	6970	1936	0.40	0.44	73.3	73.5	12.7	12.7	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.847	3360	6970	0.48	70.4	15.9	B
2	1.00	0.847	4312	6970	0.62	69.0	20.8	C
3	1.00	0.847	4654	6970	0.67	67.9	22.8	C
4	1.00	0.847	3490	6970	0.50	70.4	16.5	B
5	1.00	0.847	3602	6970	0.52	70.3	17.1	B
6	1.00	0.847	2813	6970	0.40	70.4	13.3	B

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.847	0.962	4361	1001	6970	1936	0.63	0.52	64.8	62.6	22.4	23.6	C
2	1.00	1.00	0.847	0.962	5448	1136	6970	1936	0.78	0.59	62.6	60.0	29.0	29.0	D
3	1.00	1.00	0.847	0.962	5773	1119	6970	1936	0.83	0.58	61.8	59.0	31.1	30.5	D
4	1.00	1.00	0.847	0.962	4554	1064	6970	1936	0.65	0.55	64.5	62.2	23.5	24.7	C
5	1.00	1.00	0.847	0.962	4343	741	6970	1936	0.62	0.38	65.1	62.9	22.2	22.8	C
6	1.00	1.00	0.847	0.962	3536	723	6970	1936	0.51	0.37	65.9	63.7	17.9	19.0	B

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.862	4419	6970	0.63	69.0	21.3	C
2	1.00	0.862	5505	6970	0.79	63.8	28.8	D
3	1.00	0.862	5821	6970	0.84	61.7	31.4	D

4	1.00	0.862	4617	6970	0.66	68.3	22.5	C
5	1.00	0.862	4367	6970	0.63	69.1	21.1	C
6	1.00	0.862	3572	6970	0.51	70.7	16.8	B

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	67.1	13.5	10.0	6.90	B
2	64.0	18.4	13.7	7.20	C
3	63.6	17.4	13.1	7.20	B
4	67.7	13.6	10.0	6.80	B
5	67.8	13.7	10.0	6.80	B
6	68.7	11.5	8.3	6.70	B

Facility Overall Results

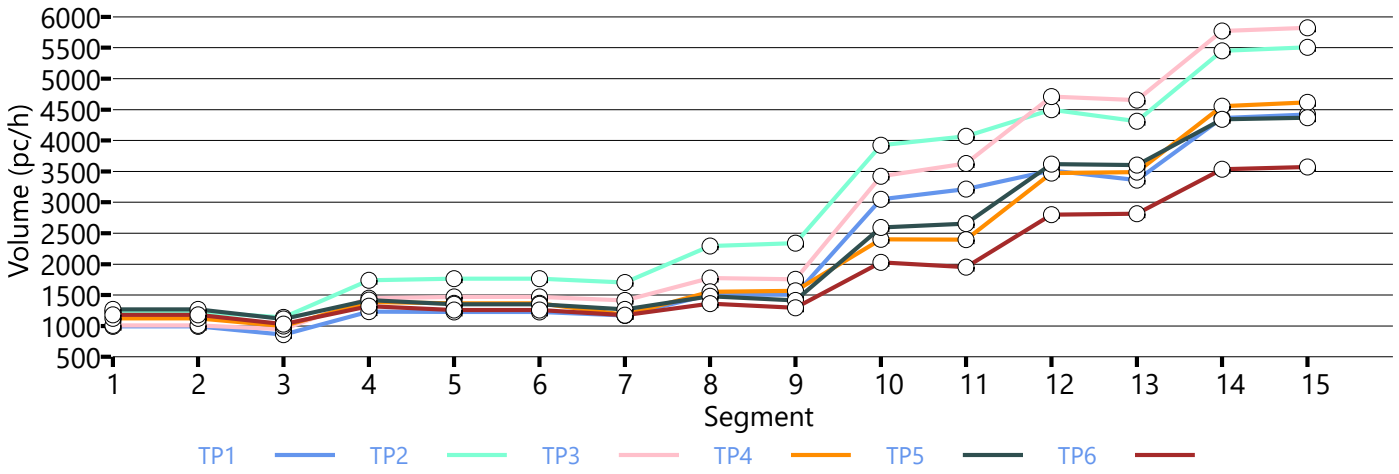
Space Mean Speed, mi/h	66.2	Density, veh/mi/ln	10.9
Average Travel Time, min	7.00	Density, pc/mi/ln	14.7

Messages

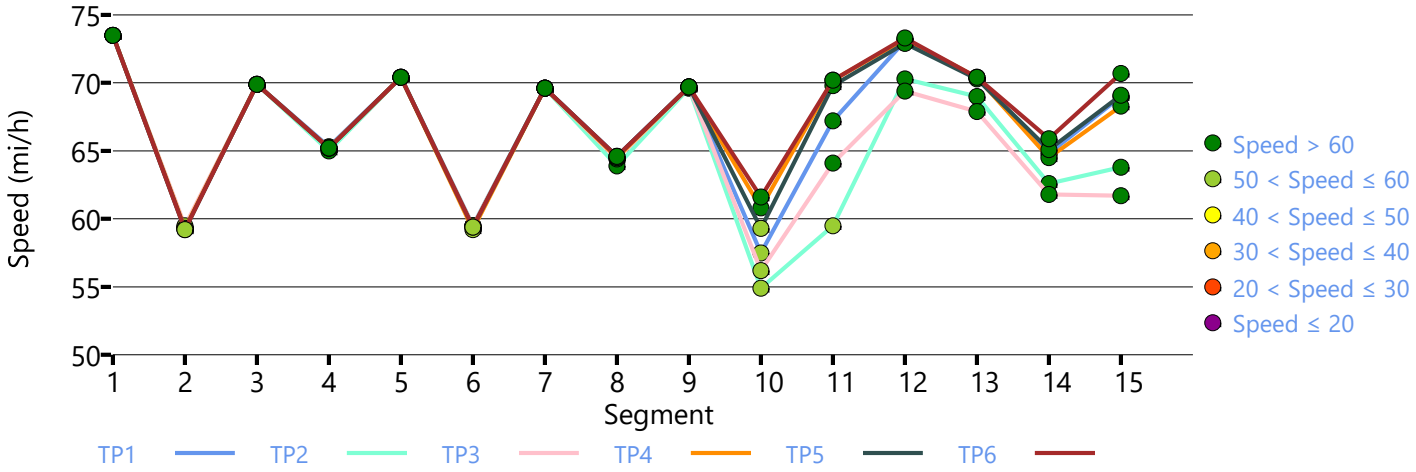
WARNING 1	Merge capacity is less than merge demand for analysis period 2 on segment 10.

Comments

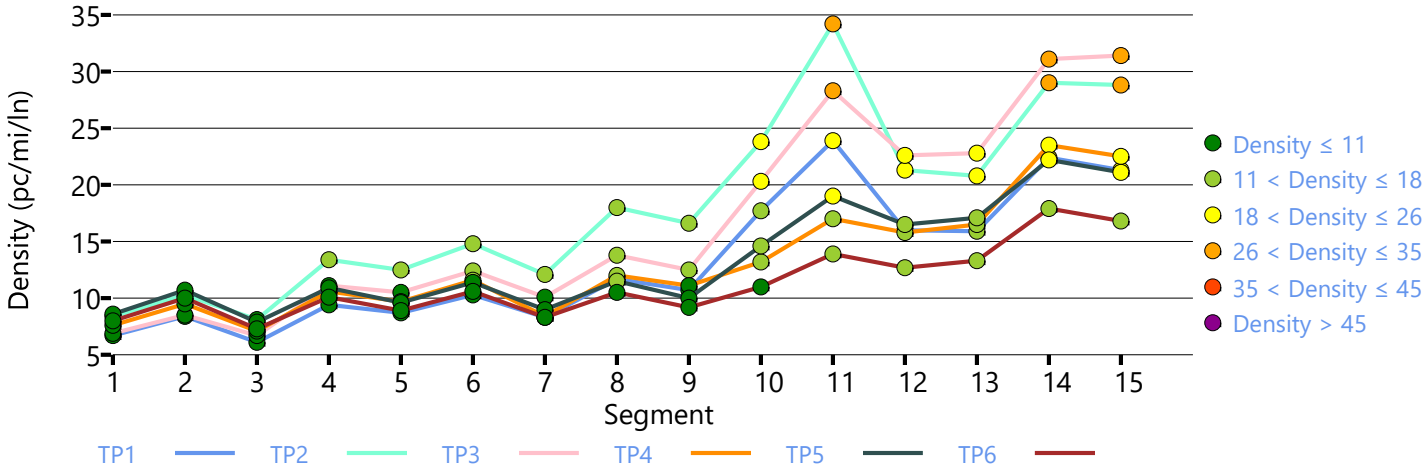
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	10/17/2019
Agency		Analysis Year	2022 Phase 1
Jurisdiction		Time Analyzed	
Project Description	2022 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	7.68		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco	5000	2
2	Diverge	Diverge	Atrisco Diverge	1500	2
3	Basic	Basic	Between Atrisco Ramps	2300	2
4	Merge	Merge	Atrisco Merge	1500	2
5	Basic	Basic	West of Arroyo	10000	2
6	Diverge	Diverge	Arroyo Diverge	1500	2
7	Basic	Basic	Before Arroyo Merge	1750	2
8	Merge	Merge	Arroyo Merge	1500	2
9	Basic	Basic	Between Arroyo Ramps	1100	2
10	Weaving	Weaving	Arroyo Merge Unser Diverge	2850	3
11	Basic	Basic	Before Unser Merge	1900	2
12	Merge	Basic	Unser Merge	1500	3
13	Basic	Basic	Between Unser Ramps	1200	3
14	Merge	Merge	Unser Merge	1500	3
15	Basic	Basic	East of Unser	5450	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	1025	4646	0.22	73.5	7.0	A
2	1.00	0.521	1261	4646	0.27	73.5	8.6	A
3	1.00	0.521	1042	4646	0.22	73.5	7.1	A
4	1.00	0.521	1155	4646	0.25	73.5	7.9	A
5	1.00	0.521	1301	4646	0.28	73.5	8.8	A
6	1.00	0.521	1213	4646	0.26	73.5	8.2	A

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.521	0.641	1025	128	4646	1936	0.22	0.07	59.3	59.3	8.6	5.9	A
2	1.00	1.00	0.521	0.641	1261	101	4646	1936	0.27	0.05	59.4	59.4	10.6	7.9	A
3	1.00	1.00	0.521	0.641	1042	75	4646	1936	0.22	0.04	59.5	59.5	8.8	6.0	A
4	1.00	1.00	0.521	0.641	1155	128	4646	1936	0.25	0.07	59.3	59.3	9.7	7.0	A
5	1.00	1.00	0.521	0.641	1301	154	4646	1936	0.28	0.08	59.2	59.2	11.0	8.2	A
6	1.00	1.00	0.521	0.641	1213	148	4646	1936	0.26	0.08	59.2	59.2	10.2	7.5	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.505	895	4646	0.19	69.9	6.4	A
2	1.00	0.505	1172	4646	0.25	69.9	8.3	A
3	1.00	0.505	980	4646	0.21	69.9	7.0	A
4	1.00	0.505	1030	4646	0.22	69.9	7.3	A
5	1.00	0.505	1147	4646	0.25	69.9	8.2	A
6	1.00	0.505	1063	4646	0.23	69.9	7.6	A

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.505	0.794	1267	372	4646	1936	0.27	0.19	65.3	65.3	9.7	8.5	A
2	1.00	1.00	0.505	0.794	1771	599	4646	1936	0.38	0.31	65.0	65.0	13.6	12.3	B
3	1.00	1.00	0.505	0.794	1481	501	4646	1936	0.32	0.26	65.2	65.2	11.4	10.1	B
4	1.00	1.00	0.505	0.794	1423	393	4646	1936	0.31	0.20	65.2	65.2	10.9	9.7	A
5	1.00	1.00	0.505	0.794	1453	306	4646	1936	0.31	0.16	65.2	65.2	11.1	10.0	A
6	1.00	1.00	0.505	0.794	1353	290	4646	1936	0.29	0.15	65.2	65.2	10.4	9.2	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.595	1255	4646	0.27	70.4	8.9	A
2	1.00	0.595	1795	4646	0.39	70.4	12.8	B
3	1.00	0.595	1501	4646	0.32	70.4	10.7	A
4	1.00	0.595	1398	4646	0.30	70.4	9.9	A
5	1.00	0.595	1382	4646	0.30	70.4	9.8	A
6	1.00	0.595	1289	4646	0.28	70.4	9.1	A

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.595	0.725	1255	59	4646	1936	0.27	0.03	59.5	59.5	10.5	6.8	A
2	1.00	1.00	0.595	0.725	1795	66	4646	1936	0.39	0.03	59.5	59.5	15.1	11.4	B

3	1.00	1.00	0.595	0.725	1501	59	4646	1936	0.32	0.03	59.5	59.5	12.6	8.9	A
4	1.00	1.00	0.595	0.725	1398	167	4646	1936	0.30	0.09	59.2	59.2	11.8	8.0	A
5	1.00	1.00	0.595	0.725	1382	83	4646	1936	0.30	0.04	59.4	59.4	11.6	7.9	A
6	1.00	1.00	0.595	0.725	1289	83	4646	1936	0.28	0.04	59.4	59.4	10.9	7.1	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.588	1197	4646	0.26	69.6	8.5	A
2	1.00	0.588	1735	4646	0.37	69.6	12.3	B
3	1.00	0.588	1446	4646	0.31	69.6	10.3	A
4	1.00	0.588	1209	4646	0.26	69.6	8.6	A
5	1.00	0.588	1296	4646	0.28	69.6	9.2	A
6	1.00	0.588	1202	4646	0.26	69.6	8.5	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.588	0.980	1538	341	4646	1936	0.33	0.18	64.5	64.5	11.9	12.4	B
2	1.00	1.00	0.588	0.980	2327	592	4646	1936	0.50	0.31	63.9	63.9	18.2	18.4	B
3	1.00	1.00	0.588	0.980	1808	362	4646	1936	0.39	0.19	64.4	64.4	14.0	14.5	B
4	1.00	1.00	0.588	0.980	1585	376	4646	1936	0.34	0.19	64.5	64.5	12.3	12.7	B
5	1.00	1.00	0.588	0.980	1513	217	4646	1936	0.33	0.11	64.6	64.6	11.7	12.2	B
6	1.00	1.00	0.588	0.980	1393	191	4646	1936	0.30	0.10	64.6	64.6	10.8	11.3	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	1536	4646	0.33	69.7	10.9	A
2	1.00	0.676	2367	4646	0.51	69.6	16.8	B
3	1.00	0.676	1783	4646	0.38	69.7	12.7	B
4	1.00	0.676	1596	4646	0.34	69.7	11.3	B
5	1.00	0.676	1442	4646	0.31	69.7	10.2	A
6	1.00	0.676	1322	4646	0.28	69.7	9.4	A

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.806	3070	3574	0.86	57.4	17.8	B
2	1.00	0.806	3947	4055	0.98	54.8	24.0	C
3	1.00	0.806	3447	3693	0.93	56.2	20.4	C
4	1.00	0.806	2424	4178	0.58	60.7	13.3	B
5	1.00	0.806	2616	3664	0.71	59.3	14.7	B
6	1.00	0.806	2054	3783	0.54	61.5	11.1	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.794	3239	4646	0.70	67.1	24.1	C
2	1.00	0.794	4091	4646	0.88	59.2	34.6	D
3	1.00	0.794	3651	4646	0.79	63.9	28.6	D
4	1.00	0.794	2421	4646	0.52	70.2	17.2	B
5	1.00	0.794	2681	4646	0.58	69.7	19.2	C
6	1.00	0.794	1976	4646	0.43	70.2	14.0	B

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.794	0.980	3542	303	6970	1936	0.51	0.16	73.1	73.1	16.2	16.2	B
2	1.00	1.00	0.794	0.980	4526	435	6970	1936	0.65	0.22	70.2	70.2	21.5	21.5	C
3	1.00	1.00	0.794	0.980	4739	1088	6970	1936	0.68	0.56	69.2	69.2	22.8	22.8	C
4	1.00	1.00	0.794	0.980	3500	1079	6970	1936	0.50	0.56	73.1	73.1	16.0	16.0	B
5	1.00	1.00	0.794	0.980	3645	964	6970	1936	0.52	0.50	72.9	72.9	16.7	16.7	B
6	1.00	1.00	0.794	0.980	2830	854	6970	1936	0.41	0.44	73.3	73.5	12.8	12.8	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.847	3387	6970	0.49	70.4	16.0	B
2	1.00	0.847	4338	6970	0.62	69.0	21.0	C
3	1.00	0.847	4681	6970	0.67	67.8	23.0	C
4	1.00	0.847	3517	6970	0.50	70.3	16.7	B
5	1.00	0.847	3629	6970	0.52	70.3	17.2	B
6	1.00	0.847	2841	6970	0.41	70.4	13.5	B

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.847	0.962	4388	1001	6970	1936	0.63	0.52	64.8	62.6	22.6	23.7	C
2	1.00	1.00	0.847	0.962	5474	1136	6970	1936	0.79	0.59	62.6	60.0	29.1	29.2	D
3	1.00	1.00	0.847	0.962	5800	1119	6970	1936	0.83	0.58	61.7	58.9	31.3	30.7	D
4	1.00	1.00	0.847	0.962	4581	1064	6970	1936	0.66	0.55	64.5	62.2	23.7	24.8	C
5	1.00	1.00	0.847	0.962	4370	741	6970	1936	0.63	0.38	65.1	62.8	22.4	23.0	C
6	1.00	1.00	0.847	0.962	3564	723	6970	1936	0.51	0.37	65.9	63.7	18.0	19.1	B

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.862	4445	6970	0.64	68.9	21.5	C
2	1.00	0.862	5530	6970	0.79	63.7	28.9	D
3	1.00	0.862	5848	6970	0.84	61.5	31.7	D

4	1.00	0.862	4644	6970	0.67	68.2	22.7	C
5	1.00	0.862	4393	6970	0.63	69.1	21.2	C
6	1.00	0.862	3599	6970	0.52	70.7	17.0	B

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	67.0	13.7	10.1	6.90	B
2	64.0	18.7	13.8	7.20	C
3	63.6	17.6	13.3	7.30	B
4	67.7	13.8	10.1	6.80	B
5	67.8	13.8	10.1	6.80	B
6	68.7	11.6	8.4	6.70	B

Facility Overall Results

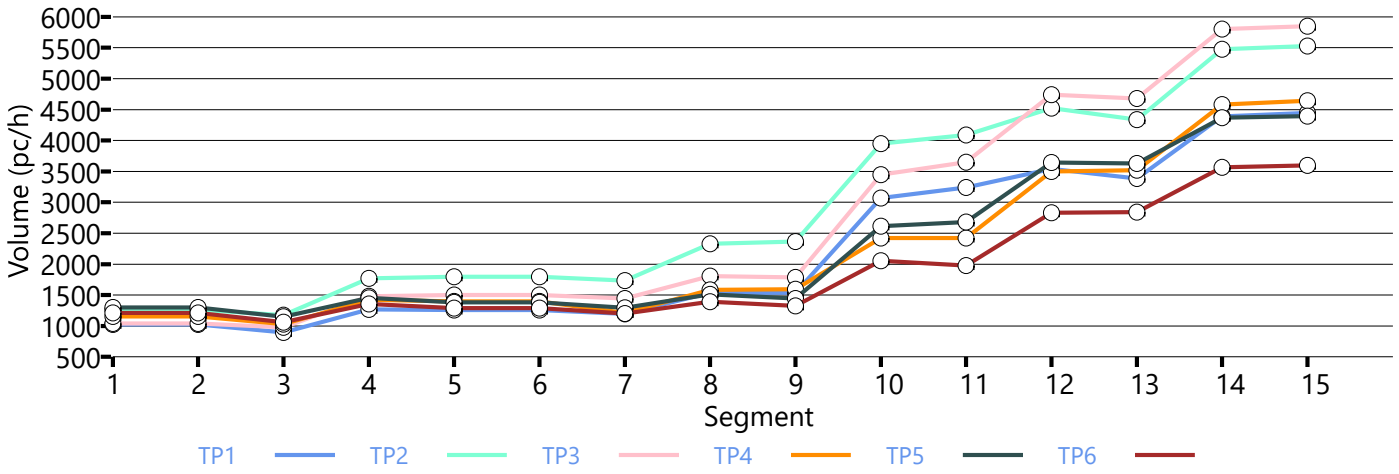
Space Mean Speed, mi/h	66.1	Density, veh/mi/ln	11.0
Average Travel Time, min	7.00	Density, pc/mi/ln	14.9

Messages

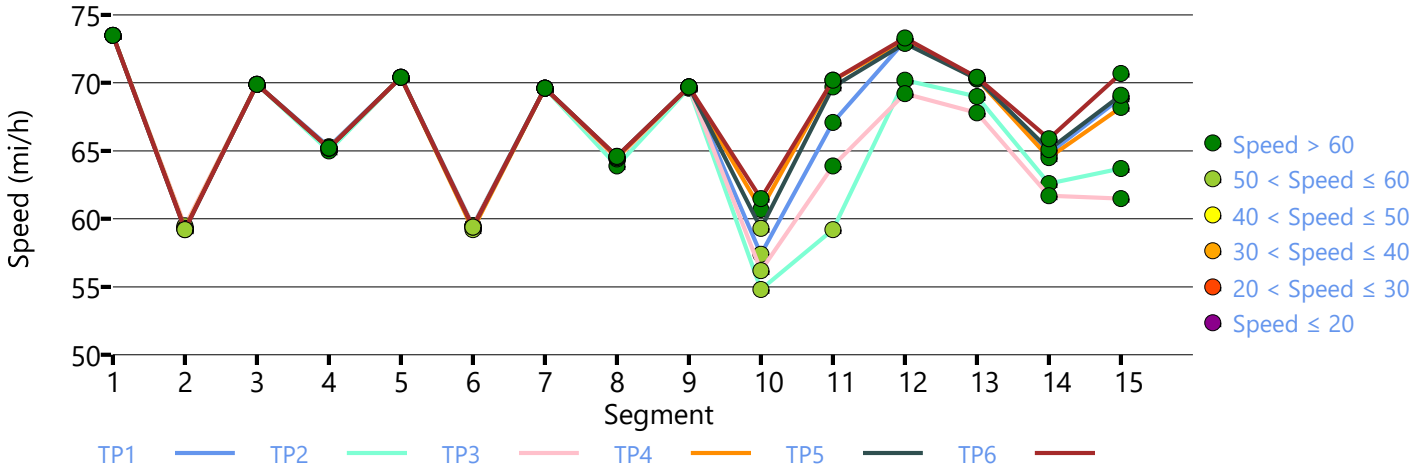
WARNING 1	Merge capacity is less than merge demand for analysis period 2 on segment 10.

Comments

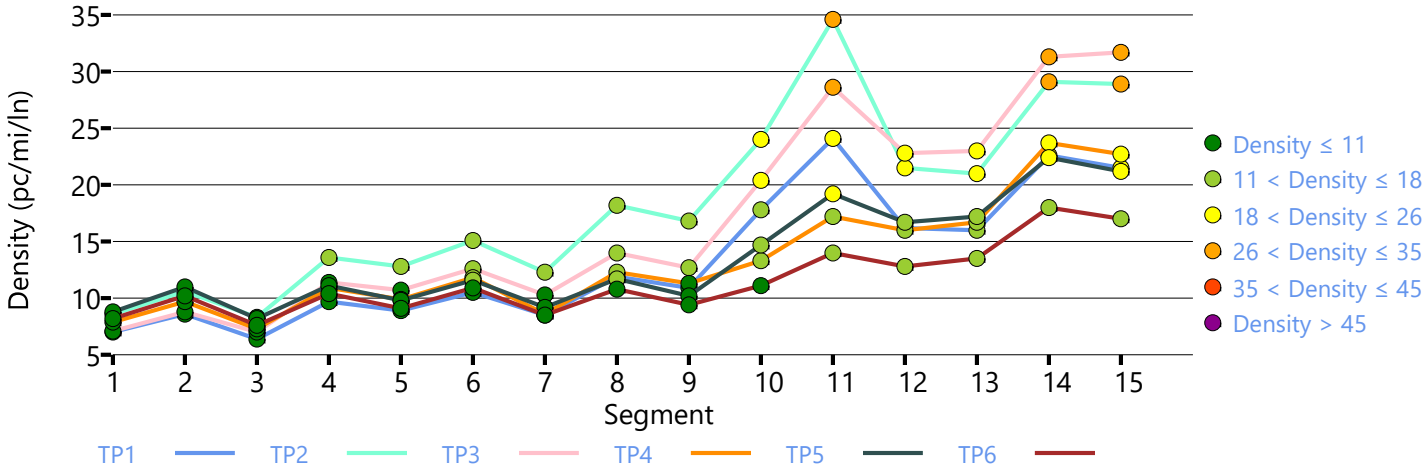
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2022 No Build
Jurisdiction		Time Analyzed	
Project Description	2022 WB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.840	5335	6970	0.77	64.7	27.5	D
2	1.00	0.855	5434	6970	0.78	64.1	28.3	D
3	1.00	0.826	5553	6970	0.80	63.4	29.2	D
4	1.00	0.846	5461	6970	0.78	64.0	28.4	D
5	1.00	0.853	5387	6970	0.77	64.4	27.9	D
6	1.00	0.845	5799	6970	0.83	61.8	31.3	D
7	1.00	0.836	5762	6970	0.83	62.0	31.0	D
8	1.00	0.826	5605	6970	0.80	63.1	29.6	D

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.840	0.962	5335	1958	9293	4000	0.57	0.49	64.0	54.5	20.8	15.1	B
2	1.00	1.00	0.855	0.962	5434	2259	9293	4000	0.58	0.56	62.5	53.6	21.7	17.3	B
3	1.00	1.00	0.826	0.962	5553	2191	9293	4000	0.60	0.55	63.0	53.8	22.0	17.1	B
4	1.00	1.00	0.846	0.962	5461	2380	9293	4000	0.59	0.60	62.0	53.3	22.0	18.1	B
5	1.00	1.00	0.853	0.962	5387	2272	9293	4000	0.58	0.57	62.4	53.6	21.6	17.3	B
6	1.00	1.00	0.845	0.962	5799	2510	9293	4000	0.62	0.63	61.6	52.9	23.5	19.7	B
7	1.00	1.00	0.836	0.962	5762	2187	9293	4000	0.62	0.55	63.1	53.8	22.8	17.5	B
8	1.00	1.00	0.826	0.962	5605	2115	9293	4000	0.60	0.53	63.4	54.0	22.1	16.7	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.769	3377	4646	0.73	66.1	25.5	C
2	1.00	0.778	3179	4646	0.68	67.5	23.6	C
3	1.00	0.739	3355	4646	0.72	66.3	25.3	C
4	1.00	0.756	3082	4646	0.66	68.0	22.7	C
5	1.00	0.774	3112	4646	0.67	67.9	22.9	C
6	1.00	0.756	3287	4646	0.71	66.8	24.6	C
7	1.00	0.759	3574	4646	0.77	64.5	27.7	D
8	1.00	0.745	3483	4646	0.75	65.3	26.7	D

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	3617	5430	0.67	65.7	18.4	B
2	1.00	0.452	3511	4882	0.72	65.4	17.9	B
3	1.00	0.470	3670	5532	0.66	65.0	18.8	B
4	1.00	0.473	3382	5319	0.64	65.5	17.2	B
5	1.00	0.467	3384	5035	0.67	65.8	17.1	B
6	1.00	0.468	3593	5294	0.68	65.3	18.3	B
7	1.00	0.490	3818	5473	0.70	65.4	19.5	B
8	1.00	0.457	3831	5395	0.71	64.6	19.8	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.566	1597	4646	0.34	70.7	11.3	B
2	1.00	0.555	1405	4646	0.30	70.7	9.9	A
3	1.00	0.544	1768	4646	0.38	70.7	12.5	B
4	1.00	0.556	1525	4646	0.33	70.7	10.8	A
5	1.00	0.551	1377	4646	0.30	70.8	9.7	A
6	1.00	0.549	1599	4646	0.34	70.7	11.3	B
7	1.00	0.547	1698	4646	0.37	70.7	12.0	B
8	1.00	0.542	1768	4646	0.38	70.7	12.5	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.566	0.588	1869	272	6970	2000	0.27	0.14	73.4	73.5	8.5	8.5	A
2	1.00	1.00	0.555	0.588	1648	243	6970	2000	0.24	0.12	73.4	73.5	7.5	7.5	A
3	1.00	1.00	0.544	0.588	1974	206	6970	2000	0.28	0.10	73.4	73.5	9.0	9.0	A
4	1.00	1.00	0.556	0.588	1687	162	6970	2000	0.24	0.08	73.4	73.5	7.7	7.7	A
5	1.00	1.00	0.551	0.588	1561	184	6970	2000	0.22	0.09	73.4	73.5	7.1	7.1	A
6	1.00	1.00	0.549	0.588	1789	190	6970	2000	0.26	0.10	73.4	73.5	8.1	8.1	A
7	1.00	1.00	0.547	0.588	1860	162	6970	2000	0.27	0.08	73.4	73.5	8.4	8.4	A
8	1.00	1.00	0.542	0.588	1945	177	6970	2000	0.28	0.09	73.4	73.5	8.8	8.8	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.569	1870	6970	0.27	70.8	8.8	A
2	1.00	0.560	1648	6970	0.24	70.8	7.8	A
3	1.00	0.549	1973	6970	0.28	70.8	9.3	A
4	1.00	0.559	1687	6970	0.24	70.8	7.9	A
5	1.00	0.555	1562	6970	0.22	70.8	7.4	A
6	1.00	0.553	1790	6970	0.26	70.8	8.4	A
7	1.00	0.551	1858	6970	0.27	70.8	8.7	A
8	1.00	0.546	1945	6970	0.28	70.8	9.2	A

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.569	0.847	1870	418	6970	2000	0.27	0.21	62.8	58.8	9.9	9.3	A
2	1.00	1.00	0.560	0.847	1648	312	6970	2000	0.24	0.16	63.1	59.1	8.7	7.8	A
3	1.00	1.00	0.549	0.847	1973	341	6970	2000	0.28	0.17	63.3	59.0	10.4	9.7	A
4	1.00	1.00	0.559	0.847	1687	352	6970	2000	0.24	0.18	63.0	59.0	8.9	8.1	A
5	1.00	1.00	0.555	0.847	1562	341	6970	2000	0.22	0.17	62.9	59.0	8.3	7.4	A
6	1.00	1.00	0.553	0.847	1790	362	6970	2000	0.26	0.18	63.1	59.0	9.5	8.7	A
7	1.00	1.00	0.551	0.847	1858	306	6970	2000	0.27	0.15	63.3	59.1	9.8	9.0	A
8	1.00	1.00	0.546	0.847	1945	321	6970	2000	0.28	0.16	63.4	59.1	10.2	9.5	A

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.489	1452	6970	0.21	70.1	6.9	A
2	1.00	0.493	1337	6970	0.19	70.1	6.3	A
3	1.00	0.486	1634	6970	0.23	70.2	7.7	A
4	1.00	0.483	1335	6970	0.19	70.1	6.3	A

5	1.00	0.473	1222	6970	0.18	70.1	5.8	A
6	1.00	0.478	1429	6970	0.21	70.1	6.8	A
7	1.00	0.493	1552	6970	0.22	70.2	7.3	A
8	1.00	0.486	1626	6970	0.23	70.2	7.7	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.489	0.820	1636	184	6970	2000	0.23	0.09	68.0	65.5	8.0	6.8	A
2	1.00	1.00	0.493	0.820	1489	152	6970	2000	0.21	0.08	68.1	65.5	7.3	6.0	A
3	1.00	1.00	0.486	0.820	1855	221	6970	2000	0.27	0.11	67.8	65.4	9.1	7.9	A
4	1.00	1.00	0.483	0.820	1535	200	6970	2000	0.22	0.10	68.0	65.5	7.5	6.3	A
5	1.00	1.00	0.473	0.820	1443	221	6970	2000	0.21	0.11	67.9	65.5	7.1	6.0	A
6	1.00	1.00	0.478	0.820	1661	232	6970	2000	0.24	0.12	67.9	65.5	8.2	7.0	A
7	1.00	1.00	0.493	0.820	1731	179	6970	2000	0.25	0.09	68.0	65.5	8.5	7.2	A
8	1.00	1.00	0.486	0.820	1847	221	6970	2000	0.27	0.11	67.8	65.4	9.1	7.9	A

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1637	6970	0.23	70.4	7.8	A
2	1.00	0.526	1490	6970	0.21	70.4	7.1	A
3	1.00	0.526	1854	6970	0.27	70.4	8.8	A
4	1.00	0.526	1538	6970	0.22	70.4	7.3	A
5	1.00	0.526	1443	6970	0.21	70.4	6.8	A
6	1.00	0.526	1660	6970	0.24	70.4	7.9	A
7	1.00	0.526	1734	6970	0.25	70.4	8.2	A
8	1.00	0.526	1846	6970	0.26	70.4	8.7	A

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	66.6	14.1	9.7	6.60	B
2	66.2	13.5	9.4	6.60	B
3	66.0	14.9	9.9	6.70	B
4	66.3	13.6	9.3	6.60	B
5	66.4	13.1	9.1	6.60	B
6	65.2	14.6	10.0	6.80	B
7	65.2	15.1	10.3	6.80	B
8	65.8	15.1	10.1	6.70	B

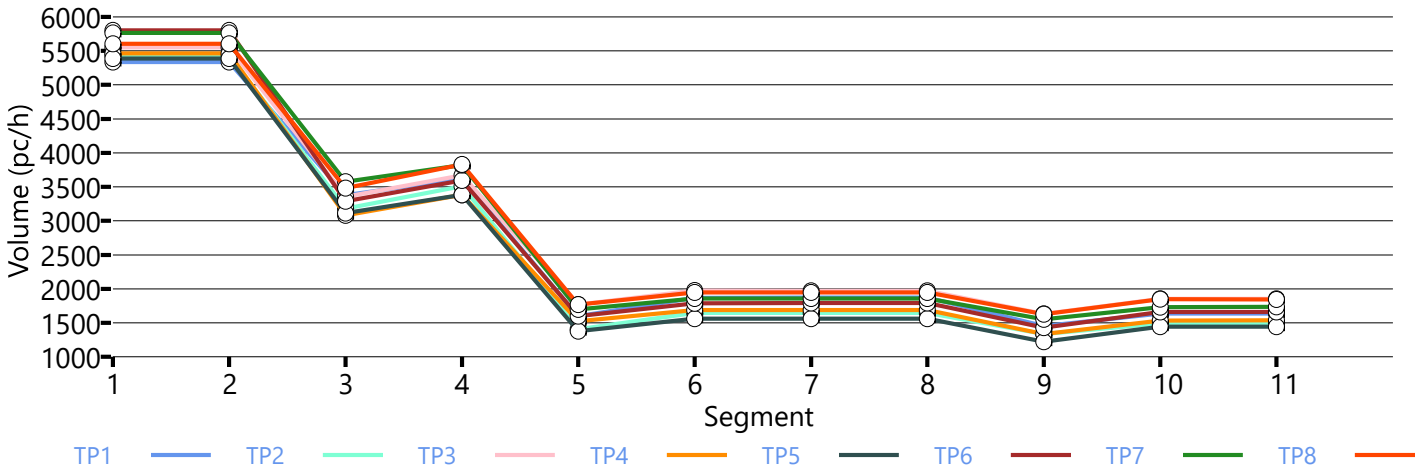
Facility Overall Results

Space Mean Speed, mi/h	65.9	Density, veh/mi/ln	9.7
Average Travel Time, min	6.70	Density, pc/mi/ln	14.3

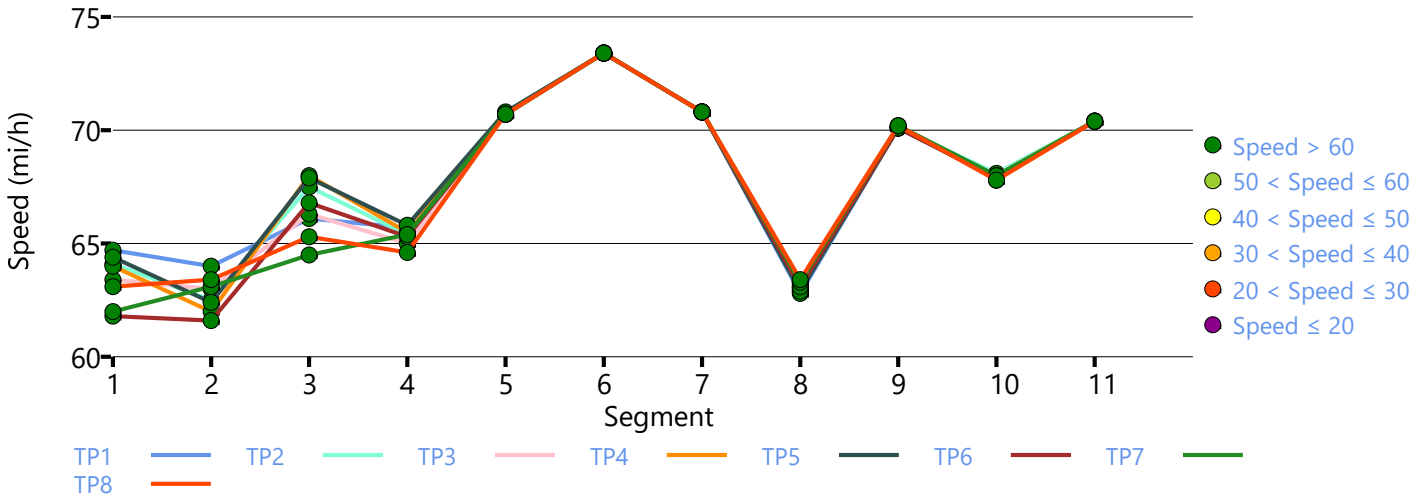
Messages

Comments

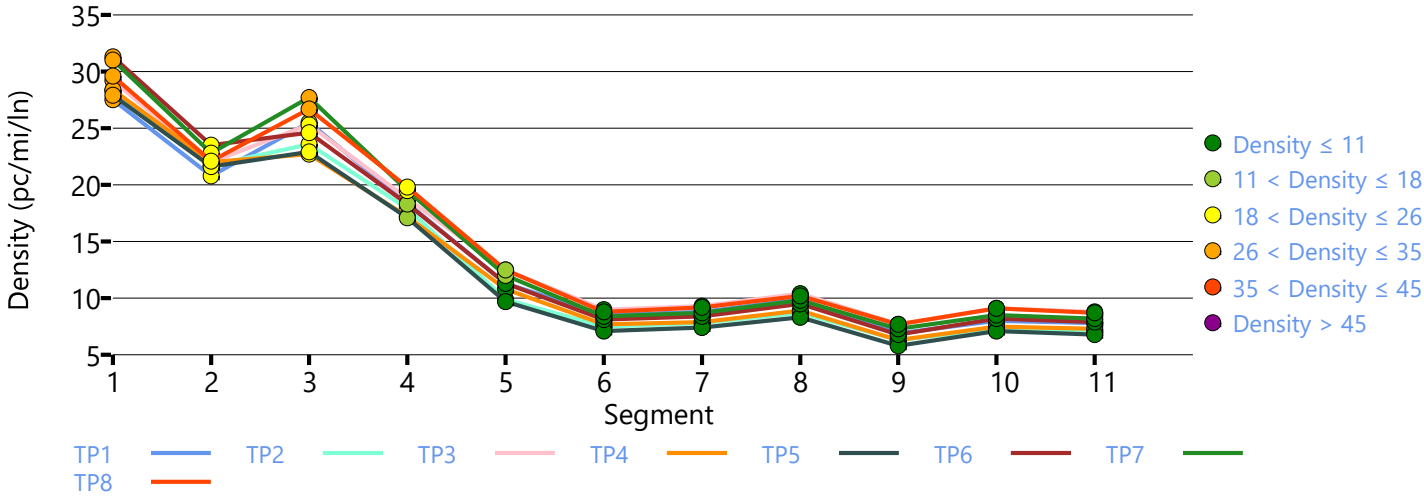
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2022 Phase 1
Jurisdiction		Time Analyzed	
Project Description	2022 EWB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.840	5358	6970	0.77	64.6	27.6	D
2	1.00	0.855	5457	6970	0.78	64.0	28.4	D
3	1.00	0.826	5577	6970	0.80	63.2	29.4	D
4	1.00	0.846	5485	6970	0.79	63.8	28.7	D
5	1.00	0.853	5434	6970	0.78	64.1	28.3	D
6	1.00	0.845	5822	6970	0.84	61.6	31.5	D
7	1.00	0.836	5786	6970	0.83	61.8	31.2	D
8	1.00	0.826	5630	6970	0.81	62.9	29.8	D

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.840	0.962	5358	1966	9293	4000	0.58	0.49	63.9	54.4	21.0	15.2	B
2	1.00	1.00	0.855	0.962	5457	2266	9293	4000	0.59	0.57	62.5	53.6	21.8	17.4	B
3	1.00	1.00	0.826	0.962	5577	2199	9293	4000	0.60	0.55	63.0	53.8	22.1	17.2	B
4	1.00	1.00	0.846	0.962	5485	2388	9293	4000	0.59	0.60	61.9	53.2	22.2	18.2	B
5	1.00	1.00	0.853	0.962	5434	2280	9293	4000	0.58	0.57	62.5	53.6	21.7	17.4	B
6	1.00	1.00	0.845	0.962	5822	2518	9293	4000	0.63	0.63	61.6	52.9	23.6	19.8	B
7	1.00	1.00	0.836	0.962	5786	2194	9293	4000	0.62	0.55	63.1	53.8	22.9	17.7	B
8	1.00	1.00	0.826	0.962	5630	2123	9293	4000	0.61	0.53	63.4	54.0	22.2	16.9	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.769	3394	4646	0.73	66.0	25.7	C
2	1.00	0.778	3195	4646	0.69	67.4	23.7	C
3	1.00	0.739	3372	4646	0.73	66.2	25.5	C
4	1.00	0.756	3099	4646	0.67	67.9	22.8	C
5	1.00	0.774	3155	4646	0.68	67.6	23.3	C
6	1.00	0.756	3304	4646	0.71	66.6	24.8	C
7	1.00	0.759	3592	4646	0.77	64.4	27.9	D
8	1.00	0.745	3501	4646	0.75	65.2	26.8	D

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	3643	5465	0.67	65.7	18.5	B
2	1.00	0.452	3540	4916	0.72	65.3	18.1	B
3	1.00	0.470	3697	5541	0.67	65.0	19.0	B
4	1.00	0.473	3410	5352	0.64	65.5	17.4	B
5	1.00	0.467	3455	5133	0.67	65.7	17.5	B
6	1.00	0.468	3621	5335	0.68	65.2	18.5	B
7	1.00	0.490	3844	5495	0.70	65.4	19.6	B
8	1.00	0.457	3859	5429	0.71	64.6	19.9	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.566	1620	4646	0.35	70.7	11.4	B
2	1.00	0.555	1429	4646	0.31	70.7	10.1	A
3	1.00	0.544	1792	4646	0.39	70.7	12.7	B
4	1.00	0.556	1549	4646	0.33	70.7	10.9	A
5	1.00	0.551	1437	4646	0.31	70.7	10.1	A
6	1.00	0.549	1623	4646	0.35	70.7	11.5	B
7	1.00	0.547	1720	4646	0.37	70.7	12.1	B
8	1.00	0.542	1792	4646	0.39	70.7	12.7	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.566	0.588	1892	272	6970	2000	0.27	0.14	73.4	73.5	8.6	8.6	A
2	1.00	1.00	0.555	0.588	1674	245	6970	2000	0.24	0.12	73.4	73.5	7.6	7.6	A
3	1.00	1.00	0.544	0.588	1999	207	6970	2000	0.29	0.10	73.4	73.5	9.1	9.1	A
4	1.00	1.00	0.556	0.588	1712	163	6970	2000	0.25	0.08	73.4	73.5	7.8	7.8	A
5	1.00	1.00	0.551	0.588	1622	185	6970	2000	0.23	0.09	73.4	73.5	7.4	7.4	A
6	1.00	1.00	0.549	0.588	1815	192	6970	2000	0.26	0.10	73.4	73.5	8.2	8.2	A
7	1.00	1.00	0.547	0.588	1883	163	6970	2000	0.27	0.08	73.4	73.5	8.5	8.5	A
8	1.00	1.00	0.542	0.588	1971	179	6970	2000	0.28	0.09	73.4	73.5	8.9	8.9	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.569	1893	6970	0.27	70.8	8.9	A
2	1.00	0.560	1673	6970	0.24	70.8	7.9	A
3	1.00	0.549	1998	6970	0.29	70.8	9.4	A
4	1.00	0.559	1712	6970	0.25	70.8	8.1	A
5	1.00	0.555	1623	6970	0.23	70.8	7.6	A
6	1.00	0.553	1816	6970	0.26	70.8	8.5	A
7	1.00	0.551	1882	6970	0.27	70.8	8.9	A
8	1.00	0.546	1971	6970	0.28	70.8	9.3	A

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.569	0.847	1893	419	6970	2000	0.27	0.21	62.9	58.8	10.0	9.4	A
2	1.00	1.00	0.560	0.847	1673	313	6970	2000	0.24	0.16	63.2	59.1	8.8	8.0	A
3	1.00	1.00	0.549	0.847	1998	342	6970	2000	0.29	0.17	63.3	59.0	10.5	9.9	A
4	1.00	1.00	0.559	0.847	1712	353	6970	2000	0.25	0.18	63.0	59.0	9.1	8.3	A
5	1.00	1.00	0.555	0.847	1623	342	6970	2000	0.23	0.17	62.9	59.0	8.6	7.8	A
6	1.00	1.00	0.553	0.847	1816	364	6970	2000	0.26	0.18	63.1	59.0	9.6	8.9	A
7	1.00	1.00	0.551	0.847	1882	307	6970	2000	0.27	0.15	63.4	59.1	9.9	9.2	A
8	1.00	1.00	0.546	0.847	1971	322	6970	2000	0.28	0.16	63.4	59.1	10.4	9.7	A

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.489	1476	6970	0.21	70.1	7.0	A
2	1.00	0.493	1363	6970	0.20	70.2	6.4	A
3	1.00	0.486	1660	6970	0.24	70.2	7.9	A
4	1.00	0.483	1362	6970	0.20	70.1	6.4	A

5	1.00	0.473	1292	6970	0.19	70.1	6.1	A
6	1.00	0.478	1456	6970	0.21	70.1	6.9	A
7	1.00	0.493	1576	6970	0.23	70.2	7.5	A
8	1.00	0.486	1652	6970	0.24	70.2	7.8	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.489	0.820	1660	184	6970	2000	0.24	0.09	68.0	65.5	8.1	6.9	A
2	1.00	1.00	0.493	0.820	1517	154	6970	2000	0.22	0.08	68.1	65.5	7.4	6.1	A
3	1.00	1.00	0.486	0.820	1882	222	6970	2000	0.27	0.11	67.8	65.4	9.3	8.0	A
4	1.00	1.00	0.483	0.820	1562	200	6970	2000	0.22	0.10	68.0	65.5	7.7	6.5	A
5	1.00	1.00	0.473	0.820	1514	222	6970	2000	0.22	0.11	68.0	65.5	7.4	6.3	A
6	1.00	1.00	0.478	0.820	1689	233	6970	2000	0.24	0.12	67.9	65.5	8.3	7.2	A
7	1.00	1.00	0.493	0.820	1756	180	6970	2000	0.25	0.09	68.0	65.5	8.6	7.3	A
8	1.00	1.00	0.486	0.820	1874	222	6970	2000	0.27	0.11	67.8	65.4	9.2	8.0	A

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1660	6970	0.24	70.4	7.9	A
2	1.00	0.526	1517	6970	0.22	70.4	7.2	A
3	1.00	0.526	1880	6970	0.27	70.4	8.9	A
4	1.00	0.526	1563	6970	0.22	70.4	7.4	A
5	1.00	0.526	1508	6970	0.22	70.4	7.1	A
6	1.00	0.526	1686	6970	0.24	70.4	8.0	A
7	1.00	0.526	1759	6970	0.25	70.4	8.3	A
8	1.00	0.526	1873	6970	0.27	70.4	8.9	A

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	66.5	14.3	9.8	6.60	B
2	66.2	13.6	9.4	6.60	B
3	66.0	15.1	10.0	6.70	B
4	66.2	13.7	9.4	6.60	B
5	66.3	13.4	9.3	6.60	B
6	65.1	14.8	10.1	6.80	B
7	65.1	15.3	10.4	6.80	B
8	65.7	15.3	10.2	6.70	B

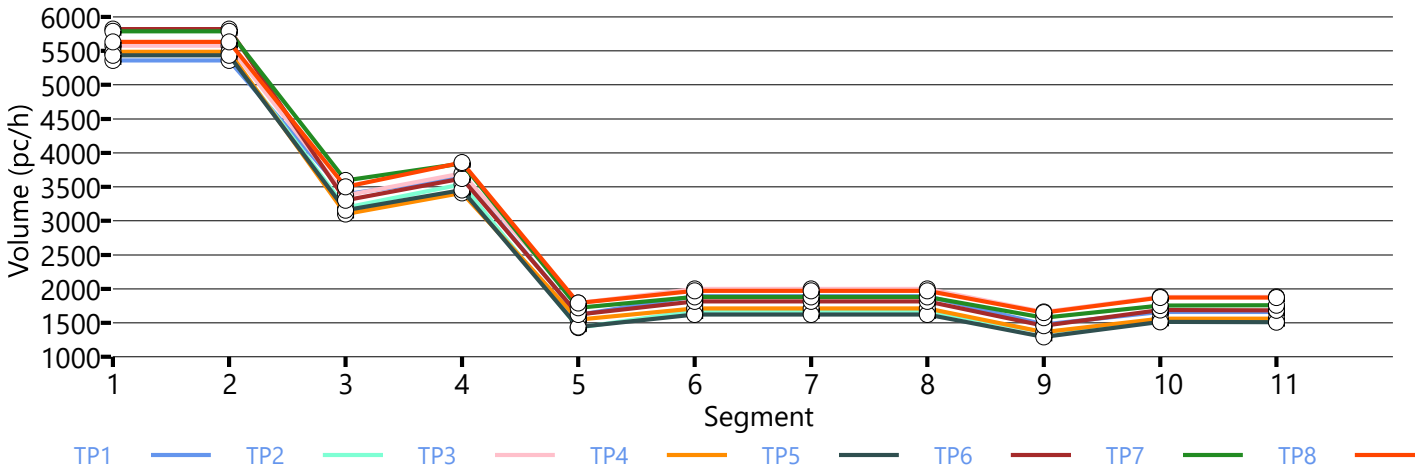
Facility Overall Results

Space Mean Speed, mi/h	65.9	Density, veh/mi/ln	9.8
Average Travel Time, min	6.70	Density, pc/mi/ln	14.4

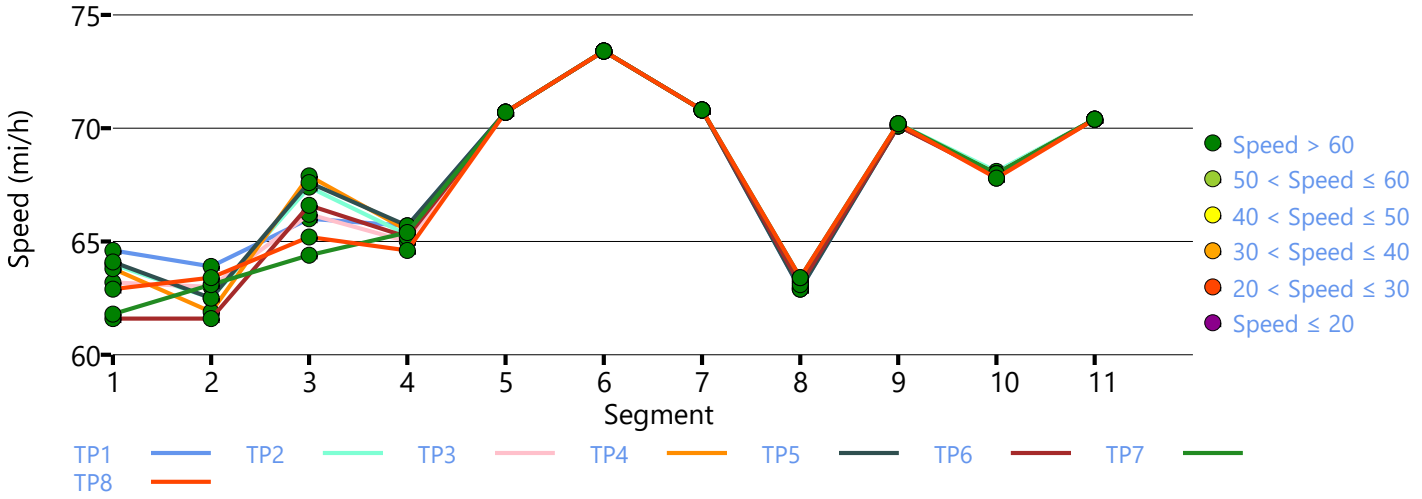
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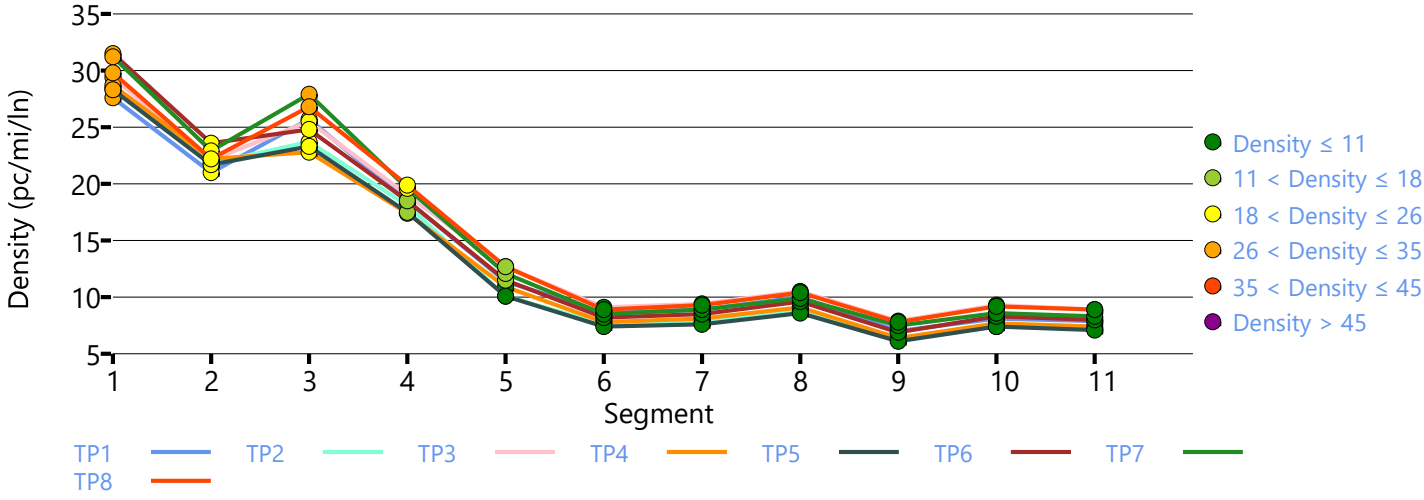
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	7/16/2020
Agency		Analysis Year	2025 Phase 2
Jurisdiction		Time Analyzed	
Project Description	2025 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	6.63		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco Vista	5000	2
2	Diverge	Diverge	Atrisco Vista Exit Ramp	1500	2
3	Basic	Basic	Between Atrisco Vista Exit and Entrance	2300	2
4	Merge	Merge	Atrisco Vista Entrance Ramp	1500	2
5	Basic	Basic	Between Atrisco Vista Entrance and Arroyo Vista Exit	7100	2
6	Diverge	Diverge	Arroyo Vista Exit	1500	2
7	Basic	Basic	Between Arroyo Vist Exit and Arroyo Vista Loop Entrance	1750	2
8	Merge	Merge	Arroyo Vista Loop Entrance	1500	2
9	Basic	Basic	Between Arroyo Vista Loop Entrance and NB-EB Entrance	1100	2
10	Weaving	Weaving	Between Arroyo Vista NB-EB Entrance and Unser Exit	2850	3
11	Basic	Basic	Between Unser Exit and Unser Loop Entrance	1900	2
12	Merge	Basic	Lane Add at Unser Loop Entrance	1500	3
13	Basic	Basic	Between Unser Loop Entrance and NB-EB Entrance	1200	3
14	Merge	Merge	Unser NB-EB Entrance	1500	3
15	Basic	Basic	Between Unser NB-EB Entrance and Coors Exit	2800	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	1253	4646	0.27	70.4	8.9	A
2	1.00	0.521	1499	4646	0.32	70.4	10.7	A
3	1.00	0.521	1271	4646	0.27	70.4	9.0	A

4	1.00		0.521		1390		4646		0.30		70.4		9.9	A
5	1.00		0.521		1543		4646		0.33		70.4		11.0	A
6	1.00		0.521		1449		4646		0.31		70.4		10.3	A

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.521	0.641	1253	136	4646	1936	0.27	0.07	59.3	59.3	10.6	7.8	A
2	1.00	1.00	0.521	0.641	1499	106	4646	1936	0.32	0.05	59.4	59.4	12.6	9.9	A
3	1.00	1.00	0.521	0.641	1271	78	4646	1936	0.27	0.04	59.4	59.4	10.7	8.0	A
4	1.00	1.00	0.521	0.641	1390	136	4646	1936	0.30	0.07	59.3	59.3	11.7	9.0	A
5	1.00	1.00	0.521	0.641	1543	164	4646	1936	0.33	0.08	59.2	59.2	13.0	10.3	B
6	1.00	1.00	0.521	0.641	1449	156	4646	1936	0.31	0.08	59.2	59.2	12.2	9.5	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.505	1121	4646	0.24	69.9	8.0	A
2	1.00	0.505	1412	4646	0.30	69.9	10.0	A
3	1.00	0.511	1198	4646	0.26	69.9	8.5	A
4	1.00	0.505	1261	4646	0.27	69.9	8.9	A
5	1.00	0.504	1387	4646	0.30	69.9	9.9	A
6	1.00	0.504	1300	4646	0.28	69.9	9.2	A

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.505	0.794	1513	392	4646	1936	0.33	0.20	64.6	64.6	11.7	12.2	B
2	1.00	1.00	0.505	0.794	2046	634	4646	2000	0.44	0.32	64.2	64.2	15.9	16.2	B
3	1.00	1.00	0.505	0.794	1742	530	4646	1936	0.37	0.27	64.4	64.4	13.5	13.9	B
4	1.00	1.00	0.505	0.794	1675	414	4646	1936	0.36	0.21	64.5	64.5	13.0	13.4	B
5	1.00	1.00	0.504	0.794	1709	322	4646	1936	0.37	0.17	64.4	64.4	13.3	13.7	B
6	1.00	1.00	0.504	0.794	1606	306	4646	1936	0.35	0.16	64.5	64.5	12.4	12.9	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.595	1474	4646	0.32	70.4	10.5	A
2	1.00	0.595	2044	4646	0.44	70.4	14.5	B
3	1.00	0.605	1707	4646	0.37	70.4	12.1	B
4	1.00	0.588	1643	4646	0.35	70.4	11.7	B
5	1.00	0.567	1684	4646	0.36	70.4	12.0	B
6	1.00	0.568	1581	4646	0.34	70.4	11.2	B

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.595	0.725	1474	63	4646	1936	0.32	0.03	59.5	59.5	12.4	8.6	A
2	1.00	1.00	0.595	0.725	2044	69	4646	1936	0.44	0.04	59.5	59.5	17.2	13.6	B
3	1.00	1.00	0.605	0.725	1707	63	4646	1936	0.37	0.03	59.5	59.5	14.3	10.7	B
4	1.00	1.00	0.588	0.725	1643	177	4646	1936	0.35	0.09	59.1	59.1	13.9	10.1	B
5	1.00	1.00	0.567	0.725	1684	88	4646	1936	0.36	0.05	59.4	59.4	14.2	10.5	B
6	1.00	1.00	0.568	0.725	1581	88	4646	1936	0.34	0.05	59.4	59.4	13.3	9.6	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.588	1413	4646	0.30	69.6	10.0	A
2	1.00	0.588	1983	4646	0.43	69.6	14.1	B
3	1.00	0.600	1645	4646	0.35	69.6	11.7	B
4	1.00	0.568	1475	4646	0.32	69.6	10.5	A
5	1.00	0.557	1600	4646	0.34	69.6	11.4	B
6	1.00	0.557	1497	4646	0.32	69.6	10.6	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.588	0.980	1772	359	4646	1936	0.38	0.19	64.4	64.4	13.8	14.2	B
2	1.00	1.00	0.588	0.980	2607	624	4646	1936	0.56	0.32	63.5	63.5	20.5	20.6	C
3	1.00	1.00	0.600	0.980	2028	383	4646	1936	0.44	0.20	64.2	64.2	15.8	16.2	B
4	1.00	1.00	0.568	0.980	1872	397	4646	1936	0.40	0.21	64.3	64.3	14.6	15.0	B
5	1.00	1.00	0.557	0.980	1829	229	4646	1936	0.39	0.12	64.3	64.3	14.2	14.7	B
6	1.00	1.00	0.557	0.980	1697	200	4646	1936	0.37	0.10	64.4	64.4	13.2	13.7	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	1750	4646	0.38	69.7	12.4	B
2	1.00	0.690	2577	4646	0.55	69.6	18.4	C
3	1.00	0.679	2006	4646	0.43	69.6	14.2	B
4	1.00	0.666	1842	4646	0.40	69.7	13.1	B
5	1.00	0.620	1798	4646	0.39	69.7	12.8	B
6	1.00	0.613	1680	4646	0.36	69.7	11.9	B

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.640	3672	4047	0.91	55.8	21.9	C
2	1.00	0.660	4585	4564	1.03	53.5	28.6	D
3	1.00	0.649	4015	4171	0.98	54.9	24.4	C

4	1.00	0.622	3036	4964	0.61	59.5	17.0	B
5	1.00	0.568	3337	4425	0.75	57.7	19.3	B
6	1.00	0.538	2744	4790	0.57	60.3	15.2	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.820	3418	4646	0.74	65.8	26.0	C
2	1.00	0.801	4261	4646	0.92	57.1	37.3	E
3	1.00	0.814	3767	4646	0.81	62.8	30.0	D
4	1.00	0.767	2761	4646	0.59	69.5	19.9	C
5	1.00	0.765	3051	4646	0.66	68.2	22.4	C
6	1.00	0.726	2399	4646	0.52	70.2	17.1	B

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.816	0.980	3756	321	6970	1936	0.54	0.17	72.7	72.7	17.2	17.2	B
2	1.00	1.00	0.801	0.980	4722	461	6970	1936	0.68	0.24	69.3	69.3	22.7	22.7	C
3	1.00	1.00	0.814	0.980	4917	1150	6970	1936	0.71	0.59	68.3	68.3	24.0	24.0	C
4	1.00	1.00	0.767	0.980	3902	1141	6970	1936	0.56	0.59	72.3	72.3	18.0	18.0	B
5	1.00	1.00	0.765	0.980	4070	1019	6970	1936	0.58	0.53	71.9	71.9	18.9	18.9	C
6	1.00	1.00	0.726	0.980	3302	903	6970	1936	0.47	0.47	73.3	73.4	15.0	15.0	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.831	3752	6970	0.54	70.1	17.8	B
2	1.00	0.818	4725	6970	0.68	67.6	23.3	C
3	1.00	0.853	4916	6970	0.71	66.8	24.5	C
4	1.00	0.832	3889	6970	0.56	70.0	18.5	C
5	1.00	0.821	4060	6970	0.58	69.6	19.4	C
6	1.00	0.799	3288	6970	0.47	70.4	15.6	B

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.831	0.962	4822	1070	6970	1936	0.69	0.55	64.0	61.7	25.1	25.9	C
2	1.00	1.00	0.818	0.962	5937	1212	6970	1936	0.85	0.63	61.1	58.1	32.4	31.5	D
3	1.00	1.00	0.853	0.962	6108	1192	6970	1936	0.88	0.62	60.5	57.4	33.7	32.3	D
4	1.00	1.00	0.832	0.962	5025	1136	6970	1936	0.72	0.59	63.6	61.2	26.3	27.1	C
5	1.00	1.00	0.821	0.962	4854	794	6970	1936	0.70	0.41	64.3	62.0	25.2	25.4	C
6	1.00	1.00	0.799	0.962	4063	775	6970	1936	0.58	0.40	65.4	63.2	20.7	21.6	C

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.860	4822	6970	0.69	67.2	23.9	C
2	1.00	0.847	5940	6970	0.85	60.7	32.6	D
3	1.00	0.874	6110	6970	0.88	59.4	34.3	D
4	1.00	0.862	5022	6970	0.72	66.3	25.2	C
5	1.00	0.845	4849	6970	0.70	67.1	24.1	C
6	1.00	0.831	4059	6970	0.58	69.6	19.4	C

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	65.5	15.3	10.7	6.10	B
2	62.4	20.5	14.4	6.40	F
3	62.7	18.7	13.5	6.30	C
4	66.5	15.4	10.6	6.00	B
5	66.3	16.0	10.7	6.00	B
6	67.6	13.7	8.9	5.90	B

Facility Overall Results

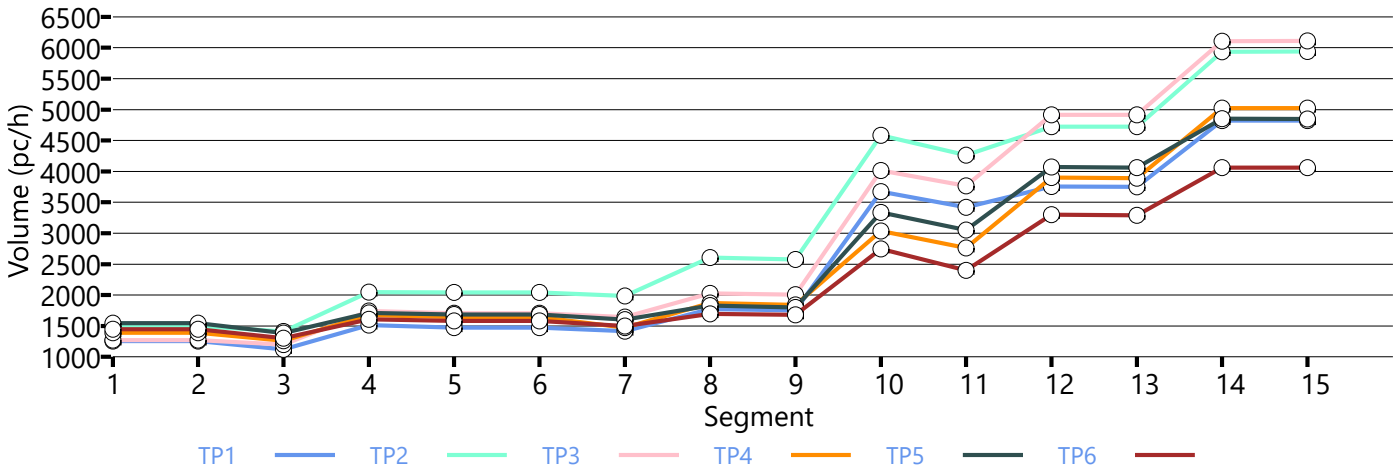
Space Mean Speed, mi/h	64.8	Density, veh/mi/ln	11.5
Average Travel Time, min	6.10	Density, pc/mi/ln	16.6

Messages

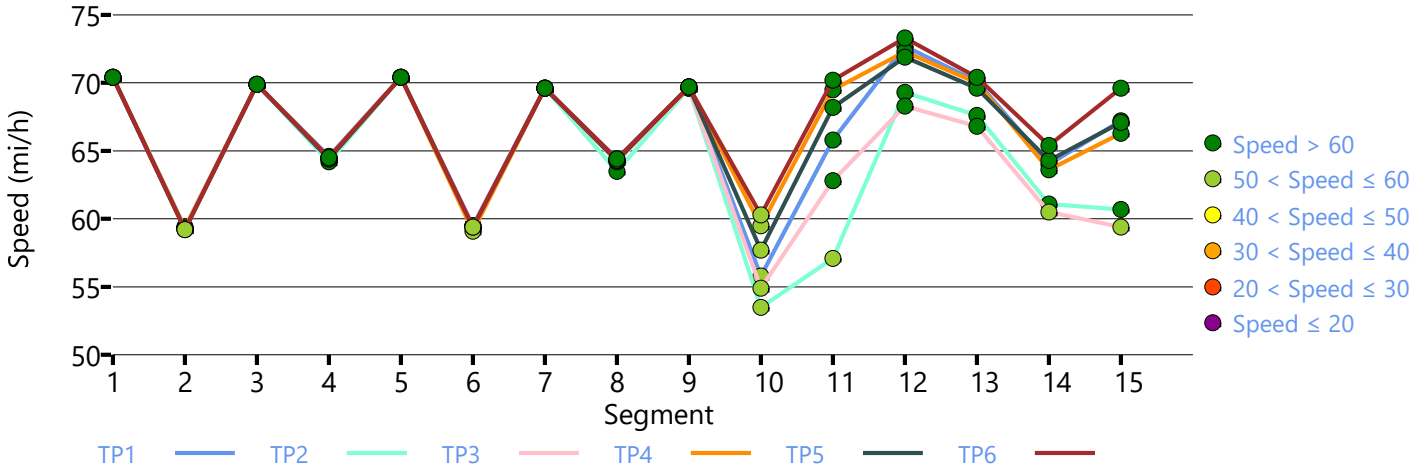
WARNING 1	Merge capacity is less than merge demand for analysis period 2 on segment 10.
WARNING 2	Merge capacity is less than merge demand for analysis period 3 on segment 10.

Comments

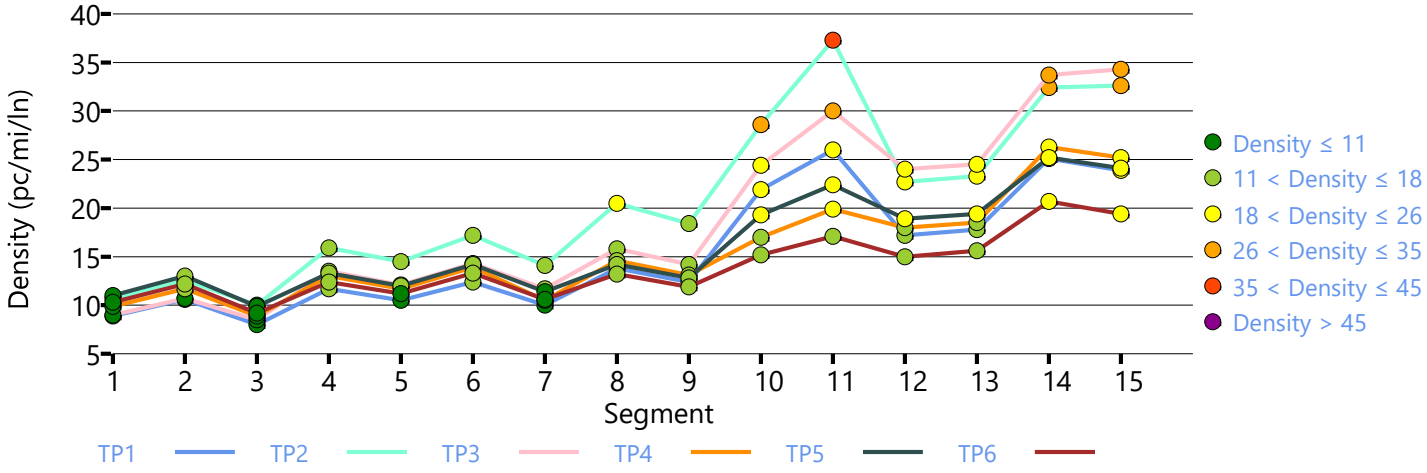
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2025 Phase 2
Jurisdiction		Time Analyzed	
Project Description	2025 WB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.840	5671	6970	0.81	62.6	30.2	D
2	1.00	0.855	5777	6970	0.83	61.9	31.1	D
3	1.00	0.828	5886	6970	0.84	61.1	32.1	D
4	1.00	0.847	5798	6970	0.83	61.8	31.3	D
5	1.00	0.855	5713	6970	0.82	62.4	30.5	D
6	1.00	0.846	6152	6970	0.88	59.1	34.7	D
7	1.00	0.836	6122	6970	0.88	59.3	34.4	D
8	1.00	0.828	5942	6970	0.85	60.7	32.6	D

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.840	0.962	5671	2083	9293	4000	0.61	0.52	63.6	54.1	22.3	16.7	B
2	1.00	1.00	0.855	0.962	5777	2401	9293	4000	0.62	0.60	62.1	53.2	23.3	19.0	B
3	1.00	1.00	0.828	0.962	5886	2330	9293	4000	0.63	0.58	62.6	53.4	23.5	18.7	B
4	1.00	1.00	0.847	0.962	5798	2529	9293	4000	0.62	0.63	61.5	52.8	23.6	19.8	B
5	1.00	1.00	0.855	0.962	5713	2415	9293	4000	0.61	0.60	62.0	53.2	23.0	18.9	B
6	1.00	1.00	0.846	0.962	6152	2666	9293	4000	0.66	0.67	61.2	52.5	25.1	21.5	C
7	1.00	1.00	0.836	0.962	6122	2325	9293	4000	0.66	0.58	62.7	53.4	24.4	19.2	B
8	1.00	1.00	0.828	0.962	5942	2249	9293	4000	0.64	0.56	63.0	53.7	23.6	18.3	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.770	3584	4646	0.77	64.5	27.8	D
2	1.00	0.779	3375	4646	0.73	66.1	25.5	C
3	1.00	0.740	3558	4646	0.77	64.7	27.5	D
4	1.00	0.758	3269	4646	0.70	66.9	24.4	C
5	1.00	0.775	3306	4646	0.71	66.6	24.8	C
6	1.00	0.758	3483	4646	0.75	65.3	26.7	D
7	1.00	0.760	3791	4646	0.82	62.5	30.3	D
8	1.00	0.746	3694	4646	0.80	63.5	29.1	D

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	3855	5474	0.70	65.3	19.7	B
2	1.00	0.450	3752	4939	0.76	64.9	19.3	B
3	1.00	0.469	3913	5544	0.71	64.6	20.2	C
4	1.00	0.472	3613	5369	0.67	65.1	18.5	B
5	1.00	0.466	3616	5095	0.71	65.5	18.4	B
6	1.00	0.467	3831	5344	0.72	64.8	19.7	B
7	1.00	0.489	4069	5500	0.74	65.0	20.9	C
8	1.00	0.456	4083	5446	0.75	64.2	21.2	C

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.566	1717	4646	0.37	70.7	12.1	B
2	1.00	0.555	1515	4646	0.33	70.7	10.7	A
3	1.00	0.545	1895	4646	0.41	70.7	13.4	B
4	1.00	0.556	1644	4646	0.35	70.7	11.6	B
5	1.00	0.551	1488	4646	0.32	70.7	10.5	A
6	1.00	0.549	1718	4646	0.37	70.7	12.1	B
7	1.00	0.548	1821	4646	0.39	70.7	12.9	B
8	1.00	0.542	1897	4646	0.41	70.7	13.4	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.566	0.588	2006	289	6970	2000	0.29	0.14	73.4	73.5	9.1	9.1	A
2	1.00	1.00	0.555	0.588	1772	257	6970	2000	0.25	0.13	73.4	73.5	8.0	8.0	A
3	1.00	1.00	0.545	0.588	2114	219	6970	2000	0.30	0.11	73.4	73.5	9.6	9.6	A
4	1.00	1.00	0.556	0.588	1816	172	6970	2000	0.26	0.09	73.4	73.5	8.2	8.2	A
5	1.00	1.00	0.551	0.588	1684	196	6970	2000	0.24	0.10	73.4	73.5	7.6	7.6	A
6	1.00	1.00	0.549	0.588	1922	204	6970	2000	0.28	0.10	73.4	73.5	8.7	8.7	A
7	1.00	1.00	0.548	0.588	1993	172	6970	2000	0.29	0.09	73.4	73.5	9.0	9.0	A
8	1.00	1.00	0.542	0.588	2084	187	6970	2000	0.30	0.09	73.4	73.5	9.5	9.5	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.569	2007	6970	0.29	70.8	9.4	A
2	1.00	0.560	1771	6970	0.25	70.8	8.3	A
3	1.00	0.549	2117	6970	0.30	70.8	10.0	A
4	1.00	0.559	1816	6970	0.26	70.8	8.5	A
5	1.00	0.556	1682	6970	0.24	70.8	7.9	A
6	1.00	0.554	1919	6970	0.28	70.8	9.0	A
7	1.00	0.551	1995	6970	0.29	70.8	9.4	A
8	1.00	0.546	2084	6970	0.30	70.8	9.8	A

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.569	0.847	2007	443	6970	2000	0.29	0.22	62.9	58.8	10.6	10.1	B
2	1.00	1.00	0.560	0.847	1771	329	6970	2000	0.25	0.16	63.2	59.1	9.3	8.6	A
3	1.00	1.00	0.549	0.847	2117	362	6970	2000	0.30	0.18	63.4	59.0	11.1	10.6	B
4	1.00	1.00	0.559	0.847	1816	373	6970	2000	0.26	0.19	63.0	58.9	9.6	8.9	A
5	1.00	1.00	0.556	0.847	1682	362	6970	2000	0.24	0.18	63.0	59.0	8.9	8.1	A
6	1.00	1.00	0.554	0.847	1919	384	6970	2000	0.28	0.19	63.1	58.9	10.1	9.5	A
7	1.00	1.00	0.551	0.847	1995	325	6970	2000	0.29	0.16	63.4	59.1	10.5	9.8	A
8	1.00	1.00	0.546	0.847	2084	340	6970	2000	0.30	0.17	63.4	59.0	11.0	10.4	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.488	1572	6970	0.23	70.1	7.4	A
2	1.00	0.492	1449	6970	0.21	70.2	6.9	A
3	1.00	0.486	1759	6970	0.25	70.2	8.3	A
4	1.00	0.482	1450	6970	0.21	70.1	6.9	A

5	1.00	0.472	1331	6970	0.19	70.1	6.3	A
6	1.00	0.478	1544	6970	0.22	70.1	7.3	A
7	1.00	0.492	1675	6970	0.24	70.2	7.9	A
8	1.00	0.485	1753	6970	0.25	70.2	8.3	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.488	0.820	1768	196	6970	2000	0.25	0.10	67.3	64.4	8.8	10.3	B
2	1.00	1.00	0.492	0.820	1611	162	6970	2000	0.23	0.08	67.4	64.4	8.0	9.5	A
3	1.00	1.00	0.486	0.820	1994	235	6970	2000	0.29	0.12	67.1	64.3	9.9	11.5	B
4	1.00	1.00	0.482	0.820	1662	212	6970	2000	0.24	0.11	67.3	64.4	8.2	9.9	A
5	1.00	1.00	0.472	0.820	1566	235	6970	2000	0.22	0.12	67.2	64.4	7.8	9.5	A
6	1.00	1.00	0.478	0.820	1790	246	6970	2000	0.26	0.12	67.2	64.4	8.9	10.6	B
7	1.00	1.00	0.492	0.820	1865	190	6970	2000	0.27	0.10	67.3	64.4	9.2	10.8	B
8	1.00	1.00	0.485	0.820	1988	235	6970	2000	0.29	0.12	67.1	64.3	9.9	11.5	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1764	6970	0.25	70.4	8.4	A
2	1.00	0.526	1608	6970	0.23	70.4	7.6	A
3	1.00	0.526	1992	6970	0.29	70.4	9.4	A
4	1.00	0.526	1660	6970	0.24	70.4	7.9	A
5	1.00	0.526	1561	6970	0.22	70.4	7.4	A
6	1.00	0.526	1787	6970	0.26	70.4	8.5	A
7	1.00	0.526	1863	6970	0.27	70.4	8.8	A
8	1.00	0.526	1983	6970	0.28	70.4	9.4	A

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	65.5	15.3	10.5	6.70	B
2	65.1	14.6	10.1	6.80	B
3	64.9	16.2	10.8	6.80	B
4	65.2	14.7	10.1	6.80	B
5	65.3	14.2	9.9	6.70	B
6	63.8	15.9	11.0	6.90	B
7	63.7	16.5	11.3	6.90	B
8	64.5	16.4	10.9	6.80	B

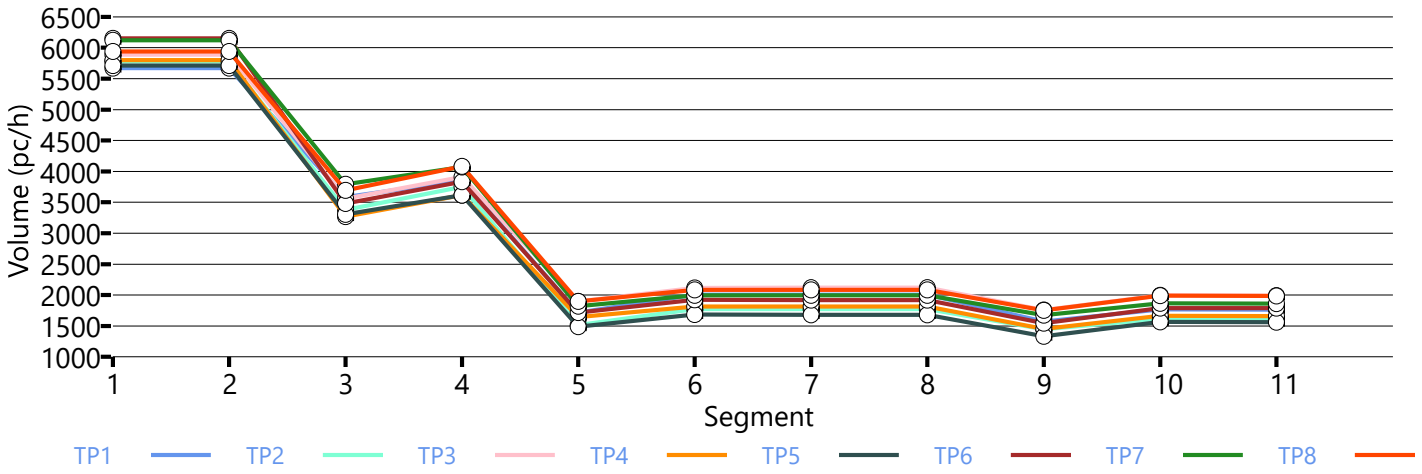
Facility Overall Results

Space Mean Speed, mi/h	64.7	Density, veh/mi/ln	10.6
Average Travel Time, min	6.80	Density, pc/mi/ln	15.5

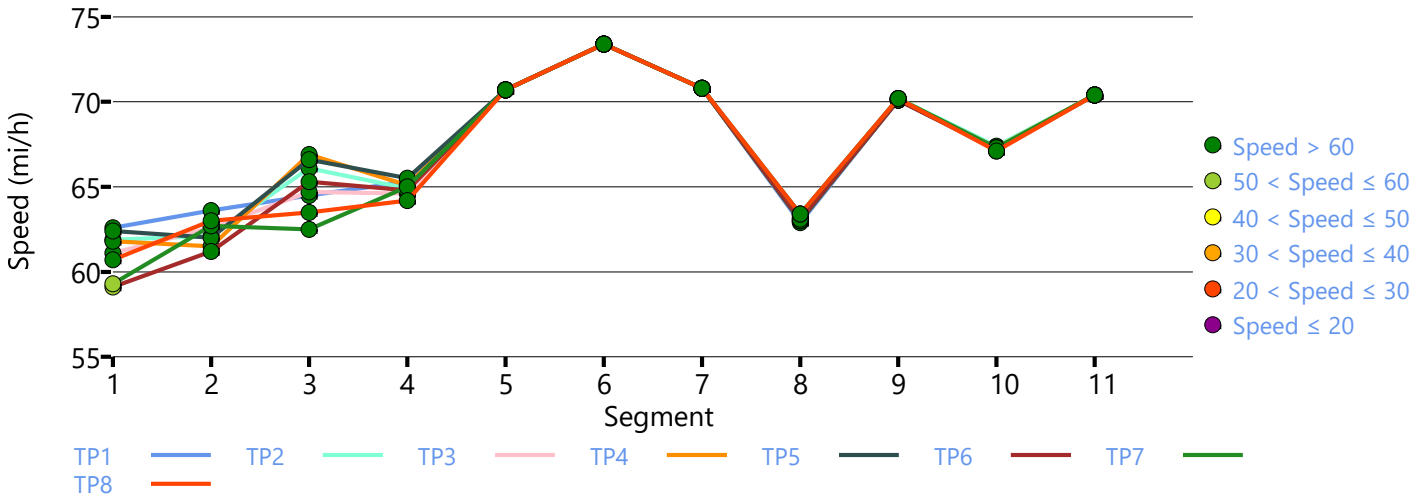
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Comments

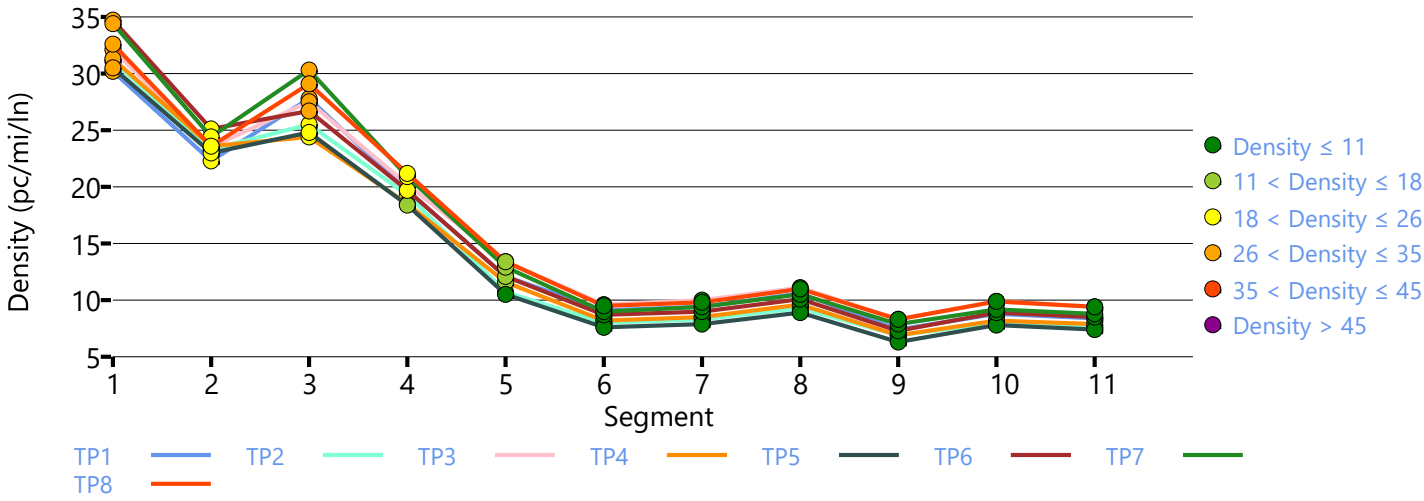
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2030 Phase 3
Jurisdiction		Time Analyzed	
Project Description	2030 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	6.63		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco Vista	5000	2
2	Diverge	Diverge	Atrisco Vista Exit Ramp	1500	2
3	Basic	Basic	Between Atrisco Vista Exit and Entrance	2300	2
4	Merge	Merge	Atrisco Vista Entrance Ramp	1500	2
5	Basic	Basic	Between Atrisco Vista Entrance and Arroyo Vista Exit	7100	2
6	Diverge	Diverge	Arroyo Vista Exit	1500	2
7	Basic	Basic	Between Arroyo Vist Exit and Arroyo Vista Loop Entrance	1750	2
8	Merge	Merge	Arroyo Vista Loop Entrance	1500	2
9	Basic	Basic	Between Arroyo Vista Loop Entrance and NB-EB Entrance	1100	2
10	Weaving	Weaving	Between Arroyo Vista NB-EB Entrance and Unser Exit	2850	3
11	Basic	Basic	Between Unser Exit and Unser Loop Entrance	1900	2
12	Merge	Basic	Lane Add at Unser Loop Entrance	1500	3
13	Basic	Basic	Between Unser Loop Entrance and NB-EB Entrance	1200	3
14	Merge	Merge	Unser NB-EB Entrance	1500	3
15	Basic	Basic	Between Unser NB-EB Entrance and Coors Exit	2800	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	1635	4646	0.35	70.4	11.6	B
2	1.00	0.521	1898	4646	0.41	70.4	13.5	B
3	1.00	0.521	1653	4646	0.36	70.4	11.7	B

4	1.00		0.521		1779		4646		0.38		70.4		12.6	B
5	1.00		0.521		1942		4646		0.42		70.4		13.8	B
6	1.00		0.521		1843		4646		0.40		70.4		13.1	B

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.521	0.641	1635	147	4646	1936	0.35	0.08	59.2	59.2	13.8	11.1	B
2	1.00	1.00	0.521	0.641	1898	115	4646	1936	0.41	0.06	59.3	59.3	16.0	13.4	B
3	1.00	1.00	0.521	0.641	1653	86	4646	1936	0.36	0.04	59.4	59.4	13.9	11.3	B
4	1.00	1.00	0.521	0.641	1779	147	4646	1936	0.38	0.08	59.2	59.2	15.0	12.4	B
5	1.00	1.00	0.521	0.641	1942	178	4646	1936	0.42	0.09	59.1	59.1	16.4	13.8	B
6	1.00	1.00	0.521	0.641	1843	170	4646	1936	0.40	0.09	59.2	59.2	15.6	12.9	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.503	1507	4646	0.32	69.9	10.7	A
2	1.00	0.510	1794	4646	0.39	69.9	12.7	B
3	1.00	0.511	1577	4646	0.34	69.9	11.2	B
4	1.00	0.505	1650	4646	0.36	69.9	11.7	B
5	1.00	0.504	1782	4646	0.38	69.9	12.7	B
6	1.00	0.503	1692	4646	0.36	69.9	12.0	B

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.503	0.794	1935	428	4646	1936	0.42	0.22	64.3	64.3	15.0	15.4	B
2	1.00	1.00	0.510	0.794	2485	691	4646	2000	0.53	0.35	63.7	63.7	19.5	19.6	B
3	1.00	1.00	0.511	0.794	2155	578	4646	1936	0.46	0.30	64.0	64.0	16.8	17.1	B
4	1.00	1.00	0.505	0.794	2103	453	4646	1936	0.45	0.23	64.1	64.1	16.4	16.7	B
5	1.00	1.00	0.504	0.794	2136	354	4646	1936	0.46	0.18	64.1	64.1	16.7	17.0	B
6	1.00	1.00	0.503	0.794	2027	335	4646	1936	0.44	0.17	64.2	64.2	15.8	16.2	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.592	1855	4646	0.40	70.4	13.2	B
2	1.00	0.611	2396	4646	0.52	70.3	17.0	B
3	1.00	0.611	2070	4646	0.45	70.4	14.7	B
4	1.00	0.589	2025	4646	0.44	70.4	14.4	B
5	1.00	0.568	2076	4646	0.45	70.4	14.7	B
6	1.00	0.568	1967	4646	0.42	70.4	14.0	B

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.592	0.725	1855	69	4646	1936	0.40	0.04	59.5	59.5	15.6	11.9	B
2	1.00	1.00	0.611	0.725	2396	76	4646	1936	0.52	0.04	59.4	59.4	20.2	16.6	B
3	1.00	1.00	0.611	0.725	2070	69	4646	1936	0.45	0.04	59.5	59.5	17.4	13.8	B
4	1.00	1.00	0.589	0.725	2025	192	4646	1936	0.44	0.10	59.1	59.1	17.1	13.4	B
5	1.00	1.00	0.568	0.725	2076	95	4646	1936	0.45	0.05	59.4	59.4	17.5	13.8	B
6	1.00	1.00	0.568	0.725	1967	95	4646	1936	0.42	0.05	59.4	59.4	16.6	12.9	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.585	1791	4646	0.39	69.6	12.7	B
2	1.00	0.606	2325	4646	0.50	69.6	16.5	B
3	1.00	0.606	2005	4646	0.43	69.6	14.2	B
4	1.00	0.569	1852	4646	0.40	69.6	13.2	B
5	1.00	0.557	1993	4646	0.43	69.6	14.1	B
6	1.00	0.557	1882	4646	0.41	69.6	13.4	B

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.585	0.980	2184	393	4646	1936	0.47	0.20	64.0	64.0	17.1	17.4	B
2	1.00	1.00	0.606	0.980	3007	682	4646	1936	0.65	0.35	62.6	62.6	24.0	23.7	C
3	1.00	1.00	0.606	0.980	2423	418	4646	1936	0.52	0.22	63.7	63.7	19.0	19.2	B
4	1.00	1.00	0.569	0.980	2286	434	4646	1936	0.49	0.22	63.9	63.9	17.9	18.2	B
5	1.00	1.00	0.557	0.980	2244	251	4646	1936	0.48	0.13	64.0	64.0	17.5	17.9	B
6	1.00	1.00	0.557	0.980	2102	220	4646	1936	0.45	0.11	64.1	64.1	16.4	16.8	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	2120	4646	0.46	69.6	15.1	B
2	1.00	0.706	2942	4646	0.63	68.7	21.4	C
3	1.00	0.685	2372	4646	0.51	69.6	16.9	B
4	1.00	0.668	2214	4646	0.48	69.6	15.7	B
5	1.00	0.618	2194	4646	0.47	69.6	15.6	B
6	1.00	0.615	2055	4646	0.44	69.6	14.6	B

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.639	4141	4255	0.99	54.5	25.3	C
2	1.00	0.678	4952	4675	1.13	52.6	31.4	D
3	1.00	0.655	4433	4574	1.03	54.3	27.2	C

4	1.00	0.624	3520	5255	0.67	58.1	20.2	C
5	1.00	0.566	3879	4713	0.82	56.1	23.0	C
6	1.00	0.538	3242	5163	0.63	59.0	18.3	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.813	3825	4646	0.82	62.2	30.7	D
2	1.00	0.812	4531	4646	0.98	53.4	42.4	E
3	1.00	0.818	4159	4646	0.90	58.4	35.6	E
4	1.00	0.770	3162	4646	0.68	67.6	23.4	C
5	1.00	0.765	3489	4646	0.75	65.3	26.7	D
6	1.00	0.728	2783	4646	0.60	69.4	20.1	C

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.813	0.980	4180	355	6970	1936	0.60	0.18	71.5	71.5	19.5	19.5	C
2	1.00	1.00	0.812	0.980	5038	507	6970	1936	0.72	0.26	67.7	67.7	24.8	24.8	C
3	1.00	1.00	0.818	0.980	5415	1256	6970	1936	0.78	0.65	65.3	65.3	27.6	27.6	D
4	1.00	1.00	0.770	0.980	4408	1246	6970	1936	0.63	0.64	70.7	70.7	20.8	20.8	C
5	1.00	1.00	0.765	0.980	4603	1114	6970	1936	0.66	0.58	69.9	69.9	22.0	22.0	C
6	1.00	1.00	0.728	0.980	3771	988	6970	1936	0.54	0.51	72.6	72.6	17.3	17.3	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.828	4176	6970	0.60	69.4	20.1	C
2	1.00	0.828	5043	6970	0.72	66.2	25.4	C
3	1.00	0.856	5412	6970	0.78	64.2	28.1	D
4	1.00	0.835	4378	6970	0.63	68.8	21.2	C
5	1.00	0.821	4581	6970	0.66	68.2	22.4	C
6	1.00	0.800	3742	6970	0.54	70.2	17.8	B

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.828	0.962	5352	1176	6970	1936	0.77	0.61	62.8	60.2	28.4	28.7	D
2	1.00	1.00	0.828	0.962	6374	1331	6970	1936	0.91	0.69	58.9	55.5	36.1	33.9	D
3	1.00	1.00	0.856	0.962	6722	1310	6970	1936	0.96	0.68	57.3	53.4	39.1	35.5	E
4	1.00	1.00	0.835	0.962	5626	1248	6970	1936	0.81	0.64	61.9	59.2	30.3	30.2	D
5	1.00	1.00	0.821	0.962	5457	876	6970	1936	0.78	0.45	63.0	60.5	28.9	28.4	D
6	1.00	1.00	0.800	0.962	4599	857	6970	1936	0.66	0.44	64.7	62.4	23.7	24.3	C

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.861	5330	6970	0.76	64.7	27.5	D
2	1.00	0.855	6381	6970	0.92	57.2	37.2	E
3	1.00	0.877	6719	6970	0.96	54.1	41.4	E
4	1.00	0.864	5622	6970	0.81	62.9	29.8	D
5	1.00	0.845	5449	6970	0.78	64.0	28.4	D
6	1.00	0.832	4589	6970	0.66	68.1	22.5	C

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	64.3	18.4	12.7	6.20	C
2	60.9	23.6	16.7	6.50	F
3	60.3	22.3	16.2	6.60	F
4	65.1	18.6	12.7	6.10	C
5	64.9	19.3	12.7	6.10	C
6	67.0	16.6	10.6	5.90	B

Facility Overall Results

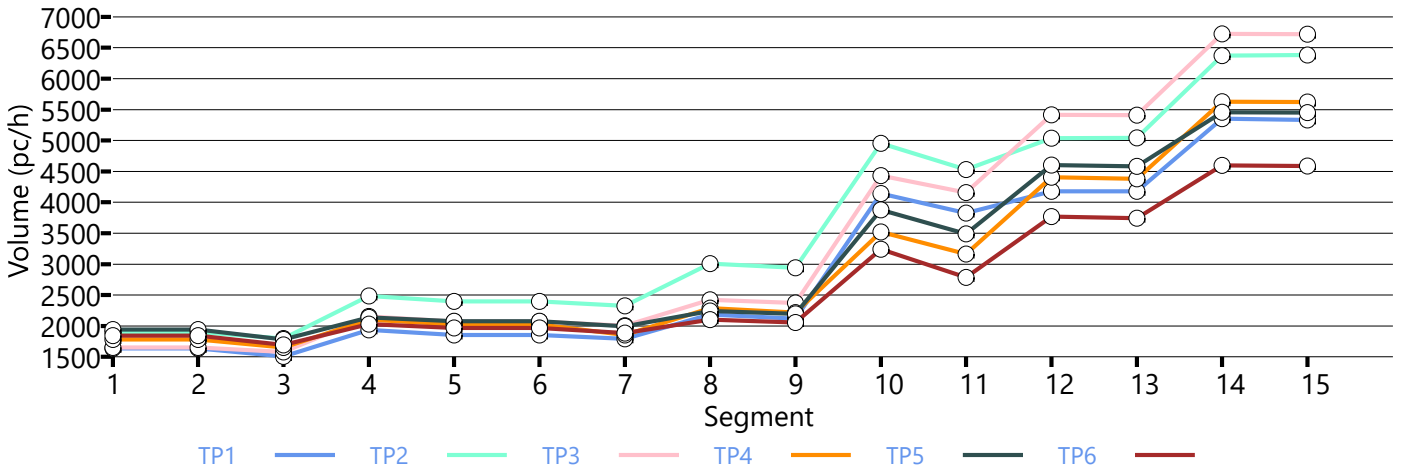
Space Mean Speed, mi/h	63.4	Density, veh/mi/ln	13.6
Average Travel Time, min	6.30	Density, pc/mi/ln	19.8

Messages

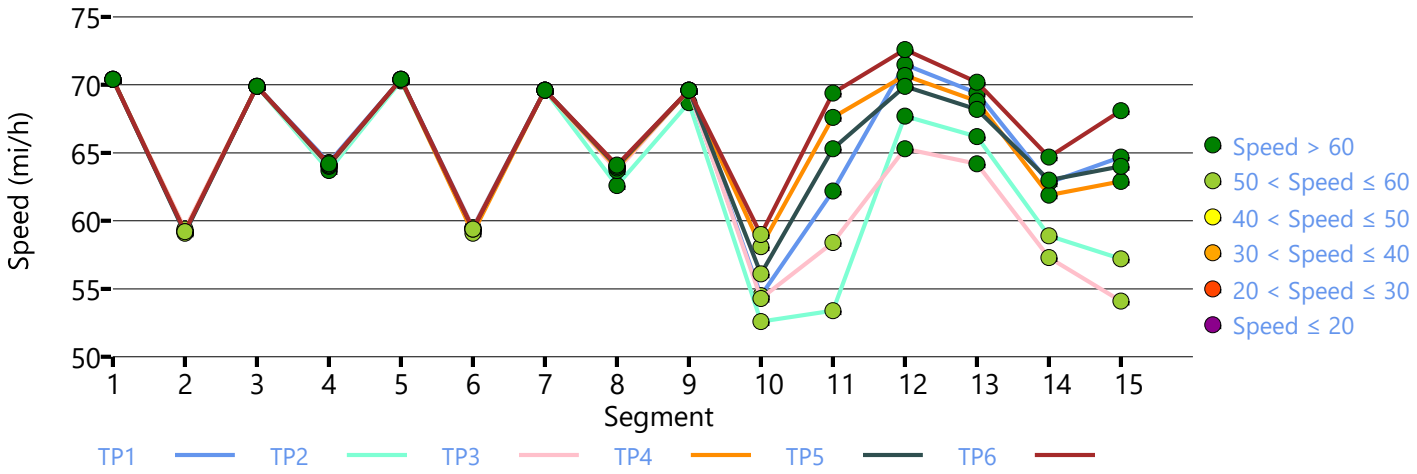
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Comments

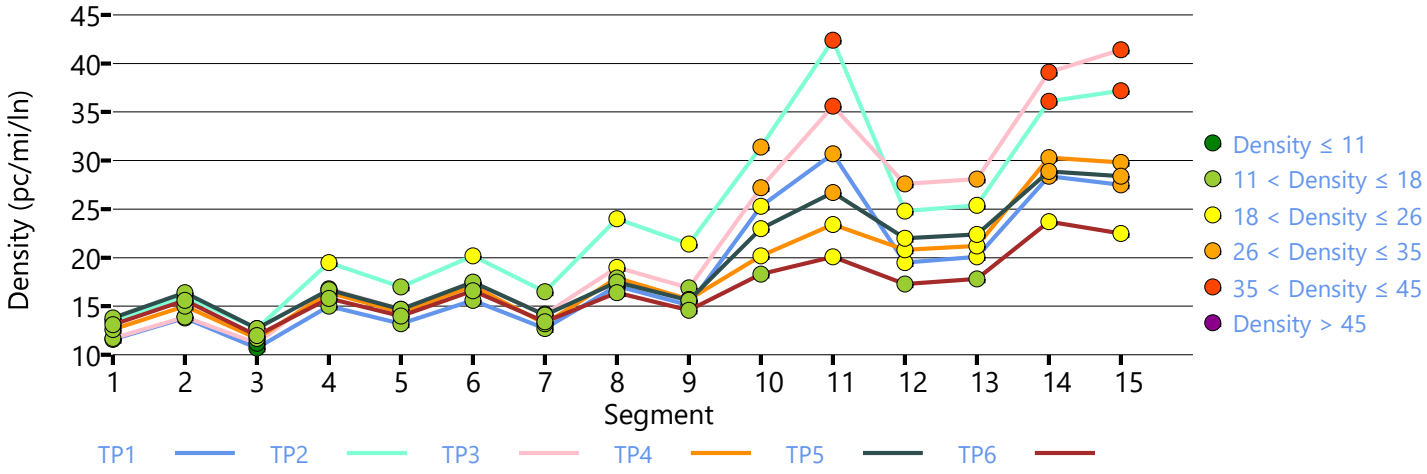
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2030 Phase 3
Jurisdiction		Time Analyzed	
Project Description	2030 WB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.843	6171	6970	0.89	59.0	34.9	D
2	1.00	0.856	6301	6970	0.90	57.9	36.3	E
3	1.00	0.829	6416	6970	0.92	56.9	37.6	E
4	1.00	0.849	6317	6970	0.91	57.7	36.5	E
5	1.00	0.856	6234	6970	0.89	58.4	35.6	E
6	1.00	0.847	6708	6970	0.96	54.2	41.3	E
7	1.00	0.839	6658	6970	0.96	54.7	40.6	E
8	1.00	0.831	6461	6970	0.93	56.5	38.1	E

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.843	0.962	6171	2282	9293	4000	0.66	0.57	63.0	53.6	24.5	19.1	B
2	1.00	1.00	0.856	0.962	6301	2627	9293	4000	0.68	0.66	61.5	52.6	25.6	21.6	C
3	1.00	1.00	0.829	0.962	6416	2549	9293	4000	0.69	0.64	61.9	52.8	25.9	21.3	C
4	1.00	1.00	0.849	0.962	6317	2766	9293	4000	0.68	0.69	60.9	52.2	25.9	22.5	C
5	1.00	1.00	0.856	0.962	6234	2642	9293	4000	0.67	0.66	61.3	52.5	25.4	21.5	C
6	1.00	1.00	0.847	0.962	6708	2916	9293	4000	0.72	0.73	60.5	51.8	27.7	24.3	C
7	1.00	1.00	0.839	0.962	6658	2545	9293	4000	0.72	0.64	62.1	52.8	26.8	21.8	C
8	1.00	1.00	0.831	0.962	6461	2462	9293	4000	0.70	0.62	62.3	53.0	25.9	20.9	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.773	3890	4646	0.84	61.5	31.6	D
2	1.00	0.781	3671	4646	0.79	63.7	28.8	D
3	1.00	0.742	3864	4646	0.83	61.8	31.3	D
4	1.00	0.760	3555	4646	0.77	64.7	27.5	D
5	1.00	0.778	3591	4646	0.77	64.4	27.9	D
6	1.00	0.760	3786	4646	0.81	62.6	30.2	D
7	1.00	0.762	4118	4646	0.89	58.9	35.0	D
8	1.00	0.749	4007	4646	0.86	60.2	33.3	D

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	4205	5492	0.77	64.8	21.6	C
2	1.00	0.448	4107	4968	0.83	64.4	21.3	C
3	1.00	0.468	4269	5550	0.77	64.0	22.2	C
4	1.00	0.470	3952	5404	0.73	64.6	20.4	C
5	1.00	0.464	3959	5125	0.77	64.9	20.3	C
6	1.00	0.466	4184	5370	0.78	64.3	21.7	C
7	1.00	0.488	4441	5503	0.81	64.5	23.0	C
8	1.00	0.455	4455	5455	0.82	63.6	23.3	C

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.568	1877	4646	0.40	70.7	13.2	B
2	1.00	0.556	1664	4646	0.36	70.7	11.8	B
3	1.00	0.545	2072	4646	0.45	70.7	14.6	B
4	1.00	0.556	1806	4646	0.39	70.7	12.8	B
5	1.00	0.551	1639	4646	0.35	70.7	11.6	B
6	1.00	0.550	1880	4646	0.40	70.7	13.3	B
7	1.00	0.548	1995	4646	0.43	70.7	14.1	B
8	1.00	0.542	2074	4646	0.45	70.7	14.6	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.568	0.588	2209	332	6970	2000	0.32	0.17	73.4	73.5	10.0	10.0	A
2	1.00	1.00	0.556	0.588	1962	298	6970	2000	0.28	0.15	73.4	73.5	8.9	8.9	A
3	1.00	1.00	0.545	0.588	2327	255	6970	2000	0.33	0.13	73.4	73.5	10.6	10.6	A
4	1.00	1.00	0.556	0.588	2010	204	6970	2000	0.29	0.10	73.4	73.5	9.1	9.1	A
5	1.00	1.00	0.551	0.588	1869	230	6970	2000	0.27	0.12	73.4	73.5	8.5	8.5	A
6	1.00	1.00	0.550	0.588	2118	238	6970	2000	0.30	0.12	73.4	73.5	9.6	9.6	A
7	1.00	1.00	0.548	0.588	2199	204	6970	2000	0.32	0.10	73.4	73.5	10.0	10.0	A
8	1.00	1.00	0.542	0.588	2295	221	6970	2000	0.33	0.11	73.4	73.5	10.4	10.4	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.571	2208	6970	0.32	70.8	10.4	A
2	1.00	0.561	1961	6970	0.28	70.8	9.2	A
3	1.00	0.549	2330	6970	0.33	70.8	11.0	A
4	1.00	0.559	2011	6970	0.29	70.8	9.5	A
5	1.00	0.556	1867	6970	0.27	70.8	8.8	A
6	1.00	0.554	2119	6970	0.30	70.8	10.0	A
7	1.00	0.551	2201	6970	0.32	70.8	10.4	A
8	1.00	0.546	2297	6970	0.33	70.8	10.8	A

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.571	0.847	2208	484	6970	2000	0.32	0.24	62.8	58.6	11.7	11.3	B
2	1.00	1.00	0.561	0.847	1961	361	6970	2000	0.28	0.18	63.2	59.0	10.3	9.7	A
3	1.00	1.00	0.549	0.847	2330	396	6970	2000	0.33	0.20	63.4	58.9	12.3	11.8	B
4	1.00	1.00	0.559	0.847	2011	407	6970	2000	0.29	0.20	63.1	58.9	10.6	10.1	B
5	1.00	1.00	0.556	0.847	1867	396	6970	2000	0.27	0.20	63.0	58.9	9.9	9.2	A
6	1.00	1.00	0.554	0.847	2119	419	6970	2000	0.30	0.21	63.1	58.8	11.2	10.7	B
7	1.00	1.00	0.551	0.847	2201	355	6970	2000	0.32	0.18	63.4	59.0	11.6	11.0	B
8	1.00	1.00	0.546	0.847	2297	372	6970	2000	0.33	0.19	63.5	59.0	12.1	11.6	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.488	1744	6970	0.25	70.1	8.3	A
2	1.00	0.492	1614	6970	0.23	70.2	7.6	A
3	1.00	0.485	1946	6970	0.28	70.2	9.2	A
4	1.00	0.481	1620	6970	0.23	70.1	7.7	A

5	1.00	0.471	1493	6970	0.21	70.1	7.1	A
6	1.00	0.477	1717	6970	0.25	70.1	8.1	A
7	1.00	0.491	1857	6970	0.27	70.2	8.8	A
8	1.00	0.485	1936	6970	0.28	70.2	9.2	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.488	0.820	1960	216	6970	2000	0.28	0.11	67.1	64.3	9.7	11.3	B
2	1.00	1.00	0.492	0.820	1793	179	6970	2000	0.26	0.09	67.3	64.4	8.9	10.4	B
3	1.00	1.00	0.485	0.820	2203	257	6970	2000	0.32	0.13	67.0	64.3	11.0	12.5	B
4	1.00	1.00	0.481	0.820	1853	233	6970	2000	0.27	0.12	67.2	64.4	9.2	10.8	B
5	1.00	1.00	0.471	0.820	1750	257	6970	2000	0.25	0.13	67.2	64.4	8.7	10.4	B
6	1.00	1.00	0.477	0.820	1987	270	6970	2000	0.29	0.13	67.0	64.3	9.9	11.6	B
7	1.00	1.00	0.491	0.820	2067	210	6970	2000	0.30	0.10	67.1	64.3	10.3	11.8	B
8	1.00	1.00	0.485	0.820	2193	257	6970	2000	0.31	0.13	67.0	64.3	10.9	12.5	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1954	6970	0.28	70.4	9.2	A
2	1.00	0.526	1789	6970	0.26	70.4	8.5	A
3	1.00	0.526	2196	6970	0.32	70.4	10.4	A
4	1.00	0.526	1844	6970	0.26	70.4	8.7	A
5	1.00	0.526	1738	6970	0.25	70.4	8.2	A
6	1.00	0.526	1977	6970	0.28	70.4	9.4	A
7	1.00	0.526	2061	6970	0.30	70.4	9.8	A
8	1.00	0.526	2186	6970	0.31	70.4	10.4	A

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	63.6	17.2	11.9	6.90	B
2	63.0	16.5	11.5	7.00	B
3	62.7	18.2	12.2	7.00	C
4	63.1	16.6	11.5	7.00	B
5	63.3	16.0	11.2	7.00	B
6	61.2	18.1	12.5	7.20	C
7	61.1	18.7	12.9	7.20	C
8	62.2	18.5	12.4	7.10	C

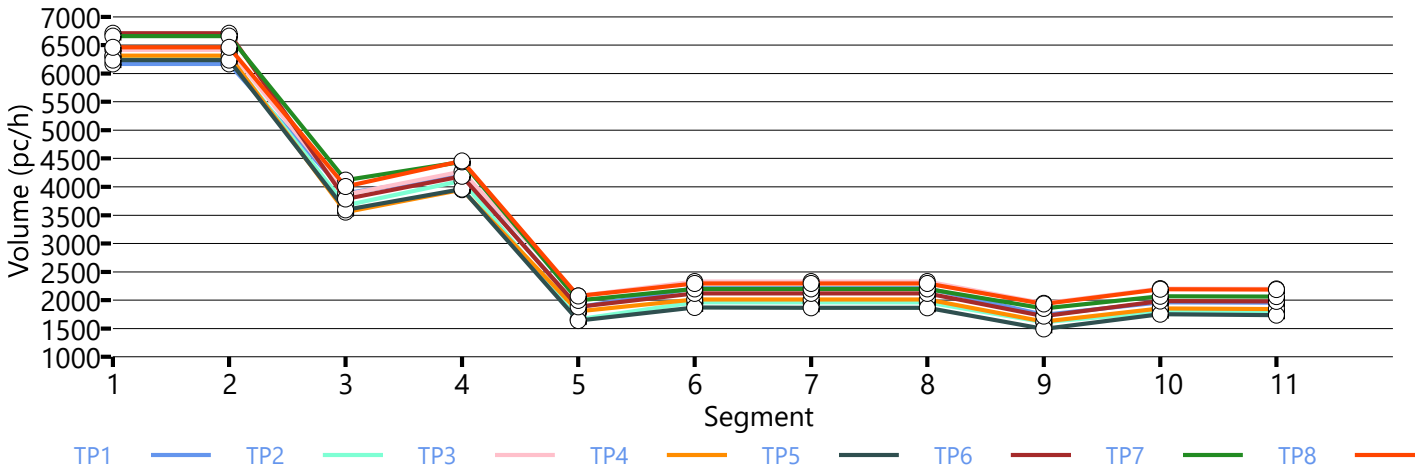
Facility Overall Results

Space Mean Speed, mi/h	62.5	Density, veh/mi/ln	12.0
Average Travel Time, min	7.00	Density, pc/mi/ln	17.5

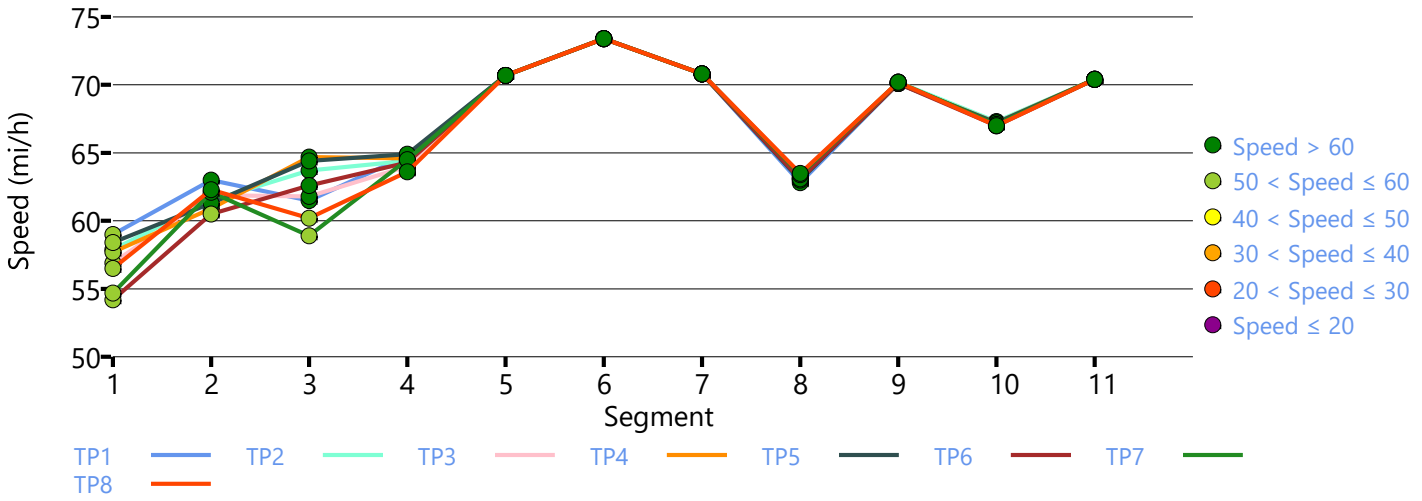
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Comments

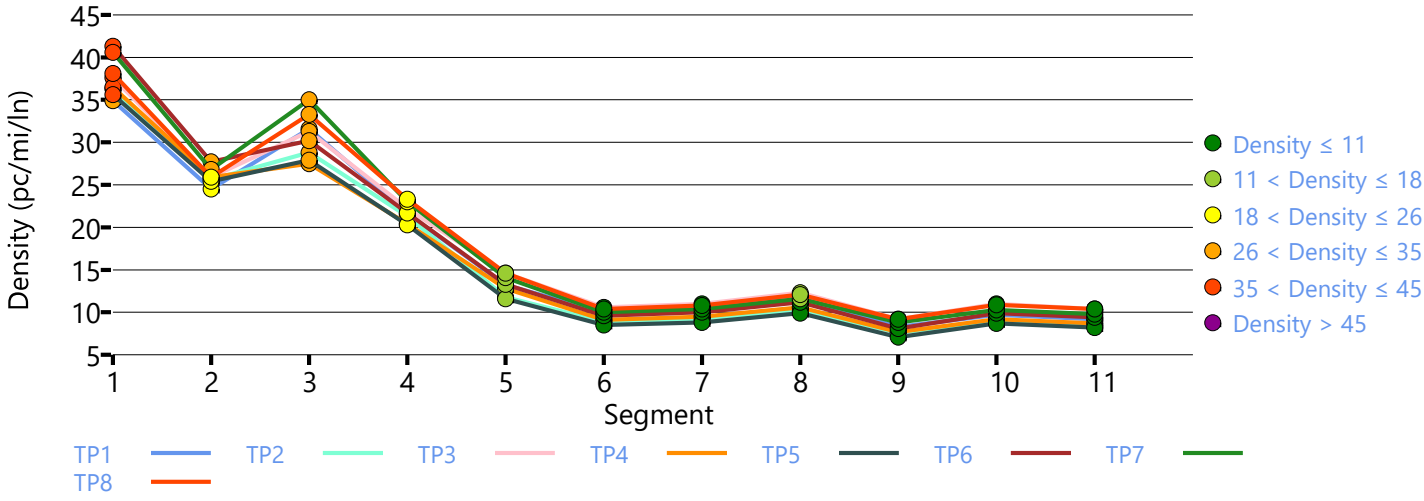
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2040 No Build
Jurisdiction		Time Analyzed	
Project Description	2040 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	6.63		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco Vista	5000	2
2	Diverge	Diverge	Atrisco Vista Exit Ramp	1500	2
3	Basic	Basic	Between Atrisco Vista Exit and Entrance	2300	2
4	Merge	Merge	Atrisco Vista Entrance Ramp	1500	2
5	Basic	Basic	Between Atrisco Vista Entrance and Arroyo Vista Exit	7100	2
6	Diverge	Diverge	Arroyo Vista Exit	1500	2
7	Basic	Basic	Between Arroyo Vist Exit and Arroyo Vista Loop Entrance	1750	2
8	Merge	Merge	Arroyo Vista Loop Entrance	1500	2
9	Basic	Basic	Between Arroyo Vista Loop Entrance and NB-EB Entrance	1100	2
10	Weaving	Weaving	Between Arroyo Vista NB-EB Entrance and Unser Exit	2850	3
11	Basic	Basic	Between Unser Exit and Unser Loop Entrance	1900	2
12	Merge	Basic	Lane Add at Unser Loop Entrance	1500	3
13	Basic	Basic	Between Unser Loop Entrance and NB-EB Entrance	1200	3
14	Merge	Merge	Unser NB-EB Entrance	1500	3
15	Basic	Basic	Between Unser NB-EB Entrance and Coors Exit	2800	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	1326	4646	0.29	70.4	9.4	A
2	1.00	0.521	1643	4646	0.35	70.4	11.7	B
3	1.00	0.521	1347	4646	0.29	70.4	9.6	A

4	1.00		0.521		1499		4646		0.32		70.4		10.7		A
5	1.00		0.521		1695		4646		0.36		70.4		12.0		B
6	1.00		0.521		1576		4646		0.34		70.4		11.2		B
Segment 2: Diverge															
AP	**PHF**		**fHV**		**Flow Rate (pc/h)**		**Capacity (pc/h)**		**d/c Ratio**		**Speed (mi/h)**		**Density (pc/mi/ln)**		**LOS**
	F	**R**	**F**	**R**	**Freeway**	**Ramp**	**Freeway**	**Ramp**	**F**	**R**	**F**	**R**	**Freeway**	**Ramp**	
1	1.00	1.00	0.521	0.641	1326	147	4646	1936	0.29	0.08	59.2	59.2	11.2	8.5	A
2	1.00	1.00	0.521	0.641	1643	115	4646	1936	0.35	0.06	59.3	59.3	13.9	11.2	B
3	1.00	1.00	0.521	0.641	1347	86	4646	1936	0.29	0.04	59.4	59.4	11.3	8.6	A
4	1.00	1.00	0.521	0.641	1499	147	4646	1936	0.32	0.08	59.2	59.2	12.7	9.9	A
5	1.00	1.00	0.521	0.641	1695	178	4646	1936	0.36	0.09	59.1	59.1	14.3	11.6	B
6	1.00	1.00	0.521	0.641	1576	170	4646	1936	0.34	0.09	59.2	59.2	13.3	10.6	B
Segment 3: Basic															
AP	**PHF**		**fHV**		**Flow Rate (pc/h)**		**Capacity (pc/h)**		**d/c Ratio**		**Speed (mi/h)**		**Density (pc/mi/ln)**		**LOS**
1	1.00		0.503		1187		4646		0.26		69.9		8.4		A
2	1.00		0.510		1533		4646		0.33		69.9		10.9		A
3	1.00		0.511		1266		4646		0.27		69.9		9.0		A
4	1.00		0.505		1360		4646		0.29		69.9		9.7		A
5	1.00		0.504		1526		4646		0.33		69.9		10.8		A
6	1.00		0.503		1416		4646		0.30		69.9		10.1		A
Segment 4: Merge															
AP	**PHF**		**fHV**		**Flow Rate (pc/h)**		**Capacity (pc/h)**		**d/c Ratio**		**Speed (mi/h)**		**Density (pc/mi/ln)**		**LOS**
	F	**R**	**F**	**R**	**Freeway**	**Ramp**	**Freeway**	**Ramp**	**F**	**R**	**F**	**R**	**Freeway**	**Ramp**	
1	1.00	1.00	0.503	0.794	1611	424	4646	1936	0.35	0.22	64.5	64.5	12.5	12.9	B
2	1.00	1.00	0.510	0.794	2221	688	4646	2000	0.48	0.34	64.0	64.0	17.4	17.5	B
3	1.00	1.00	0.511	0.794	1840	574	4646	1936	0.40	0.30	64.3	64.3	14.3	14.6	B
4	1.00	1.00	0.505	0.794	1810	450	4646	1936	0.39	0.23	64.4	64.4	14.1	14.4	B
5	1.00	1.00	0.504	0.794	1876	350	4646	1936	0.40	0.18	64.3	64.3	14.6	15.0	B
6	1.00	1.00	0.503	0.794	1747	331	4646	1936	0.38	0.17	64.4	64.4	13.6	14.0	B
Segment 5: Basic															
AP	**PHF**		**fHV**		**Flow Rate (pc/h)**		**Capacity (pc/h)**		**d/c Ratio**		**Speed (mi/h)**		**Density (pc/mi/ln)**		**LOS**
1	1.00		0.592		1578		4646		0.34		70.4		11.2		B
2	1.00		0.611		2173		4646		0.47		70.4		15.4		B
3	1.00		0.611		1805		4646		0.39		70.4		12.8		B
4	1.00		0.589		1772		4646		0.38		70.4		12.6		B
5	1.00		0.568		1843		4646		0.40		70.4		13.1		B
6	1.00		0.568		1717		4646		0.37		70.4		12.2		B
Segment 6: Diverge															

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.592	0.725	1578	69	4646	1936	0.34	0.04	59.5	59.5	13.3	9.5	A
2	1.00	1.00	0.611	0.725	2173	76	4646	1936	0.47	0.04	59.4	59.4	18.3	14.7	B
3	1.00	1.00	0.611	0.725	1805	69	4646	1936	0.39	0.04	59.5	59.5	15.2	11.5	B
4	1.00	1.00	0.589	0.725	1772	192	4646	1936	0.38	0.10	59.1	59.1	15.0	11.2	B
5	1.00	1.00	0.568	0.725	1843	95	4646	1936	0.40	0.05	59.4	59.4	15.5	11.8	B
6	1.00	1.00	0.568	0.725	1717	95	4646	1936	0.37	0.05	59.4	59.4	14.5	10.7	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.585	1511	4646	0.33	69.6	10.7	A
2	1.00	0.606	2101	4646	0.45	69.6	14.9	B
3	1.00	0.606	1738	4646	0.37	69.6	12.3	B
4	1.00	0.569	1591	4646	0.34	69.6	11.3	B
5	1.00	0.557	1756	4646	0.38	69.6	12.5	B
6	1.00	0.557	1627	4646	0.35	69.6	11.6	B

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.585	0.980	1901	390	4646	1936	0.41	0.20	64.3	64.3	14.8	15.2	B
2	1.00	1.00	0.606	0.980	2780	679	4646	1936	0.60	0.35	63.1	63.1	22.0	21.9	C
3	1.00	1.00	0.606	0.980	2153	415	4646	1936	0.46	0.21	64.0	64.0	16.8	17.1	B
4	1.00	1.00	0.569	0.980	2022	431	4646	1936	0.44	0.22	64.2	64.2	15.7	16.1	B
5	1.00	1.00	0.557	0.980	2004	248	4646	1936	0.43	0.13	64.2	64.2	15.6	16.0	B
6	1.00	1.00	0.557	0.980	1844	217	4646	1936	0.40	0.11	64.3	64.3	14.3	14.8	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	1873	4646	0.40	69.7	13.3	B
2	1.00	0.706	2745	4646	0.59	69.5	19.7	C
3	1.00	0.685	2131	4646	0.46	69.6	15.1	B
4	1.00	0.668	1987	4646	0.43	69.6	14.1	B
5	1.00	0.618	1976	4646	0.43	69.6	14.0	B
6	1.00	0.615	1820	4646	0.39	69.7	12.9	B

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.639	3885	4019	0.99	55.1	23.5	C
2	1.00	0.678	4751	4511	1.12	53.0	29.9	D
3	1.00	0.655	4141	4126	1.07	54.5	25.3	C

4	1.00	0.624	3282	4933	0.67	58.5	18.7	B
5	1.00	0.566	3649	4451	0.82	56.5	21.5	C
6	1.00	0.538	2981	4791	0.62	59.4	16.7	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.813	3633	4646	0.78	64.0	28.4	D
2	1.00	0.812	4373	4646	0.94	55.6	39.3	E
3	1.00	0.818	3848	4646	0.83	61.9	31.1	D
4	1.00	0.770	2979	4646	0.64	68.6	21.7	C
5	1.00	0.765	3327	4646	0.72	66.5	25.0	C
6	1.00	0.728	2599	4646	0.56	69.9	18.6	C

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.813	0.980	3977	344	6970	1936	0.57	0.18	72.1	72.1	18.4	18.4	C
2	1.00	1.00	0.812	0.980	4869	496	6970	1936	0.70	0.26	68.6	68.6	23.7	23.7	C
3	1.00	1.00	0.818	0.980	5093	1245	6970	1936	0.73	0.64	67.4	67.4	25.2	25.2	C
4	1.00	1.00	0.770	0.980	4214	1235	6970	1936	0.60	0.64	71.4	71.4	19.7	19.7	C
5	1.00	1.00	0.765	0.980	4430	1103	6970	1936	0.64	0.57	70.6	70.6	20.9	20.9	C
6	1.00	1.00	0.728	0.980	3576	977	6970	1936	0.51	0.50	73.0	73.0	16.3	16.3	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.828	3975	6970	0.57	69.8	19.0	C
2	1.00	0.828	4876	6970	0.70	67.0	24.3	C
3	1.00	0.856	5103	6970	0.73	65.9	25.8	C
4	1.00	0.835	4196	6970	0.60	69.3	20.2	C
5	1.00	0.821	4417	6970	0.63	68.7	21.4	C
6	1.00	0.800	3561	6970	0.51	70.3	16.9	B

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.828	0.962	5125	1150	6970	1936	0.74	0.59	63.4	60.9	26.9	27.6	C
2	1.00	1.00	0.828	0.962	6181	1305	6970	1936	0.89	0.67	59.8	56.6	34.5	32.9	D
3	1.00	1.00	0.856	0.962	6387	1284	6970	1936	0.92	0.66	59.0	55.6	36.1	33.8	D
4	1.00	1.00	0.835	0.962	5418	1222	6970	1936	0.78	0.63	62.5	59.9	28.9	29.1	D
5	1.00	1.00	0.821	0.962	5267	850	6970	1936	0.76	0.44	63.4	61.0	27.7	27.4	C
6	1.00	1.00	0.800	0.962	4392	831	6970	1936	0.63	0.43	64.9	62.7	22.6	23.3	C

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.861	5107	6970	0.73	65.9	25.8	C
2	1.00	0.855	6189	6970	0.89	58.8	35.1	E
3	1.00	0.877	6389	6970	0.92	57.1	37.3	E
4	1.00	0.864	5417	6970	0.78	64.2	28.1	D
5	1.00	0.845	5259	6970	0.75	65.1	26.9	D
6	1.00	0.832	4385	6970	0.63	68.8	21.2	C

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	64.9	16.4	11.5	6.10	B
2	61.6	21.9	15.5	6.50	F
3	61.7	19.9	14.4	6.40	F
4	65.6	16.8	11.6	6.10	B
5	65.3	17.7	11.8	6.10	B
6	67.2	15.0	9.6	5.90	B

Facility Overall Results

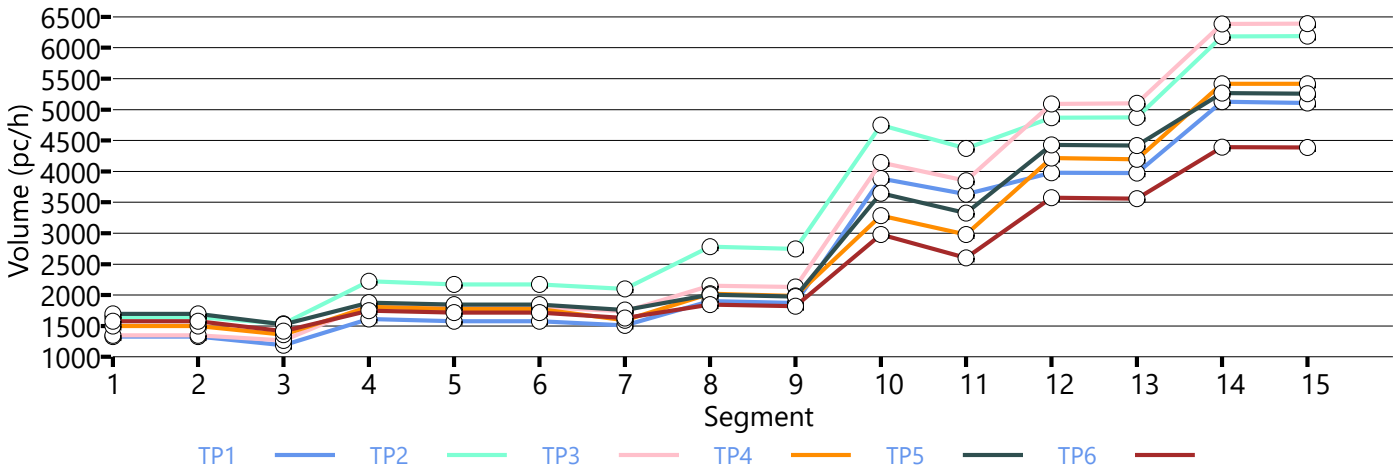
Space Mean Speed, mi/h	64.1	Density, veh/mi/ln	12.4
Average Travel Time, min	6.20	Density, pc/mi/ln	17.9

Messages

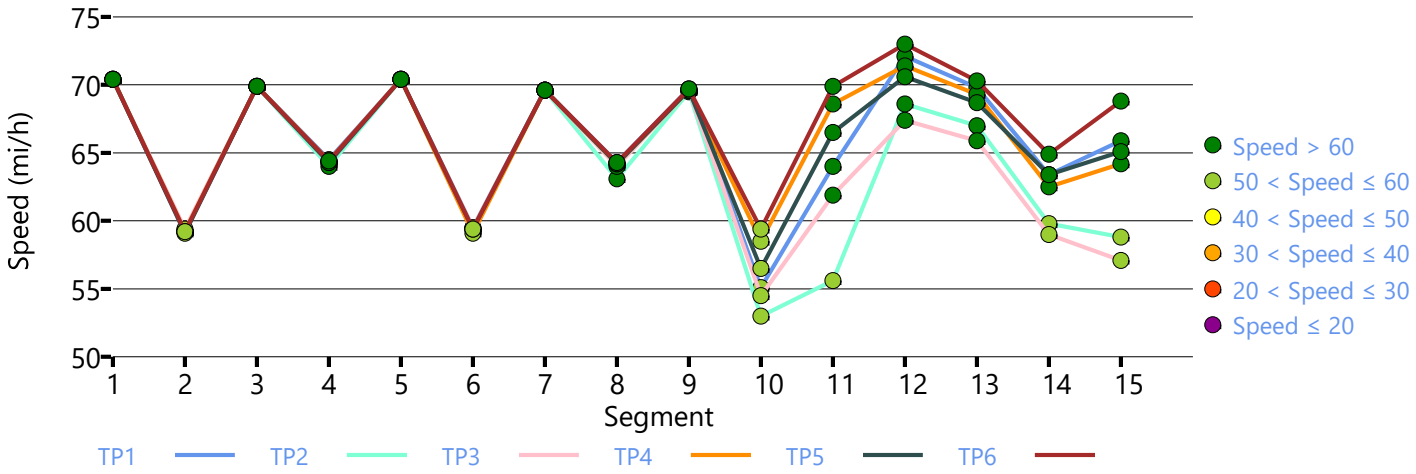
WARNING 1	Merge capacity is less than merge demand for analysis period 1 on segment 10.
WARNING 2	Merge capacity is less than merge demand for analysis period 2 on segment 10.
WARNING 3	Merge capacity is less than merge demand for analysis period 3 on segment 10.

Comments

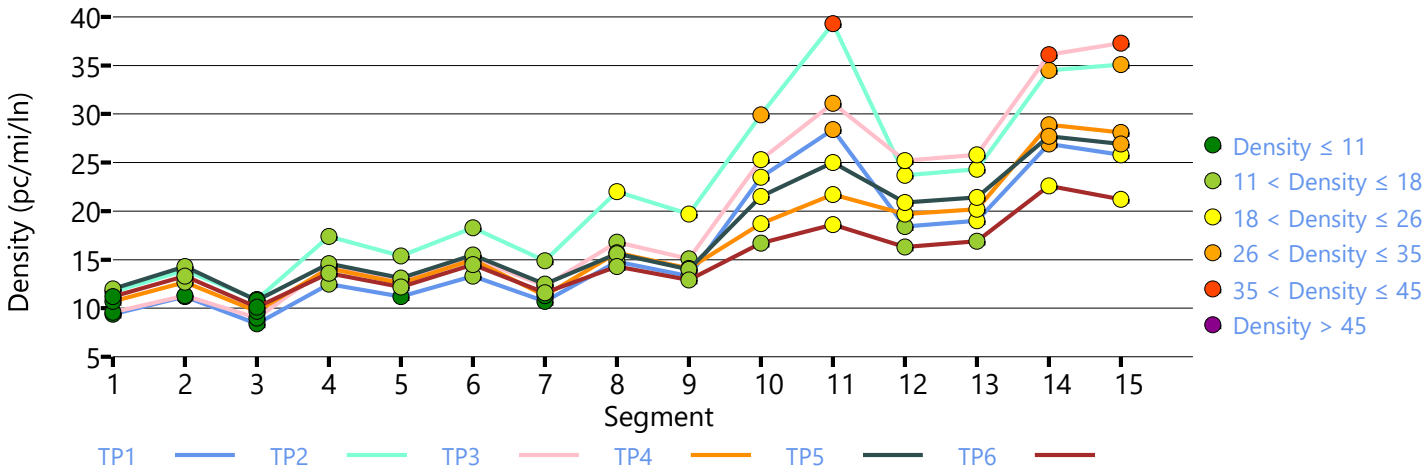
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2040 Horizon Year
Jurisdiction		Time Analyzed	
Project Description	2040 EB AM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	15
Total Analysis Periods	6	Analysis Period Duration, min	15
Facility Length, mi	6.63		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	West of Atrisco Vista	5000	2
2	Diverge	Diverge	Atrisco Vista Exit Ramp	1500	2
3	Basic	Basic	Between Atrisco Vista Exit and Entrance	2300	2
4	Merge	Merge	Atrisco Vista Entrance Ramp	1500	2
5	Basic	Basic	Between Atrisco Vista Entrance and Arroyo Vista Exit	7100	2
6	Diverge	Diverge	Arroyo Vista Exit	1500	2
7	Basic	Basic	Between Arroyo Vist Exit and Arroyo Vista Loop Entrance	1750	2
8	Merge	Merge	Arroyo Vista Loop Entrance	1500	2
9	Basic	Basic	Between Arroyo Vista Loop Entrance and NB-EB Entrance	1100	2
10	Weaving	Weaving	Between Arroyo Vista NB-EB Entrance and Unser Exit	2850	3
11	Basic	Basic	Between Unser Exit and Unser Loop Entrance	1900	2
12	Merge	Basic	Lane Add at Unser Loop Entrance	1500	3
13	Basic	Basic	Between Unser Loop Entrance and NB-EB Entrance	1200	3
14	Merge	Merge	Unser NB-EB Entrance	1500	3
15	Basic	Basic	Between Unser NB-EB Entrance and Coors Exit	2800	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.521	1856	4646	0.40	70.4	13.2	B
2	1.00	0.521	2173	4646	0.47	70.4	15.4	B
3	1.00	0.521	1877	4646	0.40	70.4	13.3	B

4	1.00		0.521		2029		4646		0.44		70.4		14.4	B
5	1.00		0.521		2225		4646		0.48		70.4		15.8	B
6	1.00		0.521		2106		4646		0.45		70.4		15.0	B

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.521	0.641	1856	147	4646	1936	0.40	0.08	59.2	59.2	15.7	13.0	B
2	1.00	1.00	0.521	0.641	2173	115	4646	1936	0.47	0.06	59.3	59.3	18.3	15.7	B
3	1.00	1.00	0.521	0.641	1877	86	4646	1936	0.40	0.04	59.4	59.4	15.8	13.2	B
4	1.00	1.00	0.521	0.641	2029	147	4646	1936	0.44	0.08	59.2	59.2	17.1	14.5	B
5	1.00	1.00	0.521	0.641	2225	178	4646	1936	0.48	0.09	59.1	59.1	18.8	16.2	B
6	1.00	1.00	0.521	0.641	2106	170	4646	1936	0.45	0.09	59.2	59.2	17.8	15.2	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.503	1736	4646	0.37	69.9	12.3	B
2	1.00	0.510	2058	4646	0.45	69.9	14.6	B
3	1.00	0.511	1778	4646	0.39	69.9	12.6	B
4	1.00	0.505	1936	4646	0.41	69.9	13.8	B
5	1.00	0.504	2064	4646	0.45	69.9	14.7	B
6	1.00	0.503	1938	4646	0.42	69.9	13.8	B

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.503	0.794	2164	428	4646	1936	0.47	0.22	64.0	64.0	16.9	17.2	B
2	1.00	1.00	0.510	0.794	2749	691	4646	2000	0.59	0.35	63.2	63.2	21.7	21.7	C
3	1.00	1.00	0.511	0.794	2352	574	4646	1936	0.51	0.30	63.8	63.8	18.4	18.6	B
4	1.00	1.00	0.505	0.794	2389	453	4646	1936	0.51	0.23	63.8	63.8	18.7	19.0	B
5	1.00	1.00	0.504	0.794	2418	354	4646	1936	0.52	0.18	63.7	63.7	19.0	19.2	B
6	1.00	1.00	0.503	0.794	2273	335	4646	1936	0.49	0.17	63.9	63.9	17.8	18.1	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.592	2049	4646	0.44	70.4	14.5	B
2	1.00	0.611	2749	4646	0.57	69.5	19.8	C
3	1.00	0.611	2352	4646	0.49	70.3	16.7	B
4	1.00	0.589	2389	4646	0.48	70.3	17.0	B
5	1.00	0.568	2418	4646	0.50	70.3	17.2	B
6	1.00	0.568	2273	4646	0.48	70.4	16.1	B

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.592	0.725	2049	69	4646	1936	0.44	0.04	59.5	59.5	17.2	13.6	B
2	1.00	1.00	0.611	0.725	2749	76	4646	1936	0.59	0.04	59.4	59.4	23.1	19.6	B
3	1.00	1.00	0.611	0.725	2352	69	4646	1936	0.51	0.04	59.5	59.5	19.8	16.2	B
4	1.00	1.00	0.589	0.725	2389	192	4646	1936	0.51	0.10	59.1	59.1	20.2	16.5	B
5	1.00	1.00	0.568	0.725	2418	95	4646	1936	0.52	0.05	59.4	59.4	20.4	16.8	B
6	1.00	1.00	0.568	0.725	2273	95	4646	1936	0.49	0.05	59.4	59.4	19.1	15.5	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.585	1988	4646	0.43	69.6	14.1	B
2	1.00	0.606	2670	4646	0.55	69.6	19.2	C
3	1.00	0.606	2284	4646	0.47	69.6	16.2	B
4	1.00	0.569	2316	4646	0.45	69.6	16.4	B
5	1.00	0.557	2211	4646	0.49	69.6	15.7	B
6	1.00	0.557	2180	4646	0.46	69.6	15.5	B

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.585	0.980	2381	393	4646	1936	0.51	0.20	63.8	63.8	18.7	18.9	B
2	1.00	1.00	0.606	0.980	3352	682	4646	1936	0.72	0.35	61.6	61.6	27.2	26.4	C
3	1.00	1.00	0.606	0.980	2702	418	4646	1936	0.58	0.22	63.3	63.3	21.3	21.4	C
4	1.00	1.00	0.569	0.980	2750	434	4646	1936	0.59	0.22	63.2	63.2	21.8	21.8	C
5	1.00	1.00	0.557	0.980	2462	251	4646	1936	0.53	0.13	63.7	63.7	19.3	19.6	B
6	1.00	1.00	0.557	0.980	2400	220	4646	1936	0.52	0.11	63.8	63.8	18.8	19.2	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.676	2290	4646	0.49	69.6	16.3	B
2	1.00	0.706	3352	4646	0.68	66.3	25.3	C
3	1.00	0.685	2702	4646	0.55	69.5	19.4	C
4	1.00	0.668	2750	4646	0.52	69.5	19.8	C
5	1.00	0.618	2462	4646	0.52	69.6	17.5	B
6	1.00	0.615	2400	4646	0.49	69.6	17.1	B

Segment 10: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.639	4327	4467	0.99	54.1	26.7	C
2	1.00	0.678	4869	4880	1.12	54.8	29.6	F
3	1.00	0.655	4520	4520	1.07	54.3	27.7	F

4	1.00	0.624	4033	5612	0.67	57.6	23.3	C
5	1.00	0.566	4113	5063	0.82	55.6	24.7	C
6	1.00	0.538	3530	5625	0.62	59.1	19.9	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.813	3980	4646	0.86	60.5	32.9	D
2	1.00	0.812	4591	4646	1.02	52.5	43.7	F
3	1.00	0.818	4262	4646	0.90	57.1	37.3	E
4	1.00	0.770	3844	4646	0.72	62.0	31.0	D
5	1.00	0.765	3824	4646	0.80	62.2	30.7	D
6	1.00	0.728	3316	4646	0.64	66.6	24.9	C

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.813	0.980	4335	355	6970	1936	0.62	0.18	71.0	71.0	20.4	20.4	C
2	1.00	1.00	0.812	0.980	5098	507	6970	1936	0.73	0.26	63.2	63.2	26.9	26.9	D
3	1.00	1.00	0.818	0.980	5518	1256	6970	1936	0.79	0.65	61.4	61.4	30.0	30.0	D
4	1.00	1.00	0.770	0.980	5090	1246	6970	1936	0.73	0.64	62.4	62.4	27.2	27.2	D
5	1.00	1.00	0.765	0.980	4938	1114	6970	1936	0.71	0.58	62.8	62.8	26.2	26.2	D
6	1.00	1.00	0.728	0.980	4304	988	6970	1936	0.62	0.51	63.9	63.9	22.5	22.5	C

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.828	4329	6970	0.62	69.0	20.9	C
2	1.00	0.828	5098	6970	0.75	66.0	25.7	C
3	1.00	0.856	5518	6970	0.78	63.6	28.9	D
4	1.00	0.835	5090	6970	0.65	66.0	25.7	C
5	1.00	0.821	4938	6970	0.68	66.7	24.7	C
6	1.00	0.800	4304	6970	0.56	69.0	20.8	C

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.828	0.962	5505	1176	6970	1936	0.79	0.61	62.4	59.8	29.4	29.4	D
2	1.00	1.00	0.828	0.962	6429	1331	6970	1936	0.92	0.69	58.7	55.2	36.5	34.2	D
3	1.00	1.00	0.856	0.962	6828	1310	6970	1936	0.98	0.68	56.6	52.6	40.2	36.0	E
4	1.00	1.00	0.835	0.962	6338	1248	6970	1936	0.91	0.64	59.4	56.0	35.6	33.5	D
5	1.00	1.00	0.821	0.962	5814	876	6970	1936	0.83	0.45	62.1	59.4	31.2	30.1	D
6	1.00	1.00	0.800	0.962	5161	857	6970	1936	0.74	0.44	63.7	61.3	27.0	27.0	C

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.861	5476	6970	0.79	63.9	28.6	D
2	1.00	0.855	6429	6970	0.94	56.8	37.7	E
3	1.00	0.877	6828	6970	0.97	53.1	42.9	E
4	1.00	0.864	6338	6970	0.83	57.6	36.7	E
5	1.00	0.845	5814	6970	0.81	61.6	31.5	D
6	1.00	0.832	5161	6970	0.68	65.6	26.2	D

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	63.9	19.8	13.6	6.20	C
2	60.9	25.2	18.0	6.50	F
3	59.8	24.0	17.7	6.70	F
4	62.5	22.3	15.7	6.40	C
5	63.5	21.7	14.8	6.30	C
6	65.7	19.3	12.7	6.10	C

Facility Overall Results

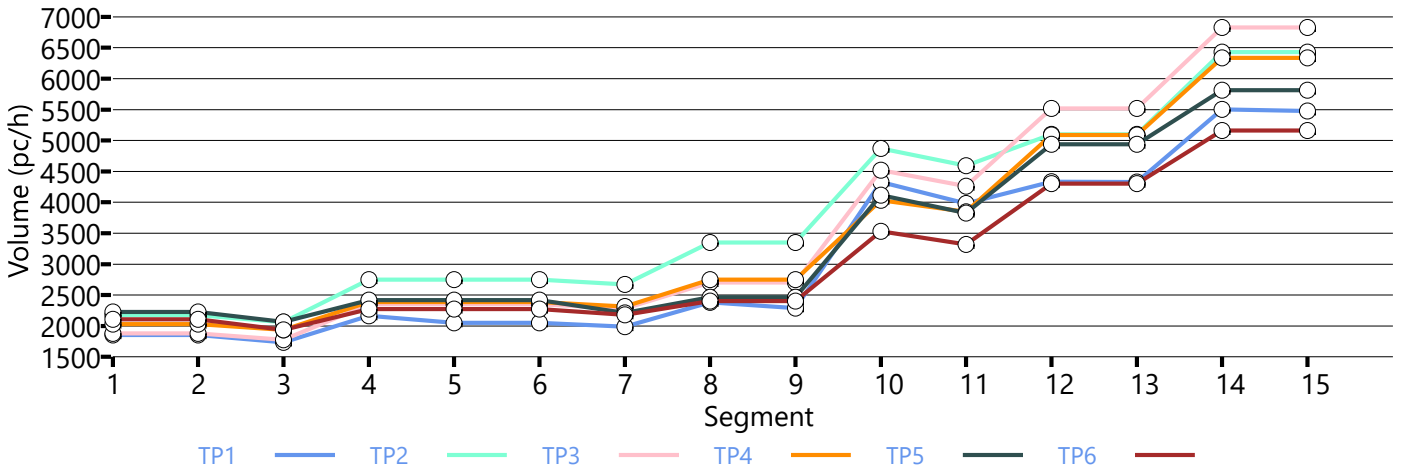
Space Mean Speed, mi/h	62.5	Density, veh/mi/ln	15.4
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Messages

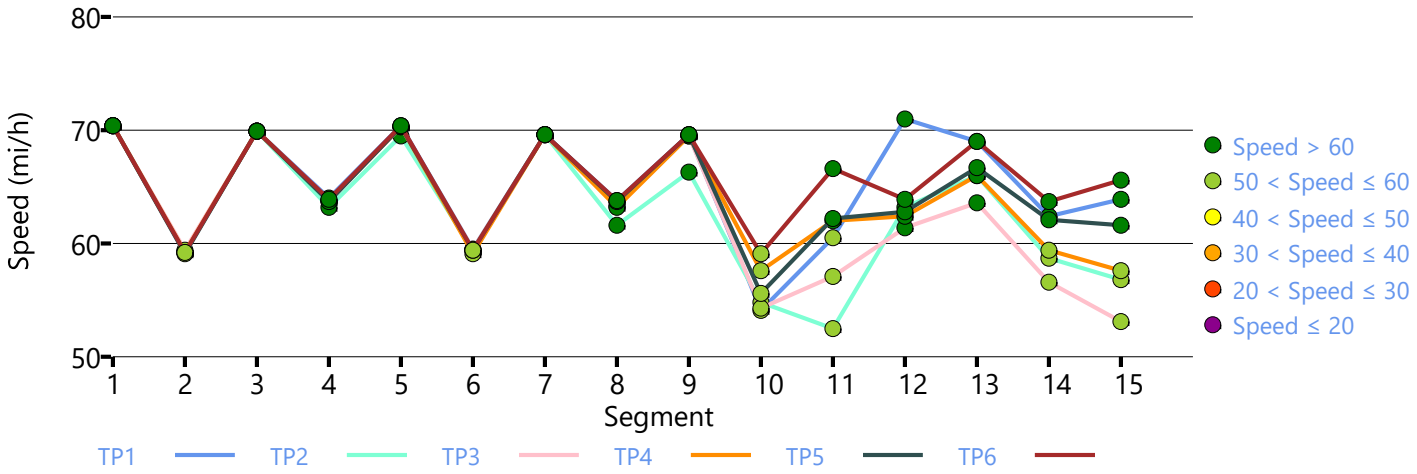
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WARNING 2	Merge capacity is less than merge demand for analysis period 2 on segment 10.
WARNING 3	Merge capacity is less than merge demand for analysis period 3 on segment 10.

Comments

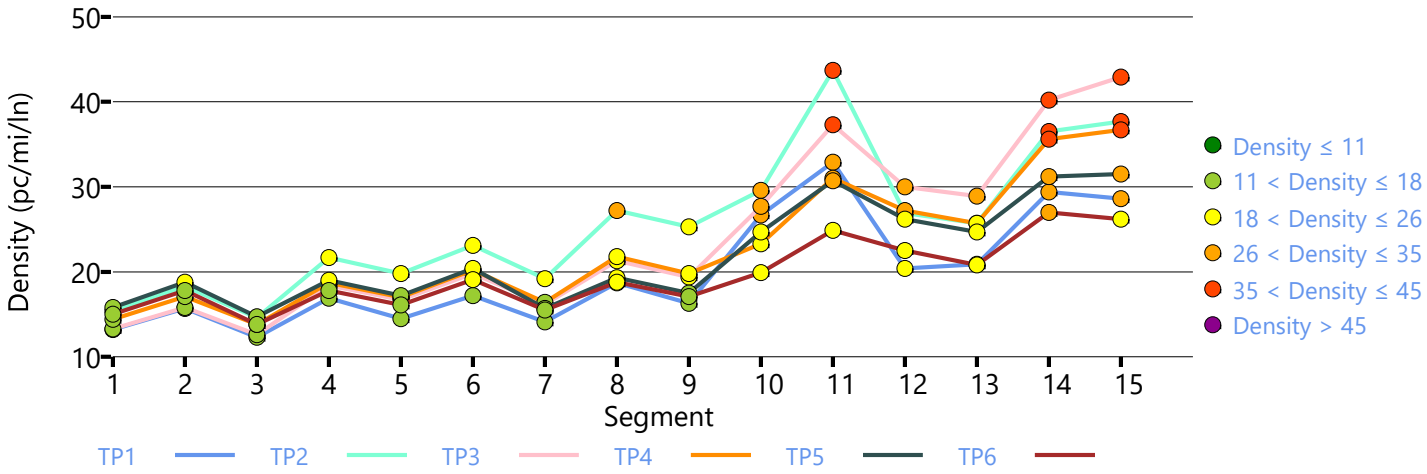
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2040 No Build
Jurisdiction		Time Analyzed	
Project Description	2040 WB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.843	6970	6970	1.06	51.6	45.0	F
2	1.00	0.856	6970	6970	1.08	51.6	45.0	F
3	1.00	0.829	6970	6970	1.10	51.6	45.0	F
4	1.00	0.849	6970	6970	1.08	51.6	45.0	F
5	1.00	0.856	6970	6970	1.07	51.6	45.0	F
6	1.00	0.847	6970	6970	1.15	51.6	45.0	F
7	1.00	0.839	6970	6970	1.14	51.6	45.0	F
8	1.00	0.831	6970	6970	1.11	51.6	45.0	F

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.843	0.962	6970	2710	9293	4000	0.75	0.68	61.6	52.3	28.3	23.6	C
2	1.00	1.00	0.856	0.962	6970	3124	9293	4000	0.75	0.78	59.8	51.2	29.1	26.2	C
3	1.00	1.00	0.829	0.962	6970	3030	9293	4000	0.75	0.76	60.2	51.4	28.9	25.6	C
4	1.00	1.00	0.849	0.962	6970	3291	9293	4000	0.75	0.82	59.0	50.7	29.5	27.3	C
5	1.00	1.00	0.856	0.962	6970	3142	9293	4000	0.75	0.79	59.7	51.1	29.2	26.3	C
6	1.00	1.00	0.847	0.962	6970	3471	9293	4000	0.75	0.87	58.2	50.2	29.9	28.4	D
7	1.00	1.00	0.839	0.962	6970	3025	9293	4000	0.75	0.76	60.2	51.4	28.9	25.6	C
8	1.00	1.00	0.831	0.962	6970	2925	9293	4000	0.75	0.73	60.6	51.7	28.8	25.0	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.773	4260	4646	1.01	57.1	37.3	F
2	1.00	0.781	4412	4646	0.95	55.1	40.0	E
3	1.00	0.742	4083	4646	1.00	59.3	34.4	F
4	1.00	0.760	4219	4646	0.92	57.7	36.6	E
5	1.00	0.778	3935	4646	0.93	61.0	32.3	D
6	1.00	0.760	4034	4646	0.98	59.9	33.7	D
7	1.00	0.762	3957	4646	1.07	60.8	32.5	F
8	1.00	0.749	4324	4646	1.04	56.3	38.4	F

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	4587	5495	0.92	64.0	23.9	C
2	1.00	0.448	4864	4989	0.99	62.9	25.8	C
3	1.00	0.468	4508	5555	0.92	63.7	23.6	C
4	1.00	0.470	4634	5422	0.88	63.2	24.4	C
5	1.00	0.464	4309	5148	0.93	64.0	22.4	C
6	1.00	0.466	4453	5386	0.94	63.7	23.3	C
7	1.00	0.488	4291	5512	0.97	64.3	22.2	C
8	1.00	0.455	4797	5483	0.98	62.8	25.5	C

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.568	1803	4646	0.49	70.7	12.7	B
2	1.00	0.556	2189	4646	0.43	70.7	15.5	B
3	1.00	0.545	1860	4646	0.54	70.7	13.1	B
4	1.00	0.556	2271	4646	0.47	70.7	16.0	B
5	1.00	0.551	1993	4646	0.43	70.7	14.1	B
6	1.00	0.550	1871	4646	0.49	70.7	13.2	B
7	1.00	0.548	1950	4646	0.52	70.7	13.8	B
8	1.00	0.542	2175	4646	0.54	70.7	15.4	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.568	0.588	2181	378	6970	2000	0.31	0.19	67.1	67.1	10.8	10.8	A
2	1.00	1.00	0.556	0.588	2526	337	6970	2000	0.36	0.17	66.9	66.9	12.6	12.6	B
3	1.00	1.00	0.545	0.588	2146	286	6970	2000	0.31	0.14	67.2	67.2	10.6	10.6	A
4	1.00	1.00	0.556	0.588	2495	224	6970	2000	0.36	0.11	67.1	67.1	12.4	12.4	B
5	1.00	1.00	0.551	0.588	2248	255	6970	2000	0.32	0.13	67.2	67.2	11.2	11.2	B
6	1.00	1.00	0.550	0.588	2136	265	6970	2000	0.31	0.13	67.2	67.2	10.6	10.6	A
7	1.00	1.00	0.548	0.588	2174	224	6970	2000	0.31	0.11	67.2	67.2	10.8	10.8	A
8	1.00	1.00	0.542	0.588	2420	245	6970	2000	0.35	0.12	67.1	67.1	12.0	12.0	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.571	2181	6970	0.38	70.8	10.3	A
2	1.00	0.561	2526	6970	0.34	70.8	11.9	B
3	1.00	0.549	2146	6970	0.40	70.8	10.1	A
4	1.00	0.559	2495	6970	0.34	70.8	11.7	B
5	1.00	0.556	2248	6970	0.32	70.8	10.6	A
6	1.00	0.554	2136	6970	0.36	70.8	10.1	A
7	1.00	0.551	2174	6970	0.38	70.8	10.2	A
8	1.00	0.546	2420	6970	0.39	70.8	11.4	B

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.571	0.847	2181	577	6970	2000	0.31	0.29	62.5	58.4	11.6	11.4	B
2	1.00	1.00	0.561	0.847	2526	431	6970	2000	0.36	0.22	63.4	58.8	13.3	13.0	B
3	1.00	1.00	0.549	0.847	2146	471	6970	2000	0.31	0.24	62.9	58.7	11.4	11.0	B
4	1.00	1.00	0.559	0.847	2495	485	6970	2000	0.36	0.24	63.1	58.6	13.2	12.9	B
5	1.00	1.00	0.556	0.847	2248	471	6970	2000	0.32	0.24	63.0	58.7	11.9	11.5	B
6	1.00	1.00	0.554	0.847	2136	499	6970	2000	0.31	0.25	62.7	58.6	11.4	11.0	B
7	1.00	1.00	0.551	0.847	2174	424	6970	2000	0.31	0.21	63.1	58.8	11.5	11.0	B
8	1.00	1.00	0.546	0.847	2420	443	6970	2000	0.35	0.22	63.3	58.8	12.7	12.4	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.488	1604	6970	0.30	70.1	7.6	A
2	1.00	0.492	1974	6970	0.28	70.2	9.3	A
3	1.00	0.485	1750	6970	0.33	70.1	8.3	A
4	1.00	0.481	2072	6970	0.28	70.1	9.8	A

5	1.00	0.471	1794	6970	0.26	70.1	8.5	A
6	1.00	0.477	1685	6970	0.29	70.1	8.0	A
7	1.00	0.491	1745	6970	0.32	70.1	8.3	A
8	1.00	0.485	2030	6970	0.33	70.2	9.6	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.488	0.820	1860	256	6970	2000	0.27	0.13	67.2	64.4	9.2	10.9	B
2	1.00	1.00	0.492	0.820	2186	212	6970	2000	0.31	0.11	67.0	64.3	10.9	12.3	B
3	1.00	1.00	0.485	0.820	2056	306	6970	2000	0.29	0.15	67.0	64.3	10.2	12.0	B
4	1.00	1.00	0.481	0.820	2349	277	6970	2000	0.34	0.14	66.9	64.2	11.7	13.2	B
5	1.00	1.00	0.471	0.820	2100	306	6970	2000	0.30	0.15	67.0	64.3	10.4	12.2	B
6	1.00	1.00	0.477	0.820	2006	321	6970	2000	0.29	0.16	67.0	64.3	10.0	11.8	B
7	1.00	1.00	0.491	0.820	1994	249	6970	2000	0.29	0.12	67.1	64.3	9.9	11.5	B
8	1.00	1.00	0.485	0.820	2336	306	6970	2000	0.34	0.15	66.8	64.2	11.7	13.3	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1860	6970	0.34	70.4	8.8	A
2	1.00	0.526	2186	6970	0.31	70.4	10.4	A
3	1.00	0.526	2056	6970	0.38	70.4	9.7	A
4	1.00	0.526	2349	6970	0.32	70.4	11.1	B
5	1.00	0.526	2100	6970	0.30	70.4	9.9	A
6	1.00	0.526	2006	6970	0.34	70.4	9.5	A
7	1.00	0.526	1994	6970	0.35	70.4	9.4	A
8	1.00	0.526	2336	6970	0.37	70.4	11.1	B

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	59.1	19.4	14.1	7.40	F
2	58.8	20.9	15.1	7.50	F
3	59.3	19.3	13.7	7.40	F
4	59.3	20.7	14.8	7.40	F
5	59.6	19.3	14.0	7.40	F
6	59.1	19.2	13.9	7.40	F
7	59.6	19.1	13.7	7.40	F
8	59.1	20.7	14.5	7.40	F

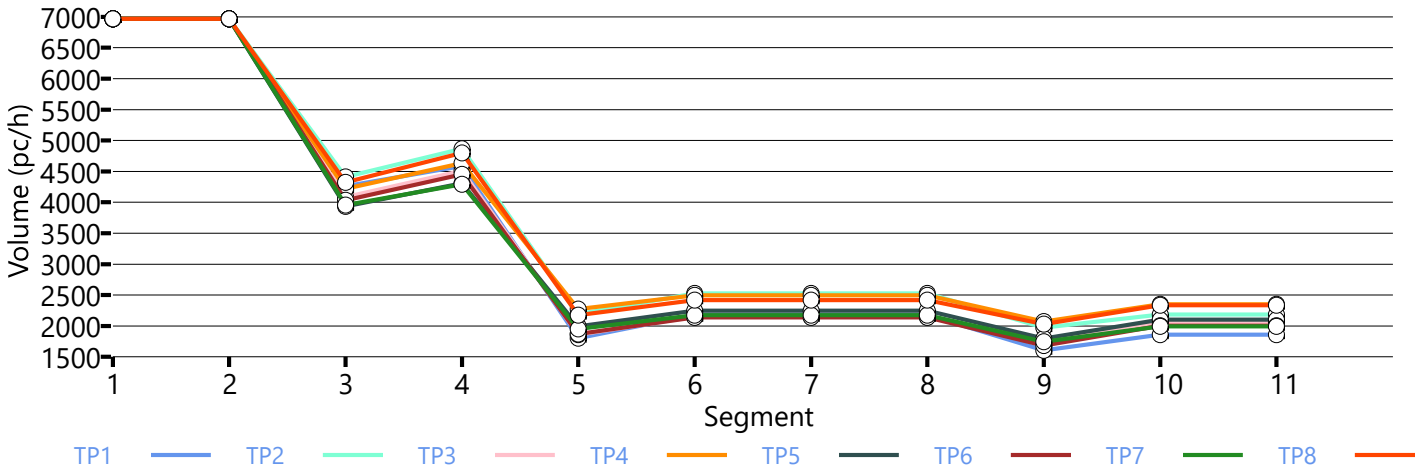
Facility Overall Results

Space Mean Speed, mi/h	59.2	Density, veh/mi/ln	14.2
Average Travel Time, min	7.40	Density, pc/mi/ln	19.8

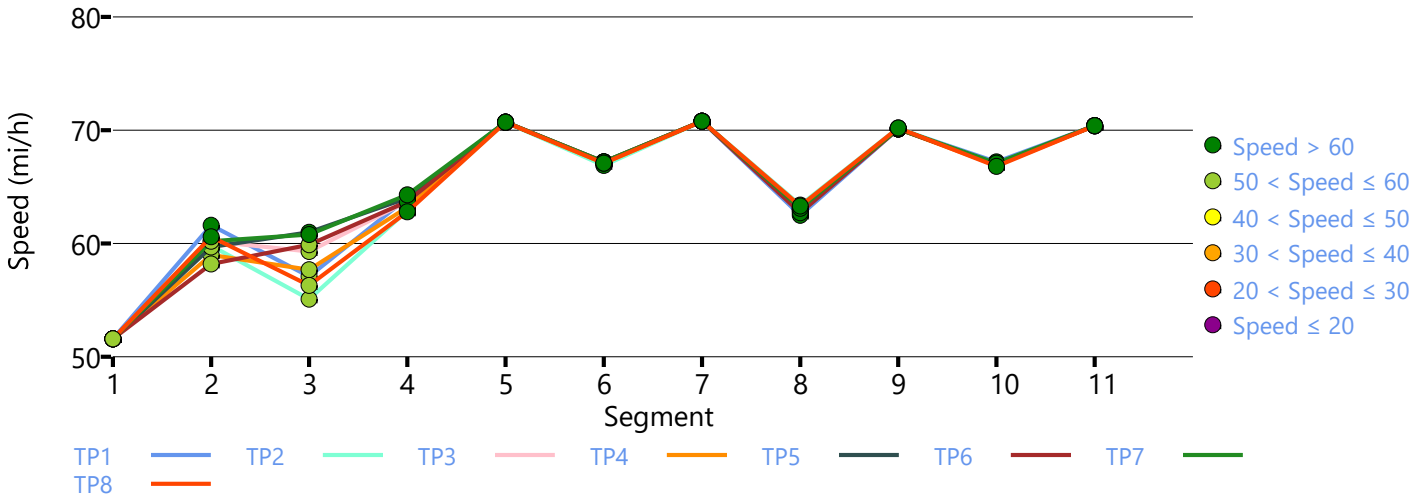
Messages

WARNING 1	Oversaturated conditions currently exist in boundary segment 1. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
WARNING 2	Oversaturated conditions currently exist in boundary analysis period 1. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
WARNING 3	Oversaturated conditions currently exist in boundary analysis period 8. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
Comments	

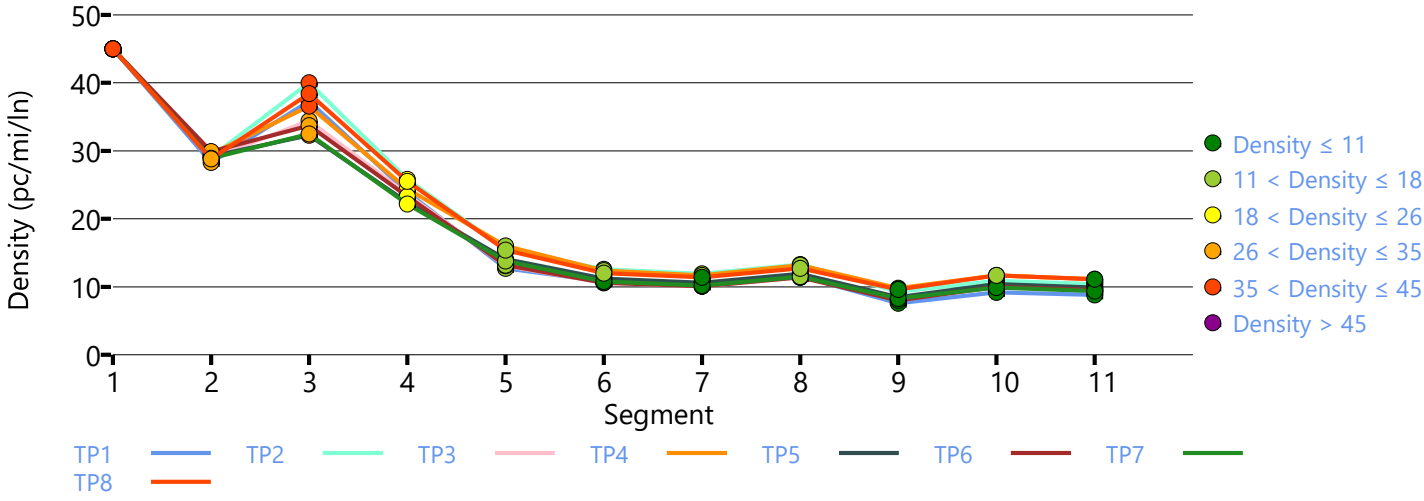
Volume Distribution



Speed Distribution



Density Distribution



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HCS7 Freeway Facilities Report

Project Information

Analyst		Date	
Agency		Analysis Year	2040 Horizon Year
Jurisdiction		Time Analyzed	
Project Description	2040 WB PM	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	11
Total Analysis Periods	8	Analysis Period Duration, min	15
Facility Length, mi	7.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	East of Unser	5450	3
2	Diverge	Diverge	Unser Diverge	1500	4
3	Basic	Basic	Between Unser Ramps	4500	2
4	Weaving	Weaving	Unser Merge Arroyo Diverge	2500	3
5	Basic	Basic	Between Arroyo Ramps	3200	2
6	Merge	Basic	Arroyo Merge	1500	3
7	Basic	Basic	East of Atrisco	9400	3
8	Diverge	Diverge	Atrisco Diverge	1500	3
9	Basic	Basic	Between Atrisco Ramps	2650	3
10	Merge	Merge	Atrisco Merge	1500	3
11	Basic	Basic	West of Atrisco	5000	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.843	6970	6970	1.06	51.6	45.0	F
2	1.00	0.856	6970	6970	1.08	51.6	45.0	F
3	1.00	0.829	6970	6970	1.10	51.6	45.0	F
4	1.00	0.849	6970	6970	1.08	51.6	45.0	F
5	1.00	0.856	6970	6970	1.07	51.6	45.0	F
6	1.00	0.847	6970	6970	1.15	51.6	45.0	F
7	1.00	0.839	6970	6970	1.14	51.6	45.0	F
8	1.00	0.831	6970	6970	1.11	51.6	45.0	F

Segment 2: Diverge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.843	0.962	6970	2710	9293	4000	0.75	0.68	61.6	52.3	28.3	23.6	C
2	1.00	1.00	0.856	0.962	6970	3124	9293	4000	0.75	0.78	59.8	51.2	29.1	26.2	C
3	1.00	1.00	0.829	0.962	6970	3030	9293	4000	0.75	0.76	60.2	51.4	28.9	25.6	C
4	1.00	1.00	0.849	0.962	6970	3291	9293	4000	0.75	0.82	59.0	50.7	29.5	27.3	C
5	1.00	1.00	0.856	0.962	6970	3142	9293	4000	0.75	0.79	59.7	51.1	29.2	26.3	C
6	1.00	1.00	0.847	0.962	6970	3471	9293	4000	0.75	0.87	58.2	50.2	29.9	28.4	D
7	1.00	1.00	0.839	0.962	6970	3025	9293	4000	0.75	0.76	60.2	51.4	28.9	25.6	C
8	1.00	1.00	0.831	0.962	6970	2925	9293	4000	0.75	0.73	60.6	51.7	28.8	25.0	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.773	4260	4646	1.01	57.1	37.3	F
2	1.00	0.781	4412	4646	0.95	55.1	40.0	E
3	1.00	0.742	4083	4646	1.00	59.3	34.4	F
4	1.00	0.760	4219	4646	0.92	57.7	36.6	E
5	1.00	0.778	3935	4646	0.93	61.0	32.3	D
6	1.00	0.760	4034	4646	0.98	59.9	33.7	D
7	1.00	0.762	3957	4646	1.07	60.8	32.5	F
8	1.00	0.749	4324	4646	1.04	56.3	38.4	F

Segment 4: Weaving

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.509	4587	5495	0.92	64.0	23.9	C
2	1.00	0.448	4864	4989	0.99	62.9	25.8	C
3	1.00	0.468	4508	5555	0.92	63.7	23.6	C
4	1.00	0.470	4634	5422	0.88	63.2	24.4	C
5	1.00	0.464	4309	5148	0.93	64.0	22.4	C
6	1.00	0.466	4453	5386	0.94	63.7	23.3	C
7	1.00	0.488	4291	5512	0.97	64.3	22.2	C
8	1.00	0.455	4797	5483	0.98	62.8	25.5	C

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.568	1803	4646	0.49	70.7	12.7	B
2	1.00	0.556	2189	4646	0.43	70.7	15.5	B
3	1.00	0.545	1860	4646	0.54	70.7	13.1	B
4	1.00	0.556	2271	4646	0.47	70.7	16.0	B
5	1.00	0.551	1993	4646	0.43	70.7	14.1	B
6	1.00	0.550	1871	4646	0.49	70.7	13.2	B
7	1.00	0.548	1950	4646	0.52	70.7	13.8	B
8	1.00	0.542	2175	4646	0.54	70.7	15.4	B

Segment 6: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.568	0.588	2181	378	6970	2000	0.31	0.19	67.1	67.1	10.8	10.8	A
2	1.00	1.00	0.556	0.588	2526	337	6970	2000	0.36	0.17	66.9	66.9	12.6	12.6	B
3	1.00	1.00	0.545	0.588	2146	286	6970	2000	0.31	0.14	67.2	67.2	10.6	10.6	A
4	1.00	1.00	0.556	0.588	2495	224	6970	2000	0.36	0.11	67.1	67.1	12.4	12.4	B
5	1.00	1.00	0.551	0.588	2248	255	6970	2000	0.32	0.13	67.2	67.2	11.2	11.2	B
6	1.00	1.00	0.550	0.588	2136	265	6970	2000	0.31	0.13	67.2	67.2	10.6	10.6	A
7	1.00	1.00	0.548	0.588	2174	224	6970	2000	0.31	0.11	67.2	67.2	10.8	10.8	A
8	1.00	1.00	0.542	0.588	2420	245	6970	2000	0.35	0.12	67.1	67.1	12.0	12.0	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.571	2181	6970	0.38	70.8	10.3	A
2	1.00	0.561	2526	6970	0.34	70.8	11.9	B
3	1.00	0.549	2146	6970	0.40	70.8	10.1	A
4	1.00	0.559	2495	6970	0.34	70.8	11.7	B
5	1.00	0.556	2248	6970	0.32	70.8	10.6	A
6	1.00	0.554	2136	6970	0.36	70.8	10.1	A
7	1.00	0.551	2174	6970	0.38	70.8	10.2	A
8	1.00	0.546	2420	6970	0.39	70.8	11.4	B

Segment 8: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.571	0.847	2181	577	6970	2000	0.31	0.29	62.5	58.4	11.6	11.4	B
2	1.00	1.00	0.561	0.847	2526	431	6970	2000	0.36	0.22	63.4	58.8	13.3	13.0	B
3	1.00	1.00	0.549	0.847	2146	471	6970	2000	0.31	0.24	62.9	58.7	11.4	11.0	B
4	1.00	1.00	0.559	0.847	2495	485	6970	2000	0.36	0.24	63.1	58.6	13.2	12.9	B
5	1.00	1.00	0.556	0.847	2248	471	6970	2000	0.32	0.24	63.0	58.7	11.9	11.5	B
6	1.00	1.00	0.554	0.847	2136	499	6970	2000	0.31	0.25	62.7	58.6	11.4	11.0	B
7	1.00	1.00	0.551	0.847	2174	424	6970	2000	0.31	0.21	63.1	58.8	11.5	11.0	B
8	1.00	1.00	0.546	0.847	2420	443	6970	2000	0.35	0.22	63.3	58.8	12.7	12.4	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.488	1604	6970	0.30	70.1	7.6	A
2	1.00	0.492	1974	6970	0.28	70.2	9.3	A
3	1.00	0.485	1750	6970	0.33	70.1	8.3	A
4	1.00	0.481	2072	6970	0.28	70.1	9.8	A

5	1.00	0.471	1794	6970	0.26	70.1	8.5	A
6	1.00	0.477	1685	6970	0.29	70.1	8.0	A
7	1.00	0.491	1745	6970	0.32	70.1	8.3	A
8	1.00	0.485	2030	6970	0.33	70.2	9.6	A

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	1.00	1.00	0.488	0.820	1860	256	6970	2000	0.27	0.13	67.2	64.4	9.2	10.9	B
2	1.00	1.00	0.492	0.820	2186	212	6970	2000	0.31	0.11	67.0	64.3	10.9	12.3	B
3	1.00	1.00	0.485	0.820	2056	306	6970	2000	0.29	0.15	67.0	64.3	10.2	12.0	B
4	1.00	1.00	0.481	0.820	2349	277	6970	2000	0.34	0.14	66.9	64.2	11.7	13.2	B
5	1.00	1.00	0.471	0.820	2100	306	6970	2000	0.30	0.15	67.0	64.3	10.4	12.2	B
6	1.00	1.00	0.477	0.820	2006	321	6970	2000	0.29	0.16	67.0	64.3	10.0	11.8	B
7	1.00	1.00	0.491	0.820	1994	249	6970	2000	0.29	0.12	67.1	64.3	9.9	11.5	B
8	1.00	1.00	0.485	0.820	2336	306	6970	2000	0.34	0.15	66.8	64.2	11.7	13.3	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	1.00	0.526	1860	6970	0.34	70.4	8.8	A
2	1.00	0.526	2186	6970	0.31	70.4	10.4	A
3	1.00	0.526	2056	6970	0.38	70.4	9.7	A
4	1.00	0.526	2349	6970	0.32	70.4	11.1	B
5	1.00	0.526	2100	6970	0.30	70.4	9.9	A
6	1.00	0.526	2006	6970	0.34	70.4	9.5	A
7	1.00	0.526	1994	6970	0.35	70.4	9.4	A
8	1.00	0.526	2336	6970	0.37	70.4	11.1	B

Facility Analysis Results

AP	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	59.1	19.4	14.1	7.40	F
2	58.8	20.9	15.1	7.50	F
3	59.3	19.3	13.7	7.40	F
4	59.3	20.7	14.8	7.40	F
5	59.6	19.3	14.0	7.40	F
6	59.1	19.2	13.9	7.40	F
7	59.6	19.1	13.7	7.40	F
8	59.1	20.7	14.5	7.40	F

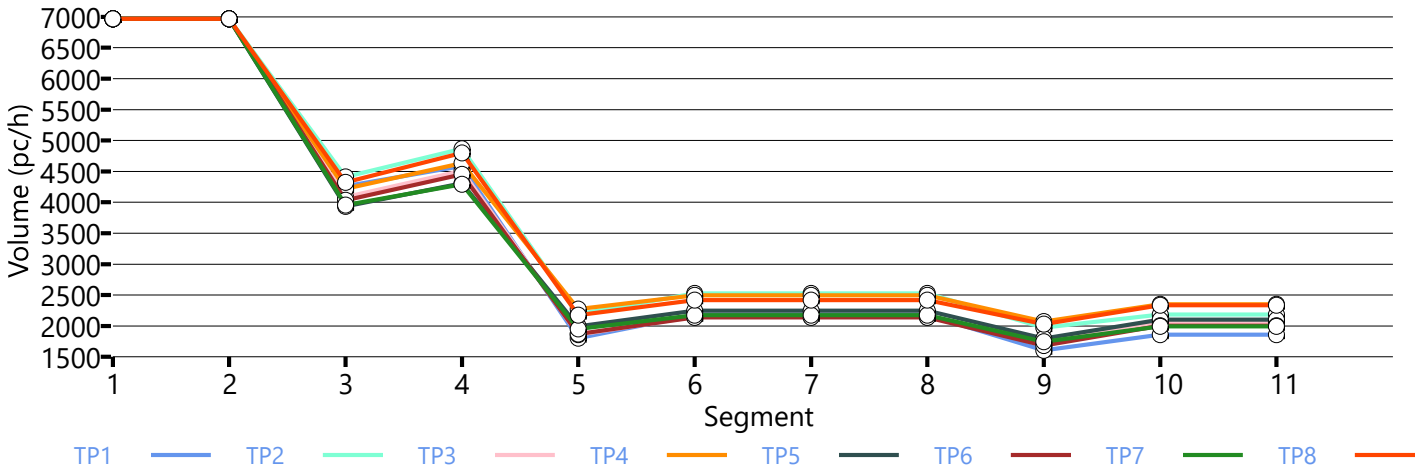
Facility Overall Results

Space Mean Speed, mi/h	59.2	Density, veh/mi/ln	14.2
Average Travel Time, min	7.40	Density, pc/mi/ln	19.8

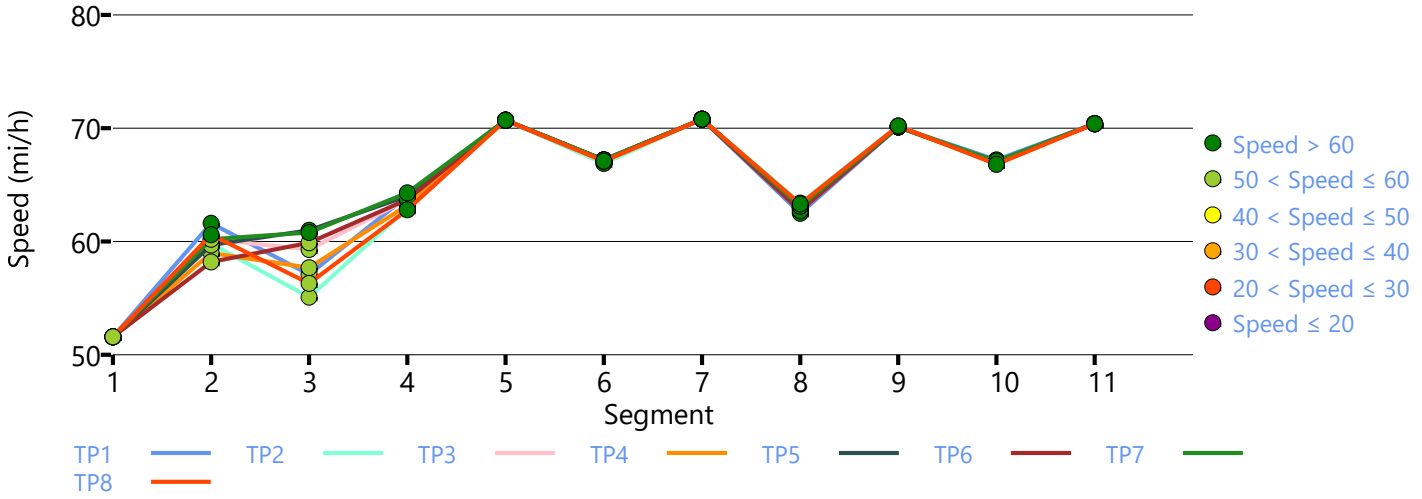
Messages

WARNING 1	Oversaturated conditions currently exist in boundary segment 1. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
WARNING 2	Oversaturated conditions currently exist in boundary analysis period 1. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
WARNING 3	Oversaturated conditions currently exist in boundary analysis period 8. Results may not be reliable. Consider expanding analysis in time and/or space to resolve this warning.
Comments	

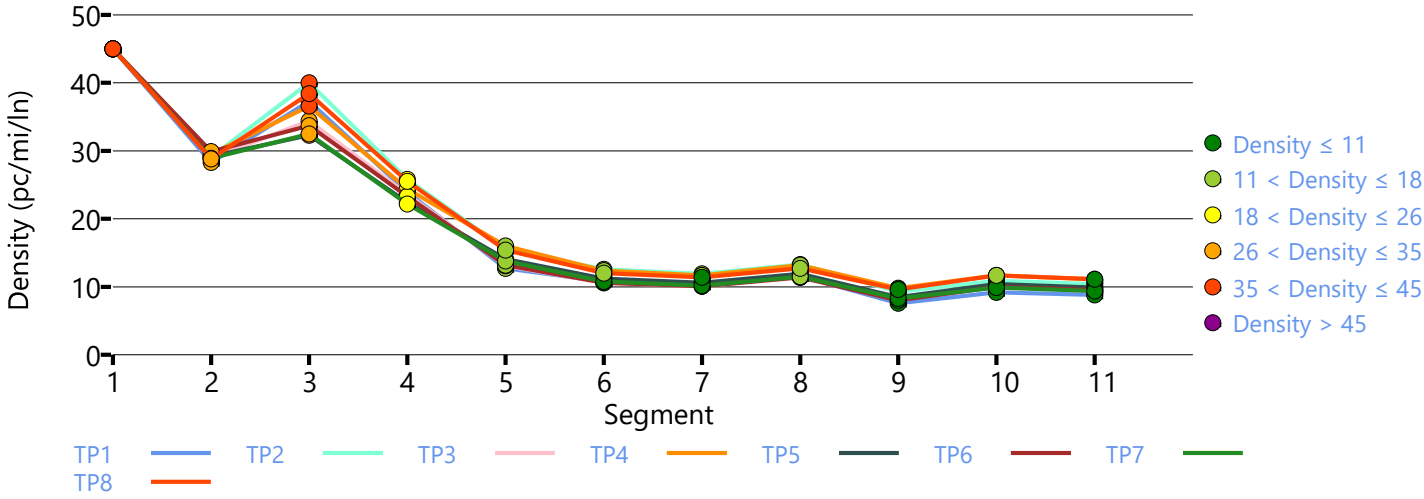
Volume Distribution



Speed Distribution



Density Distribution



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Traffic Signal Timing Sheets

ASC3 COORDINATION PLAN DATA

2/22/2021 3:49 PM

394 - Unser Blvd & Bluewater Rd

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	NO
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	120.00	STD (COS)	111	
OFFSET VAL	83%	99.6		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	15	43	0	42	12	46	11	31
	18	51.6	0	50.4	14.4	55.2	13.2	37.2

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	14%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	12	42	0	46	12	42	12	34

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:49 PM

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	130.00	STD (COS)	151	
OFFSET VAL	98%	127.4		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	11	49	0	40	11	49	11	29
	14.3	63.7	0	52	14.3	63.7	14.3	37.7

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO

VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:49 PM

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	18:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:30	AM
2	23	9:00	
3	25	15:00	PM
4	23	18:30	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	9:00
2	100	22:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)										
1	2	3	4	5	6	7	8	9	10	11
X	X	X	X	X	X	X	X	X	X	X
12	13	14	15	16	17	18	19	20	21	22
X	X	X	X	X	X	X	X	X	X	X
23	24	25	26	27	28	29	30	31		
X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:49 PM

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2											
DAY PLAN NO	2	CLEAR ALL FIELDS										
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3											
DAY PLAN NO	3	CLEAR ALL FIELDS										
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. January 2010 - New Coordination - Lee Engineering
2. Cycle lengths and offsets changed for cooridor, 9/25/14
3. New Coordination Patterns implemented 05-24-2017, Lee Engineering.

Intersection No.: 394

Centracs
1

Intersection Name: BLUEWATER - UNSER

Revision Date 5/25/2017

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	S-E	NB		EB	N-W	SB	E-N	WB
Min Grn	3	16		8	3	16	3	8
Walk:	0	7		7	0	7	0	7
Ped Clr:	0	14		24	0	14	0	24
Veh Ext:	1.5	3.0		2.0	1.5	3.0	1.5	2.0
Veh Ext2:	1.5	3.0		2.0	1.5	3.0	1.5	2.0
Max 1:	24	36		24	16	36	16	24
Max 2:	24	36		24	16	36	16	24
Max 3:								
Yellow:	3.0	4.0		4.0	3.0	4.5	3.0	4.0
Red Clr	0.5	1.0		2.0	0.5	1.0	0.5	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode: ALL RED

Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	2 & 6
Start In:	GREEN

Overlap Phases:

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:

1. Intersection flash date 11/2/00.
2. Timing sheet updated 4/4/03
3. Timing sheet updated 11/18/03.
4. Added E-N Left Turn Movement, 4/1/05.
5. Yellow and Red clearance intervals changed as per new standards given by KB, 10/10/07.
6. Pedestrian times adjusted, 12/30/11.
7. Clearance intervals updated to NMDOT standard by BB, 10/3/13.

8. Timing sheet revised to current timing sheet, 8/31/16.
9. New Coordination Patterns implemented 05-24-2017, Lee Engineering.

ASC3 COORDINATION PLAN DATA

2/22/2021 3:50 PM

393 - Unser Blvd & Los Volcanes Rd

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	NO
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	120.00	STD (COS)	111	
OFFSET VAL	98%	117.6		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	17	30	18	35	11	36	12	41
	20.4	36	21.6	42	13.2	43.2	14.4	49.2

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	19%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	13	31	13	43	12	32	11	45

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:50 PM

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	130.00	STD (COS)	151	
OFFSET VAL	4%	5.2		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	24	27	12	37	11	40	11	38
	31.2	35.1	15.6	48.1	14.3	52	14.3	49.4

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO

ASC3 COORDINATION PLAN DATA

VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	18:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:30	AM
2	23	9:00	
3	25	15:00	PM
4	23	18:30	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	9:00
2	100	22:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	X	.	.	.	.	.	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

ASC3 COORDINATION PLAN DATA

2/22/2021 3:50 PM

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS							DOW		DOM		
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS							DOW		DOM		
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. January 2010 - New Coordination - Lee Engineering
2. Cycle lengths and offsets changed for cooridor, 9/25/14
3. New Coordination Patterns implemented 05-24-2017, Lee Engineering.

Intersection No.: 393

Centracs
1

Intersection Name: LOS VOLCANES - UNSER

Revision Date 5/24/2017 ;

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	S-E	NB	W-S	EB	N-W	SB	E-N	WB
Min Grn	3	20	3	12	3	20	3	12
Walk:	0	7	0	7	0	7	0	7
Ped Clr:	0	13	0	26	0	14	0	35
Veh Ext:	1.5	4.0	1.5	2.0	1.5	4.0	1.5	2.0
Veh Ext2:	1.5	4.0	1.5	2.0	1.5	4.0	1.5	2.0
Max 1:	16	42	16	24	16	42	16	24
Max 2:	16	48	16	24	16	48	16	24
Max 3:								
Yellow:	3.0	4.0	3.0	3.5	3.0	4.5	3.0	3.5
Red Clr	0.5	1.0	0.5	2.0	0.5	1.0	0.8	2.0

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode: ALL RED

Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	2 & 6
Start In:	GREEN

Overlap Phases:

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:

1. 12/12/03 New intersection installed.
2. MAX II Mon-Fri from 6:30 am to 8:30 am, 6/6/2006.
3. Yellow and Red clearance intervals changed as per new standards given by KB, 10/10/07.
4. Pedestrian times adjusted, 12/30/11.
5. Clearance intervals updated to NMDOT standard by BB, 10/3/13.
6. Timng sheet revised to current timing sheet, 8/31/16.
7. New Coordination Patterns implemented 05-24-2017, Lee Engineering.

ASC3 COORDINATION PLAN DATA

2/22/2021 3:52 PM

391 - Unser Blvd & I-40 WB Frontage

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	NO
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130.00	STD (COS)	111	
OFFSET VAL	10%	13		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	0	71	0	0	12	59	0	29
	0	92.3	0	0	15.6	76.7	0	37.7

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	120s	STD (COS)	131
OFFSET VAL	92%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	0	46	0	0	12	34	0	54

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:52 PM

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	130.00	STD (COS)	151	
OFFSET VAL	2%	2.6		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB	W-S	EB	N-W	SB	E-N	WB
SPLITS	0	46	0	0	11	35	0	54
	0	59.8	0	0	14.3	45.5	0	70.2

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0

ASC3 COORDINATION PLAN DATA

DIMMING ENABLE	NO

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	9:00
2	100	20:30
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:30	AM
2	23	9:00	
3	25	14:00	PM
4	23	18:30	
5	100	21:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:52 PM

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	.	X	X	X	X	X	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	.	.	.	.	.	.	X

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

NOTES:

1. January 2010 - New Coordination - Lee Engineering
2. Cycle lengths and offsets changed for cooridor, 9/25/14
3. New Coordination Patterns implemented 05-16-2017, Lee Engineering.

Intersection No.:	392
Intersection Name:	I40 - UNSER
Revision Date	5/25/2017

CENTRAC
1

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:		NB			N-W	SB		WB
Min Grn		18			3	18		8
Walk:		7			0	7		7
Ped Clr:		8			0	7		23
Veh Ext:		4.0			3.0	4.0		2.0
Veh Ext2:		4.0			3.0	4.0		2.0
Max 1:		32			16	32		24
Max 2:		103			9	103		24
Max 3:								
Yellow:		4.5			3.0	4.5		4.5
Red Clr		1.0			0.5	1.0		1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode:	ALL RED
Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	2 & 6
Start In:	GREEN
Overlap Phases:	

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:
1. Turn arrow N-W changed from protected permissive to protected only, 4/15/97.
2. MAX III for phases 5 & 8, on max recall from 8:00 pm to 5:30 am during full closures.
3. Timing sheet update, 7/21/05.
4. MAX II for phases 2 & 6, 6:00am to 8:30 am, Mon-Fri, 8/23/05.
5. Yellow and Red clearance intervals changed as per new standards given by KB, 10/10/07.
6. Timing sheet updated, 3/18/09.
7. Clearance intervals updated to NMDOT standard by BB, 8/12/13.

8. Timing sheet revised to current timing sheet, corrections made to numbering and to show Centracs, 8/31/16.
9. New Coordination Patterns implemented 05-24-2017 Lee Engineering.

ASC3 COORDINATION PLAN DATA

2/22/2021 3:53 PM

369 - Central Ave & 98th St

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FLOAT
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130	STD (COS)	111	
OFFSET VAL	30%	39.00		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	
MAX SELECT	MAX2	FORCE OFF	FLOAT	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	31	9	48	17	26	9	48
	15.6	40.3	11.7	62.4	22.1	33.8	11.7	62.4

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	22%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	21	31	12	36	15	37	12	36

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

ASC3 COORDINATION PLAN DATA

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110	STD (COS)	151	
OFFSET VAL	18%	19.80		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	16	31	12	41	16	31	12	41
	17.6	34.1	13.2	45.1	17.6	34.1	13.2	45.1
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO

ASC3 COORDINATION PLAN DATA

VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

2/22/2021 3:53 PM

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS							DOW		DOM		
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	.	X	X	X	X	X	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS							DOW		DOM		
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	.	.	.	.	.	.	X

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering.
4. New Day Plan and Pattern 21 (Max Select - Max2 & Float) implemented 12-27-2016, Lee Engineering.

Intersection No.: 369

Centrac
1

Intersection Name: CENTRAL - 98TH

Revision Date 3/21/2018

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	3	16	3	16	3	16	3	16
Walk:	0	7	0	7	0	7	0	7
Ped Clr:	0	20	0	23	0	20	0	22
Veh Ext:	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Veh Ext2:	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Max 1:	18	28	16	42	16	28	16	42
Max 2:	28	24	16	48	25	24	16	48
Max 3:								
Yellow:	3.5	6.0	3.5	4.5	3.5	6.0	3.5	4.5
Red Clr	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X		X		X		X

Flash Mode: ALL RED

Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	4 & 8
Start In:	GREEN

Overlap Phases:

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:	
	1. Timings copied from controller, 12/27/89.
	2. At this time ther is no detection.
	3. Controller to P cab and Eagle EPAC 300 Controller, 3/14/89.
	4. Wiring problem with Ped Buttons repaired, 12/28/89.
	5. Added 1 sec. all red for both phases, 12/28/89, lowered phase 4 max green to 24 sec. ., 12/28/89.
	6. Revised clearance intervals, 12/28/90.
	7. Changed from a 2 phase to 4 phase intersection. Changed flash mode start up to

ALL RED, and start in green, 4/3/98.
8. Phases 3 and 7 were added due to upgrades on 98th from Central to Sage, 9/6/02.
9. Phases 1 and 5 were added in order to make intersection 8 phase, 11/5/02.
10. Timing sheet updated, MAX II time start at 6:30 - 8:30 am Phase 2 & 6 changed to to 24 sec.Phases 4 & 8 changed to 42 sec., 11/12/03.
11. TOD Step 1 start at 6:30 am MAX II 2,4,6,8. Step 2 start 8:45 am off Step 3 start at 3:00 pm MAX II 1,2,4,6,8 Step 4 start at 6:30 pm MAX II off 12/9/08.
12. Clearance intervals updated to NMDOT standard by BB, 10/3/13.
13. No longer need step 11. No TOD needed.
14. Timing sheet revised to new version of timing sheet, 8/29/16.
15. New Coordination Patterns implemented 10-2016, Lee Engineering.
16. New Day Plan and MAX2 implemented 12-27-2016, Lee Engineering.
17. Changed start up phases to North and South. 3/21/18 A.F.
18. Found typo. A.F. 9/14/20

ASC3 COORDINATION PLAN DATA

305 - 98th St & Avalon Rd

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130.00	STD (COS)	111	
OFFSET VAL	75%	98		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	5	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	34	12	42	12	34	12	42
	15.6	44.2	15.6	54.6	15.6	44.2	15.6	54.6

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	7%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	40	14	34	12	40	12	36

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

ASC3 COORDINATION PLAN DATA

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COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110.00	STD (COS)	151	
OFFSET VAL	0%	0		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	11	39	14	36	10	40	10	40
	12.1	42.9	15.4	39.6	11	44	11	44
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

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ASC3 COORDINATION PLAN DATA

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ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

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SCHEDULE NUMBER 2

SCHEDULE NUMBER			2									
DAY PLAN NO			2	CLEAR ALL FIELDS								
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER			3									
DAY PLAN NO			3	CLEAR ALL FIELDS								
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering.
4. New Day Plan implemented 12-27-2016, Lee Engineering.
5. Signal re-phased & East leg constructed July 2020
6. New coordination timings implemented 7/31/2020 by Lee Engineering

Intersection No.: 305

CENTRAC
1

Intersection Name: AVALON - 98TH

Revision Date: 11/20/2020

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	3	10	3	20	3	10	3	20
Walk:		7		7		7		7
Ped Clr:		32		25		35		28
Veh Ext:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Veh Ext2:								
Max 1:	20	30	20	40	20	30	20	40
Max 2:								
Max 3:								
Yellow:	3.0	3.0	3.0	4.5	3.0	3.0	3.0	4.5
Red Clr	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:				X				X

Flash Mode: ALL RED

Start Up Mode: ALL RED
Time: 8 SEC.
First Phases: 4 & 8
Start In: GREEN

Overlap Phases:

NOTES:

1. Timings provided by Lee Engineering following intersection modifications 11/20/2020

ASC3 COORDINATION PLAN DATA

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367 - 98th St & I40 WB Ramp

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130.00	STD (COS)	111	
OFFSET VAL	99%	128.7		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	11	48	0	41	0	59	0	0
	14.3	62.4	0	53.3	0	76.7	0	0

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	50%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	17	28	0	55	0	45	0	0

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

ASC3 COORDINATION PLAN DATA

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COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110.00	STD (COS)	151	
OFFSET VAL	26%	28.6		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	13	18	0	69	0	31	0	0
	14.3	19.8	0	75.9	0	34.1	0	0
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0

ASC3 COORDINATION PLAN DATA

DIMMING ENABLE	NO

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)										
1	2	3	4	5	6	7	8	9	10	11
X	X	X	X	X	X	X	X	X	X	X
12	13	14	15	16	17	18	19	20	21	22
X	X	X	X	X	X	X	X	X	X	X
23	24	25	26	27	28	29	30	31		
X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

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SCHEDULE NUMBER 2

SCHEDULE NUMBER	2		
DAY PLAN NO	2	CLEAR ALL FIELDS	

SELECT ALL MONTHS							DOW		DOM			
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3		
DAY PLAN NO	3	CLEAR ALL FIELDS	

SELECT ALL MONTHS							DOW		DOM			
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering. Phase 4 coordinated.
4. New Day Plan implemented 12-27-2016, Lee Engineering.

Intersection No.:	367	System:	Centracs
		Address:	1
Intersection Name:	I-40 & 98TH		
Revision Date	12/23/2013		

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	N-W	SB		WB		NB		
Min Grn	3	16		8		16		
Walk:	0	7		7		7		
Ped Clr:	0	6		26		8		
Veh Ext:	3.0	3.0		3.0		3.0		
Veh Ext2:								
Max 1:	16	22		32		22		
Max 2:	16	22		48		22		
Max 3:								
Yellow:	4.5	4.5		4.5		4.5		
Red Clr	2.0	1.0		1.5		1.0		

Recall Data

Locking Memory:				X				
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode:	ALL RED
Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	2 & 6
Start In:	GREEN
Overlap Phases:	NONE

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:

1. Intersection to be turned on, 10/31/05. Max 2 - 15:00 to 18:30 M-F.
2. Clearance intervals updated to NMDOT standard by BB, 12/23/13.
3. Max 2 enable Phase 4 @ 1500 to 1830, 2/10/14.
4. Added phase 6 for NB, removed overlap A.
5. New Coordination Patterns implemented 10-2016, Lee Engineering.

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Terry Brown
Terry O. Brown, P.E.
P. O. Box 92051
Albuquerque, NM 87199-2051

MEETING DATE: September 30, 2020

ATTENDEES: Matthew Grush (COA Transportation Development Review); Margaret Haynes and Nancy Perea (NM DOT D3 Office), Brad Julian (NM DOT State Traffic Engineer's Office); Brian Patterson (Titan Development), and Terry O. Brown, Consulting Traffic Engineer.

PROJECT: Westpointe 40 Development (Interstate 40 / 98th St.)

REQUESTED CITY ACTION: ___ Zone Change __X__ Site Development Plan

__X__ Subdivision __X__ Building Permit ___ Sector Plan ___ Sector Plan Amendment

___ Curb Cut Permit ___ Conditional Use ___ Annexation ___ Site Plan Amendment

ASSOCIATED APPLICATION: Development of approximately 100 acres located south of Interstate 40 and east of 98th St. into Distribution Warehousing Centers plus one Tire Superstore. Project phased site plan to be submitted to City and NM DOT for review at onset of TIS.

SCOPE OF REPORT:
The Traffic Impact Study should generally follow the report format as outlined in the NM DOT State Access Management Manual. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 10th Edition.
   Consultant to provide trip generation calculations at onset of Traffic Impact Study for evaluation, comment, and approval of the NM DOT and the CoA.

2. Appropriate study area:
   Signalized Intersections;
   a. Avalon Rd. (Bluewater Rd.) / 98th St. (subsequent to Phase 1)
   b. Bluewater Rd. / Unser Blvd. (All phases)
   c. Central Ave. / 98th St. (subsequent to Phase 1)
   d. Los Volcanes Rd. / Unser Blvd. (All Phases)
   e. I-40 N. Ramp / Unser Blvd. (All Phases)
   f. I-40 N. Ramp / 98th St. (subsequent to Phase 1)

   Unsignalized Intersections;
   a. Los Volcanes Rd. / Daytona Rd.
   b. I-40 S. Ramp / Unser Blvd. (All Phases)
   c. I-40 S. Ramp / 98th St. (subsequent to Phase 1)

   Driveway Intersections: all site drives.

NOTE: Phase 1 analysis will not need to analyze intersections along 98th St. since the project will not connect to 98th St. until after Phase 1.

3. Intersection turning movement counts

Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour

Consultant to provide for all intersections listed above. Base traffic volumes for Traffic Impact Study will be derived from Streetlightdata.com and adjusted to conform to recent TAQA count data. If TAQA count data not available, base traffic volumes will be derived from new turning movements volumes correlated to Streetlightdata.com ratio of current turning movements volumes to pre-COVID turning movements volumes.

4. Type of intersection progression and factors to be used.

Analysis to be based on current signal timing / offsets provided by City of Albuquerque. Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant. If peak 15-minute volumes utilized, hourly volume is 4 times peak 15-minute volumes and peak hour factor is 1.0. Use of 15-minute volumes is preferred.

5. Boundaries of area to be used for trip distribution.

City Wide - residential, office or industrial;
Interstate to be determined by consultant / approved by NMDOT & CoA.

6. Basis for trip distribution.

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts from Mid-Region Council of Governments,

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts from Mid-Region Council of Governments.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts from Mid-Region Council of Governments.

Office/Industrial - $Ts = (Tt)(Sp / D) / (Sp / D)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population
D = Distance from Development to Subarea

Commercial -
$Ts = (Tt)(Sp) / (Sp)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population

7. Traffic Assignment. Logical routing on the major street system. Consultant to provide trip distribution map and trip assignments maps at onset of Traffic Impact Study for review / approval by City of Albuquerque and New Mexico Department of Transportation.

8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
   a. Project 1 – BHI TIS (Project NICO) on Arroyo Vista Blvd. north of I-25.

9. Method of intersection capacity analysis - operational (see "Highway Capacity Manual, 6th Edition") or equivalent [i.e. HCS7] as approved by staff). Must use latest version of software and/or current edition of manual.

Implementation Year: 2022 – Phase 1
2025 – Phase 2
2030 – Phase 3 (full development)

Horizon Year: 2040

10. Traffic conditions for analysis:
    a. Existing analysis __ yes _X_ no - year (xxxx);
    b. Phase implementation year(s) without proposed development – 2022, 2025
    c. Phase implementation year(s) with proposed development – 2022, 2025
    d. Project completion year without proposed development – 2030
    e. Project completion year with proposed development – 2030
    f. Horizon Year without proposed development – 2040
    g. Horizon Year with proposed development - 2040

11. Background traffic growth.
    Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps or regional model. Minimum growth rate to be used is 1%.

12. Planned (programmed) traffic improvements.
    List planned CIP improvements in study area and projected project implementation year:
    a. None

13. Items to be included in the study:
    a. Intersection analysis.
    b. Signal progression – based on existing signal timing / offsets.
    c. Freeway Segment Analysis from west of 98th St. to east of Unser Blvd.
    d. Recommended street, intersection and signal improvements. Specifically, signal warrant analyses at unsignalized ramps on 98th St. and on Unser Blvd.
    e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway visibility.
    f. Transportation system impacts.
    g. Accident analyses _X_ yes __ no; Location(s): Study area for 3 years.
    h. Weaving analyses __ yes _X_ no; Location(s):

SUBMITTAL REQUIREMENTS:

1. Number of copies of report required
    a. 1 paper copy for City of Albuquerque and 2 paper copies for NM DOT.
    b. 1 digital copy
2. Submittal Fee – $1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3362.

_____ _____

Matt Grush, P.E., PTOE Date
Senior Engineer
City of Albuquerque, Planning, Transportation Development Section

C: TIS Scoping Meeting attendees, file

Traffic Impact Study
98th & Bluewater Commercial Development
Albuquerque, NM

January 2022

Prepared for:

Red Sky Holdings, LLC
904 Hidden Meadow Ct.
Southlake, TX 76092

Prepared by:



Civil Transformations Inc.
2929 Coors Blvd. NW, Suite 309
Albuquerque, NM 87120

Traffic Impact Study
98th & Bluewater Commercial Development
Albuquerque, NM
January 2022

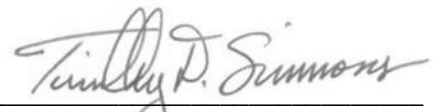
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The technical material and data contained in this document were prepared by the undersigned, whose seal as a Professional Engineer, licensed to practice in the State of New Mexico, is affixed below.





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01/21/2022 (Version 3)
11/16/2021 (Version 2)
06/04/2021 (Version 1)

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1.0 EXECUTIVE SUMMARY

1.1 Purpose of Study

This report documents the results of a Traffic Impact Study (TIS) for a proposed commercial land development located in the southeast quadrant of the 98th St. and Bluewater Rd. intersection in Albuquerque, NM. The purpose of this TIS is to assess traffic operations associated with traffic generated by this proposed project on the adjacent transportation network, specifically 98th St.

This study evaluated both the existing and proposed conditions of 98th St. from Central Ave. to I-40 and the proposed site entrances, and was conducted in accordance with the City of Albuquerque Development Process Manual (COA DPM) Article 7-5, Traffic Studies. Study requirements were established through a traffic scoping meeting held with the COA Traffic Engineer and New Mexico Department of Transportation (NMDOT) District 3 Traffic Engineering staff (see scoping meeting minutes, Appendix A).

1.2 Principal Findings

Key findings of this analysis are summarized as follows:

1. Levels of service (LOS) at 98th St. signalized intersections are acceptable for baseline conditions.
2. Site-generated traffic is not expected to cause significant, adverse impacts to the adjacent roadway network, including the traffic signalized intersections along 98th St., but will incrementally increase delay.
3. The 98th St. corridor from Central Ave. to I-40 acts as a commuter route serving residential areas in southwest Albuquerque to other areas of the city. This corridor has seen a consistent high growth trend which may continue indefinitely given the amount of vacant lands in the vicinity. Sustained traffic growth in the region will exacerbate these conditions and necessitate improvements by Year 2025 including:
   a. Expansion of 98th St. to a 6-lane arterial;
   b. Traffic signal timing improvements to optimize throughput and traffic progression;
   c. Intersection improvements to add turn lanes and/or extend queue storage.
4. Regional improvements will also be necessary to alleviate congestion on 98th St. A review of the Transportation Improvement Program (TIP) prepared by MRCOG revealed at least two projects slated for implementation in the vicinity that should be advanced.

1.3 Recommendations

The following recommendations are offered concerning on- and off-site access modifications.

1. *On-Site Access*
   a. Four access driveways are proposed to provide ample circulation and on-site queueing space for the drive-through businesses as illustrated in Figure 5 and detailed in Section 7.1 of this report.
   b. These driveways will be designed in accordance with City of Albuquerque Development Process Manual (COA DPM) requirements.
2. *Off-Site Roadway Improvements*
   a. Extension of the third northbound through (NBT) lane and 6' bike lane with 3' buffer along the property frontage from Bluewater Rd. to the Volcano Rd. return. This may necessitate the dedication of right-of-way (ROW) to accommodate the proposed roadway geometry as illustrated in Figure 8.
   b. Addition of a northbound right-turn (NBR) lane at 98th/Bluewater Rd. and accommodation of trucks.
   c. Installation of buffered sidewalk along the property frontage.
   d. Provision of a southbound left-turn (SBL) lane on 98th St. at Site Driveway 3 as described in §7.6.7.
   e. Other improvements to 98th St. at Central Ave. will be required to address background traffic growth; a fair share contribution from the developer should be established based on the proportion of site traffic contributed to this intersection.

See Section 9 of this report for further details of these recommendations.

2.0 INTRODUCTION

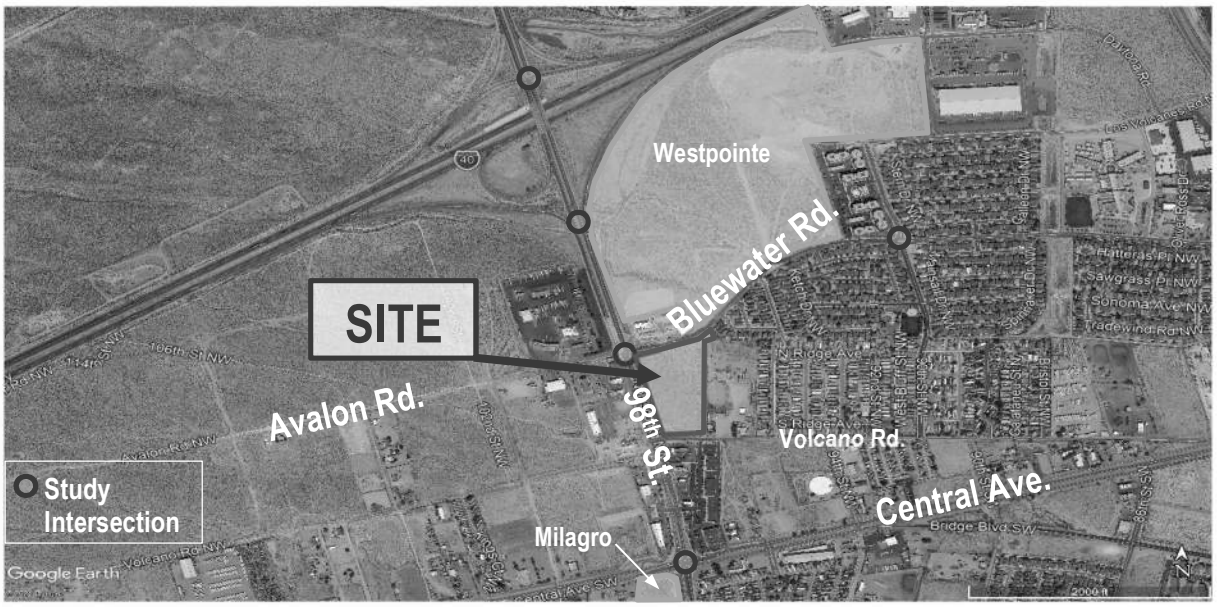
2.1 Description of Proposed Project

The project is comprised of six commercial lots within an 11-acre parcel. Construction is projected to commence in year 2021 and is slated for completion by 2025.

2.2 Project Location

The project is located in western Albuquerque south of Interstate 40 (I-40) as depicted in Figure 1.

Figure 1: Vicinity Map



Source: Google Earth

2.3 Study Area

The study area encompasses the site and adjacent roadways, namely 98th St. from Central Ave. to I-40 and Bluewater Rd. from 98th St. to 90th St. Included in the analysis are the traffic signalized intersections of 98th/Central, 98th/Bluewater/Avalon, and 98th/I-40 North Ramp as well as the unsignalized intersections of 98th/I-40 South Ramp and Bluewater/90th. 98th/Volcano was added to analyze a proposed site driveway east of 98th St.

2.4 Scope of Analysis

Primary tasks incorporated into this analysis include:

A. **Data Collection** – including traffic volume counts, other roadway network parameters, and regional data for the traffic analysis.

B. **Traffic Operations Analysis** – utilizing the collected data, computerized models were developed in *Synchro 10* software for analysis utilizing *Highway Capacity Manual (HCM)* procedures.

C. **Geometric Evaluation** – consideration of safe access measures such as auxiliary lanes and/or access geometry to mitigate traffic impacts, if necessary.

2.5 Planned Developments or Projects in the Vicinity

Two imminent development projects were identified for reference in this study:

A. Westpointe Industrial Park Development (April 2021 [draft]) – a multi-acre development proposed in the southeast quadrant of the I-40/98th St. interchange consisting of distribution centers;
B. Mercado el Milagro Retail Development (November 2019) – located in the southwest quadrant of the 98th/Central intersection, this project consists of a multi-use commercial site.

The traffic impact studies for these projects were reviewed for comparison of traffic count data, trip estimates, and recommended mitigation measures as described in Section 6 of this report.

3.0 EXISTING CONDITIONS

3.1 Current Land Use & Zoning

The site is currently vacant and zoned NR-BP (formerly SU-1) for a business park. Adjacent land uses are predominantly developed with mixed commercial uses including retail strip malls and fast food restaurants along with the proposed Westpointe Industrial Park to the north. Residential neighborhoods are located east of the site.

3.2 Existing Roadway System

The existing study street network is shown in Figure 1 and described below. These routes are under the jurisdiction of the City of Albuquerque (COA) and with designations as shown on the Functional Classification in the Albuquerque Metropolitan Planning Area by the Mid-Region Council of Governments (MRCOG). The study network is illustrated graphically in Figure 2.

3.2.1 98th St.

Designated as a Principal Arterial, the route has a posted speed of 45 mph and consists of four travel lanes, a raised median, bike lanes, curb & gutter, and concrete sidewalks. Intersection approach or spot lighting exists at the signalized intersections. Average Weekday Traffic (AWDT) on 98th St. south of I-40 was 37,000 in year 2019. Bike lanes extend from Central Ave. to Volcano Rd. 98th St. is a commuter corridor serving southwest Albuquerque and exhibiting heavy directional traffic inbound toward the city core in the AM peak and outbound in the PM peak.

3.2.2 Central Ave.

Central Ave. is designated as a Principal Arterial roadway with $AWDT_{2019}$ of 8,500; west and $AWDT_{2019}$ of 13,300 east of 98th St. The roadway consists of 4 travel lanes, raised median, curb & gutter, and intermittent concrete sidewalks. The posted speed is 55 mph.

3.2.3 Bluewater Rd.

A 2-lane Major Collector with curb & gutter and sidewalks at developed parcels and a continuous two-way left-turn lane (TWLTL) between Adonai Rd. and 90th St. AWDT east of 98th St. was not published because the portion of Bluewater from 98th St. to Adonai Rd. was constructed in 2020.

3.2.4 Avalon Rd.

A local roadway within Bernalillo County's jurisdiction west of 98th St., Avalon currently provides access to a truck stop in the northwest quadrant and commercial land uses in the southwest quadrant of the intersection.

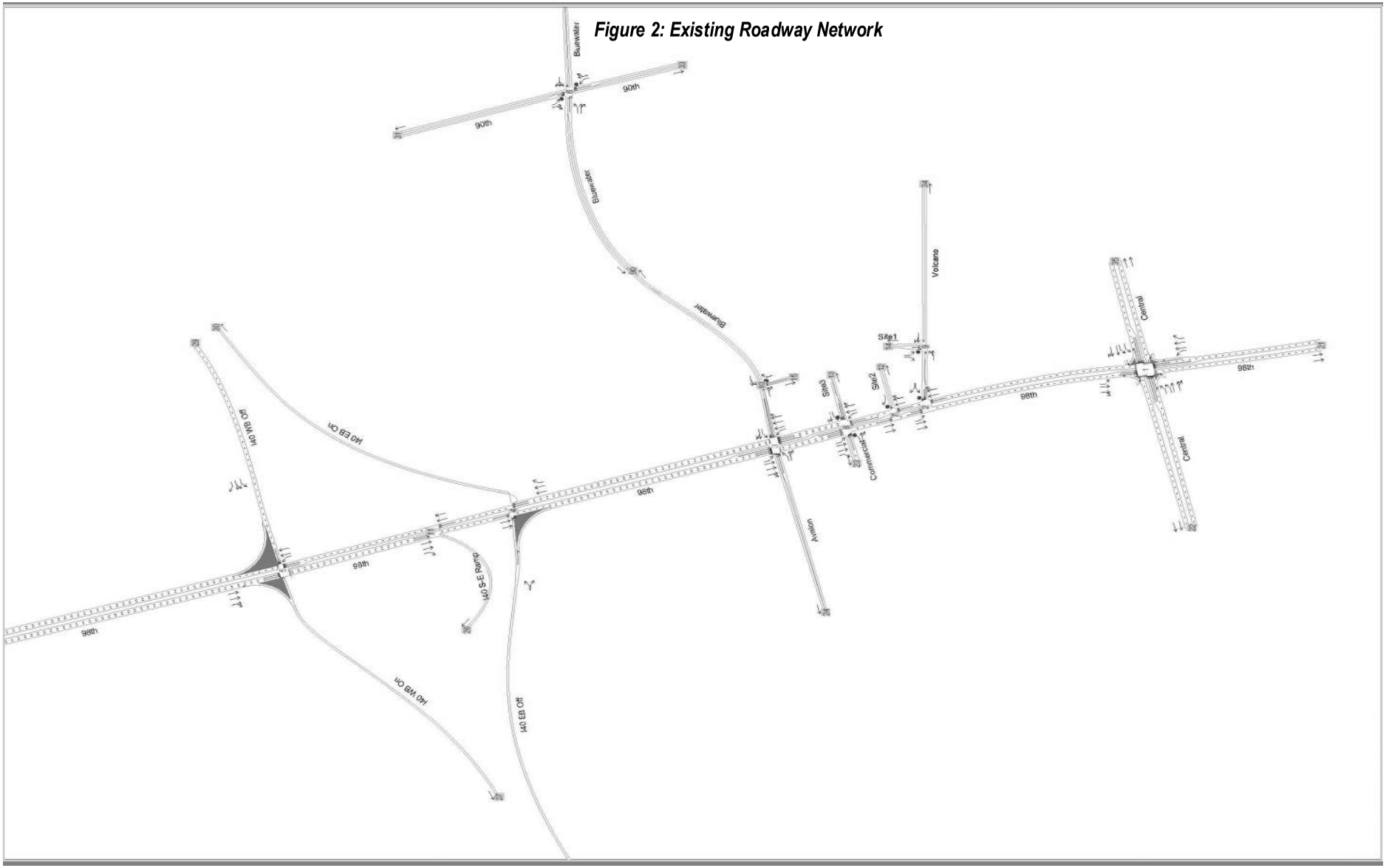
3.2.5 90th St.

90th St. is a local roadway within residential uses. However, 90th provides access to existing industrial uses, and will provide additional access to the distribution centers in the Westpointe development.

3.2.6 Interstate 40

I-40 is 4 lanes, undivided posted at 65 mph with $AWDT_{2019}$ of 68,500 east of 98th St. The North and South exit/entrance ramps have directional right-turn lanes, and the North ramp is signalized.

Figure 2: Existing Roadway Network



3.3 Existing Traffic Data

3.3.1 Turning Movement Counts and Adjustments

Manual turning movement counts (TMCs) were collected on Wednesday and Thursday, April 7 & 8, 2021 during the AM (7-9 a.m.) and PM (4-6 p.m.) peak periods for use in analyzing traffic operations at the study intersections. Because signalized intersections on 98th St. comprise a coordinated network, combined peak hour periods for the corridor were established as beginning at 7:00 a.m. and 4:15 p.m., respectively. A lane closure was emplaced for construction along the west side of 98th St. at Volcano Rd. during the count, but traffic delay did not appear significant enough to cause diversions. Also, a collision occurred on 98th St. in the northbound (NB) direction south of Bluewater affecting one NB lane, but the collision was cleared in fairly short order and normal flows were restored.

Consideration was given to traffic impacts associated with the COVID-19 pandemic and government-mandated closures. Consequently, demand flows were not measured. MRCOG has been periodically monitoring traffic patterns and reported that, in the spring of 2020, traffic volumes had dropped by 32.5% overall throughout the metro area. The following data sources were utilized to derive adjustment factors to adjust for the COVID-19 closures:

A. 48-hour traffic volume counts collected by MRCOG in 2019 on 98th and Central were used to compare the AM and PM peak hours, revealing that the manual TMC data ranged from approximately 9% to 32% lower than the volume counts (depending on the location and time period).
B. TMCs recorded as part of the Mercado el Milagro project at 98th/Central and 98th/I-40 were also compared with those collected for this project and found to be 10%-20% higher at Central but up to 30-33% higher at I-40.
C. Annual Average Daily Traffic (AADT) collected by NMDOT at the I-40 ramps ranged from about 14-32% higher than the TMCs (it should be noted that the AADTs are adjusted to include weekend and not just weekday traffic volumes, resulting in slightly lower traffic volumes than AWDTs).

Therefore, certain adjustments to these TMCs accounting for reduced travel demand were applied as follows:

1. Traffic flows on the network map showed good balance between intersections except for the NB direction between central and Bluewater; this was "smoothed" by averaging the approach/departure volumes in between these two major intersections.
2. Adjustment factors were applied to the TMC data to expand it and replicate pre-COVID19 traffic for network analysis, varying by location and by time period and ranging from 1.10 to 1.40.

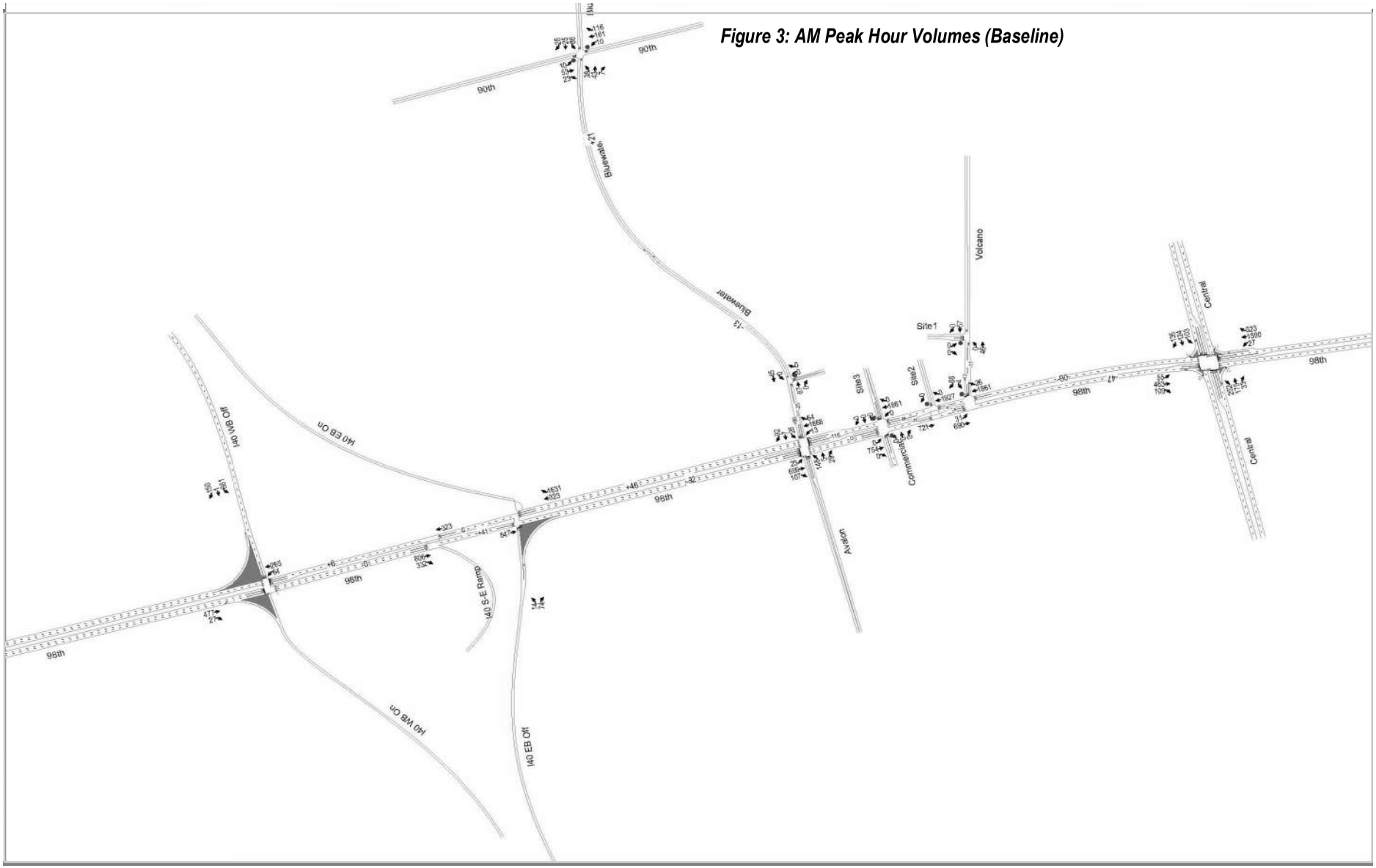
	Location	AM Factor	PM Factor
a.	98th/Central	1.23	1.00
b.	98th/Bluewater/Avalon	1.30	1.10
c.	98th/I40 South	1.40	1.20
d.	98th/I40 North	1.40	1.10
e.	Bluewater/90th	1.30	1.10

Adjusted peak hour traffic volumes derived for this analysis along 98th St. are presented in Figures 3 and 4, representing baseline conditions for analysis. Detailed reports of the TMC data and supporting volume counts are contained in Appendix B.

3.3.2 Traffic Distribution Summary

Utilizing these adjusted baseline traffic volumes, directional distribution of traffic to/from the site is tabulated in Table 1.

Figure 3: AM Peak Hour Volumes (Baseline)



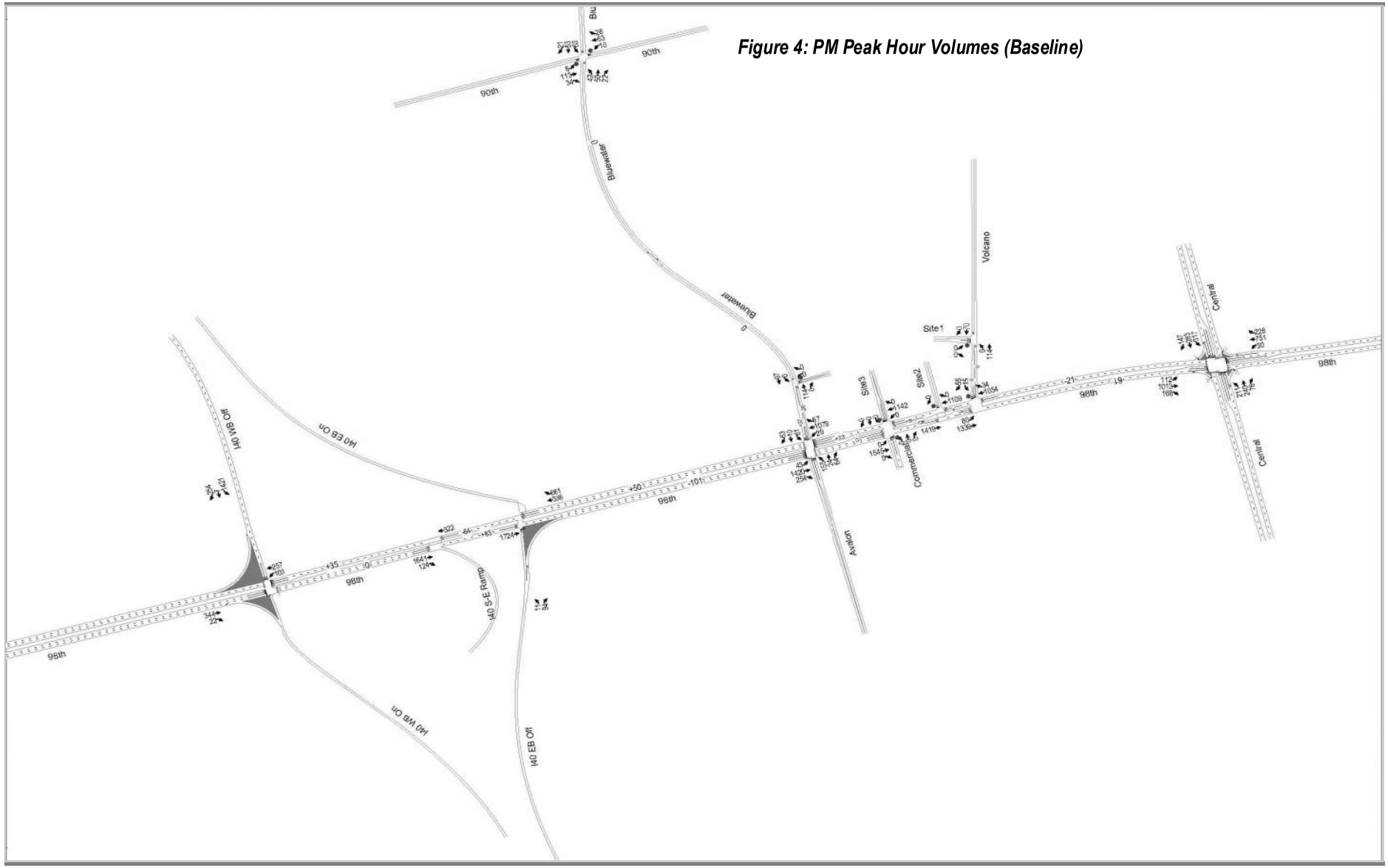


Figure 4: PM Peak Hour Volumes (Baseline)

Table 1: Traffic Distribution Summary

Intersection and Traffic Movement	Inbound		Outbound	
	AM	PM	AM	PM
Central South	48.9%	24.3%	37.8%	42.3%
Volcano East	1.3%	1.4%	1.2%	3.8%
Avalon/Bluewater Northwest	18.8%	32.8%	3.7%	4.5%
Bluewater/90th Northeast	1.7%	2.0%	3.9%	3.8%
I40 S. Ramp - NW/NE	1.7%	1.9%	43.9%	32.7%
I40 N. Ramp - North	27.6%	37.7%	9.5%	12.9%
SUM	**100%**	**100%**	**100%**	**100%**

Because 98th St. acts as a commuter corridor serving predominantly residential land uses south of Central Ave., it was not deemed necessary to employ regional gravity distribution models and therefore these distribution values were applied to new trips generated by the proposed project (see Appendix C). Also, the proposed development will attract predominantly local traffic and significant pass-by traffic.

3.4 Existing Roadway/Intersection Capacity

An analysis of the study intersections was conducted for the existing and baseline (adjusted) conditions as described in Section 6.1 of this report. These were analyzed with the existing traffic signal timing plans as provided in Appendix B. It should be noted that the westbound phase 6 coordinated time setting was lower than the maximum split required to clear the pedestrian phase at Bluewater/Avalon. While the signalized intersections operated at satisfactory levels of service (LOS) D or above as summarized in Table 5, certain lane groups and unsignalized intersections fell below LOS D as shown in the worksheets contained in Appendix D.

3.5 Transit Service

No transit service currently exists on 98th St. north. Several routes run along Central Ave. from 98th eastward and two routes serve 98th St. south of Central Ave. Nearest stops are on 98th south of Central.

3.6 Bicycle & Pedestrian Facilities

Four foot (4') bike lanes exist from Central to Volcano along 98th St., which is designated for future bike facilities in the MRCOG long-range roadway system map.

4.0 PROPOSED SITE TRAFFIC CHARACTERISTICS

4.1 Proposed Project Phasing and Timing

The project is comprised of commercial uses including restaurants and auto care on six (6) parcels as depicted in Figure 5. Construction is projected to commence in year 2021 and full buildout is assumed to be completed by 2025.

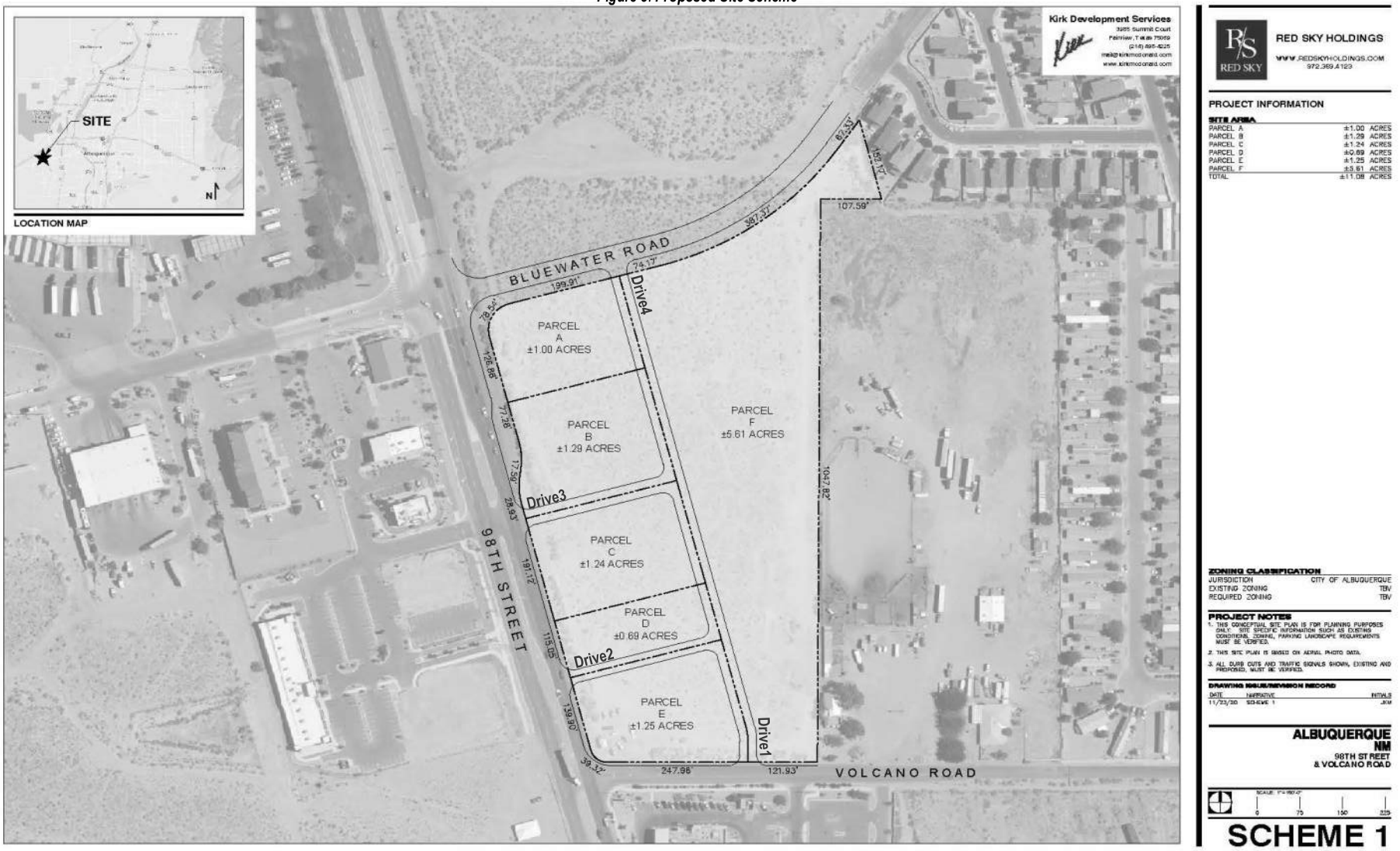
4.2 Site Access and Circulation

As illustrated on Figure 5, access is proposed via four site driveways:

1. Site Drive 1 – full access on Volcano Rd.;
2. Site Drive 2 – right-in/right-out access at 98th St. north of Volcano Rd.;
3. Site Drive 3 – full access on 98th St. aligned with the commercial center on the west side;
4. Site Drive 4 – full access on Bluewater Rd. aligned with the newly completed Maverick gas station.

Multiple access points exist within the adjacent commercial/retail sites to the south and west.

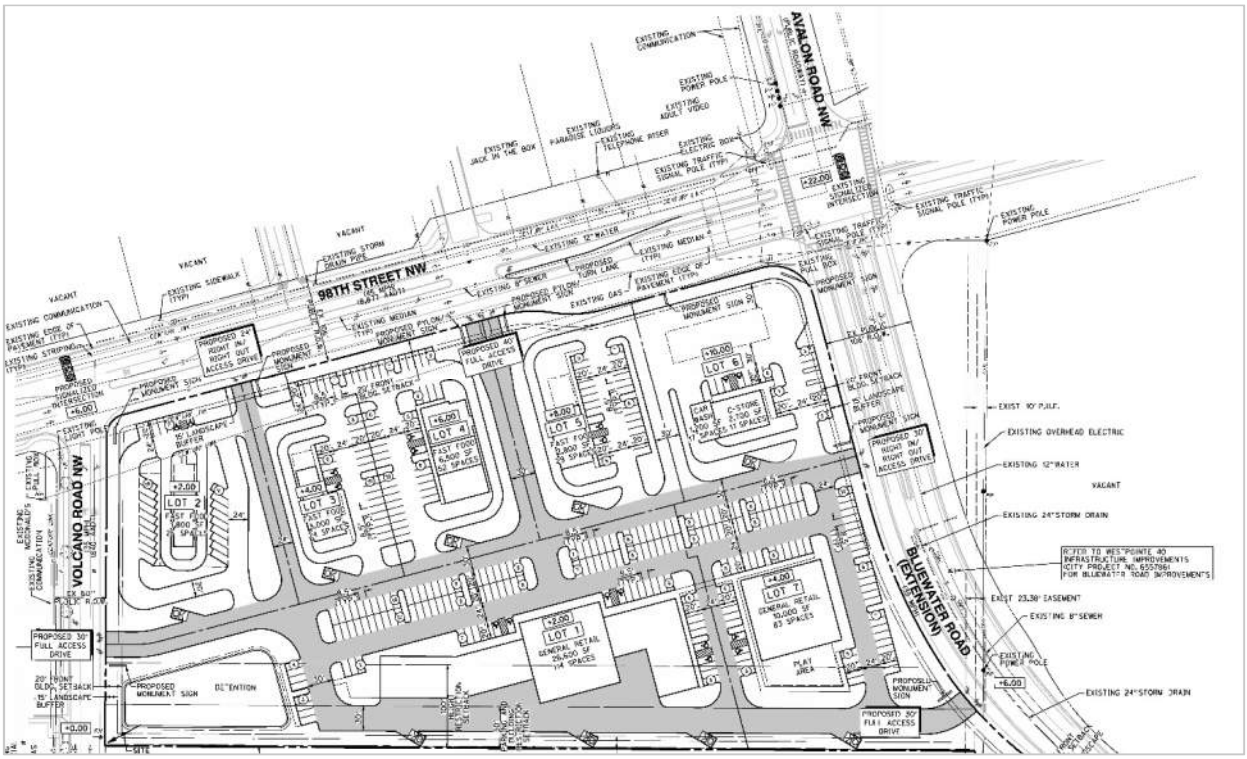
Figure 5: Proposed Site Scheme



4.3 Trip Generation

Institute of Transportation Engineers Trip Generation, 10th Edition (ITE, 2017) was used to estimate traffic generated by the proposed development. The peak of the adjacent street was selected for the calculations indicative of urban/suburban traffic patterns for typical AM and PM peak periods (i.e., 7-9 a.m., 4-6 p.m., respectively). The proposed land uses consist of restaurants and an automotive service. An early conceptual plan was prepared for preliminary planning purposes illustrating the approximate scale of the individual uses as shown in Figure 6. While this plan is not being advanced for development, the estimated building footprints were useful for traffic estimating purposes.

Figure 6: Conceptual Site Layout



The following steps and assumptions were applied to the data:

1. The "peak hour of the adjacent street traffic" was the criterion selected for the calculations as this would most likely be impacted by site traffic during typical AM and PM peak periods given the characteristics of the proposed land uses. In the vicinity of the site, 98th St. is urban/suburban in nature and thus "general urban/suburban" data were selected;
2. Gross floor area (GFA) was used for the independent variable;
3. Fitted equations were applied if available, otherwise average rates were used;
4. Internal capture trips (ICT) were calculated using the National Cooperative Highway Research Program (NCHRP) Report 684;
5. Pass-by or internal capture trips were not inherent to the proposed use and thus did not apply;
6. Pass-by trips were calculated by ITE methodology and deducted from the existing through traffic;
7. Transit trip reductions were not accounted for as service is not currently available and the proposed uses are not considered highly conducive to transit or pedestrian access.

Parcel D is proposed as a small-shell coffee shop with drive-through window and no indoor seating, though some outdoor seating may be provided. The trip generation rate for ITE Land Use 938 was derived for small kiosks and therefore the proposed site is outside of the scale for this land use category. A study conducted by K.D. Anderson & Associates, Inc. was conducted for three existing Dutch Brothers coffee stores with similar characteristics to the proposed site wherein trip generation rates were derived per 1,000 vehicles per day as the independent variable. This data was applied to at least one other site in the Albuquerque area, and thus was utilized to estimate trips for this site. The calculated site traffic volume estimates are contained in Appendix C and summarized in Table 2 below.

Table 2: Estimated Site Trip Generation

	ITE			Daily	AM			PM		
Description	**Code**	**Quant.**	**Units**	**Total**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Parcel A: Fast Food w/Drive-Thru	934	2.7	GFA[1]	1272	56	53	109	46	42	88
Parcel B: Fast Food w/Drive-Thru	934	2.8	GFA[1]	1319	58	55	113	47	44	91
Parcel C: Fast Food w/Drive-Thru	934	6.5	GFA[1]	3061	133	128	261	110	102	212
Parcel D: Coffee w/Drive-Thru no seat.	938	37.0	(2)	---	64	60	124	27	29	56
Parcel E: Fast Food w/Drive-Thru	934	1.8	GFA[1]	848	37	35	72	31	28	56
Parcel F: Automobile Care Center	942	36.6	GFA[1]	---	54	28	82	48	52	100
Total (unadjusted)				**6500**	**402**	**359**	**761**	**309**	**297**	**606**
-Internal Capture Trips					0	0	0	0	0	0
-Pass-By Trips[3]					-137	-137	-274	-113	-113	-226
Volume Added to Adjacent Street					**265**	**222**	**487**	**196**	**184**	**380**

[1]Gross Floor Area, per 1,000 square feet.
[2]Per 1,000 daily vehicles of adjacent street traffic.
[3]Included with driveway volumes but deducted from through traffic on adjacent street.

4.4 Site Traffic Distribution and Assignment

Distribution of proposed site trips was made in proportion to the directional distribution percentages inherent to the corridor at the external nodes as derived from the adjusted traffic counts shown in Figures 2 and 3 and summarized in Table 1. Those distribution percentages were applied to the estimated site trips in Table 2, and proposed trips were then assigned to 98th St., Bluewater Rd., and Volcano Rd. via the site driveways in the following proportions:

1. Site Driveway 1 = 15%;
2. Site Driveway 2 = 25%;
3. Site Driveway 3 = 25%;
4. Site Driveway 4 = 35%.

These trips were assigned by the above percentages using the TIA module in the traffic analysis software. A higher percentage was applied at Driveway 4 because southbound traffic has better access via the traffic signal at Bluewater/Avalon. The distributed trips and resulting intersection peak hour volumes are shown in the map views as well as on the "Future Volume" rows in the level of service worksheets contained in Appendix D.

5.0 FUTURE TRAFFIC CONDITIONS

5.1 Background Traffic Projection

The project was initiated in 2021, and adjustments attributed to COVID-19 closures were applied to existing traffic to establish the baseline condition for analysis. Construction and project opening is projected to be completed by year 2025, which was established as the Implementation Year. A Horizon Year analysis typically incorporates the Implementation Year plus 10 years, thus traffic was projected to year 2035.

Average Week Day Traffic (AWDT) data and recorded traffic volume counts were obtained from the MRCOG Transportation Analysis & Querying Application (TAQA). Historic traffic volumes are summarized in Table 3 below.

Table 3: Historic Traffic Volumes (AWDT)

Year	98th St. South of I-40
2009	26621
2010	26222
2011	25881
2012	30989
2013	30493
2014	30493
2015	34670
2016	35987
2017	37900
2018	39900
2019	37000

Trend line analysis was used to calculate growth rates as follows.

1. *98th St.*:
   a. Annualized compound growth rate between 2009 and 2019 was 3.35%;
   b. An annual rate calculated by trend line analysis yielded a rate of 4.58%;
   c. Because the trend line had a high degree of correlation, it was considered a reliable measure; nevertheless, it is uncertain if this rate can be sustained indefinitely;
   d. While the area along the 98th St. corridor is mostly developed, much vacant land remains in the vicinity and 98th St. is a principal arterial serving regional traffic, and thus further growth could be expected.
   e. A rate of +3.0% per year was selected for analysis, yielding growth factors of 1.13 and 1.51 for the implementation and horizon years, respectively.
2. *Adjacent Streets*:
   a. A growth rates of 1.0% per year was applied Central Ave. yielding growth factors of 1.04 and 1.15 for the implementation and horizon years, respectively;
   b. Insufficient historical data was available to forecast Bluewater traffic, but the eastern portion is mostly developed; therefore the minimum growth rate of 0.5% per year was applied and estimated trips from the Westpointe Industrial Park were added as part of the background traffic.
   c. Trends exhibited by the I-40 ramps varied and several growth rates were applied.

The calculated growth factors were input into the traffic models and applied to through traffic movements to expand background traffic volumes for analysis of the forecast traffic scenarios (see Appendix B for historic traffic data and projections). It should also be noted that the calculated growth rate was not indicative of statewide economic and related traffic growth but reflected local and regional activity in recent years. The recession associated with COVID-19 pandemic closures could be expected to negatively impact economic growth and therefore this growth rate may not be expected to continue unaltered but may result in a somewhat conservative traffic forecast estimate. In addition, the software expands the background plus site traffic, providing for additional conservativism in the traffic estimates.

6.0 TRANSPORTATION ANALYSIS

6.1 Site Traffic Operations Analysis

Intersection "nodes" constrain the capacity of a roadway segment, and therefore the baseline capacity of the study intersections were analyzed using the *Highway Capacity Manual 6th Edition (HCM)* methodology. The Level of Service (LOS) for an intersection is determined by the computed or measured delay and is defined for each minor movement at signalized, unsignalized, and roundabout intersections. LOS is assigned a letter grade from A (best) through F (worst), as summarized in Table 4 for signalized and unsignalized intersections. Signalized intersection have higher levels of delays due to higher volumes and driver expectation of greater delays. LOS D is generally considered acceptable in urban areas with right-of-way constraints; however, COA DPM Table 7.5.88 provides additional LOS criteria by location and corridor type. 98th St. is an arterial outside of any activity centers, thus LOS D is the threshold.

Table 4: Intersection Level of Service (LOS) Criteria (HCM 6th Ed.)

LOS[1]	Signalized Control Delay (sec/veh)	Unsignalized Control Delay (sec/veh)
A	0 – 10	0 – 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

[1]For Volume-to-Capacity Ratio (V/C) ≤1.0; LOS = F for V/C > 1.

Synchro 10 software package by *Trafficware Ltd.* was utilized to compute the results in HCM format. Traffic signal timing settings for the signalized intersections on 98th St. were provided by COA Traffic Engineering staff and input into the traffic models for analysis. These intersections are currently coordinated and therefore the appropriate time-of-day plans were used for the peak analyses. Capacity analyses were computed using the same, systematic method so results could be compared for these alternative scenarios:

1. **Scenario 1: Existing Traffic (2021)** – represents existing conditions prior to development of the site with traffic collected during COVID-19-related closures in April 2021.
2. **Scenario 2: Baseline (2021)** – baseline traffic adjusted to represent "normal" conditions without COVID-19 impacts, representing the baseline for analysis.
3. **Scenario 3: Implementation Year NO-Build (2025)** – baseline conditions plus background traffic growth without development, representing the implementation year operating conditions (includes Westpointe Industrial Park phases 1 and 2).

4. **Scenario 4: Implementation Year BUILD (2025)** – existing traffic plus background traffic growth and completion of development.
5. **Scenario 5: Horizon NO-Build (2035)** – existing traffic conditions plus background traffic growth without development, representing the horizon year operating conditions (includes Westpointe Industrial Park phases 1 through 3).
6. **Scenario 6: Horizon BUILD (2035)** – forecast conditions including background traffic growth and site traffic, to assess forecast traffic operations with developed conditions.

Computed results are contained in Appendix D and summarized in Table 5.

Table 5: LOS Summary for Alternative Concepts*

		AM Peak						PM Peak					
		Intersection		Max. (worst-case movement)				Intersection		Max. (worst-case movement)			
Scenario	Intersection	Delay	LOS	V/C	Delay	LOS	Dir.	Delay	LOS	V/C	Delay	LOS	Dir.
Baseline (2021)	**1 – Existing Traffic**												
	98th/Central	43.4	D	0.92	45.1	D	NBT	28.2	C	0.85	63.7	E	WBL
	98th/Volcano	0.8	(3)	0.081	102.8	F	WBL	1.3	(3)	0.322	110.1	F	WBL
	98th/Bluewater	22.3	C	0.73	16.5	B	NBT	20.3	C	0.83	75.3	E	EBL
	98th/I-40 South	0.2	(3)	0.031	15.8	C	EBL	0.3	(3)	0.107	50.7	F	EBL
	98th/I-40 North	34.9	C	0.86	55.7	E	WBL	28.9	C	0.90	32.0	C	WBL
	Bluewater/90th	9.6	(3)	0.365	13.2	B	NBL	7.8	(3)	0.257	13.2	B	SBT
	2 – Baseline Traffic (Adjusted)												
	98th/Central	77.1	E	1.13	103.9	F	NBT	28.2	C	0.85	63.7	E	WBL
	98th/Volcano	1.2	(3)	0.187	194.5	F	WBL	1.9	(3)	0.566	234.4	F	WBL
	98th/Bluewater	32.9	C	0.95	39.8	D	NBR	23.0	C	0.96	104.5	F	EBL
	98th/I-40 South	0.3	(3)	0.067	22.6	C	EBL	0.5	(3)	0.220	92.8	F	EBL
	98th/I-40 North	34.3	C	0.88	53.0	D	WBL	29.1	C	0.90	30.5	C	WBL
	Bluewater/90th	11.8	(3)	0.532	17.3	C	NBL	8.2	(3)	0.297	14.1	B	SBT
Implementation Year (2025)	**3 – Implementation Year NO-Build**												
	98th/Central	113.7	F	1.28	166.3	F	NBT	30.0	C	0.88	67.9	E	WBL
	98th/Volcano	1.6	(3)	0.344	388.6	F	WBL	1.9	(3)	0.566	234.4	F	WBL
	98th/Bluewater	55.9	E	1.09	78.8	F	NBR	24.4	C	0.96	104.5	F	EBL
	98th/I-40 South	0.3	(3)	0.086	27.1	D	EBL	0.7	(3)	0.340	153.8	F	EBL
	98th/I-40 North	34.0	C	0.89	52.8	D	WBL	29.4	C	0.91	29.7	C	WBL
	Bluewater/90th	15.2	(3)	0.672	25.9	D	NBL	8.3	(3)	0.305	14.2	B	SBT
	4 – Implementation Year BUILD												
	98th/Central	143.7	F	1.39	217.8	F	NBT	31.2	C	0.88	67.9	E	WBL
	98th/Volcano	6.3	(3)	1.74	1155.2	F	WBL	3.9	(3)	1.007	406.1	F	WBL
	98th/Bluewater	63.2	E	1.13	92.9	F	NBR	26.2	C	0.98	111.8	F	EBL
	98th/I-40 South	0.3	(3)	0.100	30.9	D	EBL	0.9	(3)	0.411	197.9	F	EBL

	98th/I-40 North	34.0	C	0.89	52.7	D	WBL	29.7	C	0.91	29.1	C	WBL
	Bluewater/90th	15.6	(3)	0.687	27.2	D	EBL	8.4	(3)	0.316	14.6	B	SBT
	Site1/Volcano	3.2	(3)	0.014	9.8	A	SBL	1.5	(3)	0.019	9.9	A	SBL
	Site2/98th	1.3	(3)	0.551	51.0	F	WBR	0.4	(3)	0.192	16.5	C	WBR
	Site3/98th	7.6	(3)	2.016	1362.3	F	WBL	2.5	(3)	0.874	500.3	F	WBL
	Site4/Bluewater	4.2	(3)	0.211	11.1	B	NBL	1.5	(3)	0.019	9.9	A	SBL
Horizon Year (2035)	**5 – Horizon NO-Build**												
	98th/Central	230.8	F	1.70	357.1	F	NBT	60.5	E	1.12	75.8	F	SBT
	98th/Volcano	5.3	(3)	1.649	2305.8	F	WBL	7.4	(3)	2.27	1476.4	F	WBL
	98th/Bluewater	154.9	F	1.49	244.6	F	NBR	32.1	C	1.02	119.8	F	EBL
	98th/I-40 South	0.5	(3)	0.177	50.4	F	EBL	3.6	(3)	1.318	904	F	EBL
	98th/I-40 North	33.6	C	0.90	52.5	D	WBL	31.8	C	0.93	28.5	C	WBL
	Bluewater/90th	36.4	(3)	0.993	81.5	F	NBL	11.1	(3)	0.537	17.2	C	SBT
	6 – Horizon BUILD												
	98th/Central	273.2	F	1.86	427.0	F	NBT	75.0	E	1.19	103.8	F	SBT
	98th/Volcano	54.2	(3)	17.31	####	F	WBL	19.3	(3)	4.64	####	F	WBL
	98th/Bluewater	158.0	F	1.51	251.3	F	NBR	30.2	C	1.03	124.7	F	EBL
	98th/I-40 South	0.5	(3)	0.215	62.6	F	EBL	4.5	(3)	1.647	####	F	EBL
	98th/I-40 North	33.7	C	0.91	52.5	D	WBL	33.5	C	0.94	29.0	C	WBL
	Bluewater/90th	18.1	(3)	0.753	32.9	D	NBT	8.6	(3)	0.341	15.2	C	SBT
	Site1/Volcano	3.1	(3)	0.014	9.8	A	SBL	1.4	(3)	0.019	10.0	B	SBL
	Site2/98th	3.7	(3)	1.026	189.4	F	WBR	0.4	(3)	0.269	22.8	C	WBR
	Site3/98th	25.8	(3)	8.07	####	F	WBL	8.9	(3)	3.495	####	F	WBL
	Site4/Bluewater	4.1	(3)	0.213	11.1	B	NBL	3.3	(3)	0.184	11.2	B	NBL

*Notes:

1. Delay is measured in seconds/vehicle
2. V/C = volume-to-capacity ratio for traffic movement
3. Only critical movement LOS at unsignalized intersections is reported (#### exceeds 3 digits).

NMDOT participates in projects "…adjacent or in close proximity to a state highway where indirect access to the property is requested…" Because of this project's proximity to I-40, NMDOT District 3 office reviews this study and requires HCS software for NMDOT signalized intersections.

It should be noted that the Bluewater/Avalon and I-40 North Ramp signals operated on different timing schemes: the primary Phase 2 was eastbound (EB) at Bluewater/Avalon whereas Phase 2 was southbound (SB) at the I-40 North ramp. HCS7 lacks the option to coordinate different phases and therefore the intersections could not be coordinated in HCS7 but had to be analyzed as isolated intersections. The "approach type" values from Synchro software were therefore input into HCS7 to approximate the effect of coordination. Consequently, while the output of HCS7 was similar to the Synchro output, a key difference was seen in the EB approach at Avalon/Bluewater as it was assigned the primary direction in HCS7 instead of the NB/SB movements. Results of the capacity analyses conducted with *Highway Capacity Software version 7 (HCS7)* are summarized by approach in Table 6 below (see Appendix E for worksheets).

Table 6: LOS Summary for Alternative Concepts (NMDOT Intersections)

	Lane	AM Peak								PM Peak							
		EB		WB		NB		SB		EB		WB		NB		SB	
	Group	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR
Scenario 1 - Existing Traffic (2021)	***98th/ Bluewater (2021)***									***98th/ Bluewater (2021)***							
	V/C[1]	0.34	0.05	0.05	0.20	0.04	0.73	0.13	0.35	0.83	0.52	0.26	0.56	0.12	0.31	0.12	0.46
	Queue[2]	123	28	23	93	10	238	18	220	143	105	65	93	10	358	13	238
	Delay (s)	27.2	25.7	31.0	34.8	25.5	19.5	27.2	29.7	75.3	50.8	44.1	55.9	8.0	23.0	8.1	10.6
	LOS	C	C	C	C	C	B	C	C	E	D	D	E	A	C	A	B
	Intersection Delay, LOS:							***22.3***	***C***							***20.3***	***C***
	98th/ I-40 North Ramp (2021)									***98th/ I-40 North Ramp (2021)***							
	V/C[1]	--	--	0.86	0.00	0.13	0.11	--	0.16	--	--	0.90	0.00	0.25	0.16	--	0.20
	Queue[2]	--	--	323	0	33	65	--	95	--	--	575	0	70	83	--	93
	Delay (s)	--	--	55.7	0.0	16.5	14.3	--	20.1	--	--	32.0	0.0	21.1	18.0	--	26.3
	LOS	--	--	E	A	B	B	--	C	--	--	C	A	C	B	--	C
	Intersection Delay, LOS:							***34.9***	***C***							***28.9***	***C***
Scenario 2 - Baseline Traffic, Adjusted	***98th/ Bluewater (2021)***									***98th/ Bluewater (2021)***							
	V/C[1]	0.46	0.06	0.06	0.26	0.06	0.95	0.27	0.45	0.93	0.59	0.30	0.61	0.15	0.34	0.14	0.51
	Queue[2]	165	35	28	125	13	395	25	280	200	120	73	103	10	388	15	268
	Delay (s)	29.5	25.9	30.8	35.9	25.9	39.8	34.9	31.2	97.7	53.6	44.2	58.3	8.7	24.0	8.7	11.3
	LOS	C	C	C	D	C	D	C	C	F	D	D	E	A	C	A	B
	Intersection Delay, LOS:							***32.9***	***C***							***22.2***	***C***
	98th/ I-40 North Ramp (2021)									***98th/ I-40 North Ramp (2021)***							
	V/C[1]	--	--	0.88	0.00	0.20	0.15	--	0.22	--	--	0.90	0.00	0.31	0.19	--	0.25
	Queue[2]	--	--	425	0	48	93	--	143	--	--	615	0	85	100	--	113
	Delay (s)	--	--	53.0	0.0	17.1	14.7	--	21.7	--	--	30.5	0.0	24.4	21.0	--	30.7
	LOS	--	--	D	A	B	B	--	C	--	--	C	A	C	C	--	C
	Intersection Delay, LOS:							***34.3***	***C***							***29.1***	***C***

Table 6 - Continued

	Lane	AM Peak								PM Peak							
		EB		WB		NB		SB		EB		WB		NB		SB	
	Group	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR
Scenario 3 - Implementation Year NO-Build	***98th/ Bluewater (2025)***									***98th/ Bluewater (2025)***							
	V/C[1]	0.48	0.06	0.07	0.29	0.06	1.09	0.53	0.48	0.96	0.62	0.31	0.63	0.17	0.39	0.16	0.56
	Queue[2]	168	35	38	140	13	660	60	305	215	125	73	108	10	433	15	308
	Delay (s)	30.1	26.4	30.5	36.5	25.9	78.8	40.7	30.2	104.5	54.6	44.3	59.0	9.8	25.2	9.5	12.3
	LOS	C	C	C	D	C	F	D	C	F	D	D	E	A	C	A	B
	Intersection Delay, LOS:							***55.9***	***C***							***23.0***	***C***
	98th/ I-40 North Ramp (2025)									***98th/ I-40 North Ramp (2025)***							
	V/C[1]	--	--	0.89	0.00	0.22	0.17	--	0.25	--	--	0.91	0.00	0.35	0.23	--	0.32
	Queue[2]	--	--	450	0	50	105	--	163	--	--	640	0	93	120	--	135
	Delay (s)	--	--	52.8	0.0	17.3	14.9	--	22.1	--	--	29.7	0.0	26.8	23.2	--	33.6
	LOS	--	--	D	A	B	B	--	C	--	--	C	A	C	C	--	C
	Intersection Delay, LOS:							***34.0***	***C***							***29.4***	***C***
Scenario 4 - Implementation Year BUILD	***98th/ Bluewater (2025)***									***98th/ Bluewater (2025)***							
	V/C[1]	0.55	0.07	0.19	0.46	0.06	1.13	0.80	0.45	0.98	0.67	0.52	0.75	0.18	0.44	0.44	0.60
	Queue[2]	173	40	105	228	13	763	140	293	223	133	153	165	13	460	48	343
	Delay (s)	33.0	29.4	28.8	40.5	25.4	92.9	51.9	27.4	111.8	58.1	43.2	61.3	11.9	28.9	14.0	14.4
	LOS	C	C	C	D	C	F	D	C	F	E	D	E	B	C	B	B
	Intersection Delay, LOS:							***63.2***	***E***							***26.2***	***C***
	98th/ I-40 North Ramp (2025)									***98th/ I-40 North Ramp (2025)***							
	V/C[1]	--	--	0.89	0.00	0.24	0.18	--	0.27	--	--	0.91	0.00	0.41	0.26	--	0.36
	Queue[2]	--	--	473	0	53	115	--	175	--	--	665	0	105	138	--	145
	Delay (s)	--	--	52.7	0.0	17.5	15.0	--	22.6	--	--	29.1	0.0	29.1	25.2	--	36.1
	LOS	--	--	D	A	B	B	--	C	--	--	C	A	C	C	--	D
	Intersection Delay, LOS:							***34.0***	***C***							***29.7***	***C***

Table 6 - Continued

	Lane	AM Peak								PM Peak							
		EB		WB		NB		SB		EB		WB		NB		SB	
	Group	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR
Scenario 5 - Horizon NO-Build	***98th/ Bluewater (2035)***									***98th/ Bluewater (2035)***							
	V/C[1]	0.52	0.07	0.11	0.34	0.08	1.49	0.76	0.58	1.02	0.51	0.47	0.80	0.28	0.58	0.36	0.82
	Queue[2]	50	38	55	168	13	1895	120	390	245	120	153	218	20	593	33	595
	Delay (s)	31.9	27.3	29.9	37.5	26.4	244.6	47.8	30.7	119.8	47.4	38.3	58.6	23.3	34.9	18.3	25.2
	LOS	C	C	C	D	C	F	D	C	F	D	D	E	C	C	B	C
	Intersection Delay, LOS:							***154.9***	***F***							***32.1***	***C***
	98th/ I-40 North Ramp (2035)									***98th/ I-40 North Ramp (2035)***							
	V/C[1]	--	--	0.90	0.00	0.30	0.22	--	0.34	--	--	0.93	0.00	0.58	0.37	--	0.57
	Queue[2]	--	--	513	0	60	145	--	223	--	--	715	0	130	190	--	205
	Delay (s)	--	--	52.5	0.0	18.3	15.5	--	23.9	--	--	28.5	0.0	36.8	29.9	--	42.9
	LOS	--	--	D	A	B	B	--	C	--	--	C	A	D	C	--	D
	Intersection Delay, LOS:							***33.6***	***C***							***31.8***	***C***
Scenario 6 - Horizon BUILD	***98th/ Bluewater (2035)***									***98th/ Bluewater (2035)***							
	V/C[1]	0.59	0.07	0.20	0.48	0.08	1.48	0.82	0.58	1.03	0.67	0.55	0.76	0.27	0.58	0.60	0.79
	Queue[2]	70	40	110	240	13	1963	150	390	250	135	160	173	18	608	95	540
	Delay (s)	35.2	29.7	28.7	41.1	26.3	251.3	54.2	30.1	124.7	57.2	43.4	60.9	20.1	34.1	25.2	20.9
	LOS	D	C	C	D	C	F	D	C	F	E	D	E	C	C	C	C
	Intersection Delay, LOS:							***158.0***	***F***							***30.2***	***C***
	98th/ I-40 North Ramp (2035)									***98th/ I-40 North Ramp (2035)***							
	V/C[1]	--	--	0.91	0.00	0.31	0.24	--	0.37	--	--	0.94	0.00	0.65	0.43	--	0.68
	Queue[2]	--	--	540	0	60	158	--	235	--	--	753	0	145	210	--	223
	Delay (s)	--	--	52.5	0.0	18.5	15.7	--	24.2	--	--	29.0	0.0	43.2	32.5	--	47.4
	LOS	--	--	D	A	B	B	--	C	--	--	C	A	D	C	--	D
	Intersection Delay, LOS:							***33.7***	***C***							***33.5***	***C***

Notes:
1. v/c = vehicle to capacity ratio
2. 95th percentile queue in feet

6.2 Queueing Summary

Queue length measurements are useful in evaluating traffic operations and for determination of turn lane storage requirements. As shown in the *HCM Guide*, "The 95th-percentile queue is defined to be the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the analysis time period." A procedure for calculating queues is provided in the HCM and computations are included in the LOS worksheets in Appendix D. A summary of queues is provided in Table 6 for key turning lane groups that could be impacted with site traffic in the implementation year.

Table 7: Calculated 95th Percentile Queues

Intersection	Movement	Available Storage[1]	Scenario 3 Queue[2] AM	Scenario 3 Queue[2] PM	Scenario 4 Queue[2] AM	Scenario 4 Queue[2] PM
Central	EBL	7 (165')	8.4* (210')	5.6 (140')	9.3* (233')	5.9 (148')
Central	SBL	4 (90')	2.1 (53')	3.2 (80')	2.4 (60')	3.6 (90')
Bluewater	NBR	--[3]	26.4 (660')	17.3 (433')	0.0	0.0
Bluewater	SBL	8 (200')	2.4 (60')	0.6 (15')	2.4 (60')	3.6 (90')
Bluewater	WBL	13 (330')	1.5 (38')	2.9 (73')	4.2 (105')	6.1 (153')
I40 North	NBL	4 (100')	2.0 (50')	3.7 (93')	2.1 (53')	4.2 (105')*

[1]Storage length per number of vehicles at an average of 25' per vehicle (feet in parenthesis).
[2]Calculated 95th Percentile queue per HCM procedures, listed in number of vehicles.
[3]NBR is shared with 3rd NBT lane which transitions 175' south of Bluewater.
*Exceeds available storage.

Queues that may require mitigation were identified at the following locations:

1. Central Ave. EBL – existing calculated queues exceed available storage in the AM peak periods, with the increase of less than one vehicle per lane attributed to site development. Mitigation analysis will evaluate whether timing adjustments could improve this condition.
2. Bluewater Rd. NBR – this movement is part of the shared lane group for the existing northbound direction. Provision of a NBR lane would improve this operation, though the NBR queue would likely be blocked by northbound traffic positioning for the N-to-E ramp at I-40.
3. NBL at I-40 North Ramp – the adjusted baseline traffic plus site traffic would be within the storage limit plus transition area.

6.3 Assessment of Impacts

Conclusions drawn from the results of these capacity analyses include:

1. Heavy directional NBT flows at Central Ave. in the AM lead to deficient LOS that becomes progressively worse; SBT also fell below LOS D for the horizon build scenario.
2. 98th/Bluewater/Avalon may also be expected to fall below LOS D by the Implementation Year No-Build with additional delay for the Build scenario.
3. Several lane groups experience high delays with poor LOS and exceeding v/c ratio of 1.0.
4. The Bluewater/90th intersection did not fall below LOS D.
5. Right turns onto 98th St. from site driveway 2 experienced extremely high delays in the AM peak due to the high through volumes on 98th St.
6. Left turns onto 98th St. at Volcano and site driveway 3 experienced extremely high delays due to the high through volumes on 98th St.
7. Site driveway 1 on Volcano and driveway 4 on Bluewater showed satisfactory LOS.

8. The EBL movement at the I-40 South Ramp experiences high levels of delay given the amount of through traffic on 98th St.; the availability of a median refuge facilitates access (though this operation was not modeled).
9. The WBL movement at I-40 North Ramp is configured with a shared through/left-turn lane, and operated satisfactorily under all scenarios.

Because intersection LOS fell below acceptable levels for some scenarios, mitigation measures were evaluated to resolve operational deficiencies as described in Section 6.4 below.

6.4 Mitigation Analysis

Based upon the results summarized in Tables 5 and 6, additional scenarios were analyzed to evaluate mitigation measures that would address operational deficiencies identified in the Horizon Year. These scenarios are described below and summarized in Table 8 and 9 (see Appendix E for LOS worksheets).

1. Mitigation Scenario 1 (MIT1) – Signal Timing Optimization Plus. Signalized intersections along 98th St. are coordinated, though coordinated phase numbers differ between the City and NMDOT intersections. Signal timing and offset optimization was run for this scenario to evaluate whether the corridor operations could be improved. In addition, recommended mitigation measures from the referenced traffic studies were incorporated as follows.
   a. Milagro and Westpointe studies recommended signal timing adjustments to improve operations.
   b. Westpointe added the following recommendations:
      i. Add a NB thru lane on 98th from south of Central to Bluewater;
      ii. Add a SB right-turn lane on 98th at Central and right-turn overlap signal phase;
      iii. Convert existing NB right-turn lane at Bluewater to a shared through/right-turn (T/R) lane.
   c. Network cycle lengths of C = 150s for AM peak and C = 145/100s for PM peak were determined to be optimal for throughput on 98th from Central to Bluewater:
      i. The I-40 North Ramp signal was set to Actuated-Uncoordinated mode;
      ii. Additional adjustments to the east-west phases may be needed to improve LOS for the left turns.
   d. This scenario improved signal operations above the Horizon Build as summarized in Table 8; however, Central and Bluewater/Avalon intersections were below LOS D.

2. Mitigation Scenario 2 (MIT2) – Add NBR at 98th/Bluewater. The existing third NB lane is a shared T/R lane and currently serves as a transitional through-lane for access to the N-E ramp at I-40.
   a. The Westpointe study recommended conversion of the existing NB right-turn lane at Bluewater to a shared through/right-turn (T/R) lane.
   b. Extension of this third through lane is essential to improve the operation of the corridor during the AM peak in particular.
   c. Addition of a NBR lane would reduce the NBT and NBR delay, improving overall operations and yielding 95th percentile queues of 0.1 vehicles in the AM and 0.0 vehicles PM for the NBR.
   d. Queue blocking by NBT traffic could impact the NBR during the most intense portion of the AM peak, but operations would benefit throughout the remainder of daily service.
   e. Network cycle lengths of C = 160s for AM peak and C = 140/100s for PM peak were determined in Year 2035 to be optimal for throughput on 98th from Central to Bluewater:
      i. The 98th/Bluewater/Avalon intersection shows higher delay than the Horizon Build due to a longer cycle length; however, the natural or equilibrium cycle is 150s for this intersection which more closely approximates the optimized timing plan.
      ii. The I-40 North Ramp signal was set to Actuated-Uncoordinated mode;

iii. Additional adjustments to the east-west phases or lane modifications may be needed to improve LOS for the left turns.

f. Addition of the NBR helped improve signalized operations above the Horizon Build as summarized in Table 8.

g. This scenario reduced the WBL queue on the I-40 North Ramp from 753' to 660' in the PM peak (800' of storage is available for this lane group).

Table 8: LOS Summary for Mitigation Scenarios

	AM Peak						PM Peak					
	Intersection		Max. (worst-case movement)				Intersection		Max. (worst-case movement)			
Intersection	Delay	LOS	V/C	Delay	LOS	Dir.	Delay	LOS	V/C	Delay	LOS	Dir.
Mitigation Scenario 1 (2035)												
98th/Central	59.8	E	1.05	65.9	F	NBT	47.2	D	0.92	88.2	F	WBL
98th/Bluewater	65.6	E	1.16	85.0	F	NBR	50.2	D	1.36	268.1	F	EBL
98th/I-40 North	43.2	D	0.91	55.2	E	WBL	31.8	C	0.94	27.1	C	WBL
Mitigation Scenario 2 (2035)												
98th/Central	54.8	D	1.02	59.8	F	NBT	33.7	C	0.93	88.5	F	WBL
98th/Bluewater	38.1	D	1.07	38.8	F	NBT	53.4	D	1.42	294.5	F	EBL
98th/I-40 North	46.1	D	0.91	58.9	E	WBL	31.8	C	0.94	27.1	C	WBL

Table 9: LOS Summary for Mitigation Scenarios (NMDOT Intersections)

		AM Peak								PM Peak							
	Lane	EB		WB		NB		SB		EB		WB		NB		SB	
	Group	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR
Mitigation Scenario 1 (2035)	***98th/ Bluewater (2035)***									***98th/ Bluewater (2035)***							
	V/C[1]	0.75	0.08	0.22	0.49	0.04	1.16	1.00	0.69	1.36	0.65	0.71	0.80	0.09	0.54	0.52	1.04
	Queue[2]	230	50	133	270	15	803	258	503	398	175	105	220	30	25	125	1233
	Delay (s)	66.8	37.9	35.3	47.1	31.1	85.0	123.4	43.6	268.1	70.7	71.8	80.2	32.6	1.7	26.4	79.8
	LOS	E	D	D	D	C	F	F	D	F	E	E	F	C	A	C	F
	Intersection Delay, LOS:							***65.6***	***E***							***50.2***	***D***
	98th/ I-40 North Ramp (2035)									***98th/ I-40 North Ramp (2035)***							
	V/C[1]	--	--	0.91	0.00	0.39	0.30	--	0.48	--	--	0.94	0.00	0.68	0.45	--	0.76
	Queue[2]	--	--	598	0	90	230	--	320	--	--	660	0	135	190	--	208
	Delay (s)	--	--	55.2	0.0	31.0	27.6	--	39.8	--	--	27.1	0.0	43.6	30.1	--	46.5
	LOS	--	--	E	A	C	C	--	D	--	--	C	A	D	C	--	D
	Intersection Delay, LOS:							***43.2***	***D***							***31.8***	***C***

Table 9 - Continued

	Lane	AM Peak								PM Peak							
		EB		WB		NB		SB		EB		WB		NB		SB	
	Group	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR	L	TR
Mitigation Scenario 2 (2035)	***98th/ Bluewater (2035)***									***98th/ Bluewater (2035)***							
	V/C[1]	0.84	0.09	0.24	0.52	0.06	0.13	1.00	0.44	1.42	0.68	0.74	0.79	0.09	0.07	0.52	1.06
	Queue[2]	275	55	153	293	13	3	323	365	420	173	113	215	28	3	123	1240
	Delay (s)	86.8	42.8	40.3	53.3	19.2	0.3	129.9	21.5	294.5	71.2	74.1	77.4	30.0	0.1	26.3	85.5
	LOS	F	D	D	D	B	A	F	C	F	E	E	E	C	A	C	F
	Intersection Delay, LOS:							***38.1***	***C***							***53.4***	***D***
	98th/ I-40 North Ramp (2035)									***98th/ I-40 North Ramp (2035)***							
	V/C[1]	--	--	0.91	0.00	0.40	0.30	--	0.48	--	--	0.94	0.00	0.68	0.45	--	0.76
	Queue[2]	--	--	638	0	95	245	--	338	--	--	660	0	135	190	--	208
	Delay (s)	--	--	58.9	0.0	33.1	29.6	--	42.3	--	--	27.1	0.0	43.6	30.1	--	46.5
	LOS	--	--	E	A	C	C	--	D	--	--	C	A	D	C	--	D
	Intersection Delay, LOS:							***46.1***	***D***							***31.8***	***C***

7.0 SITE ACCESS REQUIREMENTS

As illustrated in the Proposed Site Scheme (Figure 5), four access points are proposed to provide ample circulation and queueing space on site for the drive-through businesses.

7.1 Site Drive 1

1. A 2-lane commercial access
2. Perpendicular to and aligned with the site driveway on the south side of Volcano Rd.

7.2 Site Drive 2

1. A 2-lane commercial right-in/right-out (RIRO) access.
2. Perpendicular to 98th St.

7.3 Site Drive 3

1. A 3-lane commercial access with one ingress lane and two egress lanes for left- and right-turns.
2. Perpendicular to and aligned with the commercial driveway on the west side of 98th St.

7.4 Site Drive 4

1. A 2-lane commercial access.
2. Perpendicular to and aligned with the site driveway on the north side of Bluewater Rd.
3. Curb returns should be designed to accommodate trucks per DPM *TABLE 7.4.48*, and possibly expanded to accommodate a WB-67 vehicle if appropriate.

7.5 General Driveway Requirements

1. The proposed driveways along 98th St. meet the spacing criteria of DPM *TABLE 7.4.45* and *TABLE 7.4.46*.
2. Curb returns shall be provided as per DPM §*7-4(B)(5)(i)*.

3. Dimensional criteria are as per DPM §*7-4(B)(5)(ii)* and §*7-4(B)(5)(iii).*

7.6 Off-Site Improvements

1. Extend the third NBT lane southward to the return at Volcano Rd.
2. The extension of the third NBT lane southward through Central Ave. should be accomplished through a future project as also recommended in the Westpointe study (see Section 9).
3. Provide a 6' bike lane with 3' buffer per DPM Table 7.2.29 along the outside of the NBT lane.
4. Provide a NBR turn lane at 98th/Bluewater Rd. per the turn lane warrant criteria of COA DPM *TABLE 7.4.67*.
    a. Mitigation Alternative 2 (NBR added) showed minimal queueing; however, NBT traffic queues will be extensive in the AM peak and partially block access to the NBR.
    b. It is therefore recommended that this NBR turn lane be designed to accommodate the minimum deceleration requirement per DPM §*7-4(I)(7)(iii)(d)* with consideration of geometric or other constraints. Based on the proposed location of Site Driveway 3, this would be limited to an approximately 200' lane plus 115' transition; this should be modified as needed.
    c. Truck turning templates should be accommodated on the receiving leg of Bluewater Rd.
    d. Provide bike lane markings through the lane transition.
5. Installation of curb & gutter and ADA improvements including a buffered sidewalk along the property frontage and access ramps at the intersections
6. Modify existing traffic signal mastarm and appurtenances in the southeast quadrant of the intersection as needed to accommodate the NBR lane:
    a. Some rerouting of electrical conduit plant will be required.
    b. Install new or relocate existing pedestal poles for pedestrian signals to meet ADA requirements at the pedestrian ramps.
    c. Existing mastarm may remain if it is set back beyond return radius.
    d. Supplemental signing should be posted on the north side mastarm denoting access to I-40 via the outer NBT lane.
7. Provide a SBL turn lane to Site Driveway 3 within the existing median per DPM §*7-4(I)(7)(iii)(c) Turn Lane Design*. It is recommended that the lane be 100' in length plus transition. Given the physical, geometric constraint of the existing NBL turn lane, it may not be feasible to provide a full 100' lane, and therefore as much length for the turn lane should be provided to accommodate storage for a minimum of 2 vehicles (50' minimum). The transition may be accomplished as a "back-to-back" transition beginning at the existing NBL turn lane transition if necessary.
8. Provide complementary signing and/or pavement markings for the new turn lanes.
9. These recommendations 98th St. Conceptual Improvements are illustrated in Figure 8.
10. The distance from Driveway 3 to the nearest NMDOT intersection at the I-40 South Ramp is approximately 2,100', which exceeds the minimum spacing of 1,320' per Table 18.C-1 of the SAMM.

8.0 SUMMARY OF FINDINGS

Key findings of this analysis are summarized as follows:

1. For existing (baseline) conditions, Levels of service (LOS) at traffic signalized intersections along 98th St. are within the acceptable range though certain lane groups currently exceed capacity thresholds of delay or volume to capacity (v/c) limits.
2. Site-generated traffic is not expected to cause significant, adverse impacts to the adjacent roadway network, including the traffic signalized intersections along 98th St., but will incrementally increase delay.

3. The 98th St. corridor from Central Ave. to I-40 acts as a commuter route serving residential areas in southwest Albuquerque to other areas of the city.
4. This corridor has seen a consistent high growth trend which may continue indefinitely given the amount of vacant lands in the vicinity.
5. Sustained traffic growth in the region will exacerbate these conditions and necessitate improvements by Year 2025 including:
   a. Expansion of 98th St. to a 6-lane arterial;
   b. Traffic signal timing improvements to optimize throughput and traffic progression;
   c. Intersection improvements to add turn lanes and/or extend queue storage.
6. Regional improvements will also be necessary to alleviate congestion on 98th St. in the near term. A review of the Transportation Improvement Program (TIP) prepared by MRCOG revealed at least two projects slated for implementation in the vicinity.

9.0 RECOMMENDATIONS & MITIGATION MEASURES

This analysis has demonstrated that the 98th St. corridor from Central Ave. to I-40 is experiencing rapid growth and is in need of near-term improvements. Significant detrimental traffic impacts associated with the proposed commercial development project are not expected to occur on the adjacent transportation system. The following recommendations are offered regarding on- and off-site access modifications.

9.1 On-Site Access Roads

1. Four access driveways are proposed to provide ample circulation and queueing space on site for the drive-through businesses as illustrated in Figure 5 and detailed in Section 7.1 of this report.
2. These driveways will be designed in accordance with City of Albuquerque Development Process Manual (COA DPM) requirements.

9.2 Off-Site Roadway Improvements

1. Extension of the third northbound through (NBT) lane and 6' bike lane with 3' buffer along the property frontage from Bluewater Rd to the Volcano Rd. return. This may necessitate the dedication of right-of-way (ROW) to accommodate the proposed roadway geometry as illustrated in Figure 8.
2. Addition of a northbound right-turn (NBR) lane at 98th/Bluewater Rd. and accommodation of turning trucks.
3. Installation of curb & gutter and ADA improvements including a buffered sidewalk along the property frontage and access ramps at the intersections.
4. Provision of a southbound left-turn (SBL) lane on 98th St. at Site Driveway 3 as described in §7.6.7.
5. Widening of 98th St. to a 6-lane arterial roadway will be necessary in the near term to accommodate sustained growth in the region. The intersection is projected to exceed capacity by the Implementation Year 2025 based on background traffic growth and current signal timings. As recommended in the Westpointe Industrial Park traffic impact study (TIS) and as validated in this study, these improvements should be done under a separate project to include:
   a. Extension of the third northbound through lane (NBT) southward through the Central Ave. intersection.
   b. Addition of a SB right-turn lane on 98th at Central and right-turn overlap signal phase.
   c. Based on the Horizon Year (2035) traffic projection, intersection approach traffic volumes were tabulated to calculate the percentage of site traffic as a proportion of the total (see Appendix F), yielding:

i. 5% in the AM peak hour
ii. 3% in the PM peak hour

d. A fair share contribution from the developer should be established based on these percentage as a contribution to the 98th/Central intersection improvements.

6. Other transportation improvements that have been identified in the TIP and illustrated in Figure 7 should be advanced to alleviate congestion along 98th St. and to provide enhanced mobility in the region, including:
   a. 118th St. from Eucariz Ave. to I-40 (MPO #526.4 & 526.7) – shown as a "near term" project.
   b. 118th St. Interchange at I-40 (MPO #526.7) – listed as a "late term" project.

Figure 7: Future Network Roadway Extensions

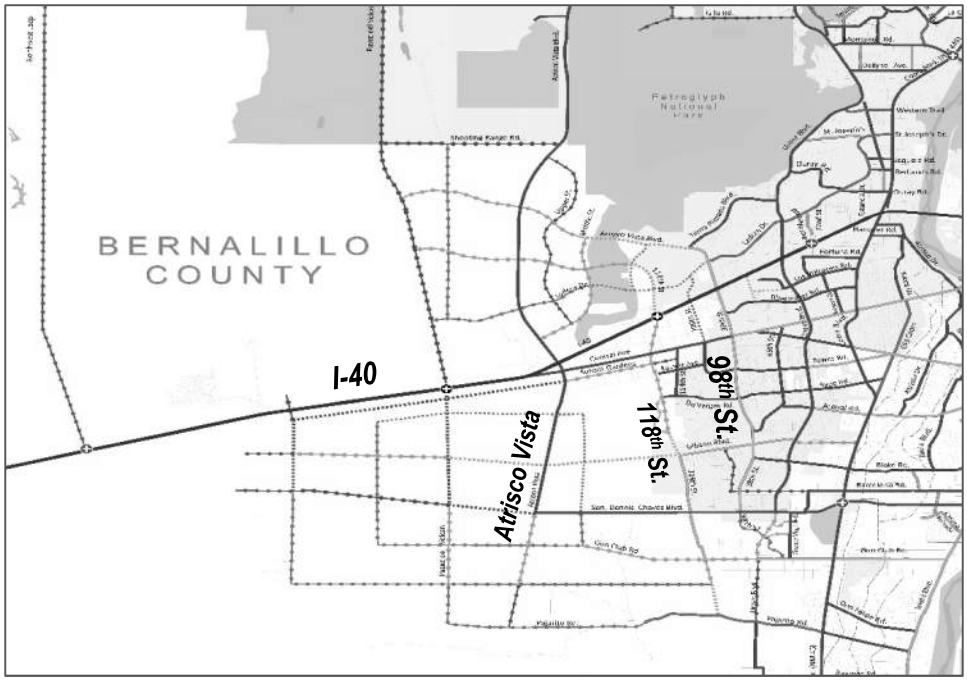
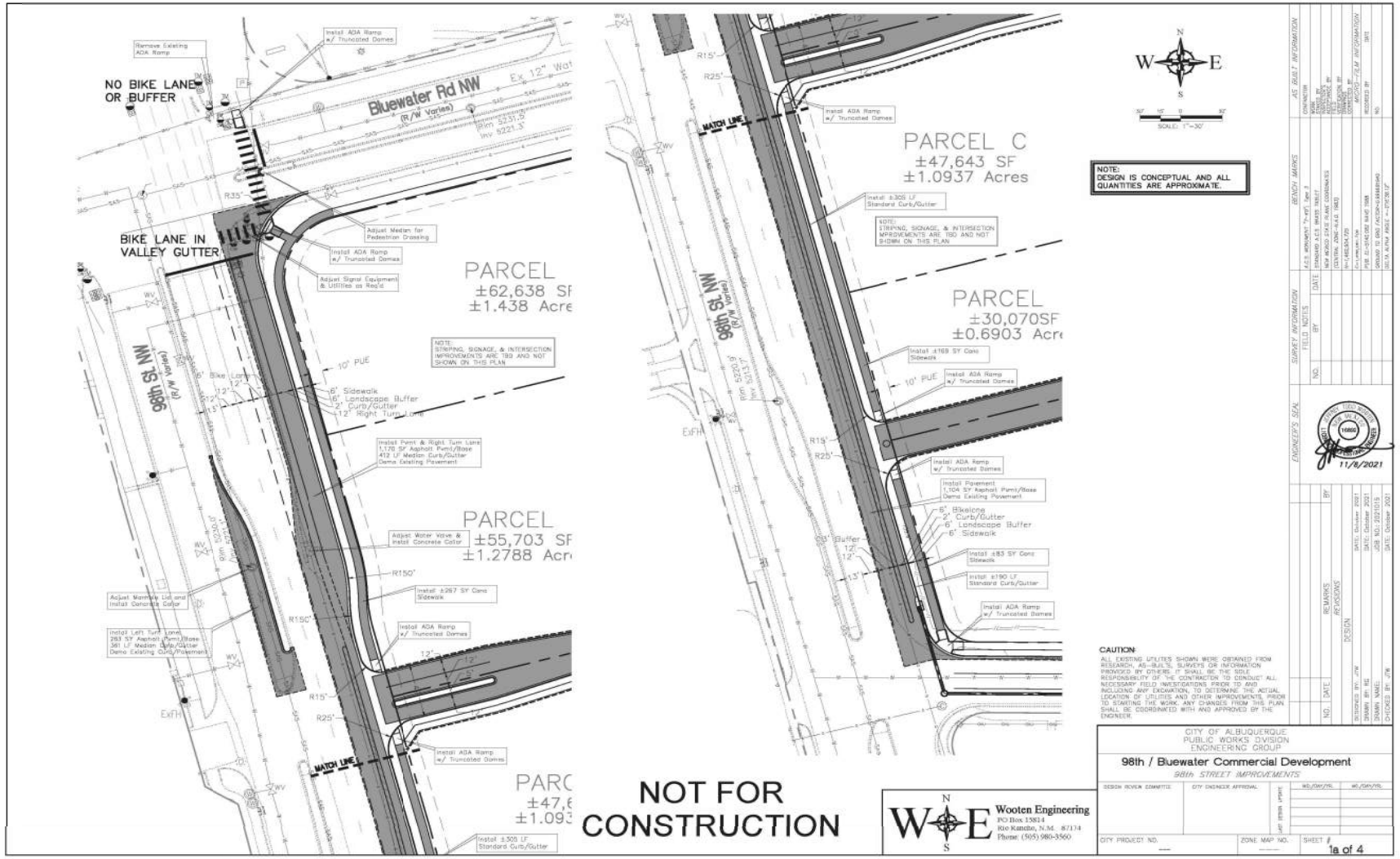


Figure 8: Conceptual 98th Street Improvements



APPENDIX A
Traffic Scoping Requirements

Civil Transformations Inc.
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Albuquerque, NM 87120
505.508.3374
www.civiltransformations.com

Minutes

To: Distribution

From: Timothy D. Simmons, PE, PTOE

Date: February 24, 2021

Re: Scoping Meeting – Traffic Impact Study for 98th/Bluewater Commercial Development

---

A virtual meeting was held on this date to discuss the traffic study requirements for the proposed project located in the southwest quadrant of the 98th St./Bluewater Rd. intersection in Albuquerque, NM. This scoping meeting was held in accordance with the City of Albuquerque (COA) Development Process Manual (DPM). The following individuals participated:

- Matthew Grush, PE – COA Traffic Engineer
- Margaret Haynes, PE – NMDOT District 3 Assistant Traffic Engineer
- Brad Julian, PE – NMDOT Traffic Technical Support Engineer
- Ashley Klein – Red Sky Development, LLC
- Tim Simmons, PE, PTOE – Transportation and Traffic Engineer

- With reference to the previously emailed Traffic Scoping Form (TSF), Tim provided an overview of the project location, conceptual site plan, and proposed land uses consisting of retail space, a gas station with convenience market, and several fast-food restaurants with drive-through lanes.
- Proposed site land uses:
  - Land Use 820 Shopping Center (retail) may over-estimate trips, will be changed to Office which includes light retail.
  - Land Use 945 Gas Station with Convenience Market may have to be upgraded to Super Convenience Center (LU960) if the building size or number of pumps meet the definition.
  - Build-out period is estimated at 5 years for the implementation year; horizon year will be implementation plus 10 years.
  - Ashley noted that new version of the conceptual site plan is being developed.
- Study intersections will include:
  - 98th/Central Ave.
  - 98th/Bluewater Rd.
  - I-40 north & south ramp terminals.
  - Bluewater/90th St.
- Access considerations:
  - Proposed driveways look consistent with COA standards.
  - Driveways should align with existing opposing driveways on Volcano and Bluewater.
  - The median on Bluewater at 98th is established for left turn storage and should not be altered.
- Other issues:
  - Avalon Rd. west of 98th St. is in the jurisdiction of Bernalillo County; Tim will contact Julie Luna to coordinate their review.
  - A Maverick gas station is under construction on the north side of Bluewater Rd. Phase II of this development called Westpoint 40 will commence soon. Margaret will forward a copy of the traffic study to Tim for coordination.

- Peak period turning movement counts (TMCs) will be collected at the intersections listed above. Pre-COVID count data up to year 2018 may be available via the MRCOG interactive web site for use in adjusting the peak data.

END OF MEETING MINUTES

These meeting minutes represent a summary of the items discussed. Any corrections or revisions should be directed to the author within 5 business days, after which time they will be considered as final.

Prepared by: *Date:* February 25, 2021

Distribution: Attendees

APPENDIX B
Existing & Projected Traffic Data
-Traffic volumes
-Forecast Volumes
-Existing Signal Timings

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Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Turning Movement Count
Traffic Impact Analysis

File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021

Groups Printed- Cars - Trucks

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	11	86	17	0	114	18	25	25	0	68	4	279	45	0	328	42	35	8	0	85	595
07:15 AM	12	86	22	0	120	19	19	26	0	64	6	330	78	2	416	48	28	10	0	86	686
07:30 AM	9	90	28	0	127	18	29	31	0	78	5	386	67	0	458	57	46	5	0	108	771
07:45 AM	13	131	22	0	166	29	28	28	0	85	7	298	73	0	378	58	33	4	1	96	725
Total	45	393	89	0	527	84	101	110	0	295	22	1293	263	2	1580	205	142	27	1	375	2777
08:00 AM	10	107	27	0	144	22	34	38	0	94	7	281	45	0	333	46	26	4	0	76	647
08:15 AM	14	90	26	0	130	18	40	32	0	90	8	269	38	0	315	55	37	9	0	101	636
08:30 AM	19	118	30	0	167	22	26	33	0	81	7	253	51	1	312	54	29	7	0	90	650
08:45 AM	22	91	26	0	139	28	33	26	0	87	4	202	44	0	250	37	38	7	0	82	558
Total	65	406	109	0	580	90	133	129	0	352	26	1005	178	1	1210	192	130	27	0	349	2491
*** BREAK ***																					
04:00 PM	25	229	41	0	295	92	51	30	1	174	9	183	55	0	247	44	51	20	0	115	831
04:15 PM	28	215	45	0	288	73	68	24	0	165	7	172	63	0	242	54	52	20	0	126	821
04:30 PM	30	257	34	0	321	81	53	45	0	179	10	178	33	0	221	68	68	15	0	151	872
04:45 PM	27	272	39	1	339	96	87	48	0	231	6	186	67	0	259	45	70	14	0	129	958
Total	110	973	159	1	1243	342	259	147	1	749	32	719	218	0	969	211	241	69	0	521	3482
05:00 PM	27	269	50	0	346	67	75	30	0	172	7	215	65	0	287	44	50	27	0	121	926
05:15 PM	34	228	49	0	311	89	64	32	1	186	8	211	76	0	295	41	60	11	1	113	905
05:30 PM	20	254	63	0	337	76	71	33	0	180	8	169	58	0	235	59	33	10	0	102	854
05:45 PM	32	266	49	0	347	87	78	33	0	198	8	181	42	1	232	38	45	12	1	96	873
Total	113	1017	211	0	1341	319	288	128	1	736	31	776	241	1	1049	182	188	60	2	432	3558
Grand Total	333	2789	568	1	3691	835	781	514	2	2132	111	3793	900	4	4808	790	701	183	3	1677	12308
Apprch %	9	75.6	15.4	0		39.2	36.6	24.1	0.1		2.3	78.9	18.7	0.1		47.1	41.8	10.9	0.2		
Total %	2.7	22.7	4.6	0	30	6.8	6.3	4.2	0	17.3	0.9	30.8	7.3	0	39.1	6.4	5.7	1.5	0	13.6	
Cars	317	2777										3775									12039
% Cars	95.2	99.6	91.5	100	97.9	98.2	94.6	95.1	100	96.2	89.2	99.5	97.4	100	98.9	97.3	96.6	92.9	100	96.5	97.8
Trucks	16	12	48	0	76	15	42	25	0	82	12	18	23	0	53	21	24	13	0	58	269
% Trucks	4.8	0.4	8.5	0	2.1	1.8	5.4	4.9	0	3.8	10.8	0.5	2.6	0	1.1	2.7	3.4	7.1	0	3.5	2.2

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File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	12	86	22	0	120	19	19	26	0	64	6	330	**78**	**2**	416	48	28	**10**	0	86	686
07:30 AM	9	90	**28**	0	127	18	29	31	0	78	5	**386**	67	0	**458**	57	**46**	5	0	**108**	**771**
07:45 AM	**13**	**131**	22	0	**166**	**29**	28	28	0	85	**7**	298	73	0	378	**58**	33	4	**1**	96	725
08:00 AM	10	107	27	0	144	22	**34**	**38**	0	**94**	7	281	45	0	333	46	26	4	0	76	647
Total Volume	44	414	99	0	557	88	110	123	0	321	25	1295	263	2	1585	209	133	23	1	366	2829
% App. Total	7.9	74.3	17.8	0		27.4	34.3	38.3	0		1.6	81.7	16.6	0.1		57.1	36.3	6.3	0.3		
PHF	.846	.790	.884	.000	.839	.759	.809	.809	.000	.854	.893	.839	.843	.250	.865	.901	.723	.575	.250	.847	.917
Cars	36	408	90	0	534	82	98	114	0	294	24	1292									
% Cars	81.8	98.6	90.9	0	95.9	93.2	89.1	92.7	0	91.6	96.0	99.8	97.0	100	99.2	97.1	91.7	87.0	100	94.5	97.1
Trucks	8	6	9	0	23	6	12	9	0	27	1	3	8	0	12	6	11	3	0	20	82
% Trucks	18.2	1.4	9.1	0	4.1	6.8	10.9	7.3	0	8.4	4.0	0.2	3.0	0	0.8	2.9	8.3	13.0	0	5.5	2.9
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	30	257	34	0	321	81	53	45	0	179	**10**					**68**				**151**	
04:45 PM	27	**272**	39	**1**	339	**96**	**87**	**48**	0	**231**	6	186	67	0	259	45	**70**	14	0	129	**958**
05:00 PM	27	269	**50**	0	**346**	67	75	30	0	172	7	**215**	65	0	287	44	50	**27**	0	121	926
05:15 PM	**34**	228	49	0	311	89	64	32	**1**	186	8	211	**76**	0	**295**	41	60	11	**1**	113	905
Total Volume	118	1026	172	1	1317	333	279	155	1	768	31	790	241	0	1062	198	248	67	1	514	3661
% App. Total	9	77.9	13.1	0.1		43.4	36.3	20.2	0.1		2.9	74.4	22.7	0		38.5	48.2	13	0.2		
PHF	.868	.943	.860	.250	.952	.867	.802	.807	.250	.831	.775	.919	.793	.000	.900	.728	.886	.620	.250	.851	.955
Cars	116	1026	166	1	1309	331	273	152	1	757	28	787	238	0	1053	196	245	67	1	509	3628
% Cars	98.3	100	96.5	100	99.4	99.4	97.8	98.1	100	98.6	90.3	99.6	98.8	0	99.2	99.0	98.8	100	100	99.0	99.1
Trucks	2	0	6	0	8	2	6	3	0	11	3	3	3	0	9	2	3	0	0	5	33
% Trucks	1.7	0	3.5	0	0.6	0.6	2.2	1.9	0	1.4	9.7	0.4	1.2	0	0.8	1.0	1.2	0	0	1.0	0.9

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File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021
Page No : 3

Groups Printed- Cars

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	11	85	16	0	112	16	24	21	0	61	4	279	42	0	325	37	33	6	0	76	574
07:15 AM	10	84	20	0	114	18	19	24	0	61	6	330	78	2	416	48	26	7	0	81	672
07:30 AM	7	88	25	0	120	17	23	30	0	70	5	385	64	0	454	57	45	5	0	107	751
07:45 AM	12	131	20	0	163	29	26	24	0	79	7	297	71	0	375	53	27	4	1	85	702
Total	40	388	81	0	509	80	92	99	0	271	22	1291	255	2	1570	195	131	22	1	349	2699
08:00 AM	7	105	25	0	137	18	30	36	0	84	6	280	42	0	328	45	24	4	0	73	622
08:15 AM	14	89	21	0	124	17	33	32	0	82	5	266	37	0	308	53	34	8	0	95	609
08:30 AM	17	117	23	0	157	21	24	27	0	72	7	253	48	1	309	52	28	3	0	83	621
08:45 AM	20	89	17	0	126	27	29	26	0	82	1	198	44	0	243	37	38	6	0	81	532
Total	58	400	86	0	544	83	116	121	0	320	19	997	171	1	1188	187	124	21	0	332	2384
*** BREAK ***																					
04:00 PM	25	229	34	0	288	91	46	29	1	167	9	182	54	0	245	41	49	18	0	108	808
04:15 PM	27	214	42	0	283	73	63	24	0	160	5	168	61	0	234	54	50	20	0	124	801
04:30 PM	30	257	31	0	318	80	51	44	0	175	8	177	32	0	217	67	67	15	0	149	859
04:45 PM	26	272	39	1	338	96	85	47	0	228	6	186	67	0	259	45	69	14	0	128	953
Total	108	972	146	1	1227	340	245	144	1	730	28	713	214	0	955	207	235	67	0	509	3421
05:00 PM	26	269	48	0	343	66	73	29	0	168	7	214	63	0	284	43	49	27	0	119	914
05:15 PM	34	228	48	0	310	89	64	32	1	186	7	210	76	0	293	41	60	11	1	113	902
05:30 PM	19	254	63	0	336	76	71	31	0	178	8	169	57	0	234	59	33	10	0	102	850
05:45 PM	32	266	48	0	346	86	78	33	0	197	8	181	41	1	231	37	45	12	1	95	869
Total	111	1017	207	0	1335	317	286	125	1	729	30	774	237	1	1042	180	187	60	2	429	3535
Grand Total	317	2777	520	1	3615	820	739	489	2	2050	99	3775	877	4	4755	769	677	170	3	1619	12039
Apprch %	8.8	76.8	14.4	0		40	36	23.9	0.1		2.1	79.4	18.4	0.1		47.5	41.8	10.5	0.2		
Total %	2.6	23.1	4.3	0	30	6.8	6.1	4.1	0	17	0.8	31.4	7.3	0	39.5	6.4	5.6	1.4	0	13.4	

Civil Transformations Inc.
2929 Coors Blvd. NW, Ste. 309
Albuquerque, NM 87120 (505) 508-3374
Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Turning Movement Count
Traffic Impact Analysis

File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	10	84	20	0	114	18	19	24	0	61	6	330	**78**	**2**	416	48	26	**7**	0	81	672
07:30 AM	7	88	**25**	0	120	17	23	30	0	70	5	**385**	64	0	**454**	**57**	**45**	5	0	**107**	**751**
07:45 AM	**12**	**131**	20	0	**163**	**29**	26	24	0	79	**7**	297	71	0	375	53	27	4	**1**	85	702
08:00 AM	7	105	25	0	137	18	**30**	**36**	0	**84**	6	280	42	0	328	45	24	4	0	73	622
Total Volume	36	408	90	0	534	82	98	114	0	294	24	1292	255	2	1573	203	122	20	1	346	2747
% App. Total	6.7	76.4	16.9	0		27.9	33.3	38.8	0		1.5	82.1	16.2	0.1		58.7	35.3	5.8	0.3		
PHF	.750	.779	.900	.000	.819	.707	.817	.792	.000	.875	.857	.839	.817	.250	.866	.890	.678	.714	.250	.808	.914
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	30	257	31	0	318	80	51	44	0	175	**8**					**67**				**149**	
04:45 PM	26	**272**	39	**1**	338	**96**	**85**	**47**	0	**228**	6	186	67	0	259	45	**69**	14	0	128	**953**
05:00 PM	26	269	**48**	0	**343**	66	73	29	0	168	7	**214**	63	0	284	43	49	**27**	0	119	914
05:15 PM	**34**	228	48	0	310	89	64	32	**1**	186	7	210	**76**	0	**293**	41	60	11	**1**	113	902
Total Volume	116	1026	166	1	1309	331	273	152	1	757	28	787	238	0	1053	196	245	67	1	509	3628
% App. Total	8.9	78.4	12.7	0.1		43.7	36.1	20.1	0.1		2.7	74.7	22.6	0		38.5	48.1	13.2	0.2		
PHF	.853	.943	.865	.250	.954	.862	.803	.809	.250	.830	.875	.919	.783	.000	.898	.731	.888	.620	.250	.854	.952

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Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Turning Movement Count
Traffic Impact Analysis

File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021
Page No : 5

Groups Printed- Trucks

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	2	2	1	4	0	7	0	0	3	0	3	5	2	2	0	9	21
07:15 AM	2	2	2	0	6	1	0	2	0	3	0	0	0	0	0	0	2	3	0	5	14
07:30 AM	2	2	3	0	7	1	6	1	0	8	0	1	3	0	4	0	1	0	0	1	20
07:45 AM	1	0	2	0	3	0	2	4	0	6	0	1	2	0	3	5	6	0	0	11	23
Total	5	5	8	0	18	4	9	11	0	24	0	2	8	0	10	10	11	5	0	26	78
08:00 AM	3	2	2	0	7	4	4	2	0	10	1	1	3	0	5	1	2	0	0	3	25
08:15 AM	0	1	5	0	6	1	7	0	0	8	3	3	1	0	7	2	3	1	0	6	27
08:30 AM	2	1	7	0	10	1	2	6	0	9	0	0	3	0	3	2	1	4	0	7	29
08:45 AM	2	2	9	0	13	1	4	0	0	5	3	4	0	0	7	0	0	1	0	1	26
Total	7	6	23	0	36	7	17	8	0	32	7	8	7	0	22	5	6	6	0	17	107
*** BREAK ***																					
04:00 PM	0	0	7	0	7	1	5	1	0	7	0	1	1	0	2	3	2	2	0	7	23
04:15 PM	1	1	3	0	5	0	5	0	0	5	2	4	2	0	8	0	2	0	0	2	20
04:30 PM	0	0	3	0	3	1	2	1	0	4	2	1	1	0	4	1	1	0	0	2	13
04:45 PM	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	5
Total	2	1	13	0	16	2	14	3	0	19	4	6	4	0	14	4	6	2	0	12	61
05:00 PM	1	0	2	0	3	1	2	1	0	4	0	1	2	0	3	1	1	0	0	2	12
05:15 PM	0	0	1	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
05:30 PM	1	0	0	0	1	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	4
05:45 PM	0	0	1	0	1	1	0	0	0	1	0	0	1	0	1	1	0	0	0	1	4
Total	2	0	4	0	6	2	2	3	0	7	1	2	4	0	7	2	1	0	0	3	23
Grand Total	16	12	48	0	76	15	42	25	0	82	12	18	23	0	53	21	24	13	0	58	269
Apprch %	21.1	15.8	63.2	0		18.3	51.2	30.5	0		22.6	34	43.4	0		36.2	41.4	22.4	0		
Total %	5.9	4.5	17.8	0	28.3	5.6	15.6	9.3	0	30.5	4.5	6.7	8.6	0	19.7	7.8	8.9	4.8	0	21.6	

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Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Turning Movement Count
Traffic Impact Analysis

File Name : 1_98th-Central
Site Code : 1
Start Date : 4/8/2021

	98TH ST From North					CENTRAL AVE From East					98TH ST From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	**3**	**2**	2	0	7	**4**	4	2	0	**10**	1	1	**3**	0	5	1	2	0	0	3	25
08:15 AM	0	1	5	0	6	1	**7**	0	0	8	**3**	3	1	0	**7**	**2**	**3**	1	0	6	27
08:30 AM	2	1	7	0	10	1	2	**6**	0	9	0	0	3	0	3	2	1	**4**	0	**7**	**29**
08:45 AM	2	2	**9**	0	**13**	1	4	0	0	5	3	**4**	0	0	7	0	0	1	0	1	26
Total Volume	7	6	23	0	36	7	17	8	0	32	7	8	7	0	22	5	6	6	0	17	107
% App. Total	19.4	16.7	63.9	0		21.9	53.1	25	0		31.8	36.4	31.8	0		29.4	35.3	35.3	0		
PHF	.583	.750	.639	.000	.692	.438	.607	.333	.000	.800	.583	.500	.583	.000	.786	.625	.500	.375	.000	.607	.922
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	**7**		**7**	**1**	**5**	**1**		**7**						**3**	**2**	**2**		**7**	**23**
04:15 PM	**1**	**1**	3	0	5	0	5	0	0	5	**2**	**4**	**2**	0	**8**	0	2	0	0	2	20
04:30 PM	0	0	3	0	3	1	2	1	0	4	2	1	1	0	4	1	1	0	0	2	13
04:45 PM	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	5
Total Volume	2	1	13	0	16	2	14	3	0	19	4	6	4	0	14	4	6	2	0	12	61
% App. Total	12.5	6.2	81.2	0		10.5	73.7	15.8	0		28.6	42.9	28.6	0		33.3	50	16.7	0		
PHF	.500	.250	.464	.000	.571	.500	.700	.750	.000	.679	.500	.375	.500	.000	.438	.333	.750	.250	.000	.429	.663

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Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021
Page No : 1

Groups Printed- Cars - Trucks

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	9	122	0	0	131	0	0	14	0	14	2	360	5	0	367	0	0	0	0	0	512
07:15 AM	10	132	2	0	144	0	0	9	0	9	1	419	2	0	422	0	0	0	0	0	575
07:30 AM	3	144	2	0	149	0	0	17	0	17	0	457	4	0	461	1	0	0	0	1	628
07:45 AM	3	163	1	1	168	3	0	14	0	17	0	393	10	0	403	0	0	1	0	1	589
Total	25	561	5	1	592	3	0	54	0	57	3	1629	21	0	1653	1	0	1	0	2	2304
08:00 AM	11	153	0	0	164	0	0	15	0	15	0	348	7	0	355	0	0	0	0	0	534
08:15 AM	5	132	2	0	139	1	0	17	0	18	1	333	4	0	338	1	0	0	0	1	496
08:30 AM	8	163	1	0	172	2	0	27	0	29	0	325	2	0	327	0	0	0	0	0	528
08:45 AM	15	149	1	0	165	1	0	13	0	14	0	266	1	0	267	1	1	0	0	2	448
Total	39	597	4	0	640	4	0	72	0	76	1	1272	14	0	1287	2	1	0	0	3	2006
*** BREAK ***																					
04:00 PM	18	338	1	0	357	2	0	18	0	20	0	224	7	0	231	0	0	1	0	1	609
04:15 PM	19	332	0	0	351	5	0	5	0	10	0	229	13	3	245	0	0	3	2	5	611
04:30 PM	21	353	0	0	374	4	0	18	0	22	0	248	5	2	255	0	0	0	1	1	652
04:45 PM	17	384	0	0	401	3	2	12	0	17	1	256	6	1	264	0	0	0	0	0	682
Total	75	1407	1	0	1483	14	2	53	0	69	1	957	31	6	995	0	0	4	3	7	2554
05:00 PM	23	343	0	0	366	3	0	20	0	23	0	237	10	0	247	0	0	0	0	0	636
05:15 PM	16	234	0	0	250	2	0	4	0	6	0	196	6	0	202	0	0	0	0	0	458
*** BREAK ***																					
Total	39	577	0	0	616	5	0	24	0	29	0	433	16	0	449	0	0	0	0	0	1094
*** BREAK ***																					
Grand Total	178	3142	10	1	3331	26	2	203	0	231	5	4291	82	6	4384	3	1	5	3	12	7958
Apprch %	5.3	94.3	0.3	0		11.3	0.9	87.9	0		0.1	97.9	1.9	0.1		25	8.3	41.7	25		
Total %	2.2	39.5	0.1	0	41.9	0.3	0	2.6	0	2.9	0.1	53.9	1	0.1	55.1	0	0	0.1	0	0.2	
Cars	170	3035	8	1	3214	26	2	193	0	221	4	4195	81	6	4286	2	0	5	3	10	7731
% Cars	95.5	96.6	80	100	96.5	100	100	95.1	0	95.7	80	97.8	98.8	100	97.8	66.7	0	100	100	83.3	97.1
Trucks	8	107	2	0	117	0	0	10	0	10	1	96	1	0	98	1	1	0	0	2	227
% Trucks	4.5	3.4	20	0	3.5	0	0	4.9	0	4.3	20	2.2	1.2	0	2.2	33.3	100	0	0	16.7	2.9

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021
Page No : 2

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	10	132	**2**	0	144	0	0	9	0	9	**1**	419	2	0	422	0	0	0	0	0	575
07:30 AM	3	144	2	0	149	0	0	**17**	0	**17**	0	**457**	4	0	**461**	**1**	0	0	0	**1**	**628**
07:45 AM	3	**163**	1	**1**	**168**	**3**	0	14	0	17	0	393	**10**	0	403	0	0	**1**	0	1	589
08:00 AM	**11**	153	0	0	164	0	0	15	0	15	0	348	7	0	355	0	0	0	0	0	534
Total Volume	27	592	5	1	625	3	0	55	0	58	1	1617	23	0	1641	1	0	1	0	2	2326
% App. Total	4.3	94.7	0.8	0.2		5.2	0	94.8	0		0.1	98.5	1.4	0		50	0	50	0		
PHF	.614	.908	.625	.250	.930	.250	.000	.809	.000	.853	.250	.885	.575	.000	.890	.250	.000	.250	.000	.500	.926
	4%	6%	20%			0	0	4%			0	2%	0			0	0	0			
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	19	332	0	0	351	**5**							**13**	**3**				**3**	**2**	**5**	
04:30 PM	21	353	0	0	374	4	0	18	0	22	0	248	5	2	255	0	0	0	1	1	652
04:45 PM	17	**384**	0	0	**401**	3	**2**	12	0	17	**1**	**256**	6	1	**264**	0	0	0	0	0	**682**
05:00 PM	**23**	343	0	0	366	3	0	**20**	0	**23**	0	237	10	0	247	0	0	0	0	0	636
Total Volume	80	1412	0	0	1492	15	2	55	0	72	1	970	34	6	1011	0	0	3	3	6	2581
% App. Total	5.4	94.6	0	0		20.8	2.8	76.4	0		0.1	95.9	3.4	0.6		0	0	50	50		
PHF	.870	.919	.000	.000	.930	.750	.250	.688	.000	.783	.250	.947	.654	.500	.957	.000	.000	.250	.375	.300	.946
	5%	1%	0																		

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021
Page No : 3

Groups Printed- Cars

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	9	121	0	0	130	0	0	13	0	13	1	345	5	0	351	0	0	0	0	0	494
07:15 AM	9	125	2	0	136	0	0	9	0	9	1	410	2	0	413	0	0	0	0	0	558
07:30 AM	3	132	2	0	137	0	0	16	0	16	0	452	4	0	456	1	0	0	0	1	610
07:45 AM	2	155	0	1	158	3	0	14	0	17	0	383	10	0	393	0	0	1	0	1	569
Total	23	533	4	1	561	3	0	52	0	55	2	1590	21	0	1613	1	0	1	0	2	2231
08:00 AM	11	147	0	0	158	0	0	15	0	15	0	338	7	0	345	0	0	0	0	0	518
08:15 AM	5	120	2	0	127	1	0	16	0	17	1	327	4	0	332	1	0	0	0	1	477
08:30 AM	7	146	1	0	154	2	0	22	0	24	0	316	2	0	318	0	0	0	0	0	496
08:45 AM	15	134	0	0	149	1	0	12	0	13	0	261	1	0	262	0	0	0	0	0	424
Total	38	547	3	0	588	4	0	65	0	69	1	1242	14	0	1257	1	0	0	0	1	1915
*** BREAK ***																					
04:00 PM	17	331	1	0	349	2	0	17	0	19	0	214	7	0	221	0	0	1	0	1	590
04:15 PM	19	325	0	0	344	5	0	5	0	10	0	224	13	3	240	0	0	3	2	5	599
04:30 PM	18	345	0	0	363	4	0	18	0	22	0	243	5	2	250	0	0	0	1	1	636
04:45 PM	17	383	0	0	400	3	2	12	0	17	1	252	6	1	260	0	0	0	0	0	677
Total	71	1384	1	0	1456	14	2	52	0	68	1	933	31	6	971	0	0	4	3	7	2502
05:00 PM	22	339	0	0	361	3	0	20	0	23	0	235	9	0	244	0	0	0	0	0	628
05:15 PM	16	232	0	0	248	2	0	4	0	6	0	195	6	0	201	0	0	0	0	0	455
*** BREAK ***																					
Total	38	571	0	0	609	5	0	24	0	29	0	430	15	0	445	0	0	0	0	0	1083
*** BREAK ***																					
Grand Total	170	3035	8	1	3214	26	2	193	0	221	4	4195	81	6	4286	2	0	5	3	10	7731
Apprch %	5.3	94.4	0.2	0		11.8	0.9	87.3	0		0.1	97.9	1.9	0.1		20	0	50	30		
Total %	2.2	39.3	0.1	0	41.6	0.3	0	2.5	0	2.9	0.1	54.3	1	0.1	55.4	0	0	0.1	0	0.1	

Civil Transformations Inc.
2929 Coors Blvd. NW, Ste. 309
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Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	9	125	**2**	0	136	0	0	9	0	9	**1**	410	2	0	413	0	0	0	0	0	558
07:30 AM	3	132	2	0	137	0	0	**16**	0	16	0	**452**	4	0	**456**	**1**	0	0	0	**1**	**610**
07:45 AM	2	**155**	0	**1**	**158**	**3**	0	14	0	**17**	0	383	**10**	0	393	0	0	**1**	0	1	569
08:00 AM	**11**	147	0	0	158	0	0	15	0	15	0	338	7	0	345	0	0	0	0	0	518
Total Volume	25	559	4	1	589	3	0	54	0	57	1	1583	23	0	1607	1	0	1	0	2	2255
% App. Total	4.2	94.9	0.7	0.2		5.3	0	94.7	0		0.1	98.5	1.4	0		50	0	50	0		
PHF	.568	.902	.500	.250	.932	.250	.000	.844	.000	.838	.250	.876	.575	.000	.881	.250	.000	.250	.000	.500	.924
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	19	325	0	0	344	**5**							**13**	**3**				**3**	**2**	**5**	
04:30 PM	18	345	0	0	363	4	0	18	0	22	0	243	5	2	250	0	0	0	1	1	636
04:45 PM	17	**383**	0	0	**400**	3	**2**	12	0	17	**1**	**252**	6	1	**260**	0	0	0	0	0	**677**
05:00 PM	**22**	339	0	0	361	3	0	**20**	0	**23**	0	235	9	0	244	0	0	0	0	0	628
Total Volume	76	1392	0	0	1468	15	2	55	0	72	1	954	33	6	994	0	0	3	3	6	2540
% App. Total	5.2	94.8	0	0		20.8	2.8	76.4	0		0.1	96	3.3	0.6		0	0	50	50		
PHF	.864	.909	.000	.000	.918	.750	.250	.688	.000	.783	.250	.946	.635	.500	.956	.000	.000	.250	.375	.300	.938

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021

Groups Printed- Trucks

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	0	1	0	1	1	15	0	0	16	0	0	0	0	0	18
07:15 AM	1	7	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	17
07:30 AM	0	12	0	0	12	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	18
07:45 AM	1	8	1	0	10	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	20
Total	2	28	1	0	31	0	0	2	0	2	1	39	0	0	40	0	0	0	0	0	73
08:00 AM	0	6	0	0	6	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	16
08:15 AM	0	12	0	0	12	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	19
08:30 AM	1	17	0	0	18	0	0	5	0	5	0	9	0	0	9	0	0	0	0	0	32
08:45 AM	0	15	1	0	16	0	0	1	0	1	0	5	0	0	5	1	1	0	0	2	24
Total	1	50	1	0	52	0	0	7	0	7	0	30	0	0	30	1	1	0	0	2	91
*** BREAK ***																					
04:00 PM	1	7	0	0	8	0	0	1	0	1	0	10	0	0	10	0	0	0	0	0	19
04:15 PM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	12
04:30 PM	3	8	0	0	11	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total	4	23	0	0	27	0	0	1	0	1	0	24	0	0	24	0	0	0	0	0	52
05:00 PM	1	4	0	0	5	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	8
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
*** BREAK ***																					
Total	1	6	0	0	7	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	11
*** BREAK ***																					
Grand Total	8	107	2	0	117	0	0	10	0	10	1	96	1	0	98	1	1	0	0	2	227
Apprch %	6.8	91.5	1.7	0		0	0	100	0		1	98	1	0		50	50	0	0		
Total %	3.5	47.1	0.9	0	51.5	0	0	4.4	0	4.4	0.4	42.3	0.4	0	43.2	0.4	0.4	0	0	0.9	

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 2_98th-Volcano
Site Code : 2
Start Date : 4/8/2021

	98TH From North					VOLCANO From East					98TH From South					VOLCANO From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	6	0	0	6	0	0	0	0	0	0	**10**	0	0	**10**	0	0	0	0	0	16
08:15 AM	0	12	0	0	12	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	19
08:30 AM	**1**	**17**	0	0	**18**	0	0	**5**	0	**5**	0	9	0	0	9	0	0	0	0	0	**32**
08:45 AM	0	15	**1**	0	16	0	0	1	0	1	0	5	0	0	5	**1**	**1**	0	0	**2**	24
Total Volume	1	50	1	0	52	0	0	7	0	7	0	30	0	0	30	1	1	0	0	2	91
% App. Total	1.9	96.2	1.9	0		0	0	100	0		0	100	0	0		50	50	0	0		
PHF	.250	.735	.250	.000	.722	.000	.000	.350	.000	.350	.000	.750	.000	.000	.750	.250	.250	.000	.000	.250	.711
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	7	0	0	8	0	0	**1**		**1**		**10**			**10**						**19**
04:15 PM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	12
04:30 PM	**3**	**8**	0	0	**11**	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total Volume	4	23	0	0	27	0	0	1	0	1	0	24	0	0	24	0	0	0	0	0	52
% App. Total	14.8	85.2	0	0		0	0	100	0		0	100	0	0		0	0	0	0		
PHF	.333	.719	.000	.000	.614	.000	.000	.250	.000	.250	.000	.600	.000	.000	.600	.000	.000	.000	.000	.000	.684

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021
Page No : 1

Groups Printed- Cars - Trucks

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	127	20	0	151	2	2	21	0	25	3	349	18	0	370	31	1	5	0	37	583
07:15 AM	3	125	22	0	150	8	0	13	0	21	3	378	12	0	393	28	1	3	0	32	596
07:30 AM	6	140	18	0	164	6	1	19	0	26	1	294	11	0	306	26	1	8	0	35	531
07:45 AM	5	146	22	0	173	4	2	18	1	25	3	262	8	0	273	29	1	6	0	36	507
Total	18	538	82	0	638	20	5	71	1	97	10	1283	49	0	1342	114	4	22	0	140	2217
08:00 AM	8	120	25	0	153	8	3	7	0	18	4	246	8	0	258	32	3	7	0	42	471
08:15 AM	4	103	29	0	136	9	3	20	0	32	3	282	19	0	304	28	0	6	0	34	506
08:30 AM	14	136	26	1	177	10	2	16	0	28	6	347	6	0	359	34	4	8	0	46	610
08:45 AM	8	161	28	0	197	8	0	21	0	29	5	285	10	0	300	26	2	3	0	31	557
Total	34	520	108	1	663	35	8	64	0	107	18	1160	43	0	1221	120	9	24	0	153	2144
*** BREAK ***																					
04:00 PM	11	315	59	0	385	14	3	11	0	28	10	215	15	1	241	27	3	15	1	46	700
04:15 PM	12	315	74	0	401	13	0	14	0	27	5	242	11	1	259	44	8	19	0	71	758
04:30 PM	12	317	50	0	379	16	4	16	0	36	8	258	14	0	280	39	4	14	0	57	752
04:45 PM	6	321	53	0	380	12	5	15	2	34	7	263	19	0	289	30	5	14	0	49	752
Total	41	1268	236	0	1545	55	12	56	2	125	30	978	59	2	1069	140	20	62	1	223	2962
05:00 PM	9	338	54	0	401	14	0	12	0	26	6	218	17	0	241	28	5	11	0	44	712
05:15 PM	16	332	47	0	395	19	1	16	1	37	9	228	26	1	264	37	6	20	0	63	759
05:30 PM	10	336	39	0	385	11	0	11	0	22	5	224	18	0	247	25	3	17	0	45	699
05:45 PM	7	316	31	0	354	16	7	10	0	33	10	228	25	0	263	20	2	14	0	36	686
Total	42	1322	171	0	1535	60	8	49	1	118	30	898	86	1	1015	110	16	62	0	188	2856
*** BREAK ***																					
Grand Total	135	3648	597	1	4381	170	33	240	4	447	88	4319	237	3	4647	484	49	170	1	704	10179
Apprch %	3.1	83.3	13.6	0		38	7.4	53.7	0.9		1.9	92.9	5.1	0.1		68.8	7	24.1	0.1		
Total %	1.3	35.8	5.9	0	43	1.7	0.3	2.4	0	4.4	0.9	42.4	2.3	0	45.7	4.8	0.5	1.7	0	6.9	
Cars	122	3554	369	1	4046	163	27	218	4	412	76	4240	230	3	4549	264	39	161	1	465	9472
% Cars	90.4	97.4	61.8	100	92.4	95.9	81.8	90.8	100	92.2	86.4	98.2	97	100	97.9	54.5	79.6	94.7	100	66.1	93.1
Trucks	13	94	228	0	335	7	6	22	0	35	12	79	7	0	98	220	10	9	0	239	707
% Trucks	9.6	2.6	38.2	0	7.6	4.1	18.2	9.2	0	7.8	13.6	1.8	3	0	2.1	45.5	20.4	5.3	0	33.9	6.9

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	4	127	20	0	151	2	**2**	**21**	0	25	**3**	349	**18**	0	370	**31**	**1**	5	0	**37**	583
07:15 AM	3	125	**22**	0	150	**8**	0	13	0	21	3	**378**	12	0	**393**	28	1	3	0	32	**596**
07:30 AM	**6**	140	18	0	164	6	1	19	0	**26**	1	294	11	0	306	26	1	**8**	0	35	531
07:45 AM	5	**146**	22	0	**173**	4	2	18	**1**	25	3	262	8	0	273	29	1	6	0	36	507
Total Volume	18	538	82	0	638	20	5	71	1	97	10	1283	49	0	1342	114	4	22	0	140	2217
% App. Total	2.8	84.3	12.9	0		20.6	5.2	73.2	1		0.7	95.6	3.7	0		81.4	2.9	15.7	0		
PHF	.750	.921	.932	.000	.922	.625	.625	.845	.250	.933	.833	.849	.681	.000	.854	.919	1.00	.688	.000	.946	.930
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	12	317	50	0	379	16	4	**16**								**39**					
04:45 PM	6	321	53	0	380	12	**5**	15	**2**	34	7	**263**	19	0	**289**	30	5	14	0	49	752
05:00 PM	9	**338**	**54**	0	**401**	14	0	12	0	26	6	218	17	0	241	28	5	11	0	44	712
05:15 PM	**16**	332	47	0	395	**19**	1	16	1	**37**	**9**	228	**26**	**1**	264	37	**6**	**20**	0	**63**	**759**
Total Volume	43	1308	204	0	1555	61	10	59	3	133	30	967	76	1	1074	134	20	59	0	213	2975
% App. Total	2.8	84.1	13.1	0		45.9	7.5	44.4	2.3		2.8	90	7.1	0.1		62.9	9.4	27.7	0		
PHF	.672	.967	.944	.000	.969	.803	.500	.922	.375	.899	.833	.919	.731	.250	.929	.859	.833	.738	.000	.845	.980

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Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021
Page No : 3

Groups Printed- Cars

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	125	12	0	141	2	2	17	0	21	3	338	17	0	358	15	1	5	0	21	541
07:15 AM	3	120	9	0	132	8	0	11	0	19	3	373	12	0	388	16	1	3	0	20	559
07:30 AM	6	135	9	0	150	6	1	19	0	26	1	289	11	0	301	10	1	6	0	17	494
07:45 AM	3	140	8	0	151	3	1	17	1	22	3	260	7	0	270	15	1	4	0	20	463
Total	16	520	38	0	574	19	4	64	1	88	10	1260	47	0	1317	56	4	18	0	78	2057
08:00 AM	6	109	12	0	127	7	3	7	0	17	4	242	7	0	253	13	2	6	0	21	418
08:15 AM	1	92	15	0	108	8	3	16	0	27	1	274	18	0	293	8	0	6	0	14	442
08:30 AM	14	125	16	1	156	9	1	15	0	25	5	337	6	0	348	15	3	7	0	25	554
08:45 AM	7	149	4	0	160	8	0	16	0	24	4	278	10	0	292	7	2	3	0	12	488
Total	28	475	47	1	551	32	7	54	0	93	14	1131	41	0	1186	43	7	22	0	72	1902
*** BREAK ***																					
04:00 PM	10	306	44	0	360	14	2	10	0	26	9	209	14	1	233	18	3	15	1	37	656
04:15 PM	11	309	58	0	378	13	0	13	0	26	5	231	11	1	248	27	6	17	0	50	702
04:30 PM	11	313	36	0	360	16	4	15	0	35	5	253	14	0	272	28	3	14	0	45	712
04:45 PM	6	318	35	0	359	9	3	14	2	28	6	262	18	0	286	20	5	14	0	39	712
Total	38	1246	173	0	1457	52	9	52	2	115	25	955	57	2	1039	93	17	60	1	171	2782
05:00 PM	8	334	39	0	381	14	0	12	0	26	6	217	16	0	239	18	4	11	0	33	679
05:15 PM	16	329	35	0	380	19	1	16	1	37	7	227	26	1	261	23	4	20	0	47	725
05:30 PM	9	335	18	0	362	11	0	10	0	21	4	223	18	0	245	16	2	17	0	35	663
05:45 PM	7	315	19	0	341	16	6	10	0	32	10	227	25	0	262	15	1	13	0	29	664
Total	40	1313	111	0	1464	60	7	48	1	116	27	894	85	1	1007	72	11	61	0	144	2731
*** BREAK ***																					
Grand Total	122	3554	369	1	4046	163	27	218	4	412	76	4240	230	3	4549	264	39	161	1	465	9472
Apprch %	3	87.8	9.1	0		39.6	6.6	52.9	1		1.7	93.2	5.1	0.1		56.8	8.4	34.6	0.2		
Total %	1.3	37.5	3.9	0	42.7	1.7	0.3	2.3	0	4.3	0.8	44.8	2.4	0	48	2.8	0.4	1.7	0	4.9	

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Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	4	125	**12**	0	141	2	**2**	17	0	21	**3**	338	**17**	0	358	15	**1**	5	0	**21**	541
07:15 AM	3	120	9	0	132	**8**	0	11	0	19	3	**373**	12	0	**388**	**16**	1	3	0	20	**559**
07:30 AM	**6**	135	9	0	150	6	1	**19**	0	**26**	1	289	11	0	301	10	1	**6**	0	17	494
07:45 AM	3	**140**	8	0	**151**	3	1	17	**1**	22	3	260	7	0	270	15	1	4	0	20	463
Total Volume	16	520	38	0	574	19	4	64	1	88	10	1260	47	0	1317	56	4	18	0	78	2057
% App. Total	2.8	90.6	6.6	0		21.6	4.5	72.7	1.1		0.8	95.7	3.6	0		71.8	5.1	23.1	0		
PHF	.667	.929	.792	.000	.950	.594	.500	.842	.250	.846	.833	.845	.691	.000	.849	.875	1.00	.750	.000	.929	.920
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	11	313	36	0	360	16	**4**									**28**					
04:45 PM	6	318	35	0	359	9	3	14	**2**	28	6	**262**	18	0	**286**	20	**5**	14	0	39	712
05:00 PM	8	**334**	**39**	0	**381**	14	0	12	0	26	6	217	16	0	239	18	4	11	0	33	679
05:15 PM	**16**	329	35	0	380	**19**	1	**16**	1	**37**	**7**	227	**26**	**1**	261	23	4	**20**	0	**47**	**725**
Total Volume	41	1294	145	0	1480	58	8	57	3	126	24	959	74	1	1058	89	16	59	0	164	2828
% App. Total	2.8	87.4	9.8	0		46	6.3	45.2	2.4		2.3	90.6	7	0.1		54.3	9.8	36	0		
PHF	.641	.969	.929	.000	.971	.763	.500	.891	.375	.851	.857	.915	.712	.250	.925	.795	.800	.738	.000	.872	.975

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021

Groups Printed- Trucks

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	2	8	0	10	0	0	4	0	4	0	11	1	0	12	16	0	0	0	16	42
07:15 AM	0	5	13	0	18	0	0	2	0	2	0	5	0	0	5	12	0	0	0	12	37
07:30 AM	0	5	9	0	14	0	0	0	0	0	0	5	0	0	5	16	0	2	0	18	37
07:45 AM	2	6	14	0	22	1	1	1	0	3	0	2	1	0	3	14	0	2	0	16	44
Total	2	18	44	0	64	1	1	7	0	9	0	23	2	0	25	58	0	4	0	62	160
08:00 AM	2	11	13	0	26	1	0	0	0	1	0	4	1	0	5	19	1	1	0	21	53
08:15 AM	3	11	14	0	28	1	0	4	0	5	2	8	1	0	11	20	0	0	0	20	64
08:30 AM	0	11	10	0	21	1	1	1	0	3	1	10	0	0	11	19	1	1	0	21	56
08:45 AM	1	12	24	0	37	0	0	5	0	5	1	7	0	0	8	19	0	0	0	19	69
Total	6	45	61	0	112	3	1	10	0	14	4	29	2	0	35	77	2	2	0	81	242
*** BREAK ***																					
04:00 PM	1	9	15	0	25	0	1	1	0	2	1	6	1	0	8	9	0	0	0	9	44
04:15 PM	1	6	16	0	23	0	0	1	0	1	0	11	0	0	11	17	2	2	0	21	56
04:30 PM	1	4	14	0	19	0	0	1	0	1	3	5	0	0	8	11	1	0	0	12	40
04:45 PM	0	3	18	0	21	3	2	1	0	6	1	1	1	0	3	10	0	0	0	10	40
Total	3	22	63	0	88	3	3	4	0	10	5	23	2	0	30	47	3	2	0	52	180
05:00 PM	1	4	15	0	20	0	0	0	0	0	0	1	1	0	2	10	1	0	0	11	33
05:15 PM	0	3	12	0	15	0	0	0	0	0	2	1	0	0	3	14	2	0	0	16	34
05:30 PM	1	1	21	0	23	0	0	1	0	1	1	1	0	0	2	9	1	0	0	10	36
05:45 PM	0	1	12	0	13	0	1	0	0	1	0	1	0	0	1	5	1	1	0	7	22
Total	2	9	60	0	71	0	1	1	0	2	3	4	1	0	8	38	5	1	0	44	125
*** BREAK ***																					
Grand Total	13	94	228	0	335	7	6	22	0	35	12	79	7	0	98	220	10	9	0	239	707
Apprch %	3.9	28.1	68.1	0		20	17.1	62.9	0		12.2	80.6	7.1	0		92.1	4.2	3.8	0		
Total %	1.8	13.3	32.2	0	47.4	1	0.8	3.1	0	5	1.7	11.2	1	0	13.9	31.1	1.4	1.3	0	33.8	

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 3_98th-Bluewater
Site Code : 3
Start Date : 4/7/2021

	98TH From North					BLUEWATER AVALON From East					98TH From South					BLUEWATER AVALON From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	2	11	13	0	26	**1**	0	0	0	1	0	4	**1**	0	5	19	**1**	**1**	0	**21**	53
08:15 AM	**3**	11	14	0	28	1	0	4	0	**5**	**2**	8	1	0	**11**	**20**	0	0	0	20	64
08:30 AM	0	11	10	0	21	1	**1**	1	0	3	1	**10**	0	0	11	19	1	1	0	21	56
08:45 AM	1	**12**	**24**	0	**37**	0	0	**5**	0	5	1	7	0	0	8	19	0	0	0	19	**69**
Total Volume	6	45	61	0	112	3	1	10	0	14	4	29	2	0	35	77	2	2	0	81	242
% App. Total	5.4	40.2	54.5	0		21.4	7.1	71.4	0		11.4	82.9	5.7	0		95.1	2.5	2.5	0		
PHF	.500	.938	.635	.000	.757	.750	.250	.500	.000	.700	.500	.725	.500	.000	.795	.963	.500	.500	.000	.964	.877
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**1**	**9**			**25**			**1**					**1**								
04:15 PM	1	6	16	0	23	0	0	1	0	1	0	**11**	0	0	**11**	**17**	**2**	**2**	0	**21**	**56**
04:30 PM	1	4	14	0	19	0	0	1	0	1	**3**	5	0	0	8	11	1	0	0	12	40
04:45 PM	0	3	**18**	0	21	**3**	**2**	1	0	**6**	1	1	1	0	3	10	0	0	0	10	40
Total Volume	3	22	63	0	88	3	3	4	0	10	5	23	2	0	30	47	3	2	0	52	180
% App. Total	3.4	25	71.6	0		30	30	40	0		16.7	76.7	6.7	0		90.4	5.8	3.8	0		
PHF	.750	.611	.875	.000	.880	.250	.375	1.00	.000	.417	.417	.523	.500	.000	.682	.691	.375	.250	.000	.619	.804

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 4_98th I40SOUTH
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Groups Printed- Cars - Trucks

	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	149	48	0	197	0	0	0	0	0	0	51	328	0	379	0	0	13	0	13	589
07:15 AM	0	142	56	0	198	0	0	0	0	0	0	69	300	0	369	1	0	10	0	11	578
07:30 AM	0	162	74	0	236	0	0	0	0	0	0	53	295	0	348	5	0	15	0	20	604
07:45 AM	0	152	59	0	211	0	0	0	0	0	0	58	242	0	300	4	0	15	0	19	530
Total	0	605	237	0	842	0	0	0	0	0	0	231	1165	0	1396	10	0	53	0	63	2301
08:00 AM	0	139	37	0	176	0	0	0	0	0	0	75	201	0	276	2	0	21	0	23	475
08:15 AM	0	119	37	0	156	0	0	0	0	0	0	112	252	0	364	7	0	20	0	27	547
08:30 AM	0	151	55	0	206	0	0	0	0	0	0	82	286	0	368	15	0	11	0	26	600
08:45 AM	0	169	46	0	215	0	0	0	0	0	0	56	237	0	293	2	0	15	0	17	525
Total	0	578	175	0	753	0	0	0	0	0	0	325	976	0	1301	26	0	67	0	93	2147
*** BREAK ***																					
04:00 PM	0	368	56	0	424	0	0	0	0	0	0	58	187	0	245	1	0	19	0	20	689
04:15 PM	0	391	44	0	435	0	0	0	0	0	0	61	218	0	279	1	0	14	0	15	729
04:30 PM	0	354	28	0	382	0	0	0	0	0	0	95	214	0	309	2	0	21	0	23	714
04:45 PM	0	326	30	0	356	0	0	0	0	0	0	86	190	0	276	3	0	24	0	27	659
Total	0	1439	158	0	1597	0	0	0	0	0	0	300	809	0	1109	7	0	78	0	85	2791
05:00 PM	0	366	22	0	388	0	0	0	0	0	0	80	179	0	259	3	0	19	0	22	669
05:15 PM	0	394	23	0	417	0	0	0	0	0	0	93	202	0	295	6	0	13	0	19	731
05:30 PM	0	358	25	1	384	0	0	0	0	0	0	89	170	0	259	3	0	16	0	19	662
05:45 PM	0	347	16	0	363	0	0	0	0	0	0	70	174	0	244	6	0	15	0	21	628
Total	0	1465	86	1	1552	0	0	0	0	0	0	332	725	0	1057	18	0	63	0	81	2690
Grand Total	0	4087	656	1	4744	0	0	0	0	0	0	1188	3675	0	4863	61	0	261	0	322	9929
Apprch %	0	86.2	13.8	0		0	0	0	0		0	24.4	75.6	0		18.9	0	81.1	0		
Total %	0	41.2	6.6	0	47.8	0	0	0	0	0	0	12	37	0	49	0.6	0	2.6	0	3.2	
Cars	0	3845	649	1	4495	0	0	0	0	0	0	1068	3493	0	4561	57	0	151	0	208	9264
% Cars	0	94.1	98.9	100	94.8	0	0	0	0	0	0	89.9	95	0	93.8	93.4	0	57.9	0	64.6	93.3
Trucks	0	242	7	0	249	0	0	0	0	0	0	120	182	0	302	4	0	110	0	114	665
% Trucks	0	5.9	1.1	0	5.2	0	0	0	0	0	0	10.1	5	0	6.2	6.6	0	42.1	0	35.4	6.7

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98th & Bluewater Commercial Development
Traffic Impact Analysis
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File Name : 4_98th I40SOUTH
Site Code : 4
Start Date : 4/7/2021
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	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	149	48	0	197	0	0	0	0	0	0	51	**328**	0	**379**	0	0	13	0	13	589
07:15 AM	0	142	56	0	198	0	0	0	0	0	0	**69**	300	0	369	1	0	10	0	11	578
07:30 AM	0	**162**	**74**	0	**236**	0	0	0	0	0	0	53	295	0	348	**5**	0	**15**	0	**20**	**604**
07:45 AM	0	152	59	0	211	0	0	0	0	0	0	58	242	0	300	4	0	15	0	19	530
Total Volume	0	605	237	0	842	0	0	0	0	0	0	231	1165	0	1396	10	0	53	0	63	2301
% App. Total	0	71.9	28.1	0		0	0	0	0		0	16.5	83.5	0		15.9	0	84.1	0		
PHF	.000	.934	.801	.000	.892	.000	.000	.000	.000	.000	.000	.837	.888	.000	.921	.500	.000	.883	.000	.788	.952
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	368	**56**	0	424	0	0	0	0	0	0	58	187	0	245	1	0	19	0	20	689
04:15 PM	0	**391**	44	0	**435**	0	0	0	0	0	0	61	**218**	0	279	1	0	14	0	15	**729**
04:30 PM	0	354	28	0	382	0	0	0	0	0	0	**95**	214	0	**309**	2	0	21	0	23	714
04:45 PM	0	326	30	0	356	0	0	0	0	0	0	86	190	0	276	**3**	0	**24**	0	**27**	659
Total Volume	0	1439	158	0	1597	0	0	0	0	0	0	300	809	0	1109	7	0	78	0	85	2791
% App. Total	0	90.1	9.9	0		0	0	0	0		0	27.1	72.9	0		8.2	0	91.8	0		
PHF	.000	.920	.705	.000	.918	.000	.000	.000	.000	.000	.000	.789	.928	.000	.897	.583	.000	.813	.000	.787	.957

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Groups Printed- Cars

	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	142	48	0	190	0	0	0	0	0	0	45	301	0	346	0	0	6	0	6	542
07:15 AM	0	130	56	0	186	0	0	0	0	0	0	64	289	0	353	1	0	6	0	7	546
07:30 AM	0	146	73	0	219	0	0	0	0	0	0	46	277	0	323	5	0	12	0	17	559
07:45 AM	0	141	59	0	200	0	0	0	0	0	0	55	229	0	284	4	0	5	0	9	493
Total	0	559	236	0	795	0	0	0	0	0	0	210	1096	0	1306	10	0	29	0	39	2140
08:00 AM	0	120	37	0	157	0	0	0	0	0	0	63	188	0	251	2	0	11	0	13	421
08:15 AM	0	102	36	0	138	0	0	0	0	0	0	96	244	0	340	7	0	13	0	20	498
08:30 AM	0	131	53	0	184	0	0	0	0	0	0	67	278	0	345	12	0	8	0	20	549
08:45 AM	0	142	46	0	188	0	0	0	0	0	0	44	224	0	268	1	0	4	0	5	461
Total	0	495	172	0	667	0	0	0	0	0	0	270	934	0	1204	22	0	36	0	58	1929
*** BREAK ***																					
04:00 PM	0	349	54	0	403	0	0	0	0	0	0	54	177	0	231	1	0	12	0	13	647
04:15 PM	0	369	44	0	413	0	0	0	0	0	0	55	195	0	250	1	0	9	0	10	673
04:30 PM	0	342	28	0	370	0	0	0	0	0	0	87	205	0	292	2	0	16	0	18	680
04:45 PM	0	312	30	0	342	0	0	0	0	0	0	79	185	0	264	3	0	14	0	17	623
Total	0	1372	156	0	1528	0	0	0	0	0	0	275	762	0	1037	7	0	51	0	58	2623
05:00 PM	0	355	22	0	377	0	0	0	0	0	0	73	175	0	248	3	0	10	0	13	638
05:15 PM	0	381	23	0	404	0	0	0	0	0	0	87	193	0	280	6	0	11	0	17	701
05:30 PM	0	342	24	1	367	0	0	0	0	0	0	85	165	0	250	3	0	7	0	10	627
05:45 PM	0	341	16	0	357	0	0	0	0	0	0	68	168	0	236	6	0	7	0	13	606
Total	0	1419	85	1	1505	0	0	0	0	0	0	313	701	0	1014	18	0	35	0	53	2572
Grand Total	0	3845	649	1	4495	0	0	0	0	0	0	1068	3493	0	4561	57	0	151	0	208	9264
Apprch %	0	85.5	14.4	0		0	0	0	0		0	23.4	76.6	0		27.4	0	72.6	0		
Total %	0	41.5	7	0	48.5	0	0	0	0	0	0	11.5	37.7	0	49.2	0.6	0	1.6	0	2.2	

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	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	142	48	0	190	0	0	0	0	0	0	45	**301**	0	346	0	0	6	0	6	542
07:15 AM	0	130	56	0	186	0	0	0	0	0	0	**64**	289	0	**353**	1	0	6	0	7	546
07:30 AM	0	**146**	**73**	0	**219**	0	0	0	0	0	0	46	277	0	323	**5**	0	**12**	0	**17**	**559**
07:45 AM	0	141	59	0	200	0	0	0	0	0	0	55	229	0	284	4	0	5	0	9	493
Total Volume	0	559	236	0	795	0	0	0	0	0	0	210	1096	0	1306	10	0	29	0	39	2140
% App. Total	0	70.3	29.7	0		0	0	0	0		0	16.1	83.9	0		25.6	0	74.4	0		
PHF	.000	.957	.808	.000	.908	.000	.000	.000	.000	.000	.000	.820	.910	.000	.925	.500	.000	.604	.000	.574	.957
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	342	28	0	370	0	0	0	0	0	0	**87**	**205**	0	**292**	2	0	**16**	0	**18**	680
04:45 PM	0	312	**30**	0	342	0	0	0	0	0	0	79	185	0	264	3	0	14	0	17	623
05:00 PM	0	355	22	0	377	0	0	0	0	0	0	73	175	0	248	3	0	10	0	13	638
05:15 PM	0	**381**	23	0	**404**	0	0	0	0	0	0	87	193	0	280	**6**	0	11	0	17	**701**
Total Volume	0	1390	103	0	1493	0	0	0	0	0	0	326	758	0	1084	14	0	51	0	65	2642
% App. Total	0	93.1	6.9	0		0	0	0	0		0	30.1	69.9	0		21.5	0	78.5	0		
PHF	.000	.912	.858	.000	.924	.000	.000	.000	.000	.000	.000	.937	.924	.000	.928	.583	.000	.797	.000	.903	.942

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 4_98th I40SOUTH
Site Code : 4
Start Date : 4/7/2021
Page No : 5

Groups Printed- Trucks

	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	7	0	0	7	0	0	0	0	0	0	6	27	0	33	0	0	7	0	7	47
07:15 AM	0	12	0	0	12	0	0	0	0	0	0	5	11	0	16	0	0	4	0	4	32
07:30 AM	0	16	1	0	17	0	0	0	0	0	0	7	18	0	25	0	0	3	0	3	45
07:45 AM	0	11	0	0	11	0	0	0	0	0	0	3	13	0	16	0	0	10	0	10	37
Total	0	46	1	0	47	0	0	0	0	0	0	21	69	0	90	0	0	24	0	24	161
08:00 AM	0	19	0	0	19	0	0	0	0	0	0	12	13	0	25	0	0	10	0	10	54
08:15 AM	0	17	1	0	18	0	0	0	0	0	0	16	8	0	24	0	0	7	0	7	49
08:30 AM	0	20	2	0	22	0	0	0	0	0	0	15	8	0	23	3	0	3	0	6	51
08:45 AM	0	27	0	0	27	0	0	0	0	0	0	12	13	0	25	1	0	11	0	12	64
Total	0	83	3	0	86	0	0	0	0	0	0	55	42	0	97	4	0	31	0	35	218
*** BREAK ***																					
04:00 PM	0	19	2	0	21	0	0	0	0	0	0	4	10	0	14	0	0	7	0	7	42
04:15 PM	0	22	0	0	22	0	0	0	0	0	0	6	23	0	29	0	0	5	0	5	56
04:30 PM	0	12	0	0	12	0	0	0	0	0	0	8	9	0	17	0	0	5	0	5	34
04:45 PM	0	14	0	0	14	0	0	0	0	0	0	7	5	0	12	0	0	10	0	10	36
Total	0	67	2	0	69	0	0	0	0	0	0	25	47	0	72	0	0	27	0	27	168
05:00 PM	0	11	0	0	11	0	0	0	0	0	0	7	4	0	11	0	0	9	0	9	31
05:15 PM	0	13	0	0	13	0	0	0	0	0	0	6	9	0	15	0	0	2	0	2	30
05:30 PM	0	16	1	0	17	0	0	0	0	0	0	4	5	0	9	0	0	9	0	9	35
05:45 PM	0	6	0	0	6	0	0	0	0	0	0	2	6	0	8	0	0	8	0	8	22
Total	0	46	1	0	47	0	0	0	0	0	0	19	24	0	43	0	0	28	0	28	118
Grand Total	0	242	7	0	249	0	0	0	0	0	0	120	182	0	302	4	0	110	0	114	665
Apprch %	0	97.2	2.8	0		0	0	0	0		0	39.7	60.3	0		3.5	0	96.5	0		
Total %	0	36.4	1.1	0	37.4	0	0	0	0	0	0	18	27.4	0	45.4	0.6	0	16.5	0	17.1	

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Site Code : 4
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	98TH From North					I40 SOUTH RAMPS From East					98TH From South					I40 SOUTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	19	0	0	19	0	0	0	0	0	0	12	**13**	0	**25**	0	0	10	0	10	54
08:15 AM	0	17	1	0	18	0	0	0	0	0	0	**16**	8	0	24	0	0	7	0	7	49
08:30 AM	0	20	**2**	0	22	0	0	0	0	0	0	15	8	0	23	**3**	0	3	0	6	51
08:45 AM	0	**27**	0	0	**27**	0	0	0	0	0	0	12	13	0	25	1	0	**11**	0	**12**	**64**
Total Volume	0	83	3	0	86	0	0	0	0	0	0	55	42	0	97	4	0	31	0	35	218
% App. Total	0	96.5	3.5	0		0	0	0	0		0	56.7	43.3	0		11.4	0	88.6	0		
PHF	.000	.769	.375	.000	.796	.000	.000	.000	.000	.000	.000	.859	.808	.000	.970	.333	.000	.705	.000	.729	.852
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	19	**2**	0	21	0	0	0	0	0	0	4	10	0	14	0	0	7	0	7	42
04:15 PM	0	**22**	0	0	**22**	0	0	0	0	0	0	6	**23**	0	**29**	0	0	5	0	5	**56**
04:30 PM	0	12	0	0	12	0	0	0	0	0	0	**8**	9	0	17	0	0	5	0	5	34
04:45 PM	0	14	0	0	14	0	0	0	0	0	0	7	5	0	12	0	0	**10**	0	**10**	36
Total Volume	0	67	2	0	69	0	0	0	0	0	0	25	47	0	72	0	0	27	0	27	168
% App. Total	0	97.1	2.9	0		0	0	0	0		0	34.7	65.3	0		0	0	100	0		
PHF	.000	.761	.250	.000	.784	.000	.000	.000	.000	.000	.000	.781	.511	.000	.621	.000	.000	.675	.000	.675	.750

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 5_98th I40NORTH
Site Code : 5
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Groups Printed- Cars - Trucks

	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	74	4	0	78	102	1	21	0	124	13	37	0	0	50	0	0	0	0	0	252
07:15 AM	0	85	4	0	89	115	0	24	0	139	11	55	0	0	66	0	0	0	0	0	294
07:30 AM	0	97	6	0	103	127	0	32	0	159	12	46	0	0	58	0	0	0	0	0	320
07:45 AM	0	85	5	0	90	128	0	30	0	158	10	51	0	0	61	0	0	0	0	0	309
Total	0	341	19	0	360	472	1	107	0	580	46	189	0	0	235	0	0	0	0	0	1175
08:00 AM	0	54	3	0	57	124	3	34	0	161	17	57	0	0	74	0	0	0	0	0	292
08:15 AM	0	68	9	0	77	107	1	45	0	153	21	78	0	0	99	0	0	0	0	0	329
08:30 AM	0	102	6	0	108	113	0	30	0	143	19	84	0	0	103	0	0	0	0	0	354
08:45 AM	0	112	8	0	120	122	1	25	0	148	15	47	0	0	62	0	0	0	0	0	330
Total	0	336	26	0	362	466	5	134	0	605	72	266	0	0	338	0	0	0	0	0	1305
*** BREAK ***																					
04:00 PM	0	84	7	0	91	319	0	46	0	365	19	44	0	0	63	0	0	0	0	0	519
04:15 PM	0	94	4	0	98	350	3	55	0	408	15	53	0	0	68	0	0	0	0	0	574
04:30 PM	0	68	3	0	71	310	2	55	0	367	30	63	0	0	93	0	0	0	0	0	531
04:45 PM	0	64	6	0	70	302	0	64	0	366	29	61	0	0	90	0	0	0	0	0	526
Total	0	310	20	0	330	1281	5	220	0	1506	93	221	0	0	314	0	0	0	0	0	2150
05:00 PM	0	87	7	0	94	330	1	57	0	388	17	57	0	0	74	0	0	0	0	0	556
05:15 PM	0	73	7	0	80	355	0	69	0	424	23	69	0	0	92	0	0	0	0	0	596
05:30 PM	0	62	8	1	71	302	0	79	1	382	21	61	0	1	83	0	0	0	0	0	536
05:45 PM	0	62	4	0	66	294	1	60	0	355	14	61	0	0	75	0	0	0	0	0	496
Total	0	284	26	1	311	1281	2	265	1	1549	75	248	0	1	324	0	0	0	0	0	2184
*** BREAK ***																					
Grand Total	0	1271	91	1	1363	3500	13	726	1	4240	286	924	0	1	1211	0	0	0	0	0	6814
Apprch %	0	93.3	6.7	0.1		82.5	0.3	17.1	0		23.6	76.3	0	0.1		0	0	0	0		
Total %	0	18.7	1.3	0	20	51.4	0.2	10.7	0	62.2	4.2	13.6	0	0	17.8	0	0	0	0	0	
Cars	0	1242	90	1	1333	3282	10	713	1	4006	190	888	0	1	1079	0	0	0	0	0	6418
% Cars	0	97.7	98.9	100	97.8	93.8	76.9	98.2	100	94.5	66.4	96.1	0	100	89.1	0	0	0	0	0	94.2
Trucks	0	29	1	0	30	218	3	13	0	234	96	36	0	0	132	0	0	0	0	0	396
% Trucks	0	2.3	1.1	0	2.2	6.2	23.1	1.8	0	5.5	33.6	3.9	0	0	10.9	0	0	0	0	0	5.8

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 5_98th I40NORTH
Site Code : 5
Start Date : 4/7/2021

	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	54	3	0	57	**124**	**3**	34	0	**161**	17	57	0	0	74	0	0	0	0	0	292
08:15 AM	0	68	**9**	0	77	107	1	**45**	0	153	**21**	78	0	0	99	0	0	0	0	0	329
08:30 AM	0	102	6	0	108	113	0	30	0	143	19	**84**	0	0	**103**	0	0	0	0	0	**354**
08:45 AM	0	**112**	8	0	**120**	122	1	25	0	148	15	47	0	0	62	0	0	0	0	0	330
Total Volume	0	336	26	0	362	466	5	134	0	605	72	266	0	0	338	0	0	0	0	0	1305
% App. Total	0	92.8	7.2	0		77	0.8	22.1	0		21.3	78.7	0	0		0	0	0	0		
PHF	.000	.750	.722	.000	.754	.940	.417	.744	.000	.939	.857	.792	.000	.000	.820	.000	.000	.000	.000	.000	.922
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	64	6	0	70	302	0	64	0	366	**29**										
05:00 PM	0	**87**	7	0	**94**	330	**1**	57	0	388	17	57	0	0	74	0	0	0	0	0	556
05:15 PM	0	73	7	0	80	**355**	0	69	0	**424**	23	**69**	0	0	**92**	0	0	0	0	0	**596**
05:30 PM	0	62	**8**	**1**	71	302	0	**79**	**1**	382	21	61	0	**1**	83	0	0	0	0	0	536
Total Volume	0	286	28	1	315	1289	1	269	1	1560	90	248	0	1	339	0	0	0	0	0	2214
% App. Total	0	90.8	8.9	0.3		82.6	0.1	17.2	0.1		26.5	73.2	0	0.3		0	0	0	0		
PHF	.000	.822	.875	.250	.838	.908	.250	.851	.250	.920	.776	.899	.000	.250	.921	.000	.000	.000	.000	.000	.929

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 5_98th I40NORTH
Site Code : 5
Start Date : 4/7/2021

Groups Printed- Cars

	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	72	4	0	76	100	1	19	0	120	7	35	0	0	42	0	0	0	0	0	238
07:15 AM	0	84	4	0	88	102	0	21	0	123	8	49	0	0	57	0	0	0	0	0	268
07:30 AM	0	97	6	0	103	113	0	32	0	145	5	44	0	0	49	0	0	0	0	0	297
07:45 AM	0	83	5	0	88	121	0	30	0	151	8	49	0	0	57	0	0	0	0	0	296
Total	0	336	19	0	355	436	1	102	0	539	28	177	0	0	205	0	0	0	0	0	1099
08:00 AM	0	52	3	0	55	107	1	33	0	141	6	55	0	0	61	0	0	0	0	0	257
08:15 AM	0	66	9	0	75	88	1	42	0	131	11	76	0	0	87	0	0	0	0	0	293
08:30 AM	0	94	6	0	100	96	0	29	0	125	7	74	0	0	81	0	0	0	0	0	306
08:45 AM	0	108	8	0	116	97	0	23	0	120	8	43	0	0	51	0	0	0	0	0	287
Total	0	320	26	0	346	388	2	127	0	517	32	248	0	0	280	0	0	0	0	0	1143
*** BREAK ***																					
04:00 PM	0	82	6	0	88	299	0	46	0	345	15	43	0	0	58	0	0	0	0	0	491
04:15 PM	0	91	4	0	95	334	3	55	0	392	12	50	0	0	62	0	0	0	0	0	549
04:30 PM	0	68	3	0	71	298	2	55	0	355	22	62	0	0	84	0	0	0	0	0	510
04:45 PM	0	64	6	0	70	290	0	63	0	353	23	61	0	0	84	0	0	0	0	0	507
Total	0	305	19	0	324	1221	5	219	0	1445	72	216	0	0	288	0	0	0	0	0	2057
05:00 PM	0	87	7	0	94	318	1	57	0	376	11	56	0	0	67	0	0	0	0	0	537
05:15 PM	0	72	7	0	79	342	0	69	0	411	18	69	0	0	87	0	0	0	0	0	577
05:30 PM	0	60	8	1	69	289	0	79	1	369	17	61	0	1	79	0	0	0	0	0	517
05:45 PM	0	62	4	0	66	288	1	60	0	349	12	61	0	0	73	0	0	0	0	0	488
Total	0	281	26	1	308	1237	2	265	1	1505	58	247	0	1	306	0	0	0	0	0	2119
*** BREAK ***																					
Grand Total	0	1242	90	1	1333	3282	10	713	1	4006	190	888	0	1	1079	0	0	0	0	0	6418
Apprch %	0	93.2	6.8	0.1		81.9	0.2	17.8	0		17.6	82.3	0	0.1		0	0	0	0		
Total %	0	19.4	1.4	0	20.8	51.1	0.2	11.1	0	62.4	3	13.8	0	0	16.8	0	0	0	0	0	

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Turning Movement Count

File Name : 5_98th I40NORTH
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	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	83	5	0	88	**121**	0	30	0	**151**	8	49	0	0	57	0	0	0	0	0	296
08:00 AM	0	52	3	0	55	107	**1**	33	0	141	6	55	0	0	61	0	0	0	0	0	257
08:15 AM	0	66	**9**	0	75	88	1	**42**	0	131	**11**	**76**	0	0	**87**	0	0	0	0	0	293
08:30 AM	0	**94**	6	0	**100**	96	0	29	0	125	7	74	0	0	81	0	0	0	0	0	**306**
Total Volume	0	295	23	0	318	412	2	134	0	548	32	254	0	0	286	0	0	0	0	0	1152
% App. Total	0	92.8	7.2	0		75.2	0.4	24.5	0		11.2	88.8	0	0		0	0	0	0		
PHF	.000	.785	.639	.000	.795	.851	.500	.798	.000	.907	.727	.836	.000	.000	.822	.000	.000	.000	.000	.000	.941
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	64	6	0	70	290	0	63	0	353	**23**										
05:00 PM	0	**87**	7	0	**94**	318	**1**	57	0	376	11	56	0	0	67	0	0	0	0	0	537
05:15 PM	0	72	7	0	79	**342**	0	69	0	**411**	18	**69**	0	0	**87**	0	0	0	0	0	**577**
05:30 PM	0	60	**8**	**1**	69	289	0	**79**	**1**	369	17	61	0	**1**	79	0	0	0	0	0	517
Total Volume	0	283	28	1	312	1239	1	268	1	1509	69	247	0	1	317	0	0	0	0	0	2138
% App. Total	0	90.7	9	0.3		82.1	0.1	17.8	0.1		21.8	77.9	0	0.3		0	0	0	0		
PHF	.000	.813	.875	.250	.830	.906	.250	.848	.250	.918	.750	.895	.000	.250	.911	.000	.000	.000	.000	.000	.926

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Turning Movement Count

File Name : 5_98th I40NORTH
Site Code : 5
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Groups Printed- Trucks

	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	2	0	0	2	2	0	2	0	4	6	2	0	0	8	0	0	0	0	0	14
07:15 AM	0	1	0	0	1	13	0	3	0	16	3	6	0	0	9	0	0	0	0	0	26
07:30 AM	0	0	0	0	0	14	0	0	0	14	7	2	0	0	9	0	0	0	0	0	23
07:45 AM	0	2	0	0	2	7	0	0	0	7	2	2	0	0	4	0	0	0	0	0	13
Total	0	5	0	0	5	36	0	5	0	41	18	12	0	0	30	0	0	0	0	0	76
08:00 AM	0	2	0	0	2	17	2	1	0	20	11	2	0	0	13	0	0	0	0	0	35
08:15 AM	0	2	0	0	2	19	0	3	0	22	10	2	0	0	12	0	0	0	0	0	36
08:30 AM	0	8	0	0	8	17	0	1	0	18	12	10	0	0	22	0	0	0	0	0	48
08:45 AM	0	4	0	0	4	25	1	2	0	28	7	4	0	0	11	0	0	0	0	0	43
Total	0	16	0	0	16	78	3	7	0	88	40	18	0	0	58	0	0	0	0	0	162
*** BREAK ***																					
04:00 PM	0	2	1	0	3	20	0	0	0	20	4	1	0	0	5	0	0	0	0	0	28
04:15 PM	0	3	0	0	3	16	0	0	0	16	3	3	0	0	6	0	0	0	0	0	25
04:30 PM	0	0	0	0	0	12	0	0	0	12	8	1	0	0	9	0	0	0	0	0	21
04:45 PM	0	0	0	0	0	12	0	1	0	13	6	0	0	0	6	0	0	0	0	0	19
Total	0	5	1	0	6	60	0	1	0	61	21	5	0	0	26	0	0	0	0	0	93
05:00 PM	0	0	0	0	0	12	0	0	0	12	6	1	0	0	7	0	0	0	0	0	19
05:15 PM	0	1	0	0	1	13	0	0	0	13	5	0	0	0	5	0	0	0	0	0	19
05:30 PM	0	2	0	0	2	13	0	0	0	13	4	0	0	0	4	0	0	0	0	0	19
05:45 PM	0	0	0	0	0	6	0	0	0	6	2	0	0	0	2	0	0	0	0	0	8
Total	0	3	0	0	3	44	0	0	0	44	17	1	0	0	18	0	0	0	0	0	65
*** BREAK ***																					
Grand Total	0	29	1	0	30	218	3	13	0	234	96	36	0	0	132	0	0	0	0	0	396
Apprch %	0	96.7	3.3	0		93.2	1.3	5.6	0		72.7	27.3	0	0		0	0	0	0		
Total %	0	7.3	0.3	0	7.6	55.1	0.8	3.3	0	59.1	24.2	9.1	0	0	33.3	0	0	0	0	0	

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 5_98th I40NORTH
Site Code : 5
Start Date : 4/7/2021

	98TH From North					I40 NORTH RAMPS From East					98TH From South					I40 NORTH RAMPS From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	2	0	0	2	17	**2**	1	0	20	11	2	0	0	13	0	0	0	0	0	35
08:15 AM	0	2	0	0	2	19	0	**3**	0	22	10	2	0	0	12	0	0	0	0	0	36
08:30 AM	0	**8**	0	0	**8**	17	0	1	0	18	**12**	**10**	0	0	**22**	0	0	0	0	0	**48**
08:45 AM	0	4	0	0	4	**25**	1	2	0	**28**	7	4	0	0	11	0	0	0	0	0	43
Total Volume	0	16	0	0	16	78	3	7	0	88	40	18	0	0	58	0	0	0	0	0	162
% App. Total	0	100	0	0		88.6	3.4	8	0		69	31	0	0		0	0	0	0		
PHF	.000	.500	.000	.000	.500	.780	.375	.583	.000	.786	.833	.450	.000	.000	.659	.000	.000	.000	.000	.000	.844
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	2	**1**		**3**	**20**				**20**											**28**
04:15 PM	0	**3**	0	0	3	16	0	0	0	16	3	**3**	0	0	6	0	0	0	0	0	25
04:30 PM	0	0	0	0	0	12	0	0	0	12	**8**	1	0	0	**9**	0	0	0	0	0	21
04:45 PM	0	0	0	0	0	12	0	**1**	0	13	6	0	0	0	6	0	0	0	0	0	19
Total Volume	0	5	1	0	6	60	0	1	0	61	21	5	0	0	26	0	0	0	0	0	93
% App. Total	0	83.3	16.7	0		98.4	0	1.6	0		80.8	19.2	0	0		0	0	0	0		
PHF	.000	.417	.250	.000	.500	.750	.000	.250	.000	.763	.656	.417	.000	.000	.722	.000	.000	.000	.000	.000	.830

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021
Page No : 1

Groups Printed- Cars - Trucks

	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	7	1	0	9	3	1	0	0	4	3	24	5	0	32	2	9	3	0	14	59
07:15 AM	2	12	6	0	20	5	1	2	0	8	2	38	8	0	48	10	4	2	0	16	92
07:30 AM	2	16	3	0	21	8	3	7	1	19	3	31	16	0	50	5	7	2	0	14	104
07:45 AM	2	5	4	0	11	27	6	4	2	39	3	31	37	0	71	8	7	0	0	15	136
Total	7	40	14	0	61	43	11	13	3	70	11	124	66	0	201	25	27	7	0	59	391
08:00 AM	2	8	5	0	15	26	9	6	2	43	0	24	28	0	52	6	15	1	0	22	132
08:15 AM	2	10	12	0	24	6	3	2	1	12	2	14	14	0	30	1	9	1	0	11	77
08:30 AM	0	6	7	0	13	7	5	2	0	14	2	11	4	0	17	5	7	4	0	16	60
08:45 AM	2	3	1	0	6	4	7	2	0	13	3	11	2	0	16	5	11	1	0	17	52
Total	6	27	25	0	58	43	24	12	3	82	7	60	48	0	115	17	42	7	0	66	321
*** BREAK ***																					
04:00 PM	2	25	11	1	39	13	8	3	0	24	2	4	4	0	10	6	11	6	0	23	96
04:15 PM	2	26	9	0	37	14	11	3	0	28	2	13	5	0	20	8	8	4	0	20	105
04:30 PM	1	56	5	1	63	10	6	2	0	18	1	13	6	0	20	2	8	7	1	18	119
04:45 PM	0	27	10	0	37	6	7	3	0	16	2	10	6	0	18	6	11	4	0	21	92
Total	5	134	35	2	176	43	32	11	0	86	7	40	21	0	68	22	38	21	1	82	412
05:00 PM	1	24	6	0	31	9	13	6	0	28	2	14	7	0	23	8	7	5	0	20	102
05:15 PM	2	23	11	0	36	14	17	6	0	37	2	12	5	0	19	9	15	11	0	35	127
05:30 PM	1	34	7	0	42	23	2	6	0	31	1	8	10	0	19	11	13	2	0	26	118
05:45 PM	1	22	7	0	30	11	16	1	0	28	4	14	2	0	20	10	10	2	0	22	100
Total	5	103	31	0	139	57	48	19	0	124	9	48	24	0	81	38	45	20	0	103	447
*** BREAK ***																					
Grand Total	23	304	105	2	434	186	115	55	6	362	34	272	159	0	465	102	152	55	1	310	1571
Apprch %	5.3	70	24.2	0.5		51.4	31.8	15.2	1.7		7.3	58.5	34.2	0		32.9	49	17.7	0.3		
Total %	1.5	19.4	6.7	0.1	27.6	11.8	7.3	3.5	0.4	23	2.2	17.3	10.1	0	29.6	6.5	9.7	3.5	0.1	19.7	
Cars	21	299	96	2	418	184	112	54	6	356	33	267	153	0	453	96	151	54	1	302	1529
% Cars	91.3	98.4	91.4	100	96.3	98.9	97.4	98.2	100	98.3	97.1	98.2	96.2	0	97.4	94.1	99.3	98.2	100	97.4	97.3
Trucks	2	5	9	0	16	2	3	1	0	6	1	5	6	0	12	6	1	1	0	8	42
% Trucks	8.7	1.6	8.6	0	3.7	1.1	2.6	1.8	0	1.7	2.9	1.8	3.8	0	2.6	5.9	0.7	1.8	0	2.6	2.7

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021
Page No : 2

	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**2**	12	**6**	0	20	5	1	2	0	8	2	**38**	8	0	48	**10**	4	**2**	0	16	92
07:30 AM	2	**16**	3	0	**21**	8	3	**7**	1	19	**3**	31	16	0	50	5	7	2	0	14	104
07:45 AM	2	5	4	0	11	**27**	6	4	**2**	39	3	31	**37**	0	**71**	8	7	0	0	15	**136**
08:00 AM	2	8	5	0	15	26	**9**	6	2	**43**	0	24	28	0	52	6	**15**	1	0	**22**	132
Total Volume	8	41	18	0	67	66	19	19	5	109	8	124	89	0	221	29	33	5	0	67	464
% App. Total	11.9	61.2	26.9	0		60.6	17.4	17.4	4.6		3.6	56.1	40.3	0		43.3	49.3	7.5	0		
PHF	1.00	.641	.750	.000	.798	.611	.528	.679	.625	.634	.667	.816	.601	.000	.778	.725	.550	.625	.000	.761	.853
Cars	7	39	14	0	60	65	18	18	5	106	8	121	86	0	215	27	33	5	0	65	446
% Cars	87.5	95.1	77.8	0	89.6	98.5	94.7	94.7	100	97.2	100	97.6	96.6	0	97.3	93.1	100	100	0	97.0	96.1
Trucks	1	2	4	0	7	1	1	1	0	3	0	3	3	0	6	2	0	0	0	2	18
% Trucks	12.5	4.9	22.2	0	10.4	1.5	5.3	5.3	0	2.8	0	2.4	3.4	0	2.7	6.9	0	0	0	3.0	3.9
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	24	6	0	31	9	13	**6**				**14**			**23**						
05:15 PM	**2**	23	**11**	0	36	14	**17**	6	0	**37**	2	12	5	0	19	9	**15**	**11**	0	**35**	**127**
05:30 PM	1	**34**	7	0	**42**	**23**	2	6	0	31	1	8	**10**	0	19	**11**	13	2	0	26	118
05:45 PM	1	22	7	0	30	11	16	1	0	28	**4**	14	2	0	20	10	10	2	0	22	100
Total Volume	5	103	31	0	139	57	48	19	0	124	9	48	24	0	81	38	45	20	0	103	447
% App. Total	3.6	74.1	22.3	0		46	38.7	15.3	0		11.1	59.3	29.6	0		36.9	43.7	19.4	0		
PHF	.625	.757	.705	.000	.827	.620	.706	.792	.000	.838	.563	.857	.600	.000	.880	.864	.750	.455	.000	.736	.880
Cars	5	103	31	0	139	56	47	19	0	122	9	48	24	0	81	35	44	20	0	99	441
% Cars	100	100	100	0	100	98.2	97.9	100	0	98.4	100	100	100	0	100	92.1	97.8	100	0	96.1	98.7
Trucks	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3	1	0	0	4	6
% Trucks	0	0	0	0	0	1.8	2.1	0	0	1.6	0	0	0	0	0	7.9	2.2	0	0	3.9	1.3

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021
Page No : 3

Groups Printed- Cars

	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	7	1	0	9	3	1	0	0	4	2	24	3	0	29	2	9	3	0	14	56
07:15 AM	1	12	6	0	19	5	1	2	0	8	2	38	7	0	47	10	4	2	0	16	90
07:30 AM	2	16	3	0	21	8	3	7	1	19	3	30	16	0	49	5	7	2	0	14	103
07:45 AM	2	5	2	0	9	26	5	3	2	36	3	29	35	0	67	7	7	0	0	14	126
Total	6	40	12	0	58	42	10	12	3	67	10	121	61	0	192	24	27	7	0	58	375
08:00 AM	2	6	3	0	11	26	9	6	2	43	0	24	28	0	52	5	15	1	0	21	127
08:15 AM	1	10	10	0	21	6	3	2	1	12	2	13	13	0	28	1	9	1	0	11	72
08:30 AM	0	5	5	0	10	7	5	2	0	14	2	11	4	0	17	5	7	3	0	15	56
08:45 AM	2	3	1	0	6	4	7	2	0	13	3	11	2	0	16	5	11	1	0	17	52
Total	5	24	19	0	48	43	24	12	3	82	7	59	47	0	113	16	42	6	0	64	307
*** BREAK ***																					
04:00 PM	2	25	11	1	39	13	8	3	0	24	2	4	4	0	10	6	11	6	0	23	96
04:15 PM	2	25	9	0	36	14	11	3	0	28	2	12	5	0	19	8	8	4	0	20	103
04:30 PM	1	55	5	1	62	10	6	2	0	18	1	13	6	0	20	2	8	7	1	18	118
04:45 PM	0	27	9	0	36	6	6	3	0	15	2	10	6	0	18	5	11	4	0	20	89
Total	5	132	34	2	173	43	31	11	0	85	7	39	21	0	67	21	38	21	1	81	406
05:00 PM	1	24	6	0	31	9	13	6	0	28	2	14	7	0	23	7	6	5	0	18	100
05:15 PM	2	23	11	0	36	13	17	6	0	36	2	12	5	0	19	8	15	11	0	34	125
05:30 PM	1	34	7	0	42	23	2	6	0	31	1	8	10	0	19	10	13	2	0	25	117
05:45 PM	1	22	7	0	30	11	15	1	0	27	4	14	2	0	20	10	10	2	0	22	99
Total	5	103	31	0	139	56	47	19	0	122	9	48	24	0	81	35	44	20	0	99	441
*** BREAK ***																					
Grand Total	21	299	96	2	418	184	112	54	6	356	33	267	153	0	453	96	151	54	1	302	1529
Apprch %	5	71.5	23	0.5		51.7	31.5	15.2	1.7		7.3	58.9	33.8	0		31.8	50	17.9	0.3		
Total %	1.4	19.6	6.3	0.1	27.3	12	7.3	3.5	0.4	23.3	2.2	17.5	10	0	29.6	6.3	9.9	3.5	0.1	19.8	

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98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021
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	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	12	**6**	0	19	5	1	2	0	8	2	**38**	7	0	47	**10**	4	**2**	0	16	90
07:30 AM	**2**	**16**	3	0	**21**	8	3	**7**	1	19	**3**	30	16	0	49	5	7	2	0	14	103
07:45 AM	2	5	2	0	9	**26**	5	3	**2**	36	3	29	**35**	0	**67**	7	7	0	0	14	126
08:00 AM	2	6	3	0	11	26	**9**	6	2	**43**	0	24	28	0	52	5	**15**	1	0	**21**	**127**
Total Volume	7	39	14	0	60	65	18	18	5	106	8	121	86	0	215	27	33	5	0	65	446
% App. Total	11.7	65	23.3	0		61.3	17	17	4.7		3.7	56.3	40	0		41.5	50.8	7.7	0		
PHF	.875	.609	.583	.000	.714	.625	.500	.643	.625	.616	.667	.796	.614	.000	.802	.675	.550	.625	.000	.774	.878
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	24	6	0	31	9	13	**6**				**14**			**23**						
05:15 PM	**2**	23	**11**	0	36	13	**17**	6	0	**36**	2	12	5	0	19	8	**15**	**11**	0	**34**	**125**
05:30 PM	1	**34**	7	0	**42**	**23**	2	6	0	31	1	8	**10**	0	19	**10**	13	2	0	25	117
05:45 PM	1	22	7	0	30	11	15	1	0	27	**4**	14	2	0	20	10	10	2	0	22	99
Total Volume	5	103	31	0	139	56	47	19	0	122	9	48	24	0	81	35	44	20	0	99	441
% App. Total	3.6	74.1	22.3	0		45.9	38.5	15.6	0		11.1	59.3	29.6	0		35.4	44.4	20.2	0		
PHF	.625	.757	.705	.000	.827	.609	.691	.792	.000	.847	.563	.857	.600	.000	.880	.875	.733	.455	.000	.728	.882

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Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021

Groups Printed- Trucks

	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	3
07:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:45 AM	0	0	2	0	2	1	1	1	0	3	0	2	2	0	4	1	0	0	0	1	10
Total	1	0	2	0	3	1	1	1	0	3	1	3	5	0	9	1	0	0	0	1	16
08:00 AM	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
08:15 AM	1	0	2	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	5
08:30 AM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
*** BREAK ***																					
Total	1	3	6	0	10	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	14
*** BREAK ***																					
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
Total	0	2	1	0	3	0	1	0	0	1	0	1	0	0	1	1	0	0	0	1	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
05:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3	1	0	0	4	6
*** BREAK ***																					
Grand Total	2	5	9	0	16	2	3	1	0	6	1	5	6	0	12	6	1	1	0	8	42
Apprch %	12.5	31.2	56.2	0		33.3	50	16.7	0		8.3	41.7	50	0		75	12.5	12.5	0		
Total %	4.8	11.9	21.4	0	38.1	4.8	7.1	2.4	0	14.3	2.4	11.9	14.3	0	28.6	14.3	2.4	2.4	0	19	

Civil Transformations Inc.
2929 Coors Blvd. NW, Ste. 309
Albuquerque, NM 87120 (505) 508-3374
Transforming Infrastructure Needs into Sustainable Solutions

98th & Bluewater Commercial Development
Traffic Impact Analysis
Turning Movement Count

File Name : 6_Bluewater-90th-AM
Site Code : 6
Start Date : 4/7/2021
Page No : 6

	90TH From North					BLUEWATER From East					90TH From South					BLUEWATER From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	**2**	0	2	**1**	**1**	**1**	0	**3**	0	**2**	**2**	0	**4**	**1**	0	0	0	**1**	**10**
08:00 AM	0	**2**	2	0	**4**	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
08:15 AM	**1**	0	2	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	5
08:30 AM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	1	4
Total Volume	1	3	8	0	12	1	1	1	0	3	0	3	3	0	6	2	0	1	0	3	24
% App. Total	8.3	25	66.7	0		33.3	33.3	33.3	0		0	50	50	0		66.7	0	33.3	0		
PHF	.250	.375	1.00	.000	.750	.250	.250	.250	.000	.250	.000	.375	.375	.000	.375	.500	.000	.250	.000	.750	.600
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	**1**			**1**							**1**			**1**						
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	**1**	0	1	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	0	0	1	**3**
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**1**	0	0	**2**	2
Total Volume	0	2	1	0	3	0	1	0	0	1	0	1	0	0	1	2	1	0	0	3	8
% App. Total	0	66.7	33.3	0		0	100	0	0		0	100	0	0		66.7	33.3	0	0		
PHF	.000	.500	.250	.000	.750	.000	.250	.000	.000	.250	.000	.250	.000	.000	.250	.500	.250	.000	.000	.375	.667

Observed Counts (TAQA)_98th-Bluewater

COGID	Route	FuncClass	FromLocation	StartDate	Capac_NB	Capac_SB	Capac_EB	Capac_WB	Daily Vol	DayVol_NB	DayVol_SB	DayVol_EB	DayVol_WB	DDS	AM Time	AM Hr Vol	AMDir Split	AM_Vol_NB	AM_Vol_SB	AM_Vol_EB	AM_Vol_WB	PM Time	PM Hr Vol	PMDir Split	PM_Vol_NB	PM_Vol_SB	PM_Vol_EB	PM_Vol_WB	VC_AM_NB	VC_AM_SB	VC_AM_EB	VC_AM_WB	VC_PM_NB	VC_PM_SB	VC_PM_EB	VC_PM_WB
24348	I-40 WBD	Urban Interstate	98TH OFF RAMP - UNSER ON RAMP	2015-03-0	0	0	0	5500	29480	0	0	0	29480	1	815	1357	1	0	0	0	1357	1645	2524	1	0	0	0	2524	0	0	0	0.25	0	0	0	0.46
24392	I-40 EBD	Urban Interstate	98TH ON RAMP 2 - UNSER OFF RAMP	2015-03-0	0	0	5500	0	26437	0	0	26437	0	1	630	2345	1	0	0	2345	0	1500	1654	1	0	0	1654	0	0	0	0.43	0	0	0	0.3	0
24442	ARROYO VISTA	Urban Minor Arterial	NORTH OF I-40 NORTH RAMPS	2018-12-0	1630	1630	0	0	10723	5949	4774	0	0	0.55	745	1241	0.66	813	428	0	0	1515	1045	0.59	611	434	0	0	0.5	0.26	0	0	0.38	0.27	0	0
24443	ARROYO VISTA	Urban Minor Arterial	NORTH OF I-40 WBD OFF RAMP	2018-09-1	1630	2520	0	0	8461	3911	4550	0	0	0.54	645	1063	0.53	501	562	0	0	1515	766	0.53	364	402	0	0	0.31	0.22	0	0	0.22	0.16	0	0
24444	98TH STREET	Urban Principal Arterial	NORTH OF I-40 S. RAMPS	2017-06-0	2000	2000	0	0	23340	4490	18850	0	0	0.81	730	1232	0.73	331	901	0	0	1730	2080	0.83	363	1717	0	0	0.17	0.45	0	0	0.18	0.86	0	0
24446	98TH STREET	Urban Principal Arterial	NORTH OF I-40 EBD ON RAMP	2018-03-0	2000	2000	0	0	24726	5548	19178	0	0	0.78	700	1726	0.6	686	1040	0	0	1530	2271	0.82	404	1867	0	0	0.34	0.52	0	0	0.2	0.93	0	0
24676	I-40 WBD	Urban Interstate	98TH ON RAMP - 98TH OFF RAMP	2019-05-1	0	0	0	3660	19417	0	0	0	19417	1	930	1252	1	0	0	0	1252	1715	1300	1	0	0	0	1300	0	0	0	0.34	0	0	0	0.35
24824	I-40 EBD	Urban Interstate	98TH ON RAMP 1 - 98TH ON RAMP 2	1992-05-0	0	0	3660	0	11287	0	0	11287	0	1	730	880	1	0	0	880	0	1700	824	1	0	0	824	0	0	0	0.24	0	0	0	0.22	0
24992	I-40 EBD	Urban Interstate	98TH OFF RAMP - 98TH ON RAMP 1	2019-05-1	0	0	3660	0	21252	0	0	21252	0	1	845	1204	1	0	0	1204	0	1815	1700	1	0	0	1700	0	0	0	0.33	0	0	0	0.46	0
25728	CENTRAL	Urban Principal Arterial	WEST OF BRIDGE	2016-04-0	0	0	2000	2000	18799	0	0	8794	10005	0.53	700	1378	0.62	0	0	860	518	1600	1533	0.57	0	0	656	877	0	0	0.43	0.26	0	0	0.33	0.44
25764	98TH STREET	Urban Principal Arterial	SOUTH OF I-40 S. RAMPS	2019-09-1	2000	2000	0	0	39463	20586	18877	0	0	0.52	645	3039	0.71	2145	894	0	0	1615	3062	0.61	1195	1867	0	0	1.07	0.45	0	0	0.6	0.93	0	0
26293	CENTRAL	Urban Principal Arterial	EAST OF 114TH ST.	2019-11-1	0	0	2000	2000	8739	0	0	4196	4543	0.52	645	868	0.65	0	0	434	234	1630	845	0.58	0	0	359	486	0	0	0.22	0.12	0	0	0.18	0.24
26532	98TH STREET	Urban Principal Arterial	SOUTH OF CENTRAL	2017-08-1	2000	2000	0	0	30258	16208	14050	0	0	0.54	645	2193	0.79	1735	458	0	0	1700	2358	0.61	912	1446	0	0	0.87	0.23	0	0	0.46	0.72	0	0

Traffic Count Data Sheet

Year Counts Taken: **2019** E-W Street: **Central Ave.** Speed Limit (Central Ave.)= **55** MPH

N-S Street: **98th St.** Speed Limit (98th St.)= **45** MPH

Signalized **2/7/19**

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	**98**	**44**	**0**	**0**	**29**	**26**	**32**	**0**	**3**	**365**	**46**	**0**	**15**	**84**	**28**	**0**
7:15 AM	7:30 AM	**124**	**67**	**6**	**0**	**21**	**27**	**53**	**0**	**4**	**410**	**35**	**0**	**16**	**122**	**28**	**0**
7:30 AM	7:45 AM	**96**	**60**	**7**	**0**	**28**	**27**	**76**	**0**	**0**	**381**	**30**	**0**	**20**	**121**	**24**	**1**
7:45 AM	8:00 AM	**88**	**61**	**5**	**0**	**34**	**38**	**34**	**0**	**7**	**395**	**53**	**1**	**14**	**103**	**30**	**0**
8:00 AM	8:15 AM	~~72~~	~~42~~	~~3~~	~~0~~	~~38~~	~~39~~	~~46~~	~~0~~	~~4~~	~~292~~	~~49~~	~~1~~	~~15~~	~~120~~	~~16~~	~~0~~
8:15 AM	8:30 AM	~~46~~	~~33~~	~~7~~	~~0~~	~~45~~	~~46~~	~~39~~	~~0~~	~~4~~	~~297~~	~~34~~	~~1~~	~~22~~	~~98~~	~~16~~	~~0~~
8:30 AM	8:45 AM	~~48~~	~~28~~	~~5~~	~~0~~	~~34~~	~~14~~	~~44~~	~~0~~	~~5~~	~~299~~	~~38~~	~~0~~	~~16~~	~~101~~	~~20~~	~~0~~
8:45 AM	9:00 AM	~~22~~	~~24~~	~~1~~	~~0~~	~~11~~	~~19~~	~~24~~	~~0~~	~~4~~	~~145~~	~~22~~	~~0~~	~~10~~	~~54~~	~~9~~	~~0~~
AM Peak Hour Volumes		**406**	**232**	**18**	**0**	**112**	**118**	**195**	**0**	**14**	**1551**	**164**	**1**	**65**	**430**	**110**	**1**
% of Total Traffic		11.9%	6.8%	0.5%		3.3%	3.5%	5.7%		0.4%	45.4%	4.8%		1.9%	12.6%	3.2%	
% Directional			19.2%				12.4%	**Intersection**			50.6%				17.7%		
AM Peak Hour Factor			*0.83*				*0.81*	0.94			*0.95*				*0.91*		

Begin Time	End Time	Eastbound (Central Ave.)				Westbound (Central Ave.)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	**43**	**55**	**8**	**0**	**57**	**40**	**31**	**1**	**9**	**207**	**39**	**0**	**35**	**304**	**64**	**1**
4:15 PM	4:30 PM	**54**	**37**	**13**	**0**	**79**	**54**	**29**	**0**	**8**	**173**	**39**	**0**	**22**	**326**	**40**	**0**
4:30 PM	4:45 PM	**43**	**40**	**6**	**0**	**58**	**49**	**36**	**0**	**9**	**199**	**41**	**0**	**21**	**332**	**40**	**0**
4:45 PM	5:00 PM	**44**	**49**	**8**	**0**	**70**	**52**	**39**	**4**	**8**	**202**	**35**	**0**	**21**	**283**	**90**	**0**
5:00 PM	5:15 PM	~~52~~	~~55~~	~~11~~	~~2~~	~~71~~	~~57~~	~~42~~	~~0~~	~~14~~	~~189~~	~~31~~	~~1~~	~~23~~	~~312~~	~~26~~	~~0~~
5:15 PM	5:30 PM	~~46~~	~~57~~	~~14~~	~~0~~	~~75~~	~~54~~	~~36~~	~~0~~	~~9~~	~~174~~	~~26~~	~~0~~	~~31~~	~~302~~	~~26~~	~~0~~
5:30 PM	5:45 PM	~~36~~	~~28~~	~~8~~	~~1~~	~~48~~	~~56~~	~~42~~	~~0~~	~~4~~	~~200~~	~~33~~	~~0~~	~~23~~	~~358~~	~~51~~	~~9~~
5:45 PM	6:00 PM	~~18~~	~~16~~	~~3~~	~~0~~	~~19~~	~~22~~	~~8~~	~~0~~	~~1~~	~~73~~	~~11~~	~~0~~	~~9~~	~~88~~	~~17~~	~~0~~
PM Peak Hour Volumes		**184**	**181**	**35**	**0**	**264**	**195**	**135**	**5**	**34**	**781**	**154**	**0**	**99**	**1245**	**234**	**1**
% of Total Traffic		5.2%	5.1%	1.0%		7.4%	5.5%	3.8%		1.0%	22.0%	4.3%		2.8%	35.1%	6.6%	
% Directional			11.3%				16.8%	**Intersection**			27.3%				44.5%		
PM Peak Hour Factor			*0.94*				*0.92*	0.98			*0.95*				*0.98*		

Traffic Count Data Sheet

Year Counts Taken: **2019** E-W Street: **I-40 S. Ramp** Speed Limit (I-40 S. Ramp)= **30** MPH

N-S Street: **98th St.** Speed Limit (98th St.)= **45** MPH

Signalized **2/7/19**

Begin Time	End Time	Eastbound (I-40 S. Ramp)				Westbound (I-40 S. Ramp)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**73**	**0**	**0**	**0**	**174**	**0**	**0**
7:15 AM	7:30 AM	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**127**	**0**	**0**	**0**	**193**	**0**	**0**
7:30 AM	7:45 AM	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**150**	**0**	**0**	**0**	**159**	**0**	**0**
7:45 AM	8:00 AM	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**183**	**0**	**0**	**0**	**179**	**0**	**0**
8:00 AM	8:15 AM	~~5~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~106~~	~~0~~	~~0~~	~~0~~	~~136~~	~~0~~	~~0~~
8:15 AM	8:30 AM	~~7~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~91~~	~~0~~	~~0~~	~~0~~	~~159~~	~~0~~	~~0~~
8:30 AM	8:45 AM	~~18~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~138~~	~~0~~	~~0~~	~~0~~	~~177~~	~~0~~	~~0~~
8:45 AM	9:00 AM	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~67~~	~~0~~	~~0~~	~~0~~	~~186~~	~~0~~	~~0~~
AM Peak Hour Volumes		**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**533**	**0**	**0**	**0**	**705**	**0**	**0**
% of Total Traffic		1.6%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	42.4%	0.0%		0.0%	56.0%	0.0%	
% Directional			1.6%				0.0%	**Intersection**			42.4%				56.0%		
AM Peak Hour Factor			***0.71***					**0.86**			***0.73***				***0.91***		

Begin Time	End Time	Eastbound (I-40 S. Ramp)				Westbound (I-40 S. Ramp)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**0**	**1**	**0**	**497**	**0**	**0**
4:15 PM	4:30 PM	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**90**	**0**	**0**	**0**	**461**	**0**	**0**
4:30 PM	4:45 PM	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**	**0**	**0**	**0**	**454**	**0**	**0**
4:45 PM	5:00 PM	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**0**	**0**	**411**	**0**	**0**
5:00 PM	5:15 PM	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~75~~	~~0~~	~~0~~	~~0~~	~~431~~	~~0~~	~~0~~
5:15 PM	5:30 PM	~~12~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~65~~	~~0~~	~~0~~	~~0~~	~~418~~	~~0~~	~~0~~
5:30 PM	5:45 PM	~~9~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~81~~	~~0~~	~~0~~	~~0~~	~~422~~	~~0~~	~~0~~
5:45 PM	6:00 PM	~~5~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~76~~	~~0~~	~~0~~	~~0~~	~~428~~	~~0~~	~~0~~
PM Peak Hour Volumes		**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**312**	**0**	**1**	**0**	**1823**	**0**	**0**
% of Total Traffic		1.2%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	14.4%	0.0%		0.0%	84.4%	0.0%	
% Directional			1.2%				0.0%	**Intersection**			14.4%				84.4%		
PM Peak Hour Factor			***0.69***					**0.92**			***0.87***				***0.92***		

Traffic Count Data Sheet

Year Counts Taken: **2019**
E-W Street: **I-40 N. Ramp**
N-S Street: **98th St.**
Speed Limit (I-40 N. Ramp)= **45** MPH
Speed Limit (98th St.)= **45** MPH
Signalized
2/18/19

Begin Time	End Time	Eastbound (I-40 N. Ramp)				Westbound (I-40 N. Ramp)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	**0**	**0**	**0**	**0**	**123**	**0**	**0**	**0**	**13**	**69**	**0**	**0**	**0**	**161**	**0**	**0**
7:15 AM	7:30 AM	**0**	**0**	**0**	**0**	**138**	**1**	**1**	**0**	**14**	**118**	**0**	**0**	**0**	**118**	**0**	**0**
7:30 AM	7:45 AM	**0**	**0**	**0**	**0**	**97**	**0**	**0**	**0**	**21**	**140**	**0**	**0**	**0**	**106**	**0**	**0**
7:45 AM	8:00 AM	**0**	**0**	**0**	**0**	**109**	**0**	**0**	**0**	**21**	**166**	**7**	**0**	**0**	**82**	**0**	**0**
8:00 AM	8:15 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~93~~	~~0~~	~~0~~	~~0~~	~~6~~	~~111~~	~~0~~	~~0~~	~~0~~	~~76~~	~~0~~	~~0~~
8:15 AM	8:30 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~98~~	~~0~~	~~0~~	~~0~~	~~11~~	~~88~~	~~0~~	~~0~~	~~0~~	~~94~~	~~0~~	~~0~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~107~~	~~0~~	~~0~~	~~0~~	~~17~~	~~141~~	~~0~~	~~0~~	~~0~~	~~126~~	~~0~~	~~0~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~118~~	~~0~~	~~0~~	~~0~~	~~10~~	~~60~~	~~0~~	~~0~~	~~0~~	~~104~~	~~0~~	~~0~~
AM Peak Hour Volumes		**0**	**0**	**0**	**0**	**467**	**1**	**1**	**0**	**69**	**493**	**7**	**0**	**0**	**467**	**0**	**0**
Percent Approach		#DIV/0!	#DIV/0!	#DIV/0!		99.6%	0.2%	0.2%		12.1%	86.6%	1.2%		0.0%	100.0%	0.0%	
								Intersection									
AM Peak Hour Factor			***#DIV/0!***				***0.84***	**0.96**			***0.73***				***0.73***		

Begin Time	End Time	Eastbound (I-40 N. Ramp)				Westbound (I-40 N. Ramp)				Northbound (98th St.)				Southbound (98th St.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	**0**	**0**	**0**	**0**	**340**	**0**	**0**	**0**	**22**	**67**	**0**	**1**	**0**	**135**	**1**	**0**
4:15 PM	4:30 PM	**0**	**0**	**0**	**0**	**386**	**1**	**0**	**0**	**19**	**69**	**0**	**0**	**0**	**73**	**0**	**0**
4:30 PM	4:45 PM	**0**	**0**	**0**	**0**	**376**	**0**	**0**	**0**	**12**	**70**	**0**	**0**	**0**	**58**	**0**	**0**
4:45 PM	5:00 PM	**0**	**0**	**0**	**0**	**355**	**0**	**0**	**0**	**19**	**55**	**0**	**0**	**0**	**67**	**0**	**0**
5:00 PM	5:15 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~309~~	~~0~~	~~0~~	~~0~~	~~21~~	~~74~~	~~0~~	~~0~~	~~0~~	~~80~~	~~0~~	~~0~~
5:15 PM	5:30 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~341~~	~~2~~	~~0~~	~~0~~	~~10~~	~~81~~	~~0~~	~~0~~	~~0~~	~~98~~	~~0~~	~~0~~
5:30 PM	5:45 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~348~~	~~0~~	~~0~~	~~0~~	~~21~~	~~79~~	~~0~~	~~0~~	~~0~~	~~72~~	~~0~~	~~0~~
5:45 PM	6:00 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~364~~	~~1~~	~~0~~	~~0~~	~~15~~	~~72~~	~~0~~	~~0~~	~~0~~	~~69~~	~~0~~	~~0~~
PM Peak Hour Volumes		**0**	**0**	**0**	**0**	**1457**	**1**	**0**	**0**	**72**	**261**	**0**	**1**	**0**	**333**	**1**	**0**
Percent Approach		#DIV/0!	#DIV/0!	#DIV/0!		99.9%	0.1%	0.0%		21.6%	78.4%	0.0%		0.0%	99.7%	0.3%	
								Intersection									
PM Peak Hour Factor			***#DIV/0!***				***0.94***	**0.94**			***0.94***				***0.61***		

B-40
A-117

NMDOT - Data Management Bureau Traffic Monitoring Program
14599 Weekly Volume Report - Mon 09/16/2019 - Sun 09/22/2019

98th at I-40

Location ID:	14599	**Type:**	SPOT
Located On:	FL-4005-P		
Direction	2-WAY		
Community:		**Period:**	Mon 09/16/2019 - Sun 09/22/2019
AADT:	36216		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	344	330						337
1:00 AM	230	250						240
2:00 AM	202	239						221
3:00 AM	258	271						265
4:00 AM	485	444						465
5:00 AM	1087	1079						1083
6:00 AM	2223	2328						2276
7:00 AM	2880	2881						2881
8:00 AM	2480	2509						2495
9:00 AM	1912	1881						1897
10:00 AM	1703	1682						1693
11:00 AM	1717	1653						1685
12:00 PM	1921	1765						1843
1:00 PM	2002	1960						1981
2:00 PM	2365	2237						2301
3:00 PM	2723	2759						2741
4:00 PM	2992	3019						3006
5:00 PM	2773	3012						2893
6:00 PM	2332	2679						2506
7:00 PM	1939	2278						2109
8:00 PM	1642	1829						1736
9:00 PM	1094	1464						1279
10:00 PM	802	1050						926
11:00 PM	553	667						610
Total	**38659**	**40266**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	38659	40266						39463
AM Pk Hr	7:00	7:00						
AM Peak	2880	2881						2881
PM Pk Hr	4:00	4:00						
PM Peak	2992	3019						3006
% Peak Hr	7.74%	7.50%						7.50%
% Peak Hr	7.74%	7.50%						7.62%

NMDOT - Data Management Bureau Traffic Monitoring Program
14599_POS Weekly Volume Report - Mon 09/16/2019 - Sun 09/22/2019

Location ID:	14599_POS	**Type:**	SPOT
Located On:	FL-4005-P		
Direction	POS		
Community:		**Period:**	Mon 09/16/2019 - Sun 09/22/2019
AADT:	18895		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	137	113						125
1:00 AM	102	97						100
2:00 AM	103	106						105
3:00 AM	157	176						167
4:00 AM	365	343						354
5:00 AM	856	866						861
6:00 AM	1722	1773						1748
7:00 AM	1973	1981						1977
8:00 AM	1560	1607						1584
9:00 AM	1162	1159						1161
10:00 AM	989	988						989
11:00 AM	950	915						933
12:00 PM	984	901						943
1:00 PM	1026	1014						1020
2:00 PM	1209	1149						1179
3:00 PM	1262	1186						1224
4:00 PM	1238	1155						1197
5:00 PM	1075	1244						1160
6:00 PM	1019	1140						1080
7:00 PM	847	980						914
8:00 PM	588	785						687
9:00 PM	414	608						511
10:00 PM	281	392						337
11:00 PM	219	255						237
Total	**20238**	**20933**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	20238	20933						20586
AM Pk Hr	7:00	7:00						
AM Peak	1973	1981						1977
PM Pk Hr	3:00	5:00						
PM Peak	1262	1244						1253
% Peak Hr	9.75%	9.46%						9.50%
% Peak Hr	9.75%	9.46%						9.61%

NMDOT - Data Management Bureau Traffic Monitoring Program
14599_NEG Weekly Volume Report - Mon 09/16/2019 - Sun 09/22/2019

Location ID:	14599_NEG	**Type:**	SPOT
Located On:	FL-4005-P		
Direction	NEG		
Community:		**Period:**	Mon 09/16/2019 - Sun 09/22/2019
AADT:	17322		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	207	217						212
1:00 AM	128	153						141
2:00 AM	99	133						116
3:00 AM	101	95						98
4:00 AM	120	101						111
5:00 AM	231	213						222
6:00 AM	501	555						528
7:00 AM	907	900						904
8:00 AM	920	902						911
9:00 AM	750	722						736
10:00 AM	714	694						704
11:00 AM	767	738						753
12:00 PM	937	864						901
1:00 PM	976	946						961
2:00 PM	1156	1088						1122
3:00 PM	1461	1573						1517
4:00 PM	1754	1864						1809
5:00 PM	1698	1768						1733
6:00 PM	1313	1539						1426
7:00 PM	1092	1298						1195
8:00 PM	1054	1044						1049
9:00 PM	680	856						768
10:00 PM	521	658						590
11:00 PM	334	412						373
Total	**18421**	**19333**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	18421	19333						18877
AM Pk Hr	8:00	8:00						
AM Peak	920	902						911
PM Pk Hr	4:00	4:00						
PM Peak	1754	1864						1809
% Peak Hr	9.52%	9.64%						10.00%
% Peak Hr	9.52%	9.64%						9.58%

NMDOT - Data Management Bureau Traffic Monitoring Program
10151 Weekly Volume Report - Mon 09/16/2019 - Sun 09/22/2019

Location ID:	10151 ***I-40 EB OFF RAMP***	**Type:**	SPOT
Located On:	IX-40-P-153.0-A		
Direction	1-WAY		
Community:		**Period:**	Mon 09/16/2019 - Sun 09/22/2019
AADT:	1743		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	33	34						34
1:00 AM	28	38						33
2:00 AM	22	11						17
3:00 AM	29	23						26
4:00 AM	31	30						31
5:00 AM	29	41						35
6:00 AM	40	51						46
7:00 AM	69	62						66
8:00 AM	129	88						109
9:00 AM	97	94						96
10:00 AM	98	89						94
11:00 AM	74	73						74
12:00 PM	89	111						100
1:00 PM	96	109						103
2:00 PM	98	98						98
3:00 PM	133	131						132
4:00 PM	93	117						105
5:00 PM	109	137						123
6:00 PM	77	112						95
7:00 PM	51	101						76
8:00 PM	73	95						84
9:00 PM	51	65						58
10:00 PM	55	87						71
11:00 PM	26	73						50
Total	**1630**	**1870**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	1630	1870						1750
AM Pk Hr	8:00	9:00						
AM Peak	129	94						112
PM Pk Hr	3:00	5:00						
PM Peak	133	137						135
% Peak Hr	8.16%	7.33%						7.50%
% Peak Hr	8.16%	7.33%						7.74%

NMDOT - Data Management Bureau Traffic Monitoring Program
10368 Weekly Volume Report - Mon 05/13/2019 - Sun 05/19/2019

Location ID:	10368 ***I-40 EB ON1 (S-E Loop)***	**Type:**	SPOT
Located On:	IX-40-P-153.0-G		
Direction	1-WAY		
Community:		**Period:**	Mon 05/13/2019 - Sun 05/19/2019
AADT:	1887		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	7	6						7
1:00 AM	1	1						1
2:00 AM	2	3						3
3:00 AM	10	10						10
4:00 AM	21	19						20
5:00 AM	89	82						86
6:00 AM	242	252						247
7:00 AM	299	313						306
8:00 AM	192	202						197
9:00 AM	101	111						106
10:00 AM	76	95						86
11:00 AM	82	64						73
12:00 PM	93	76						85
1:00 PM	80	89						85
2:00 PM	82	106						94
3:00 PM	86	85						86
4:00 PM	84	109						97
5:00 PM	83	96						90
6:00 PM	60	79						70
7:00 PM	105	90						98
8:00 PM	36	42						39
9:00 PM	94	70						82
10:00 PM	14	33						24
11:00 PM	6	9						8
Total	**1945**	**2042**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	1945	2042						1994
AM Pk Hr	7:00	7:00						
AM Peak	299	313						306
PM Pk Hr	7:00	4:00						
PM Peak	105	109						107
% Peak Hr	15.37%	15.33%						15.00%
% Peak Hr	15.37%	15.33%						15.35%

NMDOT - Data Management Bureau Traffic Monitoring Program
10434 Weekly Volume Report - Mon 05/13/2019 - Sun 05/19/2019

Location ID:	10434 ***I-40 EB ON2 (N-E Ramp)***	**Type:**	SPOT
Located On:	IX-40-P-153.0-H		
Direction	1-WAY		
Community:		**Period:**	Mon 05/13/2019 - Sun 05/19/2019
AADT:	14816		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	122	72						97
1:00 AM	69	64						67
2:00 AM	59	60						60
3:00 AM	170	162						166
4:00 AM	275	283						279
5:00 AM	744	812						778
6:00 AM	1500	1537						1519
7:00 AM	1623	1610						1617
8:00 AM	1214	1251						1233
9:00 AM	910	921						916
10:00 AM	751	748						750
11:00 AM	817	713						765
12:00 PM	869	756						813
1:00 PM	934	768						851
2:00 PM	834	948						891
3:00 PM	767	861						814
4:00 PM	740	740						740
5:00 PM	754	819						787
6:00 PM	673	690						682
7:00 PM	531	580						556
8:00 PM	449	416						433
9:00 PM	364	404						384
10:00 PM	241	292						267
11:00 PM	189	177						183
Total	**15599**	**15684**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	15599	15684						15642
AM Pk Hr	7:00	7:00						
AM Peak	1623	1610						1617
PM Pk Hr	1:00	2:00						
PM Peak	934	948						941
% Peak Hr	10.40%	10.27%						10.00%
% Peak Hr	10.40%	10.27%						10.33%

NMDOT - Data Management Bureau Traffic Monitoring Program
10817 Weekly Volume Report - Mon 05/13/2019 - Sun 05/19/2019

Location ID:	10817 ***I-40 WB ON (S-E + N-W)***	**Type:**	SPOT
Located On:	IX-40-P-153.0-T		
Direction	1-WAY		
Community:		**Period:**	Mon 05/13/2019 - Sun 05/19/2019
AADT:	1969		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	34	29						32
1:00 AM	40	20						30
2:00 AM	10	21						16
3:00 AM	45	25						35
4:00 AM	49	21						35
5:00 AM	64	47						56
6:00 AM	92	75						84
7:00 AM	111	126						119
8:00 AM	94	126						110
9:00 AM	118	110						114
10:00 AM	122	97						110
11:00 AM	123	126						125
12:00 PM	138	116						127
1:00 PM	113	126						120
2:00 PM	101	112						107
3:00 PM	132	133						133
4:00 PM	130	154						142
5:00 PM	115	142						129
6:00 PM	95	123						109
7:00 PM	94	78						86
8:00 PM	63	99						81
9:00 PM	46	66						56
10:00 PM	60	101						81
11:00 PM	40	58						49
Total	**2029**	**2131**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	2029	2131						2080
AM Pk Hr	11:00	7:00						
AM Peak	123	126						125
PM Pk Hr	12:00	4:00						
PM Peak	138	154						146
% Peak Hr	6.80%	7.23%						7.00%
% Peak Hr	6.80%	7.23%						7.01%

NMDOT - Data Management Bureau Traffic Monitoring Program
10592 Weekly Volume Report - Mon 05/13/2019 - Sun 05/19/2019

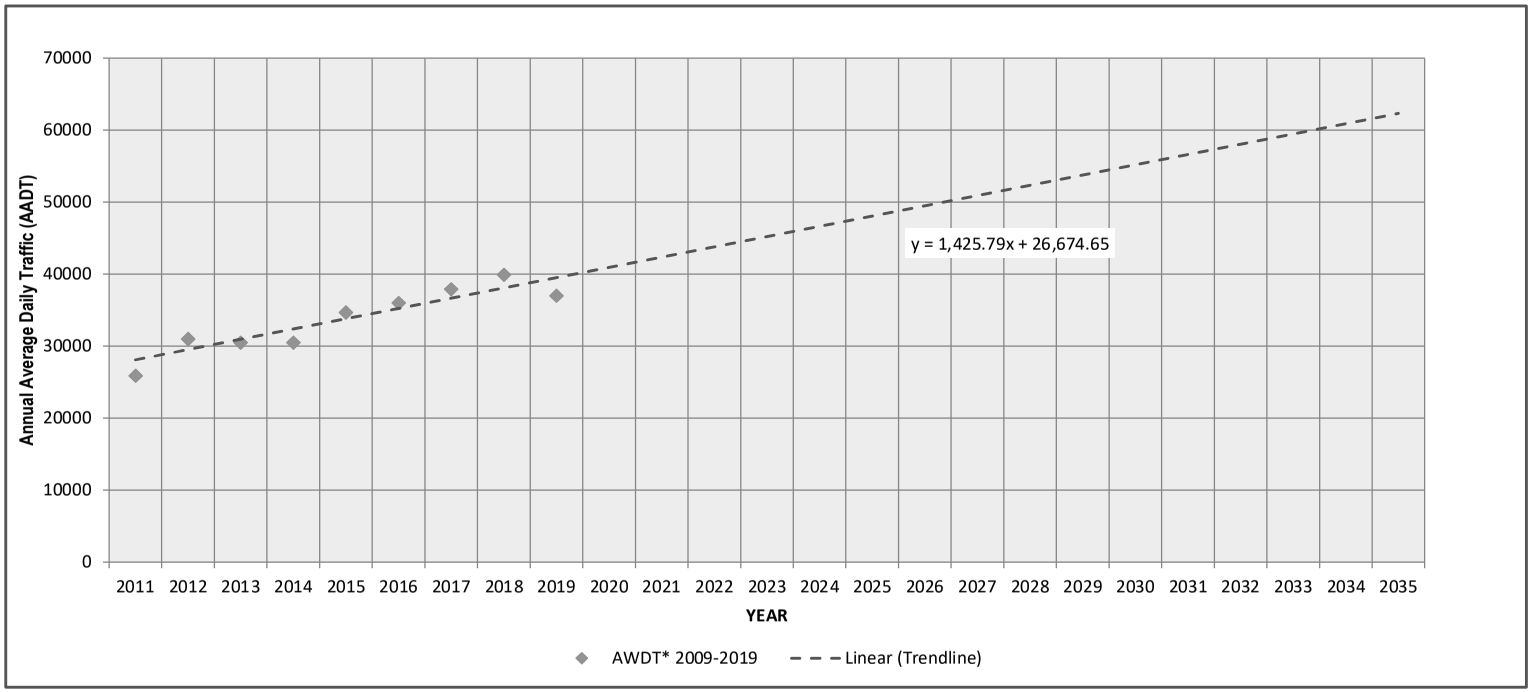
Location ID:	10592 ***I-40 WB OFF (W-S + W-N)***	**Type:**	SPOT
Located On:	IX-40-P-153.0-N		
Direction	1-WAY		
Community:		**Period:**	Mon 05/13/2019 - Sun 05/19/2019
AADT:	18015		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg
12:00 AM	233	213						223
1:00 AM	154	100						127
2:00 AM	74	96						85
3:00 AM	79	43						61
4:00 AM	80	77						79
5:00 AM	160	164						162
6:00 AM	389	384						387
7:00 AM	582	595						589
8:00 AM	616	632						624
9:00 AM	632	652						642
10:00 AM	722	612						667
11:00 AM	753	811						782
12:00 PM	955	919						937
1:00 PM	915	1036						976
2:00 PM	1210	1305						1258
3:00 PM	1765	1746						1756
4:00 PM	2165	2342						2254
5:00 PM	2208	2275						2242
6:00 PM	1695	1568						1632
7:00 PM	1406	1269						1338
8:00 PM	890	938						914
9:00 PM	493	550						522
10:00 PM	464	429						447
11:00 PM	313	329						321
Total	**18953**	**19085**	**0**	**0**	**0**	**0**	**0**	
24HrTotal	18953	19085						19019
AM Pk Hr	11:00	11:00						
AM Peak	753	811						782
PM Pk Hr	5:00	4:00						
PM Peak	2208	2342						2275
% Peak Hr	11.65%	12.27%						12.00%
% Peak Hr	11.65%	12.27%						11.96%

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - 98th St. from Central to Avalon

YEAR	AWDT* 2009-2019	TRENDLINE	
2009	26621	*25249*	
2010	26222	*26675*	
2011	25881	*28100*	
2012	30989	*29526*	
2013	30493	*30952*	
2014	30493	*32378*	
2015	34670	*33804*	
2016	35987	*35229*	
2017	37900	*36655*	
2018	39900	*38081*	
2019	37000	*39507*	
2020		*40933*	
2021		*42358*	
2022		*43784*	
2023		*45210*	
2024		*46636*	
2025		*48062*	
2026		*49487*	
2027		*50913*	
2028		*52339*	
2029		*53765*	
2030		*55190*	
2031		*56616*	
2032		*58042*	
2033		*59468*	
2034		*60894*	
2035		*62319*	
	10379	37071	growth
	1037.90	1425.79	rate



G_1 = 3.35% 2009-2019 AADT compounded annual rate

G_2 = *4.58% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 3% / year traffic growth rate for 98th St.

GF_4= 1.13 Growth Factor to Year 2025

GF_{14}= 1.51 Growth Factor to Year 2035

Comments:

High growth rate may not be sustainable over forecast period; limited developable land S. of Central Ave., but more developable land is available W. of 98th St.

Source(s):

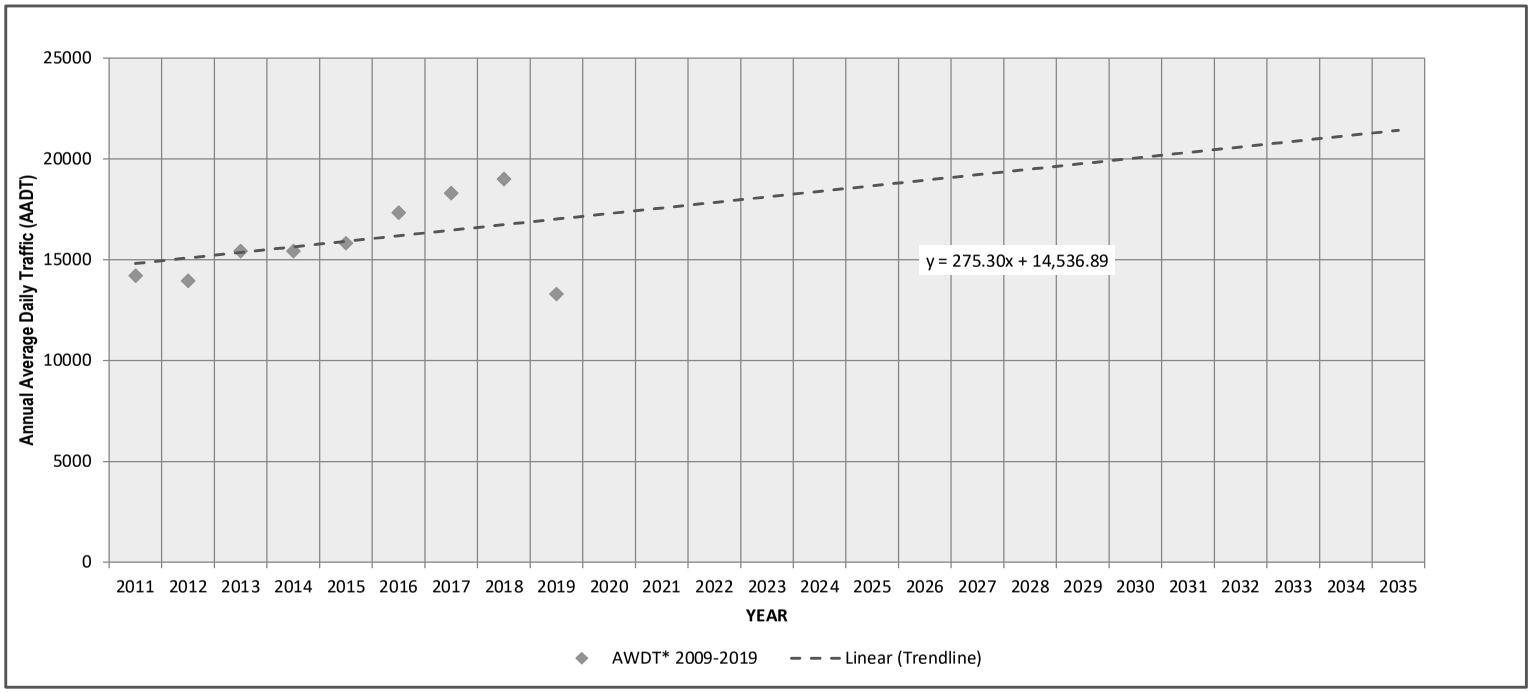
2009-2016 = MRCOG Transportation Analysis and Querying Application (TAQA) via www.taqa.mrcog-nm.gov/taqa/

2007-2019 = "MRCOG Traffic Flows for the Greater Albuquerque Area"
(98th St., COGID #25764)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - Central Ave. East of 98th St.

YEAR	AWDT* 2009-2019	TRENDLINE
2009	14725	*14262*
2010	14504	*14537*
2011	14200	*14812*
2012	13959	*15087*
2013	15439	*15363*
2014	15439	*15638*
2015	15825	*15913*
2016	17328	*16189*
2017	18300	*16464*
2018	19000	*16739*
2019	13300	*17015*
2020		*17290*
2021		*17565*
2022		*17840*
2023		*18116*
2024		*18391*
2025		*18666*
2026		*18942*
2027		*19217*
2028		*19492*
2029		*19768*
2030		*20043*
2031		*20318*
2032		*20593*
2033		*20869*
2034		*21144*
2035		*21419*
	-1425	7158 growth
	-142.50	823.82 rate



G_1 = -1.01% 2009-2019 AADT compounded annual rate

G_2 = *1.78% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 1% / year traffic growth rate for Central Ave. GF_4= **1.04 Growth Factor to Year 2025**

Comments: GF_{14}= **1.15 Growth Factor to Year 2035**

Low-moderate growth; developable land available along Central Ave. and Bridge Blvd.

Source(s):

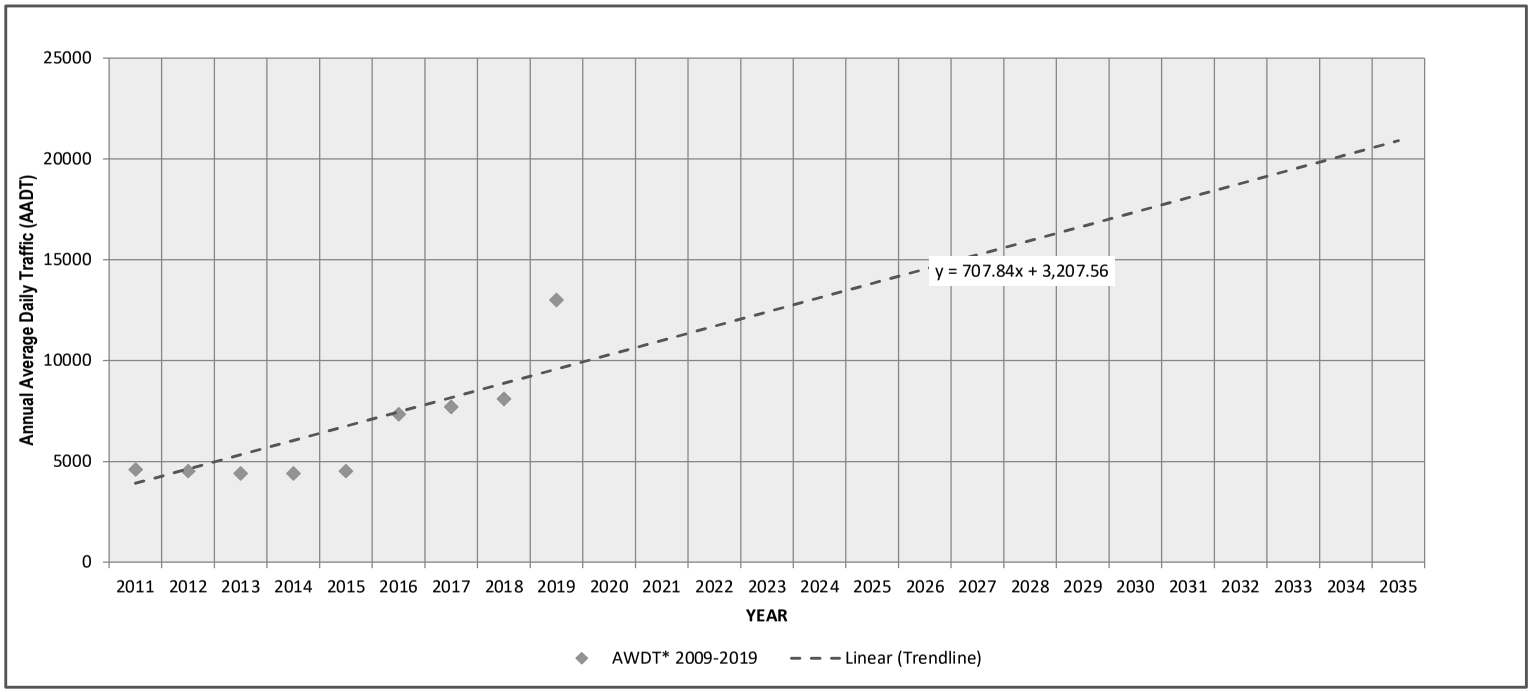
2009-2016 = MRCOG Transportation Analysis and Querying Application (TAQA) via www.taqa.mrcog-nm.gov/taqa/

2007-2019 = "MRCOG Traffic Flows for the Greater Albuquerque Area"
(98th St., COGID #25764)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - Bluewater West of Unser

YEAR	AWDT* 2009-2019	TRENDLINE
2009	3187	*2500*
2010	4660	*3208*
2011	4599	*3915*
2012	4521	*4623*
2013	4406	*5331*
2014	4406	*6039*
2015	4516	*6747*
2016	7333	*7455*
2017	7700	*8162*
2018	8100	*8870*
2019	13000	*9578*
2020		*10286*
2021		*10994*
2022		*11702*
2023		*12409*
2024		*13117*
2025		*13825*
2026		*14533*
2027		*15241*
2028		*15949*
2029		*16656*
2030		*17364*
2031		*18072*
2032		*18780*
2033		*19488*
2034		*20196*
2035		*20903*
	9813	18404 growth
	981.30	803.98 rate



G_1 = 15.09% 2009-2019 AADT compounded annual rate

G_2 = *14.38% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 0.5% / year traffic growth rate for Bluewater S

GF_4= 1.02 Growth Factor to Year 2025

GF_{14}= 1.07 Growth Factor to Year 2035

Comments:

Mostly built-out; add estimated trips from Westpointe TIS to account for growth.

Source(s):

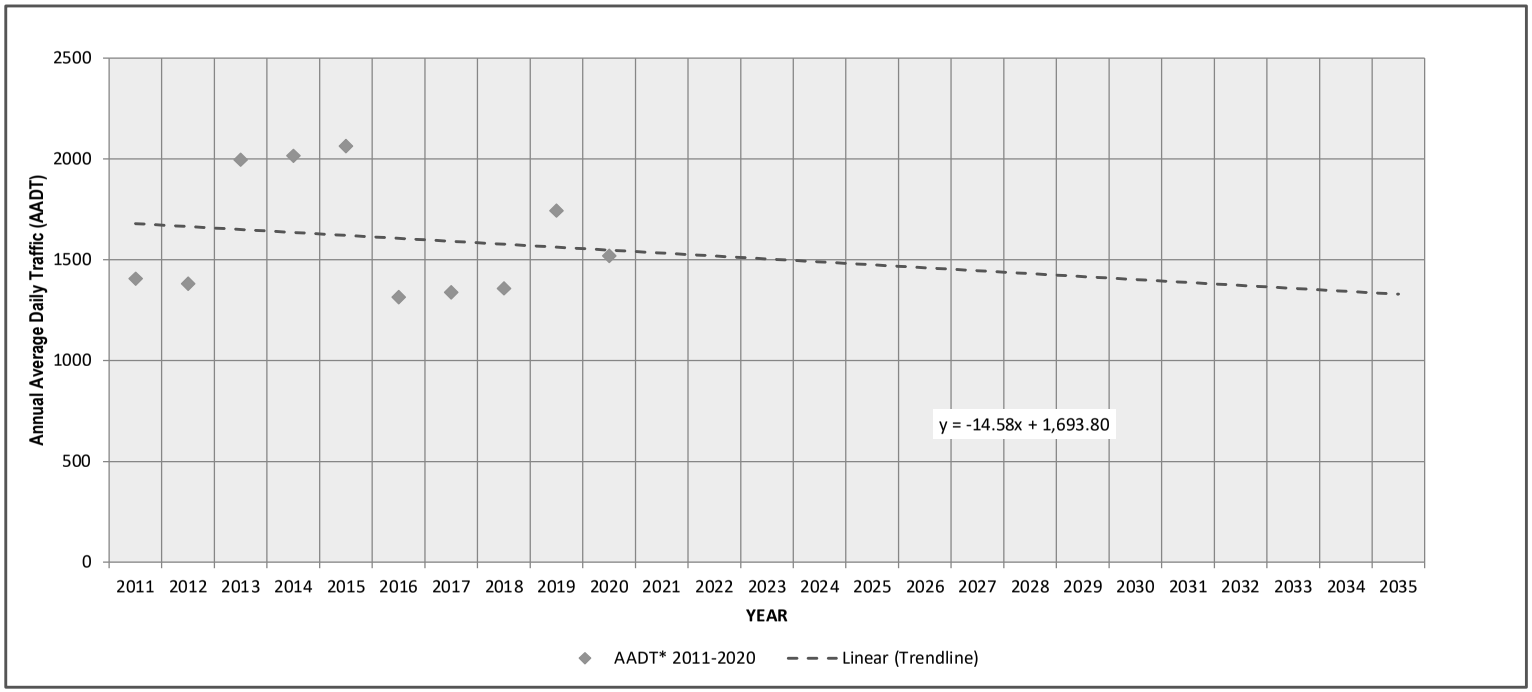
2009-2016 = MRCOG Transportation Analysis and Querying Application (TAQA) via www.taqa.mrcog-nm.gov/taqa/

2007-2019 = "MRCOG Traffic Flows for the Greater Albuquerque Area"
(Bluewater St., COGID #24714)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - I40 EB Off Ramp

YEAR	AADT* 2011-2020	TRENDLINE
2009		
2010		
2011	1406	*1679*
2012	1381	*1665*
2013	1996	*1650*
2014	2015	*1635*
2015	2063	*1621*
2016	1315	*1606*
2017	1339	*1592*
2018	1358	*1577*
2019	1743	*1563*
2020	1520	*1548*
2021		*1533*
2022		*1519*
2023		*1504*
2024		*1490*
2025		*1475*
2026		*1460*
2027		*1446*
2028		*1431*
2029		*1417*
2030		*1402*
2031		*1388*
2032		*1373*
2033		*1358*
2034		*1344*
2035		*1329*
	114	-350 growth
	12.67	-14.58 rate



G_1 = 0.87% 2009-2019 AADT compounded annual rate

G_2 = *-0.90% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 1% / year traffic growth rate for I40 EB Off

GF_4= 1.04 Growth Factor to Year 2025

GF_{14}= 1.15 Growth Factor to Year 2035

Comments:

Growth potential N. of I40, W. of 98th.

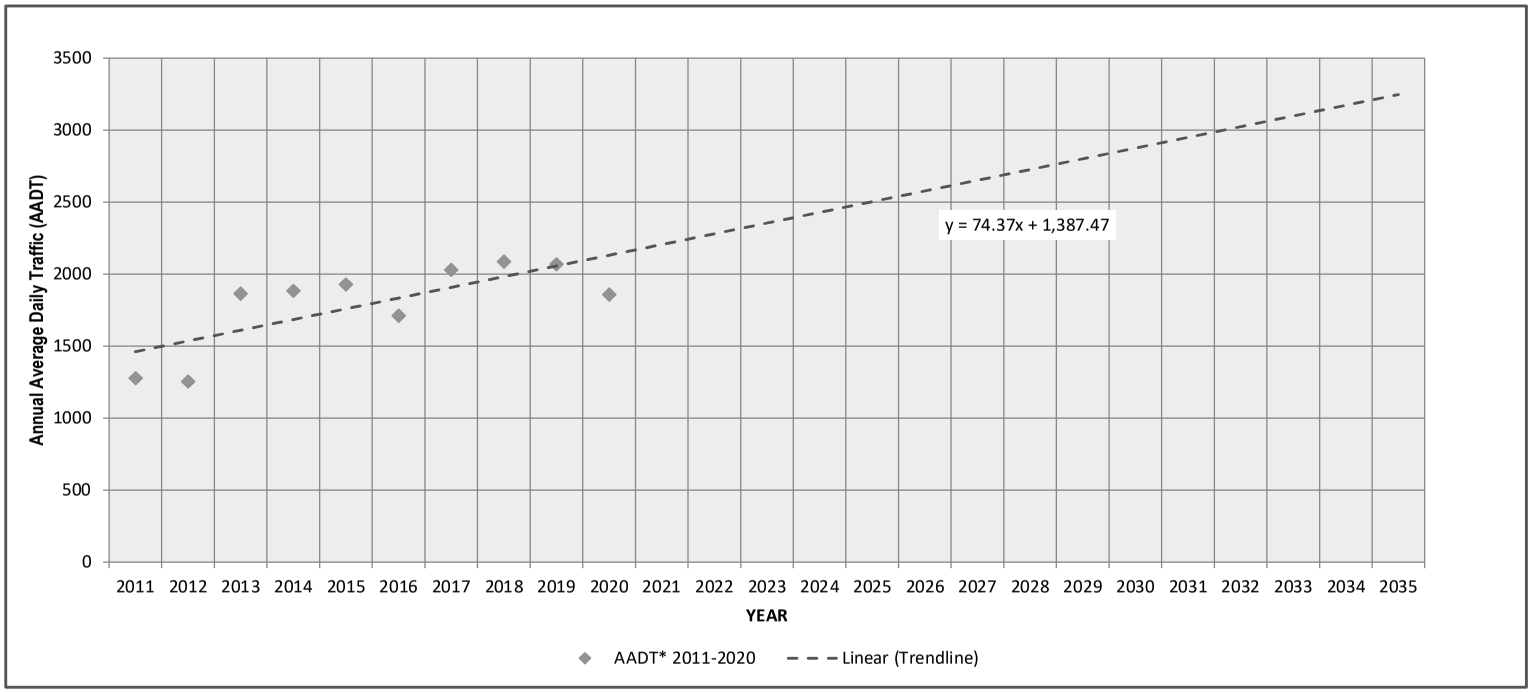
***Source:**

2011-2020 = NMDOT Traffic Monitoring Program: "AADT and AADT Trucks by Year"
accessed via *https://nmdot.public.ms2soft.com/tcds/tsearch.asp?loc=nmdot*
(LRS ID IX40P153.0A, Location ID #10151)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - I40 EB1 ON Ramp (S-E Loop)

YEAR	AADT* 2011-2020	TRENDLINE	
2009			
2010			
2011	1277	*1462*	
2012	1255	*1536*	
2013	1865	*1611*	
2014	1883	*1685*	
2015	1928	*1759*	
2016	1712	*1834*	
2017	2030	*1908*	
2018	2087	*1982*	
2019	2069	*2057*	
2020	1859	*2131*	
2021		*2206*	
2022		*2280*	
2023		*2354*	
2024		*2429*	
2025		*2503*	
2026		*2577*	
2027		*2652*	
2028		*2726*	
2029		*2800*	
2030		*2875*	
2031		*2949*	
2032		*3024*	
2033		*3098*	
2034		*3172*	
2035		*3247*	
	582	1785	growth
	64.67	74.37	rate



G_1 = 4.26% 2009-2019 AADT compounded annual rate

G_2 = *4.28% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 4% / year traffic growth rate for I40 EB1 ON

GF_4= 1.17 Growth Factor to Year 2025

GF_{14}= 1.73 Growth Factor to Year 2035

Comments:

High growth + developable land north of I40.

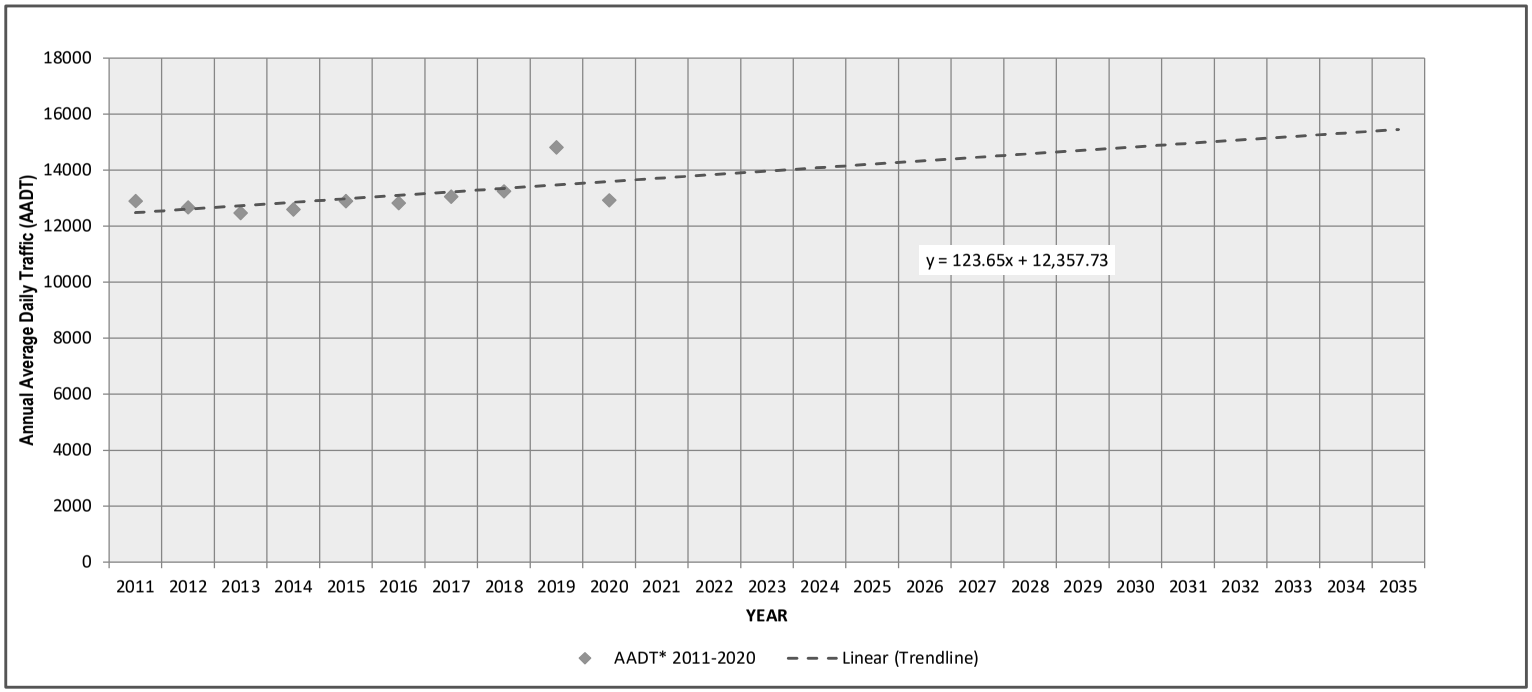
**Source:*

2011-2020 = NMDOT Traffic Monitoring Program: "AADT and AADT Trucks by Year"
accessed via *https://nmdot.public.ms2soft.com/tcds/tsearch.asp?loc=nmdot*
(LRS ID IX40P153.0G, Location ID #10368)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - I40 EB2 ON Ramp (N-E)

YEAR	AADT* 2011-2020	TRENDLINE
2009		
2010		
2011	12896	*12481*
2012	12669	*12605*
2013	12472	*12729*
2014	12593	*12852*
2015	12892	*12976*
2016	12825	*13100*
2017	13056	*13223*
2018	13239	*13347*
2019	14816	*13471*
2020	12920	*13594*
2021		*13718*
2022		*13842*
2023		*13965*
2024		*14089*
2025		*14212*
2026		*14336*
2027		*14460*
2028		*14583*
2029		*14707*
2030		*14831*
2031		*14954*
2032		*15078*
2033		*15202*
2034		*15325*
2035		*15449*
	24	2968 growth
	2.67	123.65 rate



G_1 = 0.02% 2009-2019 AADT compounded annual rate

G_2 = *0.95% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 1% / year traffic growth rate for I40 EB2 ON

GF_4= 1.04 Growth Factor to Year 2025

GF_{14}= 1.15 Growth Factor to Year 2035

Comments:

Limited developable land S. of Central Ave., but more developable land available W. of 98th St.

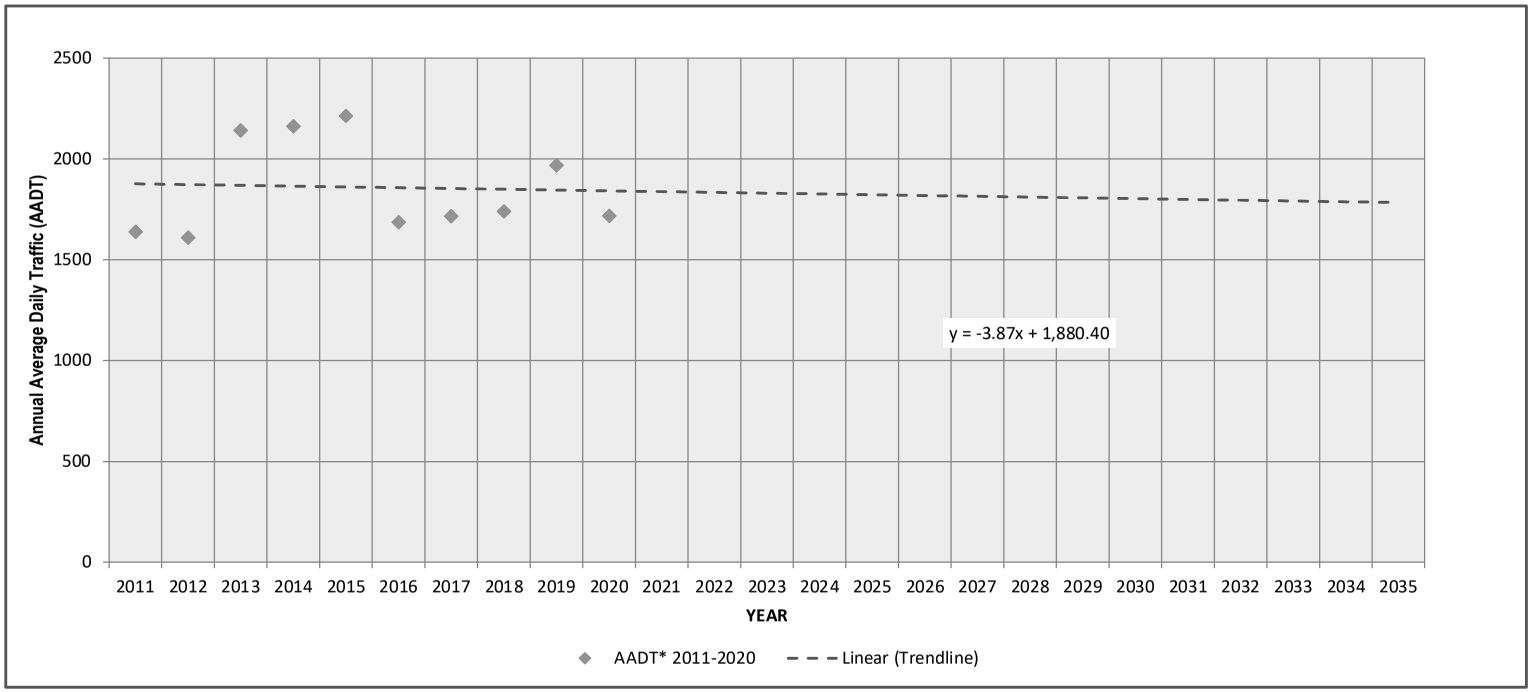
***Source:**

2011-2020 = NMDOT Traffic Monitoring Program: "AADT and AADT Trucks by Year"
accessed via *https://nmdot.public.ms2soft.com/tcds/tsearch.asp?loc=nmdot*
(LRS ID IX40P153.0H, Location ID #10434)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - I40 WB2 ON Ramp (N-W + S-W)

YEAR	AADT* 2011-2020	TRENDLINE
2009		
2010		
2011	1638	*1877*
2012	1609	*1873*
2013	2141	*1869*
2014	2162	*1865*
2015	2213	*1861*
2016	1686	*1857*
2017	1716	*1853*
2018	1740	*1849*
2019	1969	*1846*
2020	1717	*1842*
2021		*1838*
2022		*1834*
2023		*1830*
2024		*1826*
2025		*1822*
2026		*1818*
2027		*1815*
2028		*1811*
2029		*1807*
2030		*1803*
2031		*1799*
2032		*1795*
2033		*1791*
2034		*1787*
2035		*1784*
	79	-93 growth
	8.78	-3.87 rate



G_1 = 0.52% 2009-2019 AADT compounded annual rate

G_2 = *-0.21% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 1% / year traffic growth rate for I40 WB ON

GF_4= 1.04 Growth Factor to Year 2025

GF_{14}= 1.15 Growth Factor to Year 2035

Comments:

Developable land available north of I40, new employers at Atrisco Vista.

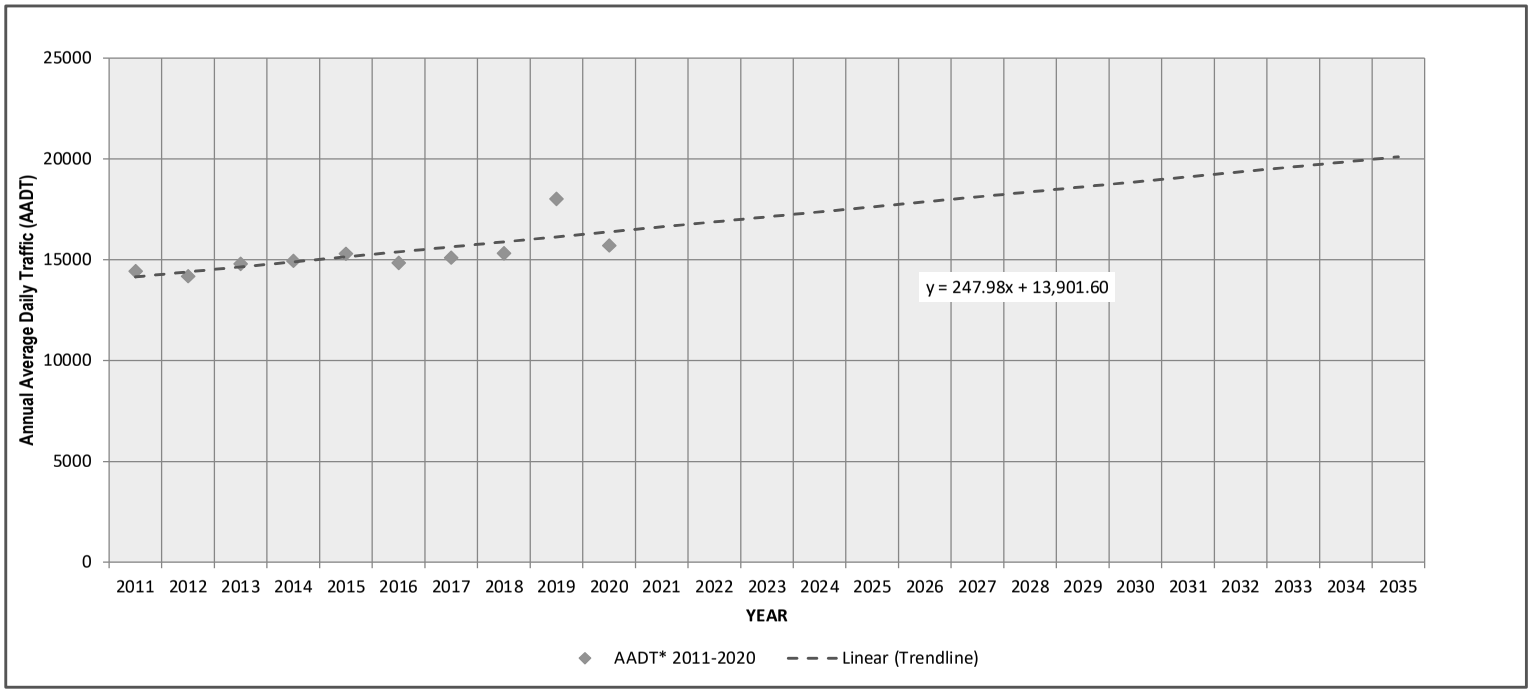
***Source:**

2011-2020 = NMDOT Traffic Monitoring Program: "AADT and AADT Trucks by Year"
accessed via *https://nmdot.public.ms2soft.com/tcds/tsearch.asp?loc=nmdot*
(LRS ID IX40P153.0T, Location ID #10817)

PROJECT: 98th & Bluewater TIS

Background Traffic Projection - I40 WB Off Ramp

YEAR	AADT* 2011-2020	TRENDLINE
2009		
2010		
2011	14438	*14150*
2012	14184	*14398*
2013	14798	*14646*
2014	14942	*14894*
2015	15297	*15142*
2016	14842	*15389*
2017	15109	*15637*
2018	15321	*15885*
2019	18015	*16133*
2020	15709	*16381*
2021		*16629*
2022		*16877*
2023		*17125*
2024		*17373*
2025		*17621*
2026		*17869*
2027		*18117*
2028		*18365*
2029		*18613*
2030		*18861*
2031		*19109*
2032		*19357*
2033		*19605*
2034		*19853*
2035		*20101*
	1271	5952 growth
	141.22	247.98 rate



G_1 = 0.94% 2009-2019 AADT compounded annual rate

G_2 = *1.64% 2009-2019 Trendline compounded annual rate*

G_3 = 1.02% 2010-2035 UNM/BBER population projection for Bernalillo County

Use 1.5% / year traffic growth rate for I40 WB Off

Comments:

Growth potential N. of I40, W. of 98th.

GF_4= 1.06 Growth Factor to Year 2025

GF_{14}= 1.23 Growth Factor to Year 2035

***Source:**

2011-2020 = NMDOT Traffic Monitoring Program: "AADT and AADT Trucks by Year"
accessed via *https://nmdot.public.ms2soft.com/tcds/tsearch.asp?loc=nmdot*
(LRS ID IX40P153.0N, Location ID #10592)

Intersection No.:	369

Centrac
1

Intersection Name:	CENTRAL - 98TH

Revision Date	3/21/2018

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	3	16	3	16	3	16	3	16
Walk:	0	7	0	7	0	7	0	7
Ped Clr:	0	20	0	23	0	20	0	22
Veh Ext:	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Veh Ext2:	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Max 1:	18	28	16	42	16	28	16	42
Max 2:	28	24	16	48	25	24	16	48
Max 3:								
Yellow:	3.5	6.0	3.5	4.5	3.5	6.0	3.5	4.5
Red Clr	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X		X		X		X

Flash Mode:	ALL RED

Start Up Mode:	ALL RED
Time:	8 SEC.
First Phases:	4 & 8
Start In:	GREEN

Overlap Phases:	

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:

1. Timings copied from controller, 12/27/89.
2. At this time ther is no detection.
3. Controller to P cab and Eagle EPAC 300 Controller, 3/14/89.
4. Wiring problem with Ped Buttons repaired, 12/28/89.
5. Added 1 sec. all red for both phases, 12/28/89, lowered phase 4 max green to 24 sec ., 12/28/89.
6. Revised clearance intervals, 12/28/90.
7. Changed from a 2 phase to 4 phase intersection. Changed flash mode start up to

ALL RED, and start in green, 4/3/98.
8. Phases 3 and 7 were added due to upgrades on 98th from Central to Sage, 9/6/02.
9. Phases 1 and 5 were added in order to make intersection 8 phase, 11/5/02.
10. Timing sheet updated, MAX II time start at 6:30 - 8:30 am Phase 2 & 6 changed to to 24 sec.Phases 4 & 8 changed to 42 sec., 11/12/03.
11. TOD Step 1 start at 6:30 am MAX II 2,4,6,8. Step 2 start 8:45 am off Step 3 start at 3:00 pm MAX II 1,2,4,6,8 Step 4 start at 6:30 pm MAX II off 12/9/08.
12. Clearance intervals updated to NMDOT standard by BB, 10/3/13.
13. No longer need step 11. No TOD needed.
14. Timing sheet revised to new version of timing sheet, 8/29/16.
15. New Coordination Patterns implemented 10-2016, Lee Engineering.
16. New Day Plan and MAX2 implemented 12-27-2016, Lee Engineering.
17. Changed start up phases to North and South. 3/21/18 A.F.
18. Found typo. A.F. 9/14/20

ASC3 COORDINATION PLAN DATA

369 - Central Ave & 98th St

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FLOAT
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130	STD (COS)	111	
OFFSET VAL	30%	39.00		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	
MAX SELECT	MAX2	FORCE OFF	FLOAT	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	31	9	48	17	26	9	48
	15.6	40.3	11.7	62.4	22.1	33.8	11.7	62.4
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	22%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	21	31	12	36	15	37	12	36
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

ASC3 COORDINATION PLAN DATA

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110	STD (COS)	151	
OFFSET VAL	18%	19.80		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	16	31	12	41	16	31	12	41
	17.6	34.1	13.2	45.1	17.6	34.1	13.2	45.1
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL		X		X		X		X

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS						DOW		DOM				
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS						DOW		DOM				
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering.
4. New Day Plan and Pattern 21 (Max Select - Max2 & Float) implemented 12-27-2016, Lee Engineering.

Intersection No.: 305

CENTRAC: 1

Intersection Name: AVALON - 98TH

Revision Date: 11/20/2020

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	3	10	3	20	3	10	3	20
Walk:		7		7		7		7
Ped Clr:		32		25		35		28
Veh Ext:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Veh Ext2:								
Max 1:	20	30	20	40	20	30	20	40
Max 2:								
Max 3:								
Yellow:	3.0	3.0	3.0	4.5	3.0	3.0	3.0	4.5
Red Clr	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5

Recall Data

Locking Memory:								
Vehicle Recall:								
Ped Recall:								
Recall To Max:				X				X

Flash Mode: ALL RED

Start Up Mode: ALL RED
Time: 8 SEC.
First Phases: 4 & 8
Start In: GREEN

Overlap Phases:

NOTES:
1. Timings provided by Lee Engineering following intersection modifications 11/20/2020

ASC3 COORDINATION PLAN DATA

305 - 98th St & Avalon Rd

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%
TS2 (PAT-OFF)	0-1		
CYCLE	130.00	STD (COS)	111
OFFSET VAL	75%	98	
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	5
PHASE RESRVCE	NO	ACTION PLAN	0

AM

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	34	12	42	12	34	12	42
	15.6	44.2	15.6	54.6	15.6	44.2	15.6	54.6
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	7%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	12	40	14	34	12	40	12	36
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

ASC3 COORDINATION PLAN DATA

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110.00	STD (COS)	151	
OFFSET VAL	0%	0		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	W-S	EB	S-E	NB	E-N	WB	N-W	SB
SPLITS	11	39	14	36	10	40	10	40
	12.1	42.9	15.4	39.6	11	44	11	44
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				X
VEH RECALL								
MAX RECALL				X				X

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering.
4. New Day Plan implemented 12-27-2016, Lee Engineering.
5. Signal re-phased & East leg constructed July 2020
6. New coordination timings implemented 7/31/2020 by Lee Engineering

Intersection No.: 367

System: Centracs
Address: 1

Intersection Name: I-40 & 98TH

Revision Date 12/23/2013

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	N-W	SB		WB		NB		
Min Grn	3	16		8		16		
Walk:	0	7		7		7		
Ped Clr:	0	6		26		8		
Veh Ext:	3.0	3.0		3.0		3.0		
Veh Ext2:								
Max 1:	16	22		32		22		
Max 2:	16	22		48		22		
Max 3:								
Yellow:	4.5	4.5		4.5		4.5		
Red Clr	2.0	1.0		1.5		1.0		

Recall Data

Locking Memory:				X				
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode: ALL RED

Start Up Mode: ALL RED
Time: 8 SEC.
First Phases: 2 & 6
Start In: GREEN

Overlap Phases: NONE

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:

1. Intersection to be turned on, 10/31/05. Max 2 - 15:00 to 18:30 M-F.
2. Clearance intervals updated to NMDOT standard by BB, 12/23/13.
3. Max 2 enable Phase 4 @ 1500 to 1830, 2/10/14.
4. Added phase 6 for NB, removed overlap A.
5. New Coordination Patterns implemented 10-2016, Lee Engineering.

ASC3 COORDINATION PLAN DATA

367 - 98th St & I40 WB Ramp

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FIXED
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	YES
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%	AM
TS2 (PAT-OFF)	0-1			
CYCLE	130.00	STD (COS)	111	
OFFSET VAL	99%	128.7		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	11	48	0	41	0	59	0	0
	14.3	62.4	0	53.3	0	76.7	0	0
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	50%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	17	28	0	55	0	45	0	0
PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

ASC3 COORDINATION PLAN DATA

COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%	PM
TS2 (PAT-OFF)	0-5			
CYCLE	110.00	STD (COS)	151	
OFFSET VAL	26%	28.6		
ACTUATED COORD	YES	TIMING PLAN	0	
ACT WALK REST	NO	SEQUENCE	0	
PHASE RESRVCE	NO	ACTION PLAN	0	

PHASE	1	2	3	4	5	6	7	8
DIRECTION	N-W	SB	E-N	WB	S-E	NB	W-S	EB
SPLITS	13	18	0	69	0	31	0	0
	14.3	19.8	0	75.9	0	34.1	0	0

PHASE	1	2	3	4	5	6	7	8
COORD PHASE				X				
VEH RECALL								
MAX RECALL		X		X		X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	03:30	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	19:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME	
1	21	6:00	AM
2	23	9:00	
3	25	14:30	PM
4	23	19:00	
5	100	22:00	
6	0	00:00	
7	0	00:00	

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	8:00
2	100	21:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

SCHEDULE NUMBER 2

SCHEDULE NUMBER			2									
DAY PLAN NO			2	CLEAR ALL FIELDS								
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER			3									
DAY PLAN NO			3	CLEAR ALL FIELDS								
SELECT ALL MONTHS					DOW		DOM					
MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

NOTES:

1. Coord sheet created for ASC3 by BB, 11/1/13.
2. Coordination sheet updated to ASC3 form 11/4/2013.
3. New Coordination Patterns implemented 10-2016, Lee Engineering. Phase 4 coordinated.
4. New Day Plan implemented 12-27-2016, Lee Engineering.

APPENDIX C
Trip Generation Data

Trip Generation Summary

Alternative: Alternative 1
Phase:
Project: 98th-Bluewater Commercial

Open Date: 7/1/2025
Analysis Date: 4/8/2021

ITE	Land Use		Weekday Average Daily Trips *	Enter	Exit	Total	Weekday AM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total	Weekday PM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total
934	FASTFOOD-DRIVE 1 - Parcel E			424	424	848		37	35	72		31	28	59
	1.8	1000 Sq. Ft. GFA												
934	FASTFOOD-DRIVE 1 - Parcel C			1531	1530	3061		133	128	261		110	102	212
	6.5	1000 Sq. Ft. GFA												
934	FASTFOOD-DRIVE 1 - Parcel B			660	659	1319		58	55	113		47	44	91
	2.8	1000 Sq. Ft. GFA												
934	FASTFOOD-DRIVE 1 - Parcel A			636	636	1272		56	53	109		46	42	88
	2.7	1000 Sq. Ft. GFA												
938	DONUT-DRIVE-NO-IN - Parcel D					0	✓	64	60	124	✓	27	29	56
	37	1000 Sq. Ft. GFA												
942	AUTOCARE 1 - Parcel F					0		54	28	82		48	52	100
	36.6	1000 Sq. Ft. GFA												
Unadjusted Volume				3251	3249	6500		402	359	761		309	297	606
Internal Capture Trips				0	0	0		0	0	0		0	0	0
Pass-By Trips				0	0	0		137	137	274		113	113	226
Volume Added to Adjacent Streets				3251	3249	6500		265	222	487		196	184	380

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

C-1

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

Detailed Land Use Data

For 2.7 1000 Sq. Ft. GFA of FASTFOOD-DRIVE 1 - Parcel A

(934) Fast-Food Restaurant with Drive-Through Window

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	1272	0	470.95	98.89	1137.66	244.44	3	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	109	53	40.19	0.38	164.25	28.78	4	51	49	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	88	44	32.67	8.17	117.22	17.87	3	52	48	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 2.8 1000 Sq. Ft. GFA of FASTFOOD-DRIVE 1 - Parcel B

(934) Fast-Food Restaurant with Drive-Through Window

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	1319	0	470.95	98.89	1137.66	244.44	3	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	113	55	40.19	0.38	164.25	28.78	4	51	49	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	91	46	32.67	8.17	117.22	17.87	3	52	48	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 6.5 1000 Sq. Ft. GFA of FASTFOOD-DRIVE 1 - Parcel C

(934) Fast-Food Restaurant with Drive-Through Window

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	3061	0	470.95	98.89	1137.66	244.44	3	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	261	128	40.19	0.38	164.25	28.78	4	51	49	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	212	106	32.67	8.17	117.22	17.87	3	52	48	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 37 1000 Sq. Ft. GFA of DONUT-DRIVE-NO-IN - Parcel D

(938) Coffee/Donut Shop with Drive-Through Window and No Indoor Seating

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday AM Peak Hour of Adjacent Street Traffic	124	0	3.35	3.35	3.35	0	0	52	48	False		0
Source : CTI - Custom												
Weekday PM Peak Hour of Adjacent Street Traffic	56	0	1.5	1.5	1.5	0	0	49	51	False		0
Source : CTI - Custom												

Detailed Land Use Data

For 1.8 1000 Sq. Ft. GFA of FASTFOOD-DRIVE 1 - Parcel E

(934) Fast-Food Restaurant with Drive-Through Window

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	848	0	470.95	98.89	1137.66	244.44	3	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	72	35	40.19	0.38	164.25	28.78	4	51	49	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	59	30	32.67	8.17	117.22	17.87	3	52	48	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 36.6 1000 Sq. Ft. GFA of AUTOCARE 1 - Parcel F

(942) Automobile Care Center

Project: 98th-Bluewater Commercial

Open Date: 7/1/2025

Analysis Date: 4/8/2021

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday AM Peak Hour of Adjacent Street Traffic	82	0	2.25	1.2	5.3	1.49	17	66	34	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	100	0	3.11	1.87	5.65	1.09	17	48	52	True	T = 2.41(X) + 11.83	0.83
Source : Trip Generation Manual 10th Edition												

Internal Capture Report - Alternative 1

AM & PM Peak Hour

Open Date: 7/1/2025

Project: 98th-Bluewater Commercial

Analysis Date: 4/8/2021

AM	Entering Trips				Exiting Trips			
Category	**Internal**	**External**	**Total**	**Percent**	**Internal**	**External**	**Total**	**Percent**
Cinema	0	0	0	0%	0	0	0	0%
Hotel	0	0	0	0%	0	0	0	0%
Office	0	0	0	0%	0	0	0	0%
Residential	0	0	0	0%	0	0	0	0%
Restaurant	0	348	348	0%	0	331	331	0%
Retail	0	0	0	0%	0	0	0	0%
All Other Land Uses	0	54	54	0%	0	28	28	0%
Totals	0	402	402	0%	0	359	359	0%

PM	Entering Trips				Exiting Trips			
Category	**Internal**	**External**	**Total**	**Percent**	**Internal**	**External**	**Total**	**Percent**
Cinema	0	0	0	0%	0	0	0	0%
Hotel	0	0	0	0%	0	0	0	0%
Office	0	0	0	0%	0	0	0	0%
Residential	0	0	0	0%	0	0	0	0%
Restaurant	0	261	261	0%	0	245	245	0%
Retail	0	0	0	0%	0	0	0	0%
All Other Land Uses	0	48	48	0%	0	52	52	0%
Totals	0	309	309	0%	0	297	297	0%

Open Date : 7/1/2025
Project : 98th-Bluewater Commercial Analysis Date : 4/8/2021

Note Type : Land Use
Alternative : Alternative 1
Phase : Phase 1
Land Use : DONUT-DRIVE-NO-IN - Parcel D

Utilized rate derived by KD Anderson study: trips per 1,000 vehicles ADT, not GFA of building (daily rate not measured).

KD Anderson & Associates, Inc.
Transportation Engineers

February 16, 2016

Mr. Kyle Garrett
DUTCH BROTHERS COFFEE
8757 Tom Thumb Court
Elk Grove, CA 95624

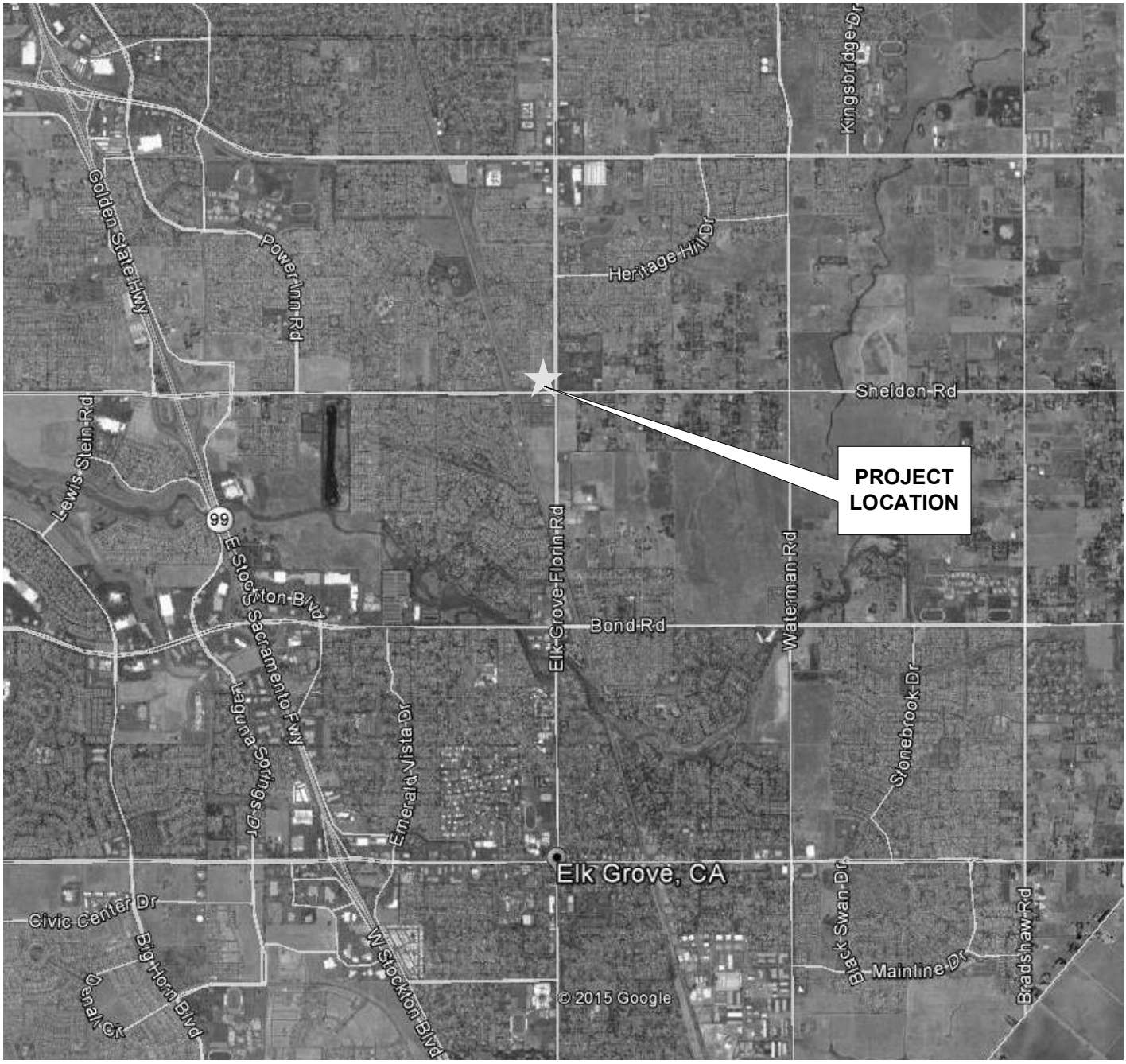
RE: SITE EVALUATION – SHELDON ROAD CROSSING RETAIL CENTER, ELK GROVE, CALIFORNIA

Dear Mr. Garrett:

KD Anderson & Associates, Inc. has completed our analysis for the proposed Dutch Brothers Coffee Kiosk to be located in the Sheldon Crossing retail center in Elk Grove. The site is located in the northwest quadrant of the Sheldon Road / Elk Grove-Florin Road intersection. The purpose of this analysis was to determine expected queuing for the kiosk and whether the anticipated traffic can be accommodated without interfering with on-site traffic flow. Additionally, inbound left turn queues from eastbound Sheldon Road was evaluated to determine whether the left turn lane capacity could be exhausted by the project. Based on our discussion with City of Elk Grove staff the a.m. and p.m. peak hours were evaluated.

INTRODUCTION

Proposed Project. The proposed project is an 800 square foot Dutch Brothers coffee kiosk that will be constructed in the existing Sheldon Crossing retail center. While the center is located along the periphery of the north and west sides of the site, the kiosk will stand alone in the southeast quadrant, adjacent to the Sheldon Road / Elk Grove-Florin Road intersection. Its location is shown in Figure 1 while the site plan is illustrated in Figure 2.

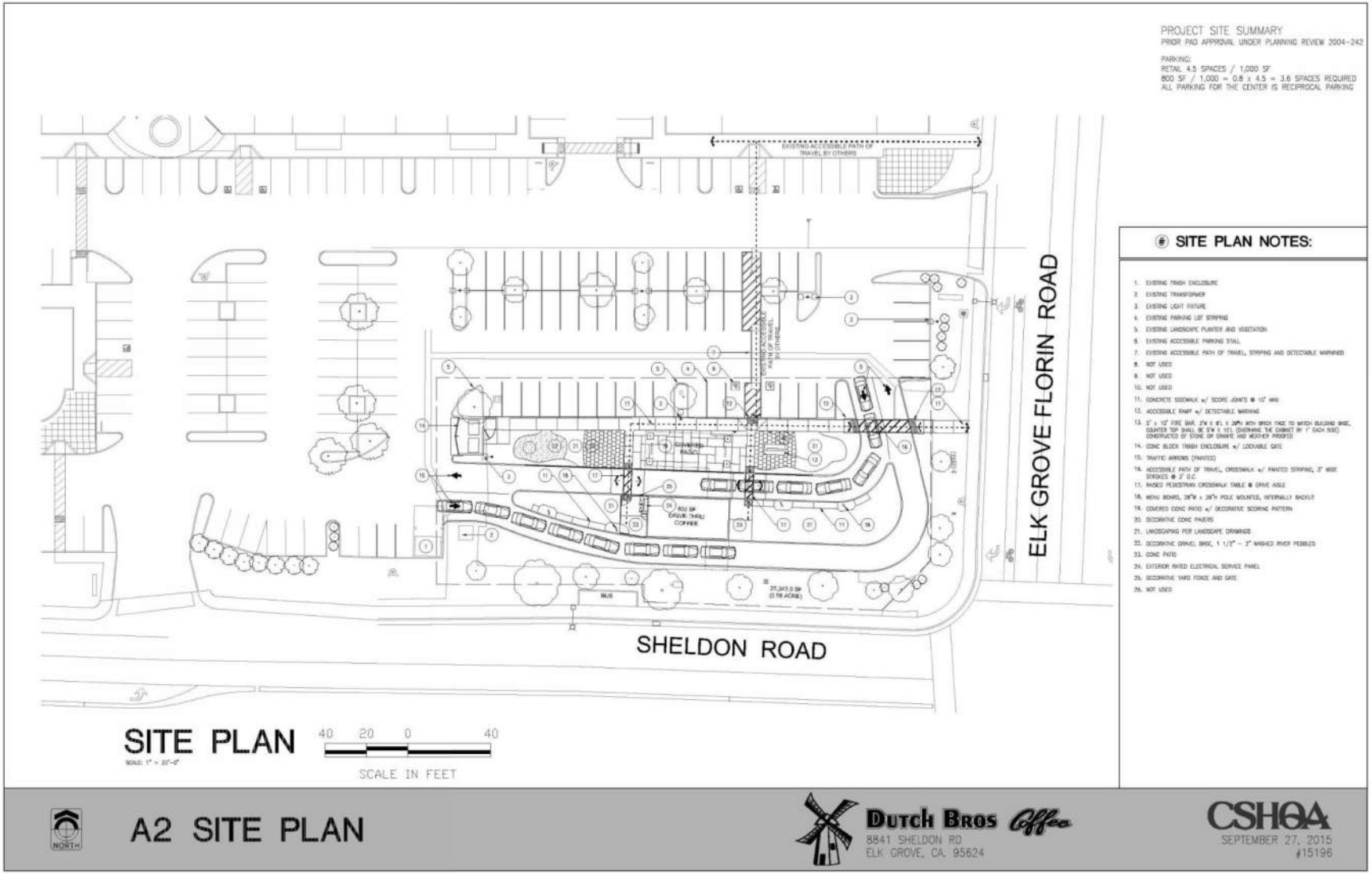


VICINITY MAP

KD Anderson & Associates, Inc.
Transportation Engineers

2526-01 LT 2/16/2016

figure 1



KD Anderson & Associates, Inc.
Transportation Engineers

2526-01 LT 1/29/2016

SITE PLAN

figure 2

EXISTING SETTING & CONDITIONS

The proposed project will construct a Dutch Brothers coffee kiosk in the northwest corner of the Elk Grove- Florin Road / Sheldon Road intersection. The proposed kiosk will include windows on both sides of the kiosk to allow sales for two-way traffic.

Elk Grove-Florin Road is a major 4 to 6 lane north-south divided arterial providing access between Elk Grove and Sacramento. An existing driveway is located about 150 feet north of the Sheldon Road intersection and provides right-in, right-out access. Traffic data from the City of Elk Grove website indicates that Elk Grove-Florin Road services about 30,400 vehicles per day (vpd). Sheldon Road is a major east-west 4 lane divided road through Elk Grove. The road extends west from Grant Line Road in the east to west of Bruceville Road where it turns north as Center Parkway. An existing driveway is located about 350 feet west north of the Elk Grove-Florin Road intersection. Access at this driveway includes right-in, right-out and left-in access. Sheldon Road carries about 23,100 vpd. The lane configurations at the project driveways are shown in Figure 3.

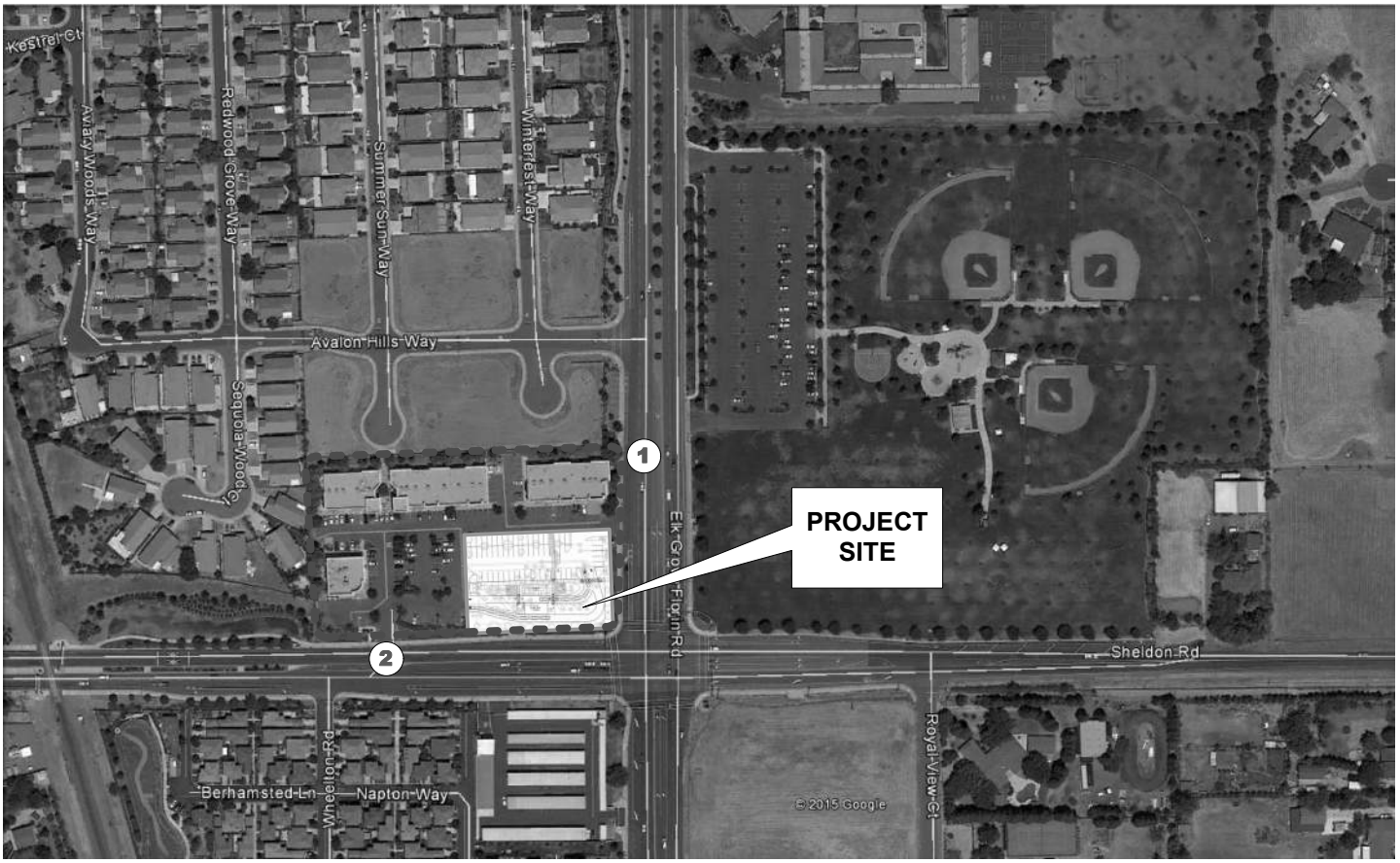
Traffic counts were conducted during the first week of December 2015 at the two driveway accesses to the shopping center to determine existing conditions at the access points. Figure 3 presents the peak hour a.m. and p.m. volumes at both intersections. This data was used to develop baseline queues at the driveway accesses. As part of the data collection, vehicle queues were also recorded at one minute intervals for outbound vehicles at the east driveway along Elk Grove-Florin Road and for inbound eastbound left turns and outbound southbound right turns at the Sheldon Road driveway. Table 1 presents the 95th percentile queues for each movement in the a.m. and p.m. peak hours. The 95th percentile was based on 60 data points collected during the a.m. and p.m. peak hours.

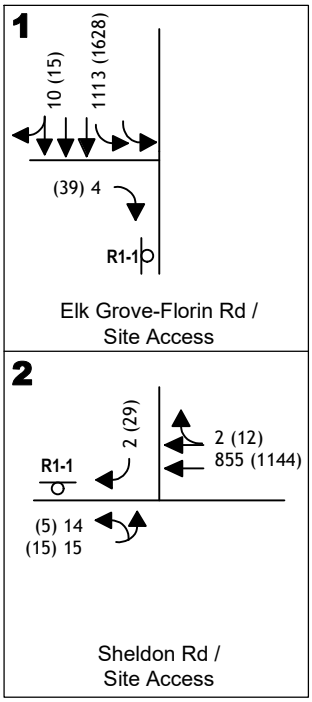
During the a.m. peak hour the 95th percentile queues consist of a single vehicle making an eastbound to southbound right turn onto Elk Grove-Florin Road, zero vehicles queued for the right turn onto westbound Sheldon Road and a two vehicle queue for the eastbound left turn movement into the retail center along Sheldon Road. The 95th percentile queue in the p.m. peak hour consists of two vehicles for all of the driveway movements. The two vehicle queue in the eastbound left turn lane is partly due to traffic heading west from Wheelton Road; this road is directly opposite the eastbound left turn lane and motorists cross eastbound Sheldon Road rather than making a u-turn at the Elk Grove-Florin Road intersection 500' east.

TABLE 1
EXISTING 95th% QUEUES AT DRIVEWAYS

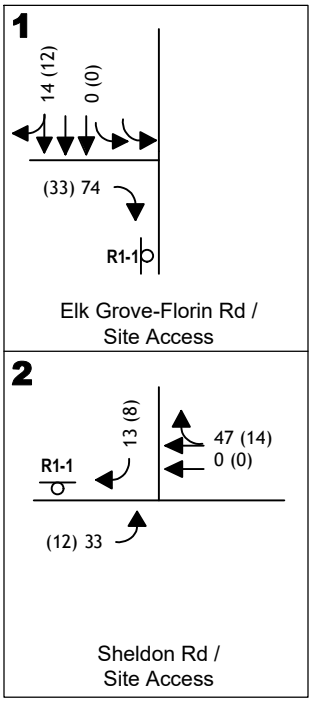
Location	AM	PM
Elk Grove-Florin Road		
Eastbound Right	1	2
Sheldon Road		
Southbound Right	0	2
Eastbound Left*	2	2

*includes u-turns in existing 120' turn lane

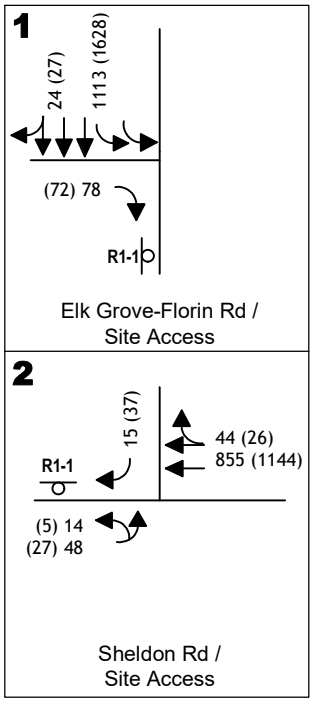




EXISTING



PROJECT TRAFFIC



EXISTING + PROJECT



N.T.S.

Legend

XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume
R1-1	Stop Sign
	Sheldon Crossing Retail Center

EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

PROJECT CONDITIONS

Trip Generation and Queue Estimates. Trip generation is determined by identifying the type and size of development. The Institute of Transportation Engineers (ITE) publication *Trip Generation* publishes trip generation rates for a variety of land uses. Land-Use 938 "Coffee/Donut Shop with Drive-Through Window and No Indoor Seating" is similar to the Dutch Brothers model of a drive-through coffee kiosk; however, limited data is available for this land use. The Dutch Brothers coffee kiosk model is a drive-through operation with some outdoor tables generally for walk-up customers.

Because of the limited data available for coffee kiosks peak hour trips were observed for three existing Dutch Brothers sites that had similar operational characteristics to the proposed project. This included dual drive-through windows and comparable lane configurations and traffic volumes on adjacent streets. Other Dutch Brothers kiosks including one in Elk Grove were considered but did not share the same characteristics. The three sites surveyed are described below:

7445 Madison Avenue, Citrus Heights – This kiosk is located within a neighborhood commercial shopping center in the city of Citrus Heights. This site is located along Madison Avenue about 400 feet east of San Juan Avenue. Madison Avenue is a six-lane roadway while San Juan Avenue is a four-lane roadway. Sacramento County data indicates that the daily traffic volume along Madison Avenue is about 48,700 (vpd) while traffic along San Juan Avenue is about 27,000 vpd.

405 Grass Valley Highway (SR 49), Auburn – This kiosk is located within a neighborhood commercial shopping center in the city of Auburn. The location is in the northwest quadrant of the State Route (SR) 49 / Fulweiler Avenue / Elm Avenue intersection. Caltrans traffic data indicates that the daily traffic volumes along SR 49 north of Elm Avenue is about 31,500 vpd while traffic along Fulweiler Avenue is about 7,100 vpd. Elm Avenue carries about 33,000 vpd at the Interstate 80 interchange area, about ¼ mile from the SR 49 / Fulweiler Avenue – Elm Avenue intersection.

8663 Auburn Folsom Road, Granite Bay – This kiosk is located within a neighborhood commercial shopping center in the town of Granite Bay. The kiosk provides outside seating for walk-up customers. This kiosk is similar in size to the proposed Elk Grove location. This site is located along Auburn Folsom Road about 600 feet south of Douglas Blvd. Auburn Folsom Road and Douglas Blvd are four-lane roadways. Placer County data indicates that the daily traffic volume along Auburn Folsom Road is about 30,300 vpd while traffic along Douglas Blvd is about 32,200 vpd.

An average peak hour trip generation rate was developed based on data collected from the three locations. Table 2 presents the observed data. Square footage is a commonly used variable for trip generation. Two of the kiosks studied are about 400 square feet while the third is about 800 square feet. An analysis of the data indicated that trip generation rates for this type of development do not appear to be dependent on square footage of the kiosk. For example, while the Madison Avenue and SR 49 sites are approximately the same size at about 400 square feet the SR 49 site has about a 20% higher a.m. rate and a 38% lower p.m. rate than the Madison Avenue site. Trip generation for specific sites may be affected by the number of additional coffee shops and kiosks in the project vicinity as the Madison Avenue site has almost twice the adjacent street traffic volume, but generates a trip rate less than half of the SR 49 site.

Instead of square footage, trip generation rates were developed based on the total adjacent street traffic due to the type of use, a drive-through coffee shop with limited outdoor seating. The rates were based on the daily traffic volumes from both the major and minor adjacent streets as each of the locations has an

intersecting street that provides a second access. This is similar to a limited 2003 Oregon Department of Transportation study of portable coffee stands with drive-through service which considered adjacent street traffic as the independent variable.

Consistent with coffee shop land uses described in ITE Trip Generation, the a.m. peak has the highest trip generation. Since only three comparative sites were observed an average trip rate was used to estimate the number of trips at the Elk Grove site. The average trip rates were calculated to be 3.35 trips per thousand vehicles in the a.m. peak hour and 1.50 trips per thousand vehicles in the p.m. peak hour. Table 2 presents the projected trips for the proposed project. 179 trips are projected in the a.m. peak hour while 80 are projected in the p.m. peak hour.

TABLE 2
TRIP GENERATION

Location	Variable (kvast)	AM			PM			Trip Generation Rate (trips/kvast)	
		Trips In	Trips Out	Total Trips	Trips In	Trips Out	Total Trips	AM	PM
Madison Ave	75.7 kvast	87 (50%)	85 (50%)	172	55 (50%)	56 (50%)	111	2.27	1.47
SR 49	38.6 kvast	105 (51%)	100 (49%)	205	34 (49%)	35 (51%)	69	5.31	1.79
Auburn Folsom Rd	62.5 kvast	81 (53%)	72 (47%)	153	38 (49%)	39 (51%)	77	2.45	1.23
Calculated Average Rate		273	257	530	127	130	257	3.35	1.50
Project Trip Generation		52%	48%		49%	51%			
Elk Grove	53.5 kvast	93	86	**179**	39	41	**80**		

kvast – per thousand vehicles of adjacent street traffic

Trip Distribution & Trip Assignment. The distribution of project traffic was determined based on our understanding of the project's market area, the type of use (i.e. an intermediate stop between origin and destination) and the directionality of adjacent street traffic; City of Elk Grove staff provided intersection turning movements at the adjacent Elk Grove-Florin Road / Sheldon Road intersection and are provided in the appendix. Most traffic is oriented north along Elk Grove-Florin Road in the a.m. peak commute period. During the p.m. peak hour the number of customers drops considerably, and the trip distribution will be oriented more evenly in all directions. Traffic along Elk Grove – Florin Road approaching from the south will make a left turn onto westbound Sheldon Road to enter the shopping center site while traffic departing to the north will exit onto Elk Grove-Florin Road and have to make a U-turn at the Sheldon Road intersection. The projected trip distribution is presented in Table 3 and the Project and Existing plus Project driveway volumes are presented in Figure 3.

TABLE 3 PROJECT TRIP DISTRIBUTION				
Route	**% of Total Trips AM**		**% of Total Trips PM**	
	Approach	**Departure**	**Approach**	**Departure**
Northbound Elk Grove-Florin Road	35%	45%	25%	30%
Southbound Elk Grove-Florin Road	15%	20%	30%	30%
Eastbound Sheldon Road	35%	20%	30%	20%
Westbound Sheldon Road	15%	15%	15%	20%
Total	100%	100%	100%	100%

Queue Estimates. Based on the existing peak hour counts a queuing analysis was conducted to determine the projected driveway queues. A 95% confidence level was used, meaning that the forecast queue length should be exceeded only 5% of the time.

Table 4 displays the projected driveway volumes with the project. The analysis indicates that the eastbound to southbound right turn will lengthen from zero to five vehicles in the a.m. peak and from two to three vehicles in the p.m. peak. The eastbound left turn into the retail center will increase from two to three vehicles in the a.m. peak hour and remain at two in the p.m. peak hour. The southbound to westbound right turn from the site onto Sheldon Road is projected to have one vehicle in the a.m. peak hour and two vehicles in the p.m. peak hour. The projected five vehicle a.m. queue along the Elk Grove-Florin Road driveway is based on project traffic heading north, south or east having to use the east driveway to access these directions. The five vehicle queue will not affect traffic within the retail center as this queue occurs in the a.m. peak hour when minimal traffic is present. The site's parking lot layout provides a 50' queuing area behind the sidewalks along Elk Grove-Florin Road and Sheldon Road. This allows a two-vehicle queue prior to an intersecting drive aisle; both adjacent drive aisles provide ingress and egress to the Dutch Brothers site. If either internal intersection is blocked by vehicles exiting the retail center site, customers will be able to drive around to the other drive-through lane as illustrated on the site plan in the Appendix.

TABLE 4 PROJECTED QUEUES AT DRIVEWAYS				
	AM		**PM**	
Location	**Existing**	**Existing + Project**	**Existing**	**Existing + Project**
Elk Grove-Florin Road				
Eastbound Right	0	5	2	3
Sheldon Road				
Southbound Right	0	1	2	2
Eastbound Left*	2	3	2	2

*includes u-turns in existing 120' turn lane

A *SimTraffic* simulation was also performed to examine whether eastbound right turning vehicles leaving the shopping center can enter the southbound traffic flow and enter the left turn lane to make a U-turn at the Elk Grove-Florin Road-Sheldon Road intersection. The intersection is about 150' from the driveway. The simulation was run during the peak hours in both a.m. and p.m. periods. The simulations indicated that vehicles can cross the three southbound through lanes and enter the left turn lanes. The queue report is provided in the Appendix which also includes reports for both driveways. The queue lengths at the driveways reflect the delays incurred in entering southbound Elk Grove-Florin Road and westbound Sheldon Road. These queuing results confirm the Poisson Distribution queuing analysis indicating a maximum of five vehicles exiting the east driveway, two vehicles exiting the south driveway and three vehicles entering the south driveway.

Queuing at Drive-Through Lanes. Queuing at each of the Dutch Brothers sites was observed to identify queues associated with the coffee kiosks. Queueing data was recorded on a per minute basis for each of the locations during three hour a.m. and p.m. peak periods, from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

Table 5 presents queueing information at 15 minute intervals showing the longest queues observed in both directions approaching the kiosk; these figures represent the highest volumes observed in each interval. The table also presents the combined queues every 15 minutes. The longest combined queues do not necessarily correspond with the longest queues in each direction. The data shows that the 95th percentile queues at the Madison Avenue kiosk were seven vehicles in either direction and 12 vehicles total in the a.m. peak period and five total vehicles and four directional vehicles in the p.m. peak period. The 95th percentile queues at the SR 49 site was five vehicles in a single service line and eight total vehicles while at the Auburn Folsom Road site the 95th percentile queue was seven vehicles in a single service line and ten total vehicles.

TABLE 5
QUEUING DATA IN DRIVE-THROUGH LANES

Time A.M. / P.M.	Madison Ave	SR 49	Auburn Folsom Rd
6:30	5 / **7** **(12)**	2 / 3 (5)	3 / 2 (5)
3:30	3 / 6 (8)	**3** / **3** (6)	6 / 4 (7)
6:45	6 / 9 (14)	2 / 3 (5)	2 / 3 (4)
3:45	**4** / 5 (8)	4 / 2 (6)	5 / **3** (7)
7:00	6 / 8 (13)	2 / 4 (6)	4 / 3 (6)
4:00	5 / 3 (8)	**3** / **3** (6)	2 / 5 (7)
7:15	5 / **7** **(12)**	4 / 4 **(8)**	6 / **7** (13)
4:15	2 / 3 (4)	2 / 2 (4)	**3** / **3** **(6)**
7:30	6 / **7** (13)	5 / 7 (12)	5 / **7** (11)
4:30	3 / 3 **(5)**	2 / 2 (4)	**3** / **3** **(6)**
7:45	6 / 6 (11)	6 / 6 (11)	5 / **7** (12)
4:45	**4** / 2 **(5)**	2 / 2 (4)	1 / **3** (4)
8:00	5 / 5 (10)	6 / **5** (10)	**7** / **7** (13)
5:00	2 / **4** (4)	**3** / 2 **(5)**	2 / 2 (3)
8:15	7 / **7** (14)	5 / **5** (9)	**7** / 5 (12)
5:15	3 / 3 (4)	1 / 1 (1)	2 / 1 (2)
8:30	5 / 6 (11)	4 / **5** **(8)**	6 / 5 **(10)**
5:30	3 / 5 (8)	**3** / 2 **(5)**	**3** / 2 (5)
8:45	8 / **7** (14)	3 / 3 (6)	5 / 4 (8)
5:45	1 / 3 (3)	**3** / 2 **(5)**	**3** / 2 (3)
9:00	3 / 4 (7)	6 / 6 (11)	3 / 4 (7)
6:00	3 / **4** (6)	**3** / 2 **(5)**	**3** / **3** **(6)**
9:15	4 / **7** (11)	4 / 4 (7)	4 / 4 (8)
6:15	3 / 2 **(5)**	**3** / 2 **(5)**	**3** / 2 (5)

longest east side or north side queue / longest west side or south side queue (maximum vehicles queued in 15 minute period – both directions)

bold indicates a.m. 95th percentile queue on one approach and /or 95th percentile queue at site

bold indicates p.m. 95th percentile queue on one approach and /or 95th percentile queue at site

Based on the information collected at the three Dutch Brothers locations the worst case scenario would require a seven vehicle service aisle for each direction. The longest queues occur in the a.m. with seven vehicles queued in a single direction and twelve vehicles queue in two directions; the 95th percentile p.m. queues were four vehicles in one direction and six vehicles total. The proposed site plan indicates that the eastbound service aisle on the south side of the site can accommodate eight vehicles while the westbound service aisle on the north side can queue seven vehicles; therefore, at a 95th percentile arrival rate the proposed available queuing is adequate.

25' spacing?

Dutch Brothers maintains statistics on customers served. They indicate that it takes about 50 seconds on average to serve a customer, and they can serve as many as 60 customers an hour at a two lane kiosk. Table 6 presents the statistical results assuming a scenario of a maximum 60 customers being served in an hour. Excluding adjacent traffic volumes and any other variables such as kiosk size and focusing on the service rate of a kiosk and the number of customers served, the 95% arrival rate is 15 to 16 vehicles. This is consistent with the proposed on-site lane storage. It is possible that the queue in either approach might exceed the proposal storage in the a.m. peak hour; however, there is adequate space between the service lane and the adjacent driveways to provide an additional two to three car queue. This would not affect outbound traffic from the site.

TABLE 6
POISSON DISTRIBUTION
DUTCH BROTHERS DRIVE-THROUGH QUEUE

Probability	Queue Exceeded (rounded)	Average Number of Vehicles Appearing in Interval
16.67%	16.67%	0
13.89%	30.56%	1
11.57%	42.13%	2
9.65%	51.77%	3
8.04%	59.81%	4
6.70%	66.51%	5
5.58%	72.09%	6
4.65%	76.74%	7
3.88%	80.62%	8
3.23%	83.85%	9
2.69%	86.54%	10
2.24%	88.78%	11
1.87%	90.65%	12
1.56%	92.21%	13
1.30%	93.51%	14
1.08%	94.59%	15
0.90%	95.49%	16

CONCLUSIONS

The proposed Dutch Brothers coffee kiosk will be constructed in the southeast quadrant of the Sheldon Crossing Retail Center, located in the northwest quadrant of the Elk Grove –Florin Road / Sheldon Road intersection. The existing driveway access intersections will be used with right-in, right-out movements only along Elk Grove-Florin Road and right-in, right-out and left-in access along Sheldon Road.

The driveways currently have queues of up to two vehicles in the a.m. peak hour, with the maximum queue in the eastbound left turn lane entering the site, and two vehicles in the p.m. peak hour, at all three study locations. The driveway queues are projected to lengthen to five vehicles exiting the eastbound driveway onto Elk Grove-Florin Road, increase to three vehicles entering eastbound from Sheldon Drive and remain at two vehicles exiting to the west along Sheldon Road. The existing eastbound left turn lane storage length will be adequate to accommodate the project traffic. Based on a SimTraffic simulation, vehicles entering the southbound left turn lane at the Elk Grove-Florin Road / Sheldon Road intersection can cross the three southbound through lanes along Elk Grove-Florin Road with minimal delays.

Queueing at the coffee kiosk was developed based on the observed queues at the three existing sites. The queues were observed to be a maximum of 14 vehicles total and up to a maximum of nine vehicles in one direction. Assuming that a maximum of 60 customers are served per hour, the Poisson Distribution analysis suggests that 15 to 16 vehicles could be queued. Based on the data collected this would occur in the a.m. peak hour when little traffic is generated by the other site uses. The proposed layout provides space on site for 15 vehicles to queue in two service lanes with up to an additional five vehicles able to queue without interfering with driveway access. The location of the project, within a shopping center, provides multiple approaches to the drive-through service lanes. The driveway access along Elk Grove-Florin Road requires a left turn to access the service lane. Although there is only about 50' between the roadway and the drive aisle, a customer can proceed to the next drive aisle to access either service lane were an exiting motorist block the internal intersection.

No mitigations are required for this project.

Should you have any questions please free to contact me at (916) 660-1555 or you may reach me via e-mail at jflecker@kdanderson.com.

Sincerely,

KD Anderson & Associates, Inc.

Jonathan D. Flecker, P.E.
Transportation Engineer

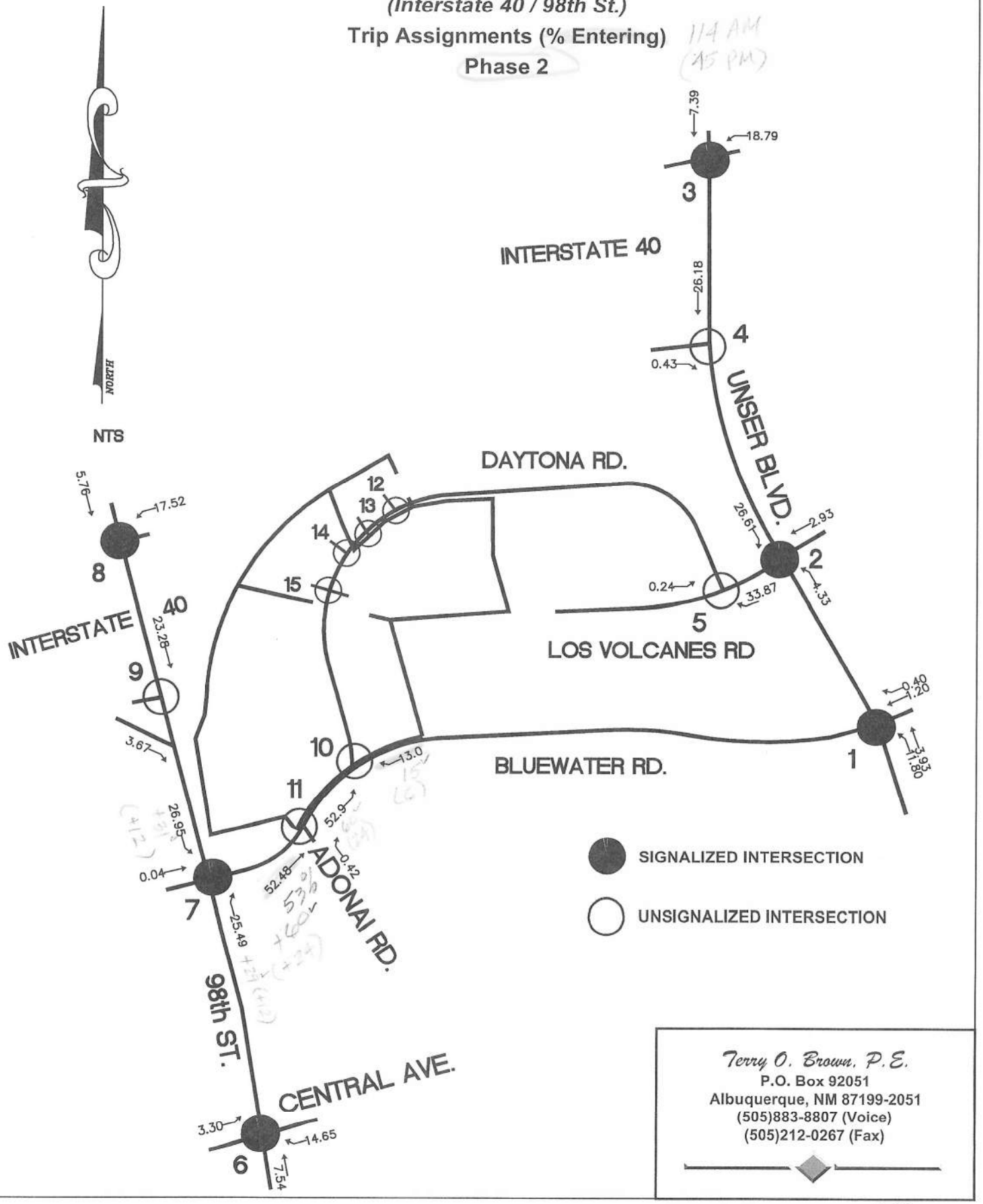
Attachments

Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Entering) 1/4 AM (45 PM)

Phase 2



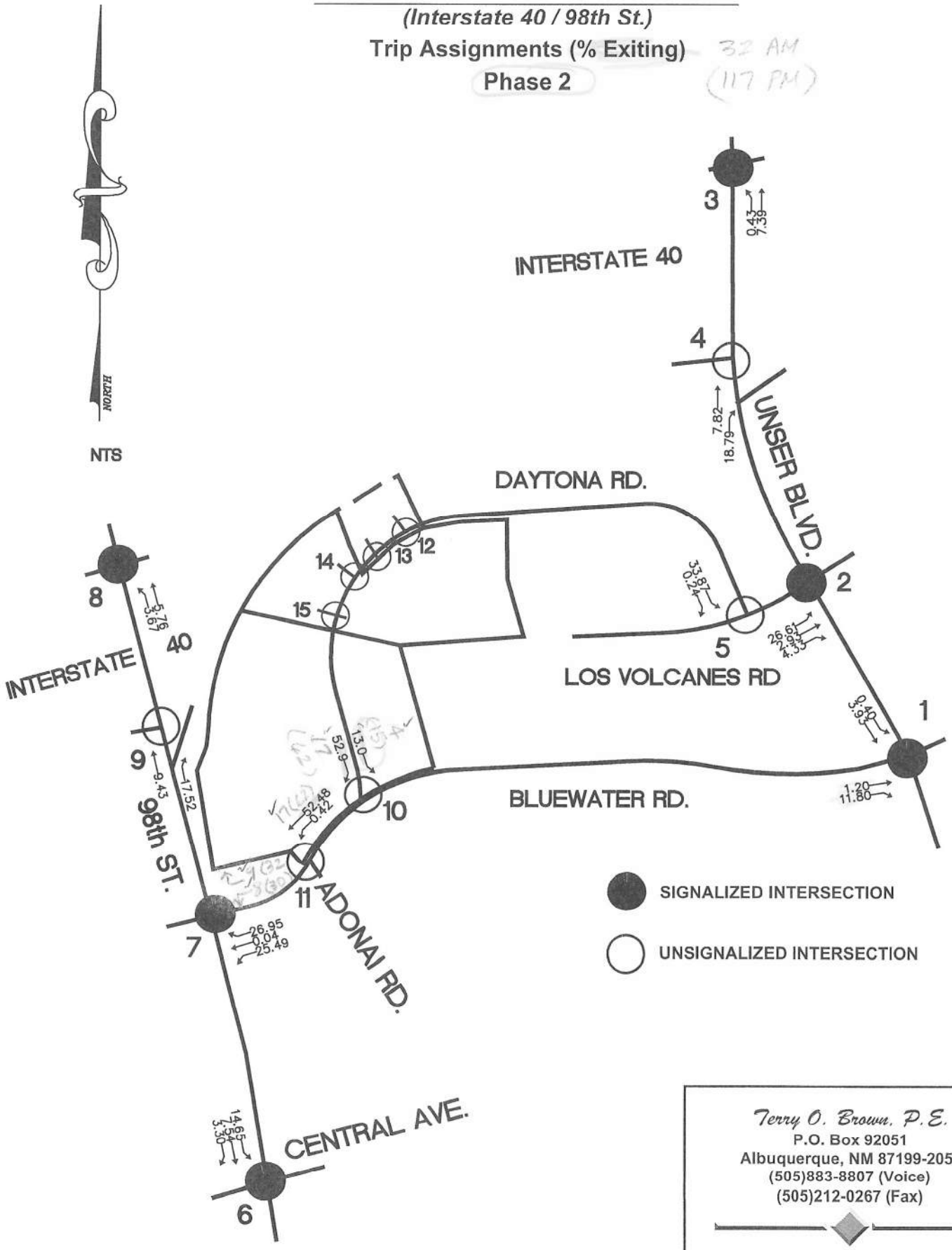
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting) 32 AM (117 PM)

Phase 2



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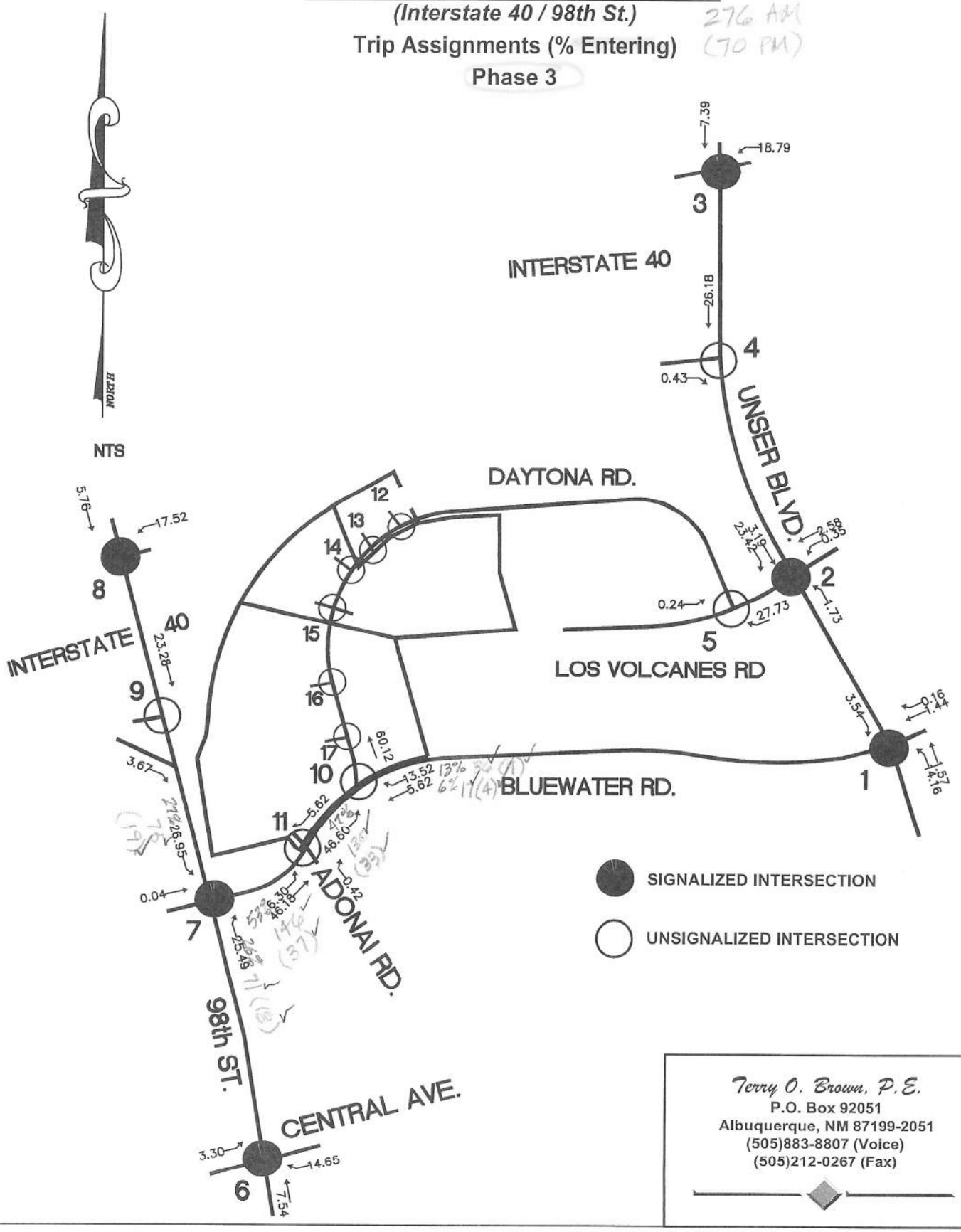
Westpointe 40 Development

(Interstate 40 / 98th St.)

276 AM (270 PM)

Trip Assignments (% Entering)

Phase 3



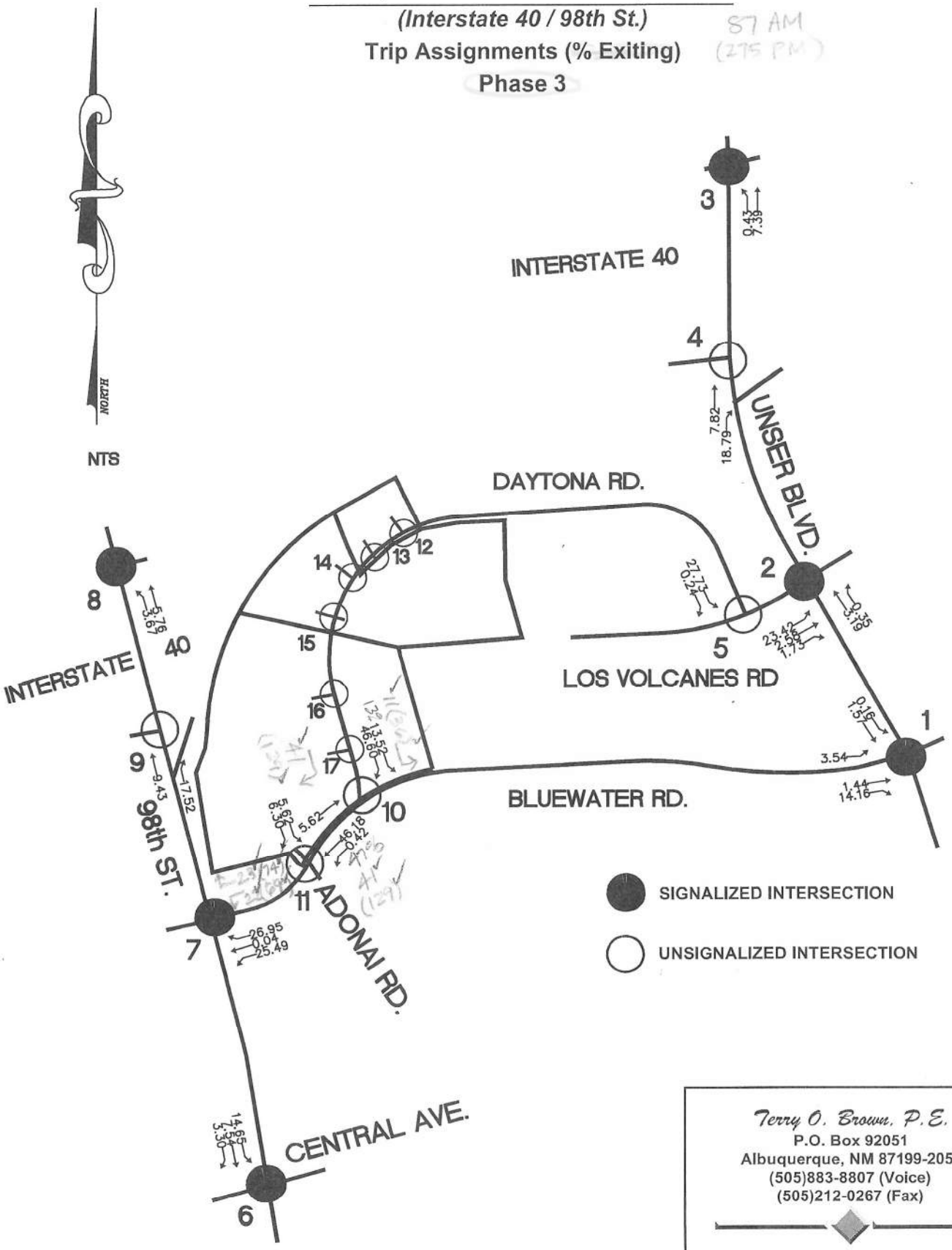
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Westpointe 40 Development

(Interstate 40 / 98th St.)

Trip Assignments (% Exiting)

Phase 3



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Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

A-39

Traffic Distribution - 98th & Bluewater Commercial Site								
Intersection and Traffic Movement	Inbound[1]				Outbound[1]			
	AM	%	PM	%	AM	%	PM	%
Central Ave.								
EBL	262	5.8%	219	4.4%	-		-	
NBT	1797	40.0%	849	16.9%	-		-	
WBR	140	3.1%	153	3.0%	-		-	
SBL	-		-		127	3.3%	112	3.7%
SBT	-		-		1145	29.6%	1013	33.2%
SBR	-		-		190	4.9%	168	5.5%
Volcano								
WBT	58	1.3%	71	1.4%	-		-	
EBT	-		-		47	1.2%	116	3.8%
Avalon/Bluewater								
SBL	55	1.2%	44	0.9%	-		-	
SBT	790	17.6%	1605	31.9%	-		-	
WBL	-		-		35	0.9%	62	2.0%
WBT	-		-		7	0.2%	10	0.3%
WBR	-		-		103	2.7%	64	2.1%
Bluewater/90th								
SBR	41	0.9%	35	0.7%	-		-	
WBT	26	0.6%	54	1.1%	-		-	
NBL	10	0.2%	10	0.2%	-		-	
EBL	-		-		100	2.6%	43	1.4%
EBT	-		-		44	1.1%	51	1.7%
EBR	-		-		7	0.2%	22	0.7%
I40 South Ramp								
EBR	77	1.7%	98	1.9%	-		-	
NBR					1696	43.9%	999	32.7%
I40 North								
SBT	539	12.0%	389	7.7%	-		-	
WBL	701	15.6%	1506	29.9%	-		-	
NBL					67	1.7%	104	3.4%
NBT					299	7.7%	290	9.5%
Total Volumes	**4496**	100%	**5033**	100%	**3867**	100%	**3054**	100%
[1] *From 2025AMX & 2025PMX traffic volumes.*								

Development: 98th & Bluewater

Driveway: 1 Driveway 1 (Node 14)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 1 (Node 14) to Origin 1 (Node 21)	10.00	27	4.00	9
2	Driveway 1 (Node 14) to Origin 2 (Node 22)	3.00	8	0.50	1
10	Origin 10 (Node 32) to Driveway 1 (Node 14)	0.00	0	0.00	---
12	Driveway 1 (Node 14) to Origin 12 (Node 34)	2.00	5	1.50	3
13	Origin 13 (Node 35) to Driveway 1 (Node 14)	0.50	1	0.00	---

Development: 98th & Bluewater

Driveway: 2 Driveway 2 (Node 12)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Origin 1 (Node 21) to Driveway 2 (Node 12)	25.00	66	0.00	---
2	Origin 2 (Node 22) to Driveway 2 (Node 12)	5.00	13	0.00	---
3	Driveway 2 (Node 12) to Origin 3 (Node 24)	0.00	---	0.00	0
5	Driveway 2 (Node 12) to Origin 5 (Node 27)	0.00	---	0.50	1
6	Driveway 2 (Node 12) to Origin 6 (Node 28)	0.00	---	2.00	4
8	Driveway 2 (Node 12) to Origin 8 (Node 30)	0.00	---	11.00	24
13	Origin 13 (Node 35) to Driveway 2 (Node 12)	2.00	5	0.00	---

Development: 98th & Bluewater

Driveway: 3 Driveway 3 (Node 13)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 3 (Node 13) to Origin 1 (Node 21)	20.00	53	3.00	7
2	Driveway 3 (Node 13) to Origin 2 (Node 22)	3.00	8	0.50	1
3	Driveway 3 (Node 13) to Origin 3 (Node 24)	0.00	---	0.00	0
5	Driveway 3 (Node 13) to Origin 5 (Node 27)	0.00	---	0.50	1
6	Driveway 3 (Node 13) to Origin 6 (Node 28)	2.00	5	2.00	4
7	Origin 7 (Node 29) to Driveway 3 (Node 13)	2.00	5	0.00	---
8	Driveway 3 (Node 13) to Origin 8 (Node 30)	0.00	---	12.00	27
13	Driveway 3 (Node 13) to Origin 13 (Node 35)	1.80	5	1.00	2

Development: 98th & Bluewater

Driveway: 4 Driveway 4 (Node 15)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 4 (Node 15) to Origin 1 (Node 21)	0.00	---	23.00	51
2	Driveway 4 (Node 15) to Origin 2 (Node 22)	0.00	---	3.00	7
3	Driveway 4 (Node 15) to Origin 3 (Node 24)	0.50	1	0.50	1
4	Origin 4 (Node 25) to Driveway 4 (Node 15)	0.50	1	0.00	---
5	Driveway 4 (Node 15) to Origin 5 (Node 27)	0.00	---	1.00	2
6	Driveway 4 (Node 15) to Origin 6 (Node 28)	10.00	27	5.00	11
7	Origin 7 (Node 29) to Driveway 4 (Node 15)	12.00	32	0.00	---
8	Driveway 4 (Node 15) to Origin 8 (Node 30)	0.00	---	23.00	51
9	Driveway 4 (Node 15) to Origin 9 (Node 31)	0.50	1	3.00	7
10	Driveway 4 (Node 15) to Origin 10 (Node 32)	0.20	1	1.00	2
11	Driveway 4 (Node 15) to Origin 11 (Node 33)	0.00	0	0.00	0
13	Driveway 4 (Node 15) to Origin 13 (Node 35)	0.00	---	2.00	4

Development: 98th & Bluewater

Driveway: 1 Driveway 1 (Node 14)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 1 (Node 14) to Origin 1 (Node 21)	4.00	8	4.00	7
2	Driveway 1 (Node 14) to Origin 2 (Node 22)	1.00	2	0.50	1
10	Origin 10 (Node 32) to Driveway 1 (Node 14)	0.00	0	0.00	---
12	Driveway 1 (Node 14) to Origin 12 (Node 34)	1.50	3	4.00	7
13	Origin 13 (Node 35) to Driveway 1 (Node 14)	0.50	1	0.00	---

Development: 98th & Bluewater

Driveway: 2 Driveway 2 (Node 12)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Origin 1 (Node 21) to Driveway 2 (Node 12)	7.00	14	0.00	---
2	Origin 2 (Node 22) to Driveway 2 (Node 12)	2.00	4	0.00	---
3	Driveway 2 (Node 12) to Origin 3 (Node 24)	0.00	---	0.00	0
5	Driveway 2 (Node 12) to Origin 5 (Node 27)	0.00	---	1.00	2
6	Driveway 2 (Node 12) to Origin 6 (Node 28)	0.00	---	2.00	4
8	Driveway 2 (Node 12) to Origin 8 (Node 30)	0.00	---	10.00	18
13	Origin 13 (Node 35) to Driveway 2 (Node 12)	1.50	3	0.00	---

Development: 98th & Bluewater

Driveway: 3 Driveway 3 (Node 13)

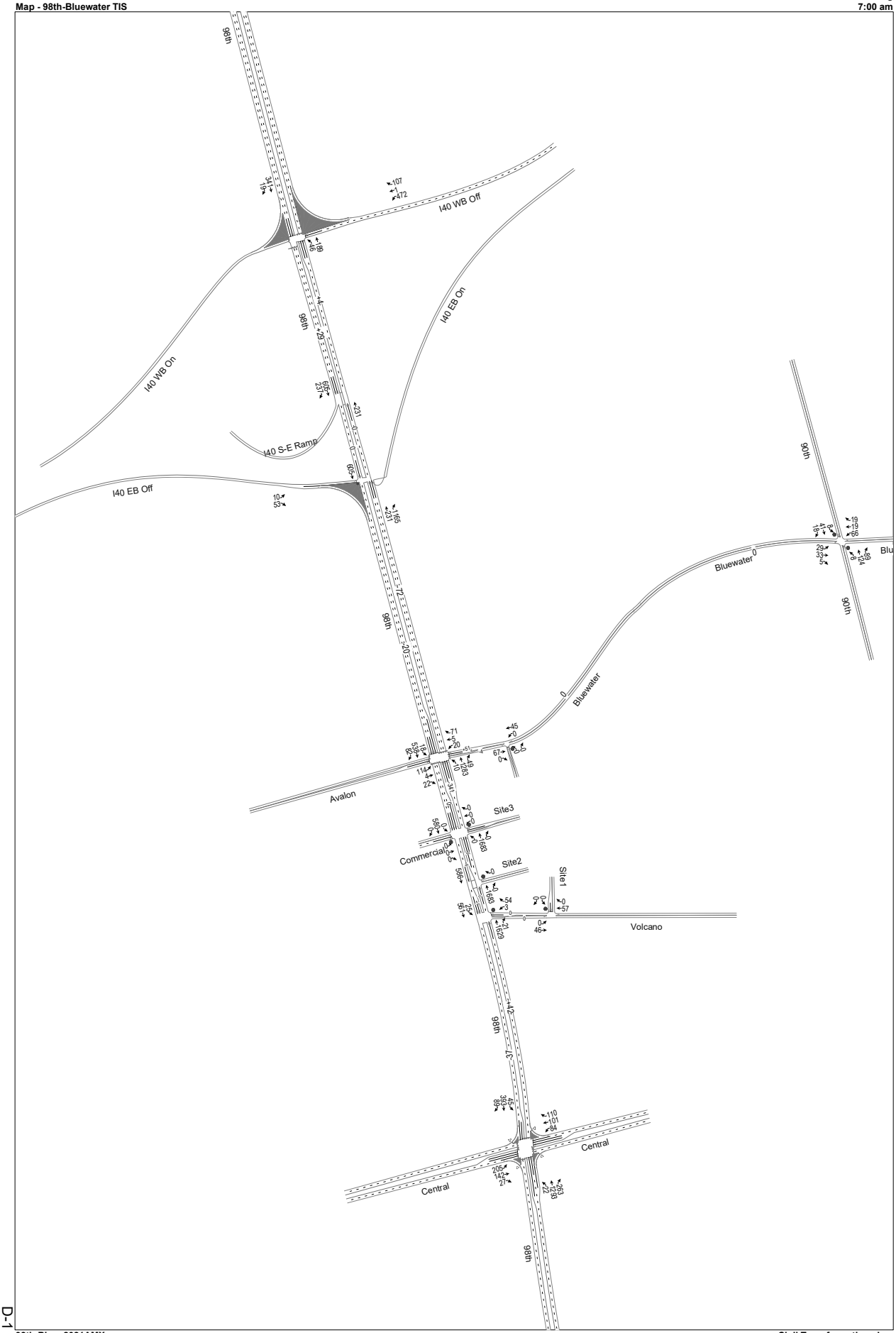
Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 3 (Node 13) to Origin 1 (Node 21)	6.00	12	3.00	6
2	Driveway 3 (Node 13) to Origin 2 (Node 22)	1.00	2	0.00	0
3	Driveway 3 (Node 13) to Origin 3 (Node 24)	0.00	---	0.00	0
5	Driveway 3 (Node 13) to Origin 5 (Node 27)	0.00	---	1.00	2
6	Driveway 3 (Node 13) to Origin 6 (Node 28)	2.00	4	3.00	6
7	Origin 7 (Node 29) to Driveway 3 (Node 13)	8.00	16	0.00	---
8	Driveway 3 (Node 13) to Origin 8 (Node 30)	0.00	---	10.00	18
13	Driveway 3 (Node 13) to Origin 13 (Node 35)	1.00	2	1.00	2

Development: 98th & Bluewater

Driveway: 4 Driveway 4 (Node 15)

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 4 (Node 15) to Origin 1 (Node 21)	0.00	---	26.00	48
2	Driveway 4 (Node 15) to Origin 2 (Node 22)	0.00	---	5.00	9
3	Driveway 4 (Node 15) to Origin 3 (Node 24)	1.00	2	0.50	1
4	Origin 4 (Node 25) to Driveway 4 (Node 15)	2.00	4	0.00	---
5	Driveway 4 (Node 15) to Origin 5 (Node 27)	0.00	---	2.00	4
6	Driveway 4 (Node 15) to Origin 6 (Node 28)	6.00	12	5.00	9
7	Origin 7 (Node 29) to Driveway 4 (Node 15)	30.00	59	0.00	---
8	Driveway 4 (Node 15) to Origin 8 (Node 30)	0.00	---	13.00	24
9	Driveway 4 (Node 15) to Origin 9 (Node 31)	0.80	2	3.00	6
10	Driveway 4 (Node 15) to Origin 10 (Node 32)	1.00	2	1.00	2
11	Driveway 4 (Node 15) to Origin 11 (Node 33)	0.20	0	0.00	0
13	Driveway 4 (Node 15) to Origin 13 (Node 35)	0.00	---	5.00	9

APPENDIX D
LOS Worksheets


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
90th
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	142	27	84	101	110	22	1293	263	45	393	89
Future Volume (veh/h)	205	142	27	84	101	110	22	1293	263	45	393	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	223	154	0	91	110	0	24	1405	0	49	427	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	276	555		136	411		428	1531		118	1593	
Arrive On Green	0.08	0.16	0.00	0.04	0.12	0.00	0.01	0.43	0.00	0.03	0.44	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	223	154	0	91	110	0	24	1405	0	49	427	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	8.3	5.2	0.0	3.5	3.9	0.0	1.0	48.4	0.0	2.3	9.8	0.0
Cycle Q Clear(g_c), s	8.3	5.2	0.0	3.5	3.9	0.0	1.0	48.4	0.0	2.3	9.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	276	555		136	411		428	1531		118	1593	
V/C Ratio(X)	0.81	0.28		0.67	0.27		0.06	0.92		0.42	0.27	
Avail Cap(c_a), veh/h	462	859		294	685		506	1531		165	1593	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.8	47.6	0.0	61.5	51.5	0.0	20.6	34.8	0.0	30.2	22.7	0.0
Incr Delay (d2), s/veh	2.2	0.3	0.0	2.1	0.3	0.0	0.0	10.3	0.0	0.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	3.8	0.0	2.6	2.9	0.0	0.7	29.6	0.0	1.5	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	47.9	0.0	63.5	51.9	0.0	20.6	45.1	0.0	31.1	23.2	0.0
LnGrp LOS	E	D		E	D		C	D		C	C	
Approach Vol, veh/h		377	A		201	A		1429	A		476	A
Approach Delay, s/veh		55.6			57.2			44.7			24.0	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	28.3	6.2	63.8	15.0	23.2	8.1	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	5.5	7.2	3.0	11.8	10.3	5.9	4.3	50.4
Green Ext Time (p_c), s	0.0	0.8	0.0	1.7	0.1	0.5	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.4
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

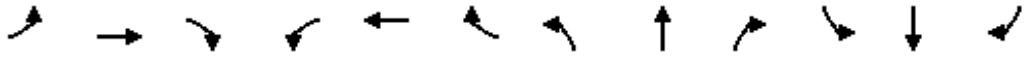
Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	54	1629	21	25	561
Future Vol, veh/h	3	54	1629	21	25	561
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	3	58	1752	23	27	603

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2121	889	0	0	1776	0
Stage 1	1765	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	44	282	-	-	338	-
Stage 1	125	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	40	282	-	-	338	-
Mov Cap-2 Maneuver	40	-	-	-	-	-
Stage 1	125	-	-	-	-	-
Stage 2	631	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	40	282	338	-
HCM Lane V/C Ratio	-	-	0.081	0.206	0.08	-
HCM Control Delay (s)	-	-	102.8	21	16.6	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	0.2	0.8	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	4	22	20	5	71	10	1283	49	18	538	82
Future Volume (veh/h)	114	4	22	20	5	71	10	1283	49	18	538	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	123	4	24	22	5	76	11	1380	53	19	578	88
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	361	88	525	485	26	388	291	1886	72	151	1679	252
Arrive On Green	0.09	0.38	0.38	0.01	0.30	0.30	0.02	0.75	0.75	0.01	0.38	0.38
Sat Flow, veh/h	1090	231	1389	1739	85	1286	1810	5046	194	1654	4446	667
Grp Volume(v), veh/h	123	0	28	22	0	81	11	931	502	19	437	229
Grp Sat Flow(s),veh/h/ln	1090	0	1620	1739	0	1371	1810	1702	1835	1654	1689	1735
Q Serve(g_s), s	9.8	0.0	1.4	1.1	0.0	5.7	0.5	19.8	19.8	0.9	12.0	12.3
Cycle Q Clear(g_c), s	9.8	0.0	1.4	1.1	0.0	5.7	0.5	19.8	19.8	0.9	12.0	12.3
Prop In Lane	1.00		0.86	1.00		0.94	1.00		0.11	1.00		0.38
Lane Grp Cap(c), veh/h	361	0	613	485	0	413	291	1273	686	151	1276	656
V/C Ratio(X)	0.34	0.00	0.05	0.05	0.00	0.20	0.04	0.73	0.73	0.13	0.34	0.35
Avail Cap(c_a), veh/h	364	0	613	624	0	413	445	1273	686	286	1276	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	25.6	30.9	0.0	33.7	25.4	12.8	12.8	26.4	28.9	29.0
Incr Delay (d2), s/veh	1.2	0.0	0.1	0.1	0.0	1.1	0.1	3.7	6.8	0.8	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	1.1	0.9	0.0	3.7	0.4	8.2	9.5	0.7	8.4	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	25.7	31.0	0.0	34.8	25.5	16.5	19.5	27.2	29.2	29.7
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		151			103			1444			685	
Approach Delay, s/veh		27.0			34.0			17.6			29.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	54.2	4.5	55.1	15.2	44.2	5.0	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	3.1	3.4	2.5	14.3	11.8	7.7	2.9	21.8
Green Ext Time (p_c), s	0.0	0.2	0.0	8.6	0.0	0.8	0.0	17.9

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

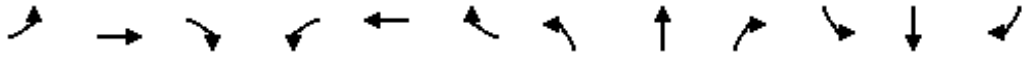
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	10	53	0	231	1165	0	605	0	0	0
Future Vol, veh/h	10	53	0	231	1165	0	605	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	11	56	0	243	1226	0	637	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	759	-	-	0	-	-	-	0
Stage 1	637	-	-	-	-	-	-	-
Stage 2	122	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	343	0	0	-	0	0	-	0
Stage 1	489	0	0	-	0	0	-	0
Stage 2	890	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	343	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-	-	-
Stage 1	489	-	-	-	-	-	-	-
Stage 2	890	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	343	-	-
HCM Lane V/C Ratio	-	0.031	-	-
HCM Control Delay (s)	-	15.8	0	-
HCM Lane LOS	-	C	A	-
HCM 95th %tile Q(veh)	-	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	472	1	107	46	189	0	0	341	19
Future Volume (veh/h)	0	0	0	472	1	107	46	189	0	0	341	19
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				514	0	0	50	205	0	0	371	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				599	0		396	1941	0	0	2381	
Arrive On Green				0.18	0.00	0.00	0.03	0.55	0.00	0.00	0.47	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				514	0	0	50	205	0	0	371	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				19.1	0.0	0.0	2.6	3.6	0.0	0.0	5.4	0.0
Cycle Q Clear(g_c), s				19.1	0.0	0.0	2.6	3.6	0.0	0.0	5.4	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				599	0		396	1941	0	0	2381	
V/C Ratio(X)				0.86	0.00		0.13	0.11	0.00	0.00	0.16	
Avail Cap(c_a), veh/h				1240	0		431	1941	0	0	2381	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				52.0	0.0	0.0	16.4	14.2	0.0	0.0	20.0	0.0
Incr Delay (d2), s/veh				3.7	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				12.9	0.0	0.0	1.3	2.6	0.0	0.0	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.7	0.0	0.0	16.5	14.3	0.0	0.0	20.1	0.0
LnGrp LOS				E	A		B	B	A	A	C	
Approach Vol, veh/h					514	A		255			371	A
Approach Delay, s/veh					55.7			14.7			20.1	
Approach LOS					E			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.4	66.6		28.4		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	4.6	7.4		21.1		5.6						
Green Ext Time (p_c), s	0.0	2.5		1.8		1.3						

Intersection Summary		
HCM 6th Ctrl Delay		34.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

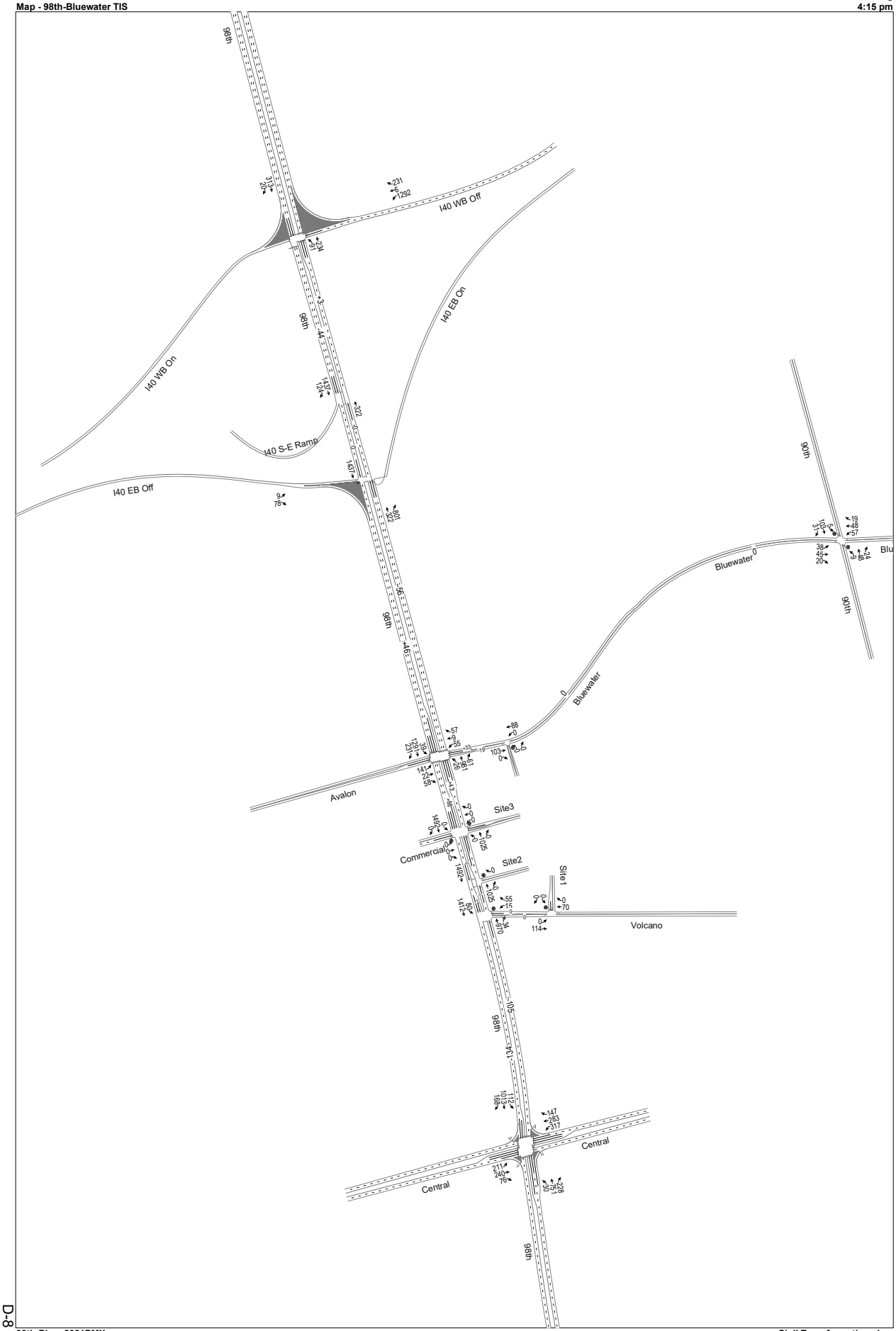
Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	33	5	66	19	19	8	124	89	8	41	18
Future Vol, veh/h	29	33	5	66	19	19	8	124	89	8	41	18
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	34	39	6	78	22	22	9	146	105	9	48	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	49	0	0	45	0	0	334	315	42	430	307	38
Stage 1	-	-	-	-	-	-	110	110	-	194	194	-
Stage 2	-	-	-	-	-	-	224	205	-	236	113	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1526	-	-	1563	-	-	620	601	1026	517	602	980
Stage 1	-	-	-	-	-	-	895	804	-	783	734	-
Stage 2	-	-	-	-	-	-	779	732	-	743	796	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1519	-	-	1563	-	-	536	555	1026	349	556	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	555	-	349	556	-
Stage 1	-	-	-	-	-	-	875	786	-	762	693	-
Stage 2	-	-	-	-	-	-	673	691	-	531	778	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	4.7	13.1	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	536	687	1519	-	-	1563	-	-	349	640
HCM Lane V/C Ratio	0.018	0.365	0.022	-	-	0.05	-	-	0.027	0.108
HCM Control Delay (s)	11.8	13.2	7.4	-	-	7.4	0	-	15.6	11.3
HCM Lane LOS	B	B	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.1	1.7	0.1	-	-	0.2	-	-	0.1	0.4


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
90th
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	222	253	0	334	298	0	32	791	0	118	1066	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	284	905		391	999		233	1335		300	1469	
Arrive On Green	0.08	0.25	0.00	0.11	0.29	0.00	0.02	0.38	0.00	0.11	0.83	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	222	253	0	334	298	0	32	791	0	118	1066	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	6.9	6.3	0.0	10.4	7.3	0.0	1.3	19.7	0.0	4.4	14.3	0.0
Cycle Q Clear(g_c), s	6.9	6.3	0.0	10.4	7.3	0.0	1.3	19.7	0.0	4.4	14.3	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	284	905		391	999		233	1335		300	1469	
V/C Ratio(X)	0.78	0.28		0.85	0.30		0.14	0.59		0.39	0.73	
Avail Cap(c_a), veh/h	424	905		393	999		328	1335		336	1469	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.5	32.9	0.0	47.9	30.7	0.0	21.1	27.6	0.0	19.2	6.8	0.0
Incr Delay (d2), s/veh	2.7	0.8	0.0	15.8	0.8	0.0	0.1	1.9	0.0	0.3	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	4.8	0.0	8.8	5.4	0.0	0.9	13.0	0.0	2.9	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	33.7	0.0	63.7	31.5	0.0	21.2	29.5	0.0	19.6	10.0	0.0
LnGrp LOS	D	C		E	C		C	C		B	A	
Approach Vol, veh/h		475	A		632	A		823	A		1184	A
Approach Delay, s/veh		42.4			48.5			29.2			10.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	35.0	6.6	51.5	13.5	38.4	10.7	47.3
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	12.4	8.3	3.3	16.3	8.9	9.3	6.4	21.7
Green Ext Time (p_c), s	0.0	1.2	0.0	4.8	0.1	1.4	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

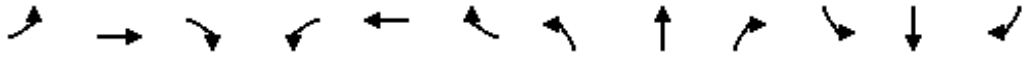
Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	970	34	80	1412
Future Vol, veh/h	15	55	970	34	80	1412
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	16	58	1021	36	84	1486

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1951	530	0	0	1058	0
Stage 1	1040	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	56	493	-	-	636	-
Stage 1	302	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	49	493	-	-	635	-
Mov Cap-2 Maneuver	49	-	-	-	-	-
Stage 1	302	-	-	-	-	-
Stage 2	306	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	49	493	635	-
HCM Lane V/C Ratio	-	-	0.322	0.117	0.133	-
HCM Control Delay (s)	-	-	110.1	13.3	11.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.4	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	22	58	55	9	57	26	981	61	39	1291	231
Future Volume (veh/h)	141	22	58	55	9	57	26	981	61	39	1291	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	144	22	59	56	9	58	27	1001	62	40	1317	236
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	174	42	113	216	16	104	223	3216	199	342	2865	513
Arrive On Green	0.07	0.12	0.12	0.04	0.09	0.09	0.01	0.22	0.22	0.02	0.66	0.66
Sat Flow, veh/h	1076	339	909	1753	170	1098	1428	4916	304	1697	4354	780
Grp Volume(v), veh/h	144	0	81	56	0	67	27	693	370	40	1030	523
Grp Sat Flow(s),veh/h/ln	1076	0	1247	1753	0	1268	1428	1702	1816	1697	1702	1730
Q Serve(g_s), s	7.5	0.0	6.7	3.1	0.0	5.6	0.7	18.8	18.9	0.9	16.3	16.3
Cycle Q Clear(g_c), s	7.5	0.0	6.7	3.1	0.0	5.6	0.7	18.8	18.9	0.9	16.3	16.3
Prop In Lane	1.00		0.73	1.00		0.87	1.00		0.17	1.00		0.45
Lane Grp Cap(c), veh/h	174	0	155	216	0	120	223	2227	1188	342	2240	1138
V/C Ratio(X)	0.83	0.00	0.52	0.26	0.00	0.56	0.12	0.31	0.31	0.12	0.46	0.46
Avail Cap(c_a), veh/h	174	0	431	283	0	450	351	2227	1188	425	2240	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	45.1	42.7	0.0	47.6	7.5	22.3	22.3	7.8	9.2	9.2
Incr Delay (d2), s/veh	29.0	0.0	5.7	1.3	0.0	8.4	0.5	0.4	0.7	0.3	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.7	0.0	4.2	2.6	0.0	3.7	0.4	13.4	14.3	0.5	9.1	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	0.0	50.8	44.1	0.0	55.9	8.0	22.7	23.0	8.1	9.9	10.6
LnGrp LOS	E	A	D	D	A	E	A	C	C	A	A	B
Approach Vol, veh/h		225			123			1090			1593	
Approach Delay, s/veh		66.5			50.5			22.4			10.1	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	18.7	5.2	78.4	11.0	15.4	5.6	78.0
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	5.1	8.7	2.7	18.3	9.5	7.6	2.9	20.9
Green Ext Time (p_c), s	0.1	0.8	0.0	12.6	0.0	0.7	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

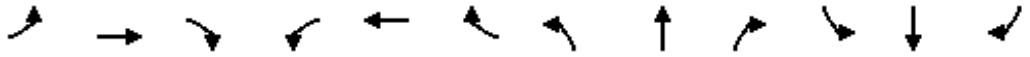
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	9	78	0	322	801	0	1437	0	0	0
Future Vol, veh/h	9	78	0	322	801	0	1437	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	9	81	0	335	834	0	1497	0	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1665	-	-	0	-	-	-	0	
Stage 1	1497	-	-	-	-	-	-	-	
Stage 2	168	-	-	-	-	-	-	-	
Critical Hdwy	6.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	
Follow-up Hdwy	3.52	-	-	-	-	-	-	-	
Pot Cap-1 Maneuver	88	0	0	-	0	0	-	0	
Stage 1	172	0	0	-	0	0	-	0	
Stage 2	844	0	0	-	0	0	-	0	
Platoon blocked, %				-			-		
Mov Cap-1 Maneuver	88	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	88	-	-	-	-	-	-	-	
Stage 1	172	-	-	-	-	-	-	-	
Stage 2	844	-	-	-	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, s	50.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	88	-	-
HCM Lane V/C Ratio	-	0.107	-	-
HCM Control Delay (s)	-	50.7	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1292	6	231	91	234	0	0	313	20
Future Volume (veh/h)	0	0	0	1292	6	231	91	234	0	0	313	20
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1393	0	0	98	252	0	0	337	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				1556	0		395	1605	0	0	1710	
Arrive On Green				0.44	0.00	0.00	0.06	0.45	0.00	0.00	0.33	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1393	0	0	98	252	0	0	337	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				40.3	0.0	0.0	4.7	4.6	0.0	0.0	5.2	0.0
Cycle Q Clear(g_c), s				40.3	0.0	0.0	4.7	4.6	0.0	0.0	5.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1556	0		395	1605	0	0	1710	
V/C Ratio(X)				0.90	0.00		0.25	0.16	0.00	0.00	0.20	
Avail Cap(c_a), veh/h				2231	0		410	1605	0	0	1710	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				28.2	0.0	0.0	20.7	17.8	0.0	0.0	26.0	0.0
Incr Delay (d2), s/veh				3.8	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				23.0	0.0	0.0	2.8	3.3	0.0	0.0	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				32.0	0.0	0.0	21.1	18.0	0.0	0.0	26.3	0.0
LnGrp LOS				C	A		C	B	A	A	C	
Approach Vol, veh/h					1393	A		350			337	A
Approach Delay, s/veh					32.0			18.9			26.3	
Approach LOS					C			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	42.3		54.8		55.2						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	6.7	7.2		42.3		6.6						
Green Ext Time (p_c), s	0.0	1.1		6.5		1.4						

Intersection Summary		
HCM 6th Ctrl Delay		28.9
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

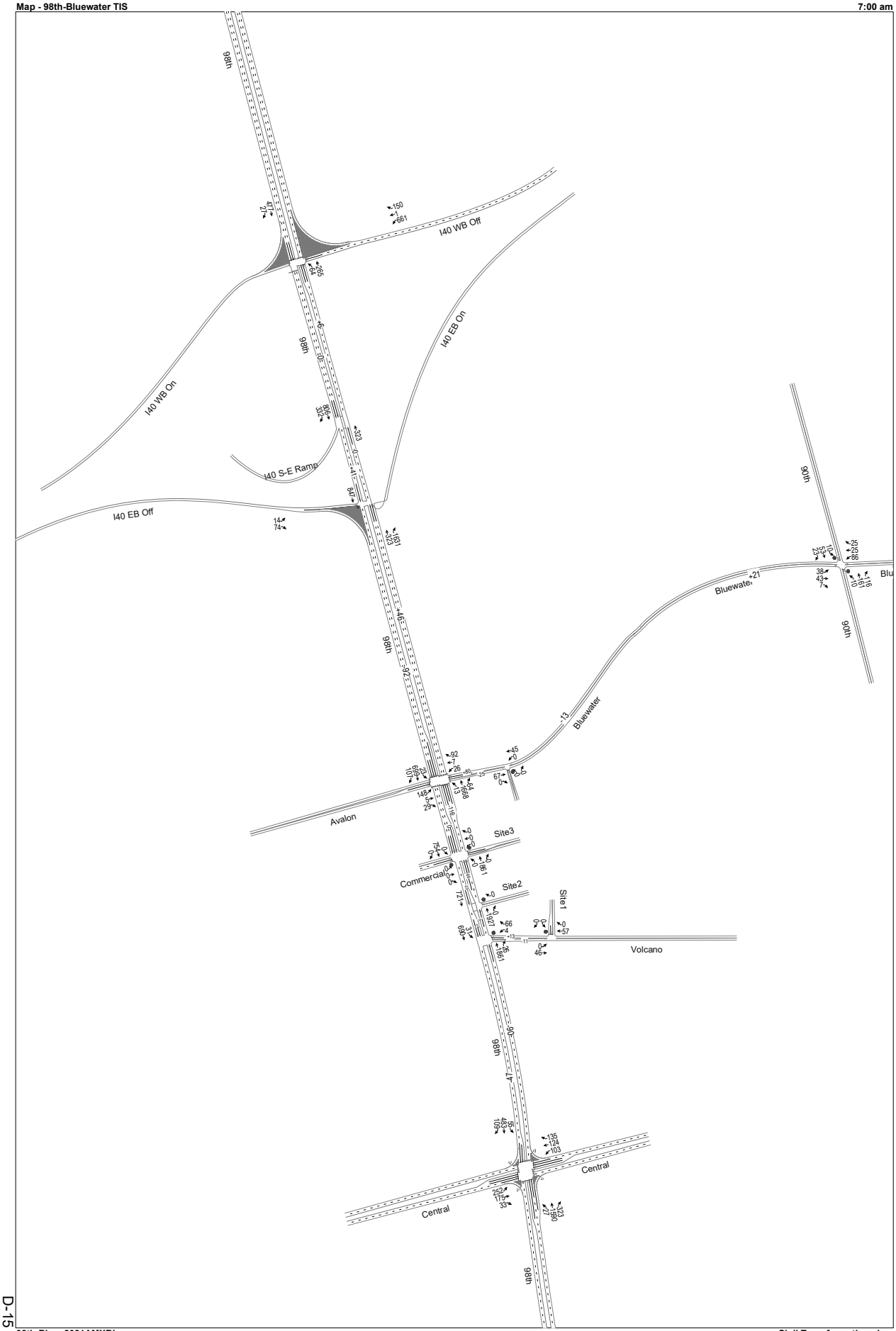
Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	45	20	57	48	19	9	48	24	5	103	31
Future Vol, veh/h	38	45	20	57	48	19	9	48	24	5	103	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	51	23	65	55	22	10	55	27	6	117	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	74	0	0	421	356	63	386	356	66
Stage 1	-	-	-	-	-	-	149	149	-	196	196	-
Stage 2	-	-	-	-	-	-	272	207	-	190	160	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1484	-	-	1526	-	-	543	570	1002	573	570	998
Stage 1	-	-	-	-	-	-	854	774	-	806	739	-
Stage 2	-	-	-	-	-	-	734	731	-	812	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1526	-	-	411	528	1002	485	528	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	411	528	-	485	528	-
Stage 1	-	-	-	-	-	-	829	752	-	783	706	-
Stage 2	-	-	-	-	-	-	564	698	-	711	744	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	3.4	11.9	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	411	627	1484	-	-	1526	-	-	485	593
HCM Lane V/C Ratio	0.025	0.13	0.029	-	-	0.042	-	-	0.012	0.257
HCM Control Delay (s)	14	11.6	7.5	-	-	7.5	0	-	12.5	13.2
HCM Lane LOS	B	B	A	-	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0.4	0.1	-	-	0.1	-	-	0	1


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
98th
98th
98th
90th
90th
Bluewater
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central
Central
98th

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	274	190	0	112	135	0	29	1728	0	60	525	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	326	581		160	411		388	1531		106	1603	
Arrive On Green	0.10	0.17	0.00	0.05	0.12	0.00	0.02	0.43	0.00	0.03	0.45	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	274	190	0	112	135	0	29	1728	0	60	525	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	10.2	6.4	0.0	4.3	4.9	0.0	1.2	56.0	0.0	2.8	12.3	0.0
Cycle Q Clear(g_c), s	10.2	6.4	0.0	4.3	4.9	0.0	1.2	56.0	0.0	2.8	12.3	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	326	581		160	411		388	1531		106	1603	
V/C Ratio(X)	0.84	0.33		0.70	0.33		0.07	1.13		0.56	0.33	
Avail Cap(c_a), veh/h	462	859		294	685		461	1531		145	1603	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.8	47.2	0.0	61.0	51.9	0.0	20.6	37.0	0.0	31.5	23.3	0.0
Incr Delay (d2), s/veh	6.7	0.3	0.0	2.1	0.5	0.0	0.0	66.9	0.0	1.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.1	4.7	0.0	3.3	3.5	0.0	0.9	51.3	0.0	1.9	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.5	47.6	0.0	63.0	52.4	0.0	20.7	103.9	0.0	33.3	23.8	0.0
LnGrp LOS	E	D		E	D		C	F		C	C	
Approach Vol, veh/h		464	A		247	A		1757	A		585	A
Approach Delay, s/veh		57.6			57.2			102.5			24.8	
Approach LOS		E			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	29.3	6.6	64.2	16.9	23.2	8.8	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	6.3	8.4	3.2	14.3	12.2	6.9	4.8	58.0
Green Ext Time (p_c), s	0.0	1.0	0.0	2.1	0.2	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	77.1
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

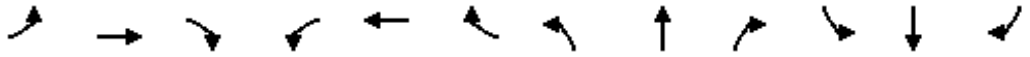
Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	4	66	1861	26	31	690
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	4	71	2001	28	33	742

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2453	1016	0	0	2030	0
Stage 1	2016	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	26	232	-	-	268	-
Stage 1	91	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	23	232	-	-	268	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.8	0	0.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	23	232	268	-
HCM Lane V/C Ratio	-	-	0.187	0.306	0.124	-
HCM Control Delay (s)	-	-	194.5	27.2	20.3	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	0.6	1.2	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	26	7	92	13	1668	64	23	699	107
Future Volume (veh/h)	148	5	29	26	7	92	13	1668	64	23	699	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	159	5	31	28	8	99	14	1794	69	25	752	115
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	348	85	526	489	31	383	235	1886	72	94	1685	256
Arrive On Green	0.09	0.38	0.38	0.02	0.30	0.30	0.02	0.75	0.75	0.01	0.38	0.38
Sat Flow, veh/h	1090	225	1394	1739	103	1271	1810	5046	194	1654	4438	673
Grp Volume(v), veh/h	159	0	36	28	0	107	14	1210	653	25	571	296
Grp Sat Flow(s),veh/h/ln	1090	0	1619	1739	0	1373	1810	1702	1835	1654	1689	1734
Q Serve(g_s), s	12.1	0.0	1.8	1.4	0.0	7.7	0.6	40.3	40.5	1.2	16.4	16.6
Cycle Q Clear(g_c), s	12.1	0.0	1.8	1.4	0.0	7.7	0.6	40.3	40.5	1.2	16.4	16.6
Prop In Lane	1.00		0.86	1.00		0.93	1.00		0.11	1.00		0.39
Lane Grp Cap(c), veh/h	348	0	611	489	0	414	235	1273	686	94	1282	658
V/C Ratio(X)	0.46	0.00	0.06	0.06	0.00	0.26	0.06	0.95	0.95	0.27	0.45	0.45
Avail Cap(c_a), veh/h	348	0	611	621	0	414	387	1273	686	224	1282	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	25.8	30.7	0.0	34.4	25.7	15.4	15.4	31.7	30.1	30.2
Incr Delay (d2), s/veh	2.0	0.0	0.2	0.1	0.0	1.5	0.2	15.9	24.4	3.2	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	0.0	1.4	1.1	0.0	5.0	0.5	12.9	15.8	1.0	10.8	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	25.9	30.8	0.0	35.9	25.9	31.2	39.8	34.9	30.6	31.2
LnGrp LOS	C	A	C	C	A	D	C	C	D	C	C	C
Approach Vol, veh/h		195			135			1877			892	
Approach Delay, s/veh		28.8			34.8			34.2			30.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	54.1	4.7	55.3	15.6	44.2	5.4	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	3.4	3.8	2.6	18.6	14.1	9.7	3.2	42.5
Green Ext Time (p_c), s	0.0	0.3	0.0	11.2	0.0	1.2	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

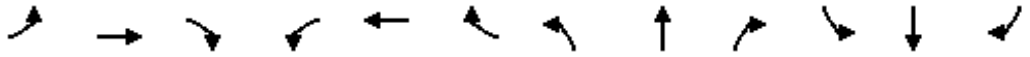
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	15	78	0	340	1717	0	892	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1062	-	-	0	-	-	-	0
Stage 1	892	-	-	-	-	-	-	-
Stage 2	170	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	219	0	0	-	0	0	-	0
Stage 1	361	0	0	-	0	0	-	0
Stage 2	843	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	219	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	219	-	-	-	-	-	-	-
Stage 1	361	-	-	-	-	-	-	-
Stage 2	843	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	219	-	-
HCM Lane V/C Ratio	-	0.067	-	-
HCM Control Delay (s)	-	22.6	0	-
HCM Lane LOS	-	C	A	-
HCM 95th %tile Q(veh)	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				719	0	0	70	288	0	0	518	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				813	0		353	1941	0	0	2325	
Arrive On Green				0.24	0.00	0.00	0.04	0.55	0.00	0.00	0.46	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				719	0	0	70	288	0	0	518	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				26.6	0.0	0.0	3.7	5.2	0.0	0.0	8.0	0.0
Cycle Q Clear(g_c), s				26.6	0.0	0.0	3.7	5.2	0.0	0.0	8.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				813	0		353	1941	0	0	2325	
V/C Ratio(X)				0.88	0.00		0.20	0.15	0.00	0.00	0.22	
Avail Cap(c_a), veh/h				1240	0		374	1941	0	0	2325	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				47.7	0.0	0.0	16.9	14.6	0.0	0.0	21.5	0.0
Incr Delay (d2), s/veh				5.3	0.0	0.0	0.3	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				17.0	0.0	0.0	1.9	3.7	0.0	0.0	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.0	0.0	0.0	17.1	14.7	0.0	0.0	21.7	0.0
LnGrp LOS				D	A		B	B	A	A	C	
Approach Vol, veh/h					719	A		358			518	A
Approach Delay, s/veh					53.0			15.2			21.7	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.8	65.2		36.6		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	5.7	10.0		28.6		7.2						
Green Ext Time (p_c), s	0.0	3.5		2.6		1.8						

Intersection Summary		
HCM 6th Ctrl Delay		34.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

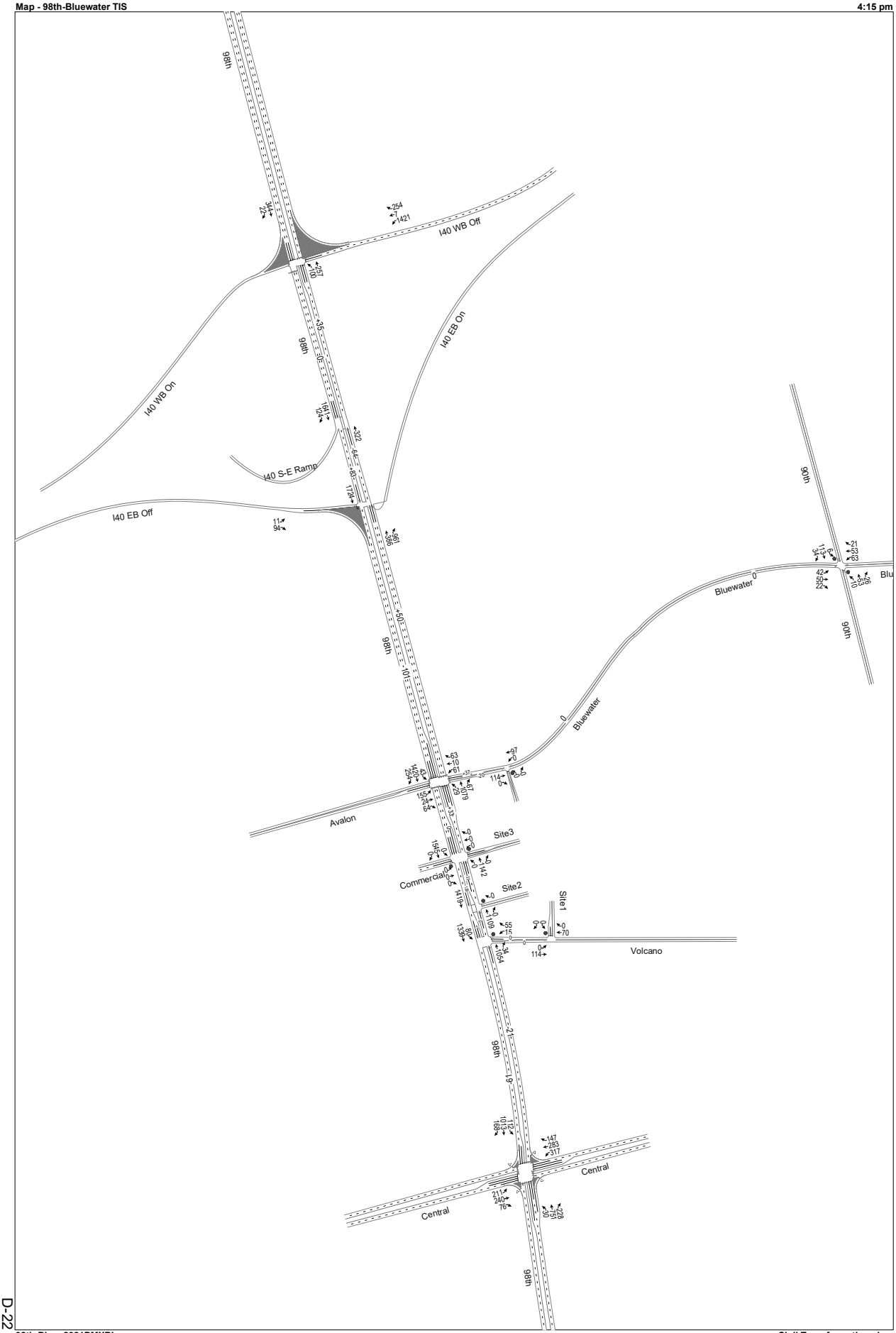
Intersection	
Int Delay, s/veh	11.8

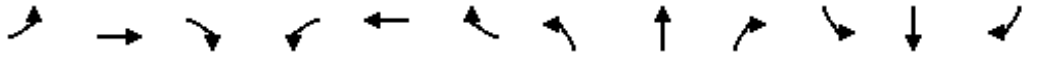
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	43	7	86	25	25	10	161	116	10	53	23
Future Vol, veh/h	38	43	7	86	25	25	10	161	116	10	53	23
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	45	51	8	101	29	29	12	189	136	12	62	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	59	0	0	435	410	55	559	400	49
Stage 1	-	-	-	-	-	-	145	145	-	251	251	-
Stage 2	-	-	-	-	-	-	290	265	-	308	149	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1508	-	-	1545	-	-	531	531	1009	423	534	966
Stage 1	-	-	-	-	-	-	858	777	-	729	694	-
Stage 2	-	-	-	-	-	-	718	689	-	679	768	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1545	-	-	431	478	1009	234	481	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	431	478	-	234	481	-
Stage 1	-	-	-	-	-	-	832	754	-	703	643	-
Stage 2	-	-	-	-	-	-	587	639	-	426	745	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	4.7	17.2	13.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	431	613	1501	-	-	1545	-	-	234	567
HCM Lane V/C Ratio	0.027	0.532	0.03	-	-	0.065	-	-	0.05	0.158
HCM Control Delay (s)	13.6	17.3	7.5	-	-	7.5	0	-	21.2	12.5
HCM Lane LOS	B	C	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.1	3.1	0.1	-	-	0.2	-	-	0.2	0.6


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
90th
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	222	253	0	334	298	0	32	791	0	118	1066	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	284	905		391	999		233	1335		300	1469	
Arrive On Green	0.08	0.25	0.00	0.11	0.29	0.00	0.02	0.38	0.00	0.11	0.83	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	222	253	0	334	298	0	32	791	0	118	1066	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	6.9	6.3	0.0	10.4	7.3	0.0	1.3	19.7	0.0	4.4	14.3	0.0
Cycle Q Clear(g_c), s	6.9	6.3	0.0	10.4	7.3	0.0	1.3	19.7	0.0	4.4	14.3	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	284	905		391	999		233	1335		300	1469	
V/C Ratio(X)	0.78	0.28		0.85	0.30		0.14	0.59		0.39	0.73	
Avail Cap(c_a), veh/h	424	905		393	999		328	1335		336	1469	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.5	32.9	0.0	47.9	30.7	0.0	21.1	27.6	0.0	19.2	6.8	0.0
Incr Delay (d2), s/veh	2.7	0.8	0.0	15.8	0.8	0.0	0.1	1.9	0.0	0.3	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	4.8	0.0	8.8	5.4	0.0	0.9	13.0	0.0	2.9	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	33.7	0.0	63.7	31.5	0.0	21.2	29.5	0.0	19.6	10.0	0.0
LnGrp LOS	D	C		E	C		C	C		B	A	
Approach Vol, veh/h		475	A		632	A		823	A		1184	A
Approach Delay, s/veh		42.4			48.5			29.2			10.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	35.0	6.6	51.5	13.5	38.4	10.7	47.3
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	12.4	8.3	3.3	16.3	8.9	9.3	6.4	21.7
Green Ext Time (p_c), s	0.0	1.2	0.0	4.8	0.1	1.4	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

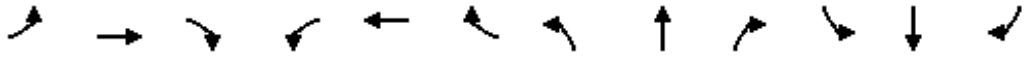
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	15	55	1054	34	80	1339
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	16	58	1109	36	84	1409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2001	574	0	0	1146	0
Stage 1	1128	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	52	462	-	-	589	-
Stage 1	271	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	45	462	-	-	588	-
Mov Cap-2 Maneuver	45	-	-	-	-	-
Stage 1	271	-	-	-	-	-
Stage 2	316	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.3	0	0.7
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	45	462	588	-
HCM Lane V/C Ratio	-	-	0.351	0.125	0.143	-
HCM Control Delay (s)	-	-	123.2	13.9	12.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0.4	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	158	24	65	62	10	64	30	1101	68	44	1449	259
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	170	40	110	208	16	104	200	3211	198	312	2862	511
Arrive On Green	0.07	0.12	0.12	0.04	0.09	0.09	0.01	0.22	0.22	0.02	0.66	0.66
Sat Flow, veh/h	1076	336	911	1753	171	1097	1428	4916	303	1697	4357	777
Grp Volume(v), veh/h	158	0	89	62	0	74	30	762	407	44	1132	576
Grp Sat Flow(s),veh/h/ln	1076	0	1247	1753	0	1269	1428	1702	1816	1697	1702	1730
Q Serve(g_s), s	7.5	0.0	7.4	3.5	0.0	6.2	0.8	20.9	20.9	1.0	18.8	18.9
Cycle Q Clear(g_c), s	7.5	0.0	7.4	3.5	0.0	6.2	0.8	20.9	20.9	1.0	18.8	18.9
Prop In Lane	1.00		0.73	1.00		0.86	1.00		0.17	1.00		0.45
Lane Grp Cap(c), veh/h	170	0	150	208	0	120	200	2223	1186	312	2236	1137
V/C Ratio(X)	0.93	0.00	0.59	0.30	0.00	0.61	0.15	0.34	0.34	0.14	0.51	0.51
Avail Cap(c_a), veh/h	170	0	431	269	0	450	326	2223	1186	393	2236	1137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	0.0	45.8	42.5	0.0	47.8	8.0	23.1	23.2	8.2	9.7	9.7
Incr Delay (d2), s/veh	50.3	0.0	7.8	1.7	0.0	10.4	0.7	0.4	0.8	0.4	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.0	4.8	2.9	0.0	4.1	0.4	14.6	15.5	0.6	10.2	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.7	0.0	53.6	44.2	0.0	58.3	8.7	23.6	24.0	8.7	10.5	11.3
LnGrp LOS	F	A	D	D	A	E	A	C	C	A	B	B
Approach Vol, veh/h		247			136			1199			1752	
Approach Delay, s/veh		81.8			51.8			23.3			10.7	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	18.2	5.3	78.3	11.0	15.4	5.7	77.8
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	5.5	9.4	2.8	20.9	9.5	8.2	3.0	22.9
Green Ext Time (p_c), s	0.1	0.9	0.0	11.3	0.0	0.7	0.0	9.9

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

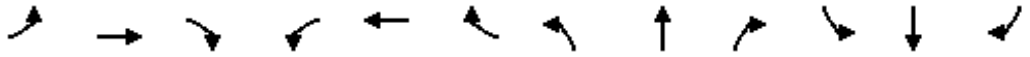
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	11	98	0	402	1001	0	1796	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1997	-	-	0	-	-	-	0
Stage 1	1796	-	-	-	-	-	-	-
Stage 2	201	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	52	0	0	-	0	0	-	0
Stage 1	118	0	0	-	0	0	-	0
Stage 2	813	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	52	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	52	-	-	-	-	-	-	-
Stage 1	118	-	-	-	-	-	-	-
Stage 2	813	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	92.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	52	-	-
HCM Lane V/C Ratio	-	0.22	-	-
HCM Control Delay (s)	-	92.8	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1534	0	0	108	276	0	0	370	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				1699	0		352	1460	0	0	1458	
Arrive On Green				0.48	0.00	0.00	0.07	0.41	0.00	0.00	0.29	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1534	0	0	108	276	0	0	370	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				44.1	0.0	0.0	5.6	5.5	0.0	0.0	6.1	0.0
Cycle Q Clear(g_c), s				44.1	0.0	0.0	5.6	5.5	0.0	0.0	6.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1699	0		352	1460	0	0	1458	
V/C Ratio(X)				0.90	0.00		0.31	0.19	0.00	0.00	0.25	
Avail Cap(c_a), veh/h				2231	0		355	1460	0	0	1458	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				26.0	0.0	0.0	23.9	20.7	0.0	0.0	30.3	0.0
Incr Delay (d2), s/veh				4.5	0.0	0.0	0.5	0.3	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				24.6	0.0	0.0	3.4	4.0	0.0	0.0	4.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.5	0.0	0.0	24.4	21.0	0.0	0.0	30.7	0.0
LnGrp LOS				C	A		C	C	A	A	C	
Approach Vol, veh/h					1534	A		384			370	A
Approach Delay, s/veh					30.5			22.0			30.7	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.8	36.9		59.3		50.7						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	7.6	8.1		46.1		7.5						
Green Ext Time (p_c), s	0.0	1.1		7.2		1.5						

Intersection Summary		
HCM 6th Ctrl Delay		29.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

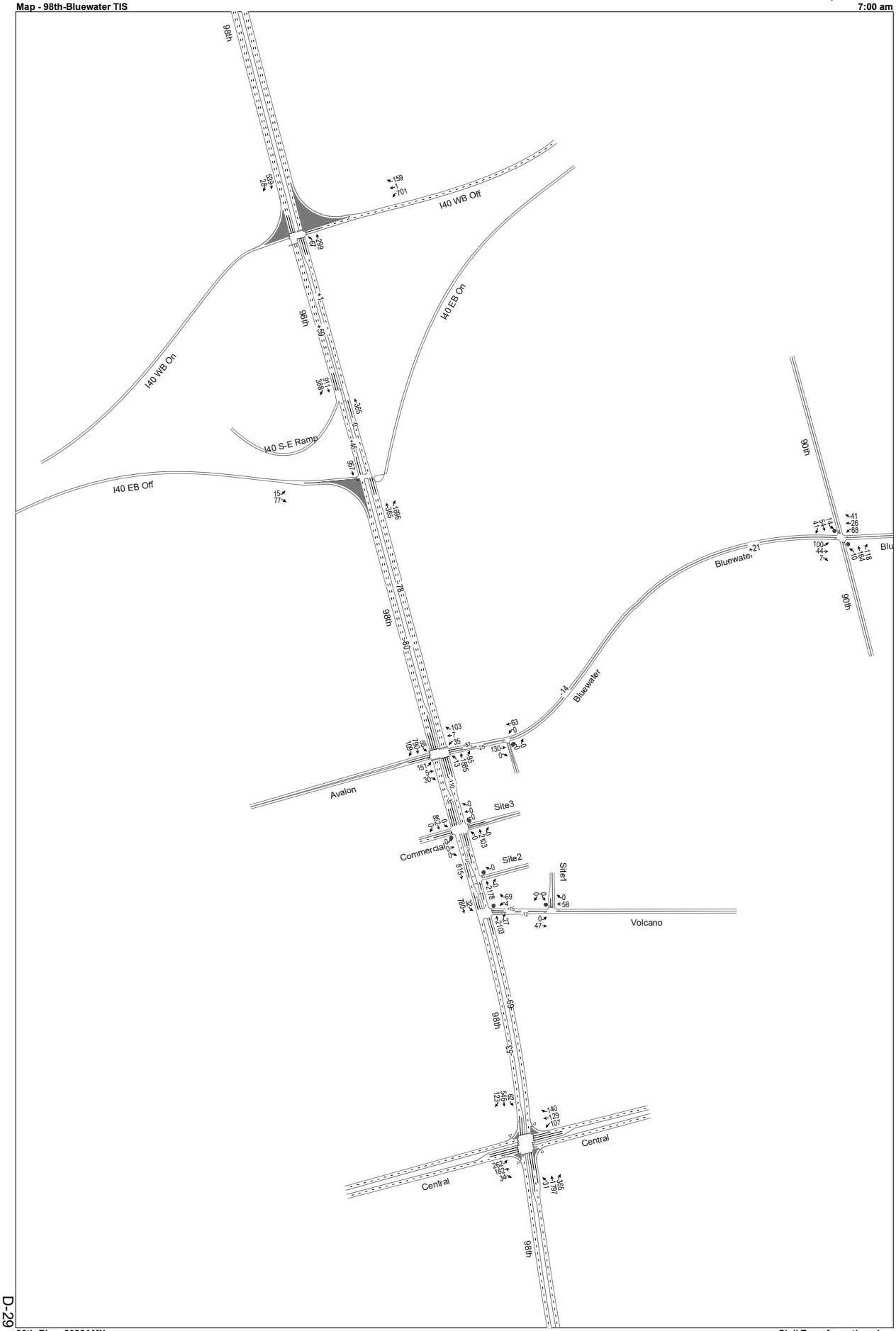
Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	57	25	72	60	24	11	60	30	7	128	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	82	0	0	466	394	70	427	394	72
Stage 1	-	-	-	-	-	-	166	166	-	216	216	-
Stage 2	-	-	-	-	-	-	300	228	-	211	178	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1476	-	-	1515	-	-	507	542	993	538	542	990
Stage 1	-	-	-	-	-	-	836	761	-	786	724	-
Stage 2	-	-	-	-	-	-	709	715	-	791	752	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1476	-	-	1515	-	-	367	498	993	445	498	990
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	498	-	445	498	-
Stage 1	-	-	-	-	-	-	808	736	-	760	688	-
Stage 2	-	-	-	-	-	-	526	679	-	682	727	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	3.4	12.4	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	367	596	1476	-	-	1515	-	-	445	563
HCM Lane V/C Ratio	0.031	0.151	0.032	-	-	0.047	-	-	0.015	0.297
HCM Control Delay (s)	15.1	12.1	7.5	-	-	7.5	0	-	13.2	14.1
HCM Lane LOS	C	B	A	-	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0.5	0.1	-	-	0.1	-	-	0	1.2


98th
I40 WB Off
I40 WB On
I40 EB On
I40 S-E Ramp
I40 EB Off
Bluewater
Avalon
Commercial
Site3
Site2
Site1
Volcano
Central
90th

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	285	198	0	116	140	0	33	1953	0	68	593	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	337	587		164	411		363	1531		112	1608	
Arrive On Green	0.10	0.17	0.00	0.05	0.12	0.00	0.02	0.43	0.00	0.04	0.45	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	285	198	0	116	140	0	33	1953	0	68	593	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	10.6	6.7	0.0	4.5	5.0	0.0	1.4	56.0	0.0	3.2	14.2	0.0
Cycle Q Clear(g_c), s	10.6	6.7	0.0	4.5	5.0	0.0	1.4	56.0	0.0	3.2	14.2	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	337	587		164	411		363	1531		112	1608	
V/C Ratio(X)	0.85	0.34		0.71	0.34		0.09	1.28		0.61	0.37	
Avail Cap(c_a), veh/h	462	859		294	685		432	1531		145	1608	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.6	47.2	0.0	60.9	52.0	0.0	20.7	37.0	0.0	31.4	23.6	0.0
Incr Delay (d2), s/veh	7.8	0.3	0.0	2.1	0.5	0.0	0.0	129.3	0.0	2.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.4	4.9	0.0	3.4	3.7	0.0	1.0	72.9	0.0	2.1	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	47.5	0.0	63.0	52.5	0.0	20.7	166.3	0.0	33.3	24.3	0.0
LnGrp LOS	E	D		E	D		C	F		C	C	
Approach Vol, veh/h		483	A		256	A		1986	A		661	A
Approach Delay, s/veh		58.1			57.2			163.9			25.2	
Approach LOS		E			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	29.6	6.9	64.4	17.3	23.2	9.2	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	6.5	8.7	3.4	16.2	12.6	7.0	5.2	58.0
Green Ext Time (p_c), s	0.0	1.0	0.0	2.4	0.2	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	113.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

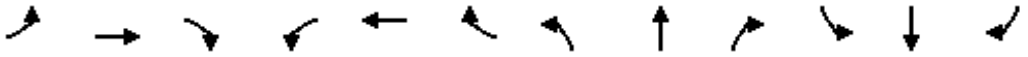
Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	4	66	1861	26	31	690
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	4	74	2261	29	35	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2766	1146	0	0	2291	0
Stage 1	2277	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	16	190	-	-	211	-
Stage 1	65	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	13	190	-	-	211	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	65	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	55.7	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	13	190	211	-
HCM Lane V/C Ratio	-	-	0.344	0.388	0.164	-
HCM Control Delay (s)	-	-	$ 388.6	35.5	25.4	-
HCM Lane LOS	-	-	F	E	D	-
HCM 95th %tile Q(veh)	-	-	0.9	1.7	0.6	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Future Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	162	5	32	37	8	111	14	2027	102	59	849	117
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	340	81	521	498	28	386	224	1862	93	110	1792	246
Arrive On Green	0.09	0.37	0.37	0.02	0.30	0.30	0.02	0.75	0.75	0.03	0.40	0.40
Sat Flow, veh/h	1090	219	1400	1739	92	1280	1810	4980	250	1654	4504	618
Grp Volume(v), veh/h	162	0	37	37	0	119	14	1383	746	59	635	331
Grp Sat Flow(s),veh/h/ln	1090	0	1618	1739	0	1372	1810	1702	1825	1654	1689	1744
Q Serve(g_s), s	12.1	0.0	1.9	1.9	0.0	8.6	0.6	48.6	48.6	2.8	18.1	18.3
Cycle Q Clear(g_c), s	12.1	0.0	1.9	1.9	0.0	8.6	0.6	48.6	48.6	2.8	18.1	18.3
Prop In Lane	1.00		0.86	1.00		0.93	1.00		0.14	1.00		0.35
Lane Grp Cap(c), veh/h	340	0	602	498	0	414	224	1273	682	110	1344	694
V/C Ratio(X)	0.48	0.00	0.06	0.07	0.00	0.29	0.06	1.09	1.09	0.53	0.47	0.48
Avail Cap(c_a), veh/h	340	0	602	621	0	414	376	1273	682	209	1344	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	26.2	30.3	0.0	34.7	25.6	16.4	16.4	32.4	29.0	29.1
Incr Delay (d2), s/veh	2.2	0.0	0.2	0.1	0.0	1.7	0.2	52.4	62.4	8.3	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	0.0	1.4	1.5	0.0	5.6	0.5	22.5	26.4	2.4	11.6	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	26.4	30.5	0.0	36.5	25.9	68.8	78.8	40.7	29.6	30.2
LnGrp LOS	C	A	C	C	A	D	C	F	F	D	C	C
Approach Vol, veh/h		199			156			2143			1025	
Approach Delay, s/veh		29.4			35.0			72.0			30.4	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	53.4	4.7	57.7	15.6	44.2	7.8	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	3.9	3.9	2.6	20.3	14.1	10.6	4.8	50.6
Green Ext Time (p_c), s	0.1	0.3	0.0	12.3	0.0	1.3	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.9
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

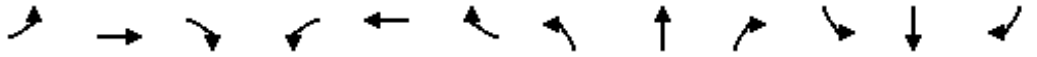
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	15	81	0	384	1786	0	1007	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1199	-	-	0	-	-	-	0
Stage 1	1007	-	-	-	-	-	-	-
Stage 2	192	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	178	0	0	-	0	0	-	0
Stage 1	314	0	0	-	0	0	-	0
Stage 2	822	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	178	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	178	-	-	-	-	-	-	-
Stage 1	314	-	-	-	-	-	-	-
Stage 2	822	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	178	-	-
HCM Lane V/C Ratio	-	0.086	-	-
HCM Control Delay (s)	-	27.1	0	-
HCM Lane LOS	-	D	A	-
HCM 95th %tile Q(veh)	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				763	0	0	72	325	0	0	586	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				858	0		333	1941	0	0	2320	
Arrive On Green				0.25	0.00	0.00	0.04	0.55	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				763	0	0	72	325	0	0	586	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				28.2	0.0	0.0	3.9	5.9	0.0	0.0	9.2	0.0
Cycle Q Clear(g_c), s				28.2	0.0	0.0	3.9	5.9	0.0	0.0	9.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				858	0		333	1941	0	0	2320	
V/C Ratio(X)				0.89	0.00		0.22	0.17	0.00	0.00	0.25	
Avail Cap(c_a), veh/h				1240	0		353	1941	0	0	2320	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				46.8	0.0	0.0	17.0	14.7	0.0	0.0	21.9	0.0
Incr Delay (d2), s/veh				6.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				18.0	0.0	0.0	2.0	4.2	0.0	0.0	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.8	0.0	0.0	17.3	14.9	0.0	0.0	22.1	0.0
LnGrp LOS				D	A		B	B	A	A	C	
Approach Vol, veh/h					763	A		397			586	A
Approach Delay, s/veh					52.8			15.4			22.1	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.9	65.1		38.4		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	5.9	11.2		30.2		7.9						
Green Ext Time (p_c), s	0.0	4.1		2.7		2.1						

Intersection Summary		
HCM 6th Ctrl Delay		34.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

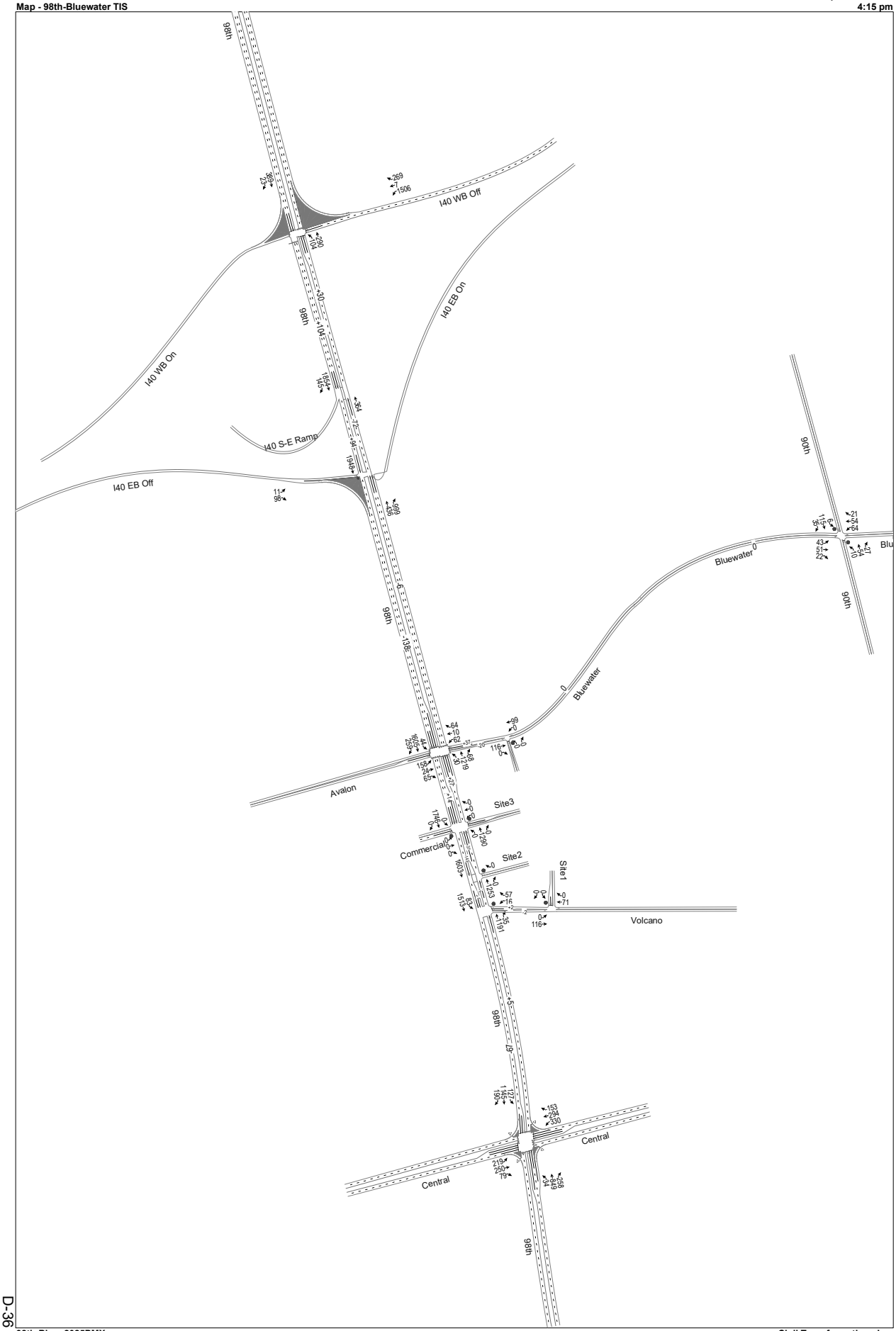
Intersection	
Int Delay, s/veh	15.2

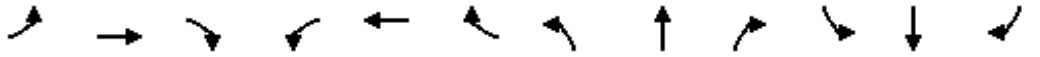
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Future Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	118	52	8	103	30	48	12	193	139	17	64	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	83	0	0	60	0	0	608	581	56	723	561	59
Stage 1	-	-	-	-	-	-	292	292	-	265	265	-
Stage 2	-	-	-	-	-	-	316	289	-	458	296	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1483	-	-	1544	-	-	408	425	1008	328	432	953
Stage 1	-	-	-	-	-	-	716	671	-	717	684	-
Stage 2	-	-	-	-	-	-	695	673	-	562	663	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1476	-	-	1544	-	-	300	362	1008	147	368	948
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	362	-	147	368	-
Stage 1	-	-	-	-	-	-	659	617	-	657	633	-
Stage 2	-	-	-	-	-	-	552	623	-	306	610	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	4.3	25.6	16.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	300	495	1476	-	-	1544	-	-	147	499
HCM Lane V/C Ratio	0.04	0.672	0.08	-	-	0.067	-	-	0.114	0.224
HCM Control Delay (s)	17.5	25.9	7.7	-	-	7.5	0	-	32.6	14.3
HCM Lane LOS	C	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.1	4.9	0.3	-	-	0.2	-	-	0.4	0.8


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
Bluewater
Avalon
Commercial
Site3
Site2
Site1
Volcano
Central
90th



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	231	263	0	347	310	0	36	893	0	133	1205	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	293	905		393	992		194	1312		274	1459	
Arrive On Green	0.08	0.25	0.00	0.11	0.28	0.00	0.02	0.37	0.00	0.13	0.82	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	231	263	0	347	310	0	36	893	0	133	1205	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	7.2	6.6	0.0	10.9	7.7	0.0	1.5	23.3	0.0	5.0	20.8	0.0
Cycle Q Clear(g_c), s	7.2	6.6	0.0	10.9	7.7	0.0	1.5	23.3	0.0	5.0	20.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	293	905		393	992		194	1312		274	1459	
V/C Ratio(X)	0.79	0.29		0.88	0.31		0.19	0.68		0.49	0.83	
Avail Cap(c_a), veh/h	424	905		393	992		285	1312		299	1459	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.4	33.0	0.0	48.0	31.0	0.0	22.2	29.2	0.0	20.2	7.7	0.0
Incr Delay (d2), s/veh	3.6	0.8	0.0	19.8	0.8	0.0	0.2	2.9	0.0	0.5	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	5.0	0.0	9.4	5.7	0.0	1.0	15.0	0.0	3.2	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	33.8	0.0	67.9	31.8	0.0	22.4	32.1	0.0	20.7	13.1	0.0
LnGrp LOS	D	C		E	C		C	C		C	B	
Approach Vol, veh/h		494	A		657	A		929	A		1338	A
Approach Delay, s/veh		42.8			50.9			31.7			13.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.0	6.9	51.1	13.8	38.2	11.4	46.6
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	12.9	8.6	3.5	22.8	9.2	9.7	7.0	25.3
Green Ext Time (p_c), s	0.0	1.3	0.0	5.0	0.1	1.5	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

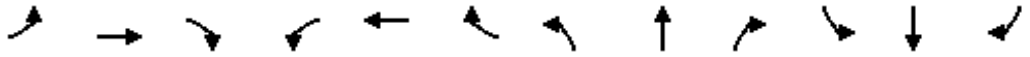
Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	15	55	1054	34	80	1339
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	16	60	1254	37	88	1593

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2247	647	0	0	1292	0
Stage 1	1274	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	35	414	-	-	517	-
Stage 1	226	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	414	-	-	517	-
Mov Cap-2 Maneuver	29	-	-	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	271	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	62.2	0	0.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	29	414	517	-
HCM Lane V/C Ratio	-	-	0.566	0.145	0.169	-
HCM Control Delay (s)	-	-	234.4	15.2	13.4	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	1.8	0.5	0.6	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	161	25	67	63	10	66	30	1244	70	45	1637	264
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	168	41	109	205	16	105	175	3228	182	275	2913	468
Arrive On Green	0.07	0.12	0.12	0.04	0.09	0.09	0.01	0.22	0.22	0.02	0.66	0.66
Sat Flow, veh/h	1076	339	908	1753	167	1101	1428	4946	278	1697	4435	712
Grp Volume(v), veh/h	161	0	92	63	0	76	30	856	458	45	1255	646
Grp Sat Flow(s),veh/h/ln	1076	0	1247	1753	0	1268	1428	1702	1820	1697	1702	1742
Q Serve(g_s), s	7.5	0.0	7.7	3.5	0.0	6.3	0.8	23.7	23.7	1.0	22.0	22.3
Cycle Q Clear(g_c), s	7.5	0.0	7.7	3.5	0.0	6.3	0.8	23.7	23.7	1.0	22.0	22.3
Prop In Lane	1.00		0.73	1.00		0.87	1.00		0.15	1.00		0.41
Lane Grp Cap(c), veh/h	168	0	149	205	0	120	175	2222	1188	275	2236	1144
V/C Ratio(X)	0.96	0.00	0.62	0.31	0.00	0.63	0.17	0.39	0.39	0.16	0.56	0.56
Avail Cap(c_a), veh/h	168	0	431	265	0	450	301	2222	1188	355	2236	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	0.0	46.0	42.5	0.0	47.9	8.8	24.3	24.3	8.9	10.3	10.3
Incr Delay (d2), s/veh	56.9	0.0	8.5	1.8	0.0	11.1	1.0	0.5	0.9	0.6	1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	0.0	5.0	2.9	0.0	4.3	0.4	16.2	17.3	0.6	11.6	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.5	0.0	54.6	44.3	0.0	59.0	9.8	24.8	25.2	9.5	11.3	12.3
LnGrp LOS	F	A	D	D	A	E	A	C	C	A	B	B
Approach Vol, veh/h		253			139			1344			1946	
Approach Delay, s/veh		86.4			52.3			24.6			11.6	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	18.2	5.3	78.3	11.0	15.4	5.8	77.8
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	5.5	9.7	2.8	24.3	9.5	8.3	3.0	25.7
Green Ext Time (p_c), s	0.1	1.0	0.0	9.0	0.0	0.8	0.0	9.2

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

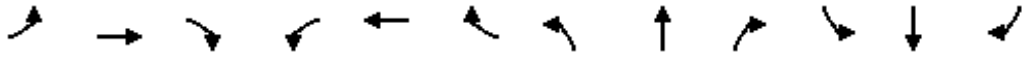
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	12	102	0	454	1041	0	2029	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	2256	-	-	0	-	-	-	0
Stage 1	2029	-	-	-	-	-	-	-
Stage 2	227	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	35	0	0	-	0	0	-	0
Stage 1	88	0	0	-	0	0	-	0
Stage 2	789	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	35	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	35	-	-	-	-	-	-	-
Stage 1	88	-	-	-	-	-	-	-
Stage 2	789	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	153.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	35	-	-
HCM Lane V/C Ratio	-	0.34	-	-
HCM Control Delay (s)	-	153.8	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	1.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1626	0	0	112	312	0	0	418	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				1790	0		316	1368	0	0	1316	
Arrive On Green				0.51	0.00	0.00	0.07	0.38	0.00	0.00	0.26	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1626	0	0	112	312	0	0	418	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				46.6	0.0	0.0	6.0	6.5	0.0	0.0	7.3	0.0
Cycle Q Clear(g_c), s				46.6	0.0	0.0	6.0	6.5	0.0	0.0	7.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1790	0		316	1368	0	0	1316	
V/C Ratio(X)				0.91	0.00		0.35	0.23	0.00	0.00	0.32	
Avail Cap(c_a), veh/h				2231	0		316	1368	0	0	1316	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.6	0.0	0.0	26.1	22.8	0.0	0.0	33.0	0.0
Incr Delay (d2), s/veh				5.1	0.0	0.0	0.7	0.4	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				25.6	0.0	0.0	3.7	4.8	0.0	0.0	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.7	0.0	0.0	26.8	23.2	0.0	0.0	33.6	0.0
LnGrp LOS				C	A		C	C	A	A	C	
Approach Vol, veh/h					1626	A		424			418	A
Approach Delay, s/veh					29.7			24.1			33.6	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	33.8		62.2		47.8						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	8.0	9.3		48.6		8.5						
Green Ext Time (p_c), s	0.0	1.1		7.6		1.7						

Intersection Summary		
HCM 6th Ctrl Delay		29.4
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

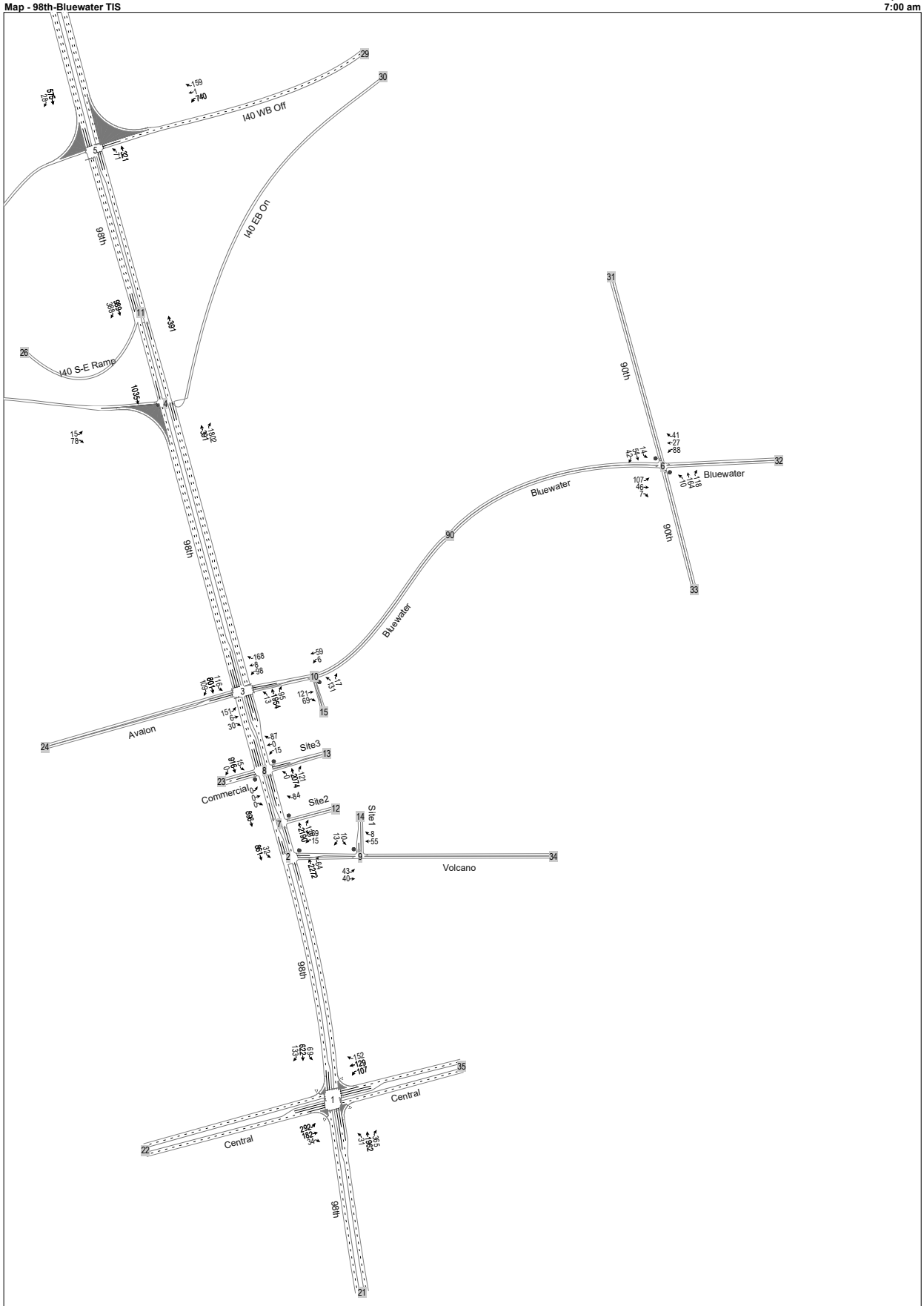
Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	58	26	73	61	24	12	61	30	7	131	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	85	0	0	84	0	0	473	400	71	434	401	73
Stage 1	-	-	-	-	-	-	169	169	-	219	219	-
Stage 2	-	-	-	-	-	-	304	231	-	215	182	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1474	-	-	1513	-	-	501	538	991	532	538	989
Stage 1	-	-	-	-	-	-	833	759	-	783	722	-
Stage 2	-	-	-	-	-	-	705	713	-	787	749	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1474	-	-	1513	-	-	360	494	991	438	494	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	360	494	-	438	494	-
Stage 1	-	-	-	-	-	-	806	734	-	757	685	-
Stage 2	-	-	-	-	-	-	520	677	-	676	724	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	3.4	12.5	14.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	360	592	1474	-	-	1513	-	-	438	559
HCM Lane V/C Ratio	0.032	0.155	0.033	-	-	0.048	-	-	0.016	0.305
HCM Control Delay (s)	15.3	12.2	7.5	-	-	7.5	0	-	13.4	14.2
HCM Lane LOS	C	B	A	-	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0.5	0.1	-	-	0.2	-	-	0	1.3


I40 WB Off
I40 EB On
I40 S-E Ramp
98th
90th
Bluewater
Avalon
Commercial
Site3
Site2
Site1
Volcano
Central
Central

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	281	175	33	103	124	146	27	1736	323	61	550	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	318	198	0	116	140	0	33	2132	0	75	676	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	369	619		164	411		331	1531		117	1619	
Arrive On Green	0.11	0.18	0.00	0.05	0.12	0.00	0.02	0.43	0.00	0.04	0.45	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	318	198	0	116	140	0	33	2132	0	75	676	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	11.9	6.6	0.0	4.5	5.0	0.0	1.4	56.0	0.0	3.5	16.6	0.0
Cycle Q Clear(g_c), s	11.9	6.6	0.0	4.5	5.0	0.0	1.4	56.0	0.0	3.5	16.6	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	369	619		164	411		331	1531		117	1619	
V/C Ratio(X)	0.86	0.32		0.71	0.34		0.10	1.39		0.64	0.42	
Avail Cap(c_a), veh/h	462	859		294	685		400	1531		145	1619	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.0	46.1	0.0	60.9	52.0	0.0	20.9	37.0	0.0	31.2	24.1	0.0
Incr Delay (d2), s/veh	11.0	0.3	0.0	2.1	0.5	0.0	0.0	180.8	0.0	3.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	4.9	0.0	3.4	3.7	0.0	1.0	91.2	0.0	2.4	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	46.4	0.0	63.0	52.5	0.0	20.9	217.8	0.0	34.2	24.9	0.0
LnGrp LOS	E	D		E	D		C	F		C	C	
Approach Vol, veh/h		516	A		256	A		2165	A		751	A
Approach Delay, s/veh		59.7			57.2			214.8			25.8	
Approach LOS		E			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	30.8	6.9	64.8	18.5	23.2	9.6	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	6.5	8.6	3.4	18.6	13.9	7.0	5.5	58.0
Green Ext Time (p_c), s	0.0	1.0	0.0	2.8	0.1	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	143.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	6.3

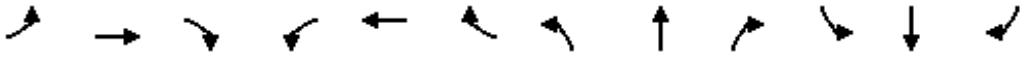
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	14	66	2011	62	31	762
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	16	74	2443	69	35	926

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3012	1257	0	0	2513	0
Stage 1	2479	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	~ 11	160	-	-	172	-
Stage 1	50	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 9	160	-	-	172	-
Mov Cap-2 Maneuver	~ 9	-	-	-	-	-
Stage 1	50	-	-	-	-	-
Stage 2	445	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	239.6	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	9	160	172	-
HCM Lane V/C Ratio	-	-	1.74	0.461	0.202	-
HCM Control Delay (s)	-	-	$ 1155.2	45.4	31.1	-
HCM Lane LOS	-	-	F	E	D	-
HCM 95th %tile Q(veh)	-	-	2.9	2.1	0.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Future Volume (veh/h)	148	6	29	96	8	165	13	1729	93	114	709	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	162	7	32	105	9	181	14	2101	102	125	861	117
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	295	99	452	557	20	393	241	1865	90	157	1922	260
Arrive On Green	0.09	0.34	0.34	0.06	0.30	0.30	0.02	0.75	0.75	0.06	0.43	0.43
Sat Flow, veh/h	1090	293	1337	1739	65	1303	1810	4990	241	1654	4513	610
Grp Volume(v), veh/h	162	0	39	105	0	190	14	1431	772	125	643	335
Grp Sat Flow(s),veh/h/ln	1090	0	1630	1739	0	1368	1810	1702	1827	1654	1689	1746
Q Serve(g_s), s	12.1	0.0	2.1	5.4	0.0	14.7	0.6	48.6	48.6	5.8	17.6	17.7
Cycle Q Clear(g_c), s	12.1	0.0	2.1	5.4	0.0	14.7	0.6	48.6	48.6	5.8	17.6	17.7
Prop In Lane	1.00		0.82	1.00		0.95	1.00		0.13	1.00		0.35
Lane Grp Cap(c), veh/h	295	0	551	557	0	412	241	1273	683	157	1439	744
V/C Ratio(X)	0.55	0.00	0.07	0.19	0.00	0.46	0.06	1.12	1.13	0.80	0.45	0.45
Avail Cap(c_a), veh/h	295	0	551	620	0	412	393	1273	683	209	1439	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	0.0	29.2	28.5	0.0	36.8	25.2	16.4	16.4	31.1	26.5	26.5
Incr Delay (d2), s/veh	3.8	0.0	0.2	0.3	0.0	3.7	0.2	66.6	76.5	20.8	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.0	1.6	4.2	0.0	9.1	0.5	26.3	30.5	5.6	11.2	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	29.4	28.8	0.0	40.5	25.4	83.0	92.9	51.9	26.9	27.4
LnGrp LOS	C	A	C	C	A	D	C	F	F	D	C	C
Approach Vol, veh/h		201			295			2217			1103	
Approach Delay, s/veh		32.3			36.3			86.1			29.9	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	48.9	4.7	61.4	15.6	44.2	11.5	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	7.4	4.1	2.6	19.7	14.1	16.7	7.8	50.6
Green Ext Time (p_c), s	0.2	0.3	0.0	12.6	0.0	2.1	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

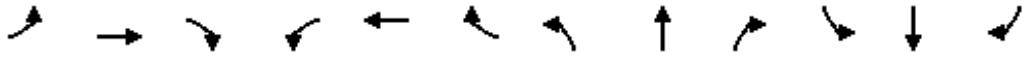
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	75	0	346	1733	0	916	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	15	82	0	412	1897	0	1090	0	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1296	-	-	0	-	-	-	0	
Stage 1	1090	-	-	-	-	-	-	-	
Stage 2	206	-	-	-	-	-	-	-	
Critical Hdwy	6.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	
Follow-up Hdwy	3.52	-	-	-	-	-	-	-	
Pot Cap-1 Maneuver	154	0	0	-	0	0	-	0	
Stage 1	284	0	0	-	0	0	-	0	
Stage 2	808	0	0	-	0	0	-	0	
Platoon blocked, %				-			-		
Mov Cap-1 Maneuver	154	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	154	-	-	-	-	-	-	-	
Stage 1	284	-	-	-	-	-	-	-	
Stage 2	808	-	-	-	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, s	30.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	154	-	-
HCM Lane V/C Ratio	-	0.1	-	-
HCM Control Delay (s)	-	30.9	0	-
HCM Lane LOS	-	D	A	-
HCM 95th %tile Q(veh)	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	698	1	150	68	284	0	0	509	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				805	0	0	77	349	0	0	625	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				900	0		323	1941	0	0	2307	
Arrive On Green				0.27	0.00	0.00	0.04	0.55	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				805	0	0	77	349	0	0	625	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				29.7	0.0	0.0	4.1	6.4	0.0	0.0	9.9	0.0
Cycle Q Clear(g_c), s				29.7	0.0	0.0	4.1	6.4	0.0	0.0	9.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				900	0		323	1941	0	0	2307	
V/C Ratio(X)				0.89	0.00		0.24	0.18	0.00	0.00	0.27	
Avail Cap(c_a), veh/h				1240	0		340	1941	0	0	2307	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				46.0	0.0	0.0	17.2	14.8	0.0	0.0	22.3	0.0
Incr Delay (d2), s/veh				6.7	0.0	0.0	0.4	0.2	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				18.9	0.0	0.0	2.1	4.6	0.0	0.0	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.7	0.0	0.0	17.5	15.0	0.0	0.0	22.6	0.0
LnGrp LOS				D	A		B	B	A	A	C	
Approach Vol, veh/h					805	A		426			625	A
Approach Delay, s/veh					52.7			15.5			22.6	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.3	64.7		40.0		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	6.1	11.9		31.7		8.4						
Green Ext Time (p_c), s	0.0	4.4		2.8		2.2						

Intersection Summary		
HCM 6th Ctrl Delay		34.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	15.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Future Vol, veh/h	105	45	7	86	26	40	10	161	116	14	53	41
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	126	54	8	103	31	48	12	193	139	17	64	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	62	0	0	628	600	58	742	580	60
Stage 1	-	-	-	-	-	-	310	310	-	266	266	-
Stage 2	-	-	-	-	-	-	318	290	-	476	314	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1482	-	-	1541	-	-	395	415	1005	318	422	952
Stage 1	-	-	-	-	-	-	700	659	-	716	683	-
Stage 2	-	-	-	-	-	-	693	672	-	549	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1475	-	-	1541	-	-	287	352	1005	138	357	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	287	352	-	138	357	-
Stage 1	-	-	-	-	-	-	641	603	-	652	632	-
Stage 2	-	-	-	-	-	-	550	622	-	294	596	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	4.2	26.9	17.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	287	484	1475	-	-	1541	-	-	138	490
HCM Lane V/C Ratio	0.042	0.687	0.085	-	-	0.067	-	-	0.122	0.23
HCM Control Delay (s)	18.1	27.2	7.7	-	-	7.5	0	-	34.7	14.5
HCM Lane LOS	C	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.1	5.2	0.3	-	-	0.2	-	-	0.4	0.9

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1927	0	0	721
Future Vol, veh/h	0	84	1938	139	0	793
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	90	2355	149	0	964

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1252	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	164	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	164	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	51	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	164	-
HCM Lane V/C Ratio	-	-	0.551	-
HCM Control Delay (s)	-	-	51	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	2.8	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1861	0	0	754	0
Future Vol, veh/h	0	0	0	15	0	87	0	1835	121	15	811	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	16	0	94	0	2230	130	16	985	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2132	3377	493	2820	3312	1180	985	0	0	2360	0	0
Stage 1	1017	1017	-	2295	2295	-	-	-	-	-	-	-
Stage 2	1115	2360	-	525	1017	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	28	7	522	~ 8	8	183	697	-	-	204	-	-
Stage 1	254	313	-	40	73	-	-	-	-	-	-	-
Stage 2	222	67	-	504	313	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	13	6	522	~ 8	7	183	697	-	-	204	-	-
Mov Cap-2 Maneuver	13	6	-	~ 8	7	-	-	-	-	-	-	-
Stage 1	254	289	-	40	73	-	-	-	-	-	-	-
Stage 2	109	67	-	464	289	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	237.5	0	0.4
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	697	-	-	-	-	8	183	204	-	-
HCM Lane V/C Ratio	-	-	-	-	-	2.016	0.511	0.079	-	-
HCM Control Delay (s)	0	-	-	0	$	1362.3	43.6	24.2	-	-
HCM Lane LOS	A	-	-	A	A	F	E	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	3	2.6	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	46	57	0	0	0
Future Vol, veh/h	43	39	54	8	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	43	59	9	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	68	0	-	0	199	64
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1533	-	-	-	790	1000
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1533	-	-	-	766	1000
Mov Cap-2 Maneuver	-	-	-	-	766	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	SB
HCM Control Delay, s	3.9	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1533	-	-	-	766	1000
HCM Lane V/C Ratio	0.03	-	-	-	0.014	0.014
HCM Control Delay (s)	7.4	0	-	-	9.8	8.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0

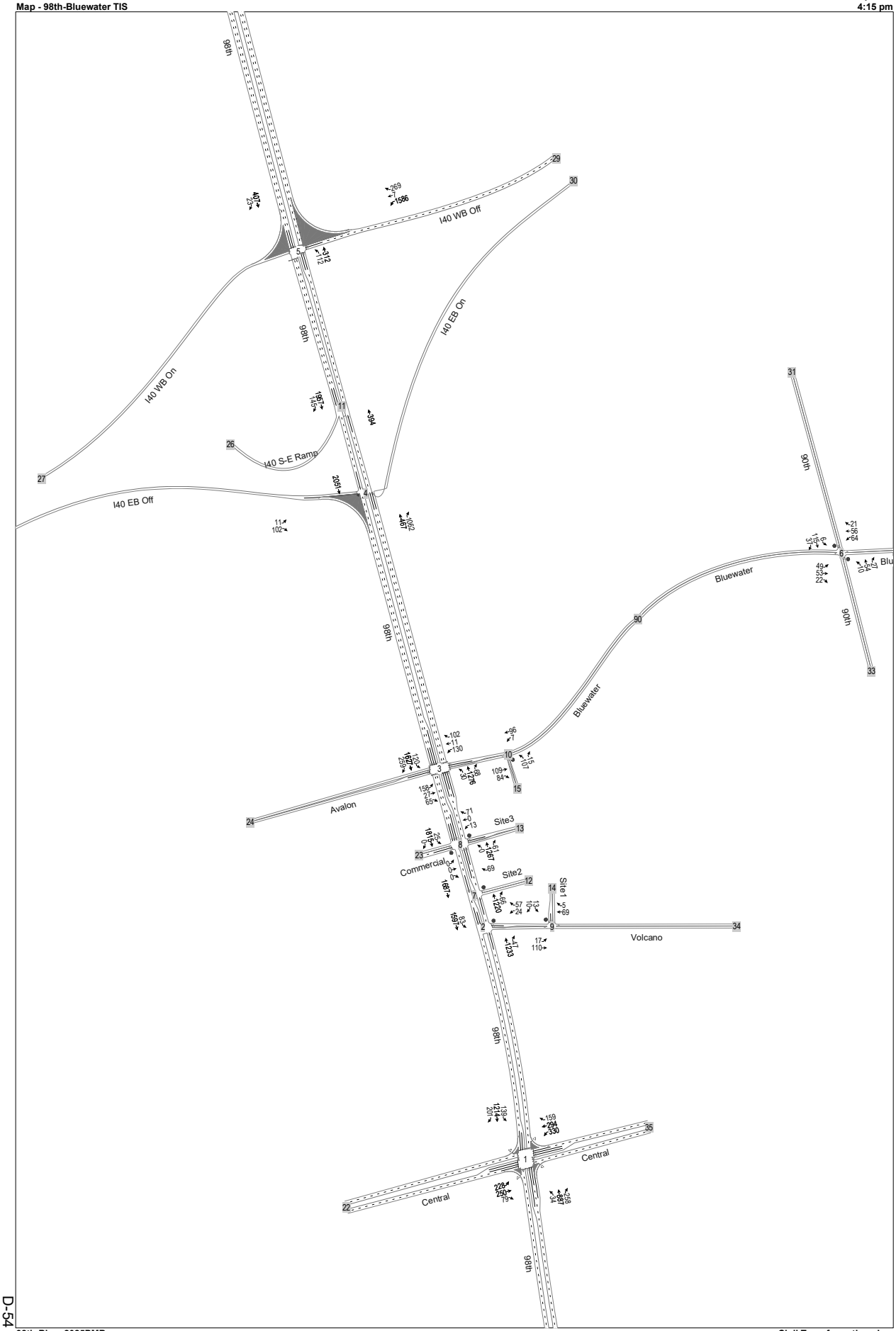
Intersection	
Int Delay, s/veh	4.2

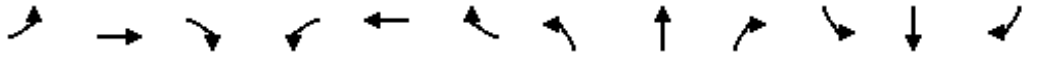
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	127	0	0	62	0	0
Future Vol, veh/h	119	69	6	58	131	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	131	74	6	64	141	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	205	0	244	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	76	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1366	-	744	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1366	-	740	876
Mov Cap-2 Maneuver	-	-	-	-	740	-
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	942	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	753	-	-	1366	-
HCM Lane V/C Ratio	0.211	-	-	0.005	-
HCM Control Delay (s)	11.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
98th
90th
Bluewater
Bluewater
90th
Avalon
Site3
Commercial
Site2
Site1
Volcano
98th
Central
Central
98th



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	219	240	76	317	283	153	30	785	228	123	1074	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	240	263	0	347	310	0	36	934	0	146	1277	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	301	905		393	983		172	1293		267	1458	
Arrive On Green	0.09	0.25	0.00	0.11	0.28	0.00	0.02	0.36	0.00	0.14	0.82	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	240	263	0	347	310	0	36	934	0	146	1277	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	7.5	6.6	0.0	10.9	7.7	0.0	1.5	24.9	0.0	5.6	25.2	0.0
Cycle Q Clear(g_c), s	7.5	6.6	0.0	10.9	7.7	0.0	1.5	24.9	0.0	5.6	25.2	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	301	905		393	983		172	1293		267	1458	
V/C Ratio(X)	0.80	0.29		0.88	0.32		0.21	0.72		0.55	0.88	
Avail Cap(c_a), veh/h	424	905		393	983		263	1293		284	1458	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.2	33.0	0.0	48.0	31.2	0.0	23.3	30.2	0.0	20.8	8.1	0.0
Incr Delay (d2), s/veh	4.5	0.8	0.0	19.8	0.8	0.0	0.2	3.5	0.0	0.9	7.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	5.0	0.0	9.4	5.7	0.0	1.0	16.0	0.0	3.6	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	33.8	0.0	67.9	32.0	0.0	23.5	33.7	0.0	21.7	15.7	0.0
LnGrp LOS	D	C		E	C		C	C		C	B	
Approach Vol, veh/h		503	A		657	A		970	A		1423	A
Approach Delay, s/veh		43.3			51.0			33.3			16.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.0	6.9	51.1	14.1	37.9	12.0	46.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	12.9	8.6	3.5	27.2	9.5	9.7	7.6	26.9
Green Ext Time (p_c), s	0.0	1.3	0.0	4.7	0.1	1.5	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.9

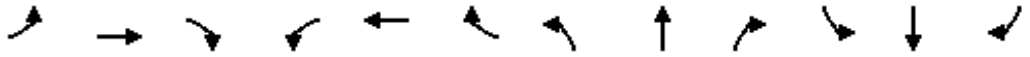
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	23	55	1091	45	80	1413
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	25	60	1298	49	88	1681

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2341	675	0	0	1348	0
Stage 1	1324	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	30	396	-	-	491	-
Stage 1	213	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 25	396	-	-	491	-
Mov Cap-2 Maneuver	~ 25	-	-	-	-	-
Stage 1	213	-	-	-	-	-
Stage 2	255	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	130.8	0	0.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	25	396	491	-
HCM Lane V/C Ratio	-	-	1.007	0.152	0.178	-
HCM Control Delay (s)	-	-	$ 406.1	15.7	13.9	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	3.1	0.5	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	26	64	127	11	100	29	1129	67	118	1440	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	161	27	67	132	11	104	30	1302	70	123	1660	264
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	164	40	100	252	15	138	165	2986	161	282	2803	443
Arrive On Green	0.07	0.11	0.11	0.08	0.12	0.12	0.01	0.20	0.20	0.04	0.63	0.63
Sat Flow, veh/h	1076	359	891	1753	121	1141	1428	4960	267	1697	4445	703
Grp Volume(v), veh/h	161	0	94	132	0	115	30	894	478	123	1269	655
Grp Sat Flow(s),veh/h/ln	1076	0	1251	1753	0	1262	1428	1702	1822	1697	1702	1744
Q Serve(g_s), s	7.5	0.0	7.9	7.3	0.0	9.7	0.9	25.3	25.3	2.9	24.2	24.4
Cycle Q Clear(g_c), s	7.5	0.0	7.9	7.3	0.0	9.7	0.9	25.3	25.3	2.9	24.2	24.4
Prop In Lane	1.00		0.71	1.00		0.90	1.00		0.15	1.00		0.40
Lane Grp Cap(c), veh/h	164	0	140	252	0	153	165	2050	1097	282	2146	1100
V/C Ratio(X)	0.98	0.00	0.67	0.52	0.00	0.75	0.18	0.44	0.44	0.44	0.59	0.60
Avail Cap(c_a), veh/h	164	0	432	252	0	447	291	2050	1097	321	2146	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	0.0	46.9	39.4	0.0	46.7	10.8	27.7	27.7	11.7	12.0	12.0
Incr Delay (d2), s/veh	64.4	0.0	11.2	3.8	0.0	14.6	1.1	0.7	1.3	2.3	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	0.0	5.3	6.1	0.0	6.6	0.5	17.2	18.4	1.9	12.9	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.8	0.0	58.1	43.2	0.0	61.3	11.9	28.4	28.9	14.0	13.2	14.4
LnGrp LOS	F	A	E	D	A	E	B	C	C	B	B	B
Approach Vol, veh/h		255			247			1402			2047	
Approach Delay, s/veh		92.0			51.6			28.2			13.6	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	17.3	5.3	75.4	11.0	18.3	8.4	72.2
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	9.3	9.9	2.9	26.4	9.5	11.7	4.9	27.3
Green Ext Time (p_c), s	0.0	1.0	0.0	7.1	0.0	1.2	0.1	8.3

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

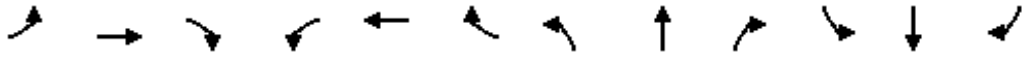
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	98	0	413	1021	0	1815	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	12	106	0	486	1106	0	2136	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	2379	-	-	0	-	-	-	0
Stage 1	2136	-	-	-	-	-	-	-
Stage 2	243	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	29	0	0	-	0	0	-	0
Stage 1	76	0	0	-	0	0	-	0
Stage 2	775	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	29	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	29	-	-	-	-	-	-	-
Stage 1	76	-	-	-	-	-	-	-
Stage 2	775	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	197.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	29	-	-
HCM Lane V/C Ratio	-	0.411	-	-
HCM Control Delay (s)	-	197.9	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	1.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1496	7	254	108	276	0	0	360	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1711	0	0	121	335	0	0	437	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				1871	0		292	1286	0	0	1198	
Arrive On Green				0.53	0.00	0.00	0.07	0.36	0.00	0.00	0.23	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1711	0	0	121	335	0	0	437	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				48.9	0.0	0.0	6.8	7.3	0.0	0.0	7.9	0.0
Cycle Q Clear(g_c), s				48.9	0.0	0.0	6.8	7.3	0.0	0.0	7.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1871	0		292	1286	0	0	1198	
V/C Ratio(X)				0.91	0.00		0.41	0.26	0.00	0.00	0.36	
Avail Cap(c_a), veh/h				2231	0		292	1286	0	0	1198	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.4	0.0	0.0	28.2	24.7	0.0	0.0	35.2	0.0
Incr Delay (d2), s/veh				5.7	0.0	0.0	0.9	0.5	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				26.6	0.0	0.0	4.2	5.5	0.0	0.0	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.1	0.0	0.0	29.1	25.2	0.0	0.0	36.1	0.0
LnGrp LOS				C	A		C	C	A	A	D	
Approach Vol, veh/h					1711	A		456			437	A
Approach Delay, s/veh					29.1			26.3			36.1	
Approach LOS					C			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	31.3		64.7		45.3						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	8.8	9.9		50.9		9.3						
Green Ext Time (p_c), s	0.0	1.1		7.8		1.8						

Intersection Summary		
HCM 6th Ctrl Delay		29.7
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	48	52	22	63	55	21	10	53	26	6	113	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	60	26	73	64	24	12	61	30	7	131	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	86	0	0	494	419	73	453	420	76
Stage 1	-	-	-	-	-	-	185	185	-	222	222	-
Stage 2	-	-	-	-	-	-	309	234	-	231	198	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1471	-	-	1510	-	-	486	525	989	517	525	985
Stage 1	-	-	-	-	-	-	817	747	-	780	720	-
Stage 2	-	-	-	-	-	-	701	711	-	772	737	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1471	-	-	1510	-	-	344	479	989	422	479	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	344	479	-	422	479	-
Stage 1	-	-	-	-	-	-	786	719	-	750	683	-
Stage 2	-	-	-	-	-	-	515	675	-	658	709	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	3.4	12.8	14.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	344	577	1471	-	-	1510	-	-	422	547
HCM Lane V/C Ratio	0.034	0.159	0.038	-	-	0.048	-	-	0.016	0.316
HCM Control Delay (s)	15.8	12.4	7.5	-	-	7.5	0	-	13.7	14.6
HCM Lane LOS	C	B	A	-	-	A	A	-	B	B
HCM 95th %tile Q(veh)	0.1	0.6	0.1	-	-	0.2	-	-	0.1	1.3

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1109	0	0	1419
Future Vol, veh/h	0	69	1080	66	0	1493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	1312	71	0	1814

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	692	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	386	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	386	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	386	-
HCM Lane V/C Ratio	-	-	0.192	-
HCM Control Delay (s)	-	-	16.5	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1142	0	0	1545	0
Future Vol, veh/h	0	0	0	13	0	71	0	1121	61	25	1606	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	76	0	1362	66	27	1951	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2686	3433	976	2425	3400	714	1951	0	0	1428	0	0
Stage 1	2005	2005	-	1395	1395	-	-	-	-	-	-	-
Stage 2	681	1428	-	1030	2005	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	10	7	251	17	7	374	296	-	-	472	-	-
Stage 1	61	103	-	149	207	-	-	-	-	-	-	-
Stage 2	407	199	-	250	103	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	8	7	251	16	7	374	296	-	-	472	-	-
Mov Cap-2 Maneuver	8	7	-	16	7	-	-	-	-	-	-	-
Stage 1	61	97	-	149	207	-	-	-	-	-	-	-
Stage 2	324	199	-	236	97	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	91.9	0	0.2
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	296	-	-	-	-	16	374	472	-	-
HCM Lane V/C Ratio	-	-	-	-	-	0.874	0.204	0.057	-	-
HCM Control Delay (s)	0	-	-	0	0$	500.3	17.1	13.1	-	-
HCM Lane LOS	A	-	-	A	A	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	2.2	0.8	0.2	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	114	70	0	0	0
Future Vol, veh/h	17	108	68	5	13	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	118	75	5	14	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	80	0	-	0	232	78
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	154	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1518	-	-	-	756	983
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	874	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1518	-	-	-	746	983
Mov Cap-2 Maneuver	-	-	-	-	746	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1518	-	-	-	746	983
HCM Lane V/C Ratio	0.012	-	-	-	0.019	0.011
HCM Control Delay (s)	7.4	0	-	-	9.9	8.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

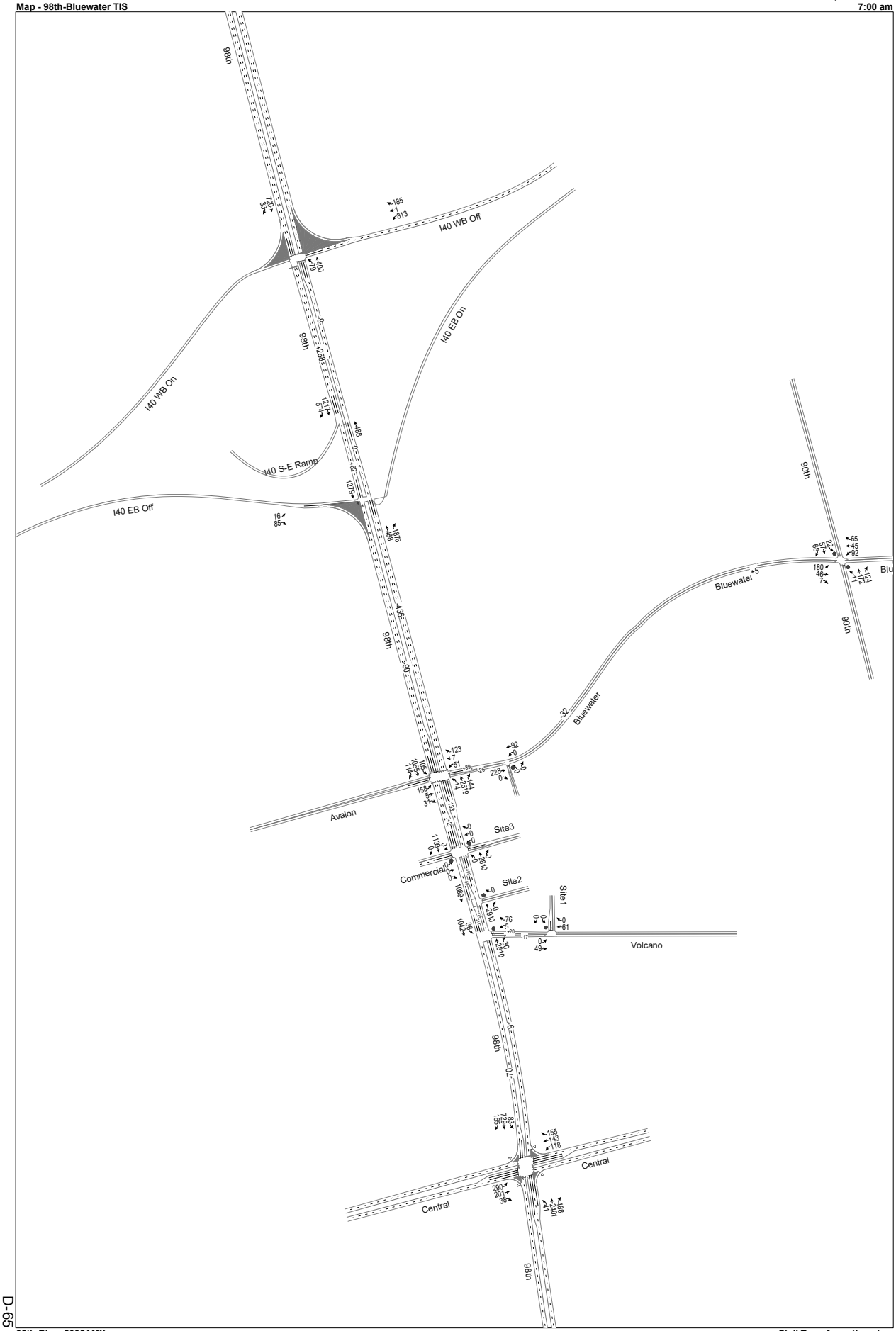
Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	97	0	0
Future Vol, veh/h	107	84	7	94	107	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	90	8	103	115	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	207	0	281	162
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	119	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1364	-	709	883
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1364	-	705	883
Mov Cap-2 Maneuver	-	-	-	-	705	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	723	-	-	1364	-
HCM Lane V/C Ratio	0.181	-	-	0.006	-
HCM Control Delay (s)	11.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-


98th
I40 WB Off
I40 WB On
I40 EB On
I40 S-E Ramp
I40 EB Off
98th
90th
Bluewater
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
98th
Central
Central
98th

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	315	219	0	129	155	0	44	2610	0	90	793	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	366	603		178	411		297	1531		126	1622	
Arrive On Green	0.11	0.18	0.00	0.05	0.12	0.00	0.02	0.43	0.00	0.05	0.45	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	315	219	0	129	155	0	44	2610	0	90	793	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	11.7	7.4	0.0	5.0	5.6	0.0	1.8	56.0	0.0	4.2	20.2	0.0
Cycle Q Clear(g_c), s	11.7	7.4	0.0	5.0	5.6	0.0	1.8	56.0	0.0	4.2	20.2	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	366	603		178	411		297	1531		126	1622	
V/C Ratio(X)	0.86	0.36		0.73	0.38		0.15	1.70		0.71	0.49	
Avail Cap(c_a), veh/h	462	859		294	685		357	1531		145	1622	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.1	47.0	0.0	60.6	52.3	0.0	21.1	37.0	0.0	30.9	25.0	0.0
Incr Delay (d2), s/veh	10.7	0.4	0.0	2.1	0.6	0.0	0.1	320.1	0.0	9.9	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	5.5	0.0	3.7	4.1	0.0	1.3	141.7	0.0	3.2	13.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.8	47.3	0.0	62.7	52.8	0.0	21.2	357.1	0.0	40.8	26.0	0.0
LnGrp LOS	E	D		E	D		C	F		D	C	
Approach Vol, veh/h		534	A		284	A		2654	A		883	A
Approach Delay, s/veh		59.4			57.3			351.5			27.6	
Approach LOS		E			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	30.1	7.5	64.9	18.4	23.2	10.4	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	7.0	9.4	3.8	22.2	13.7	7.6	6.2	58.0
Green Ext Time (p_c), s	0.0	1.1	0.0	3.4	0.2	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	230.8
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.3

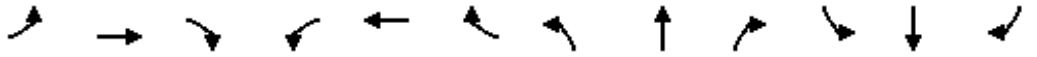
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	4	66	1861	26	31	690
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	5	82	3022	32	38	1120

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3675	1528	0	0	3055	0
Stage 1	3039	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	~ 4	104	-	-	103	-
Stage 1	24	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	104	-	-	103	-
Mov Cap-2 Maneuver	~ 3	-	-	-	-	-
Stage 1	24	-	-	-	-	-
Stage 2	312	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	237.3	0	2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	3	104	103	-
HCM Lane V/C Ratio	-	-	1.649	0.785	0.372	-
HCM Control Delay (s)	-	-	$ 2305.8	111.9	59.3	-
HCM Lane LOS	-	-	F	F	F	-
HCM 95th %tile Q(veh)	-	-	1.5	4.3	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	48	7	115	13	1668	135	98	699	107
Future Volume (veh/h)	148	5	29	48	7	115	13	1668	135	98	699	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	170	6	33	55	8	132	15	2708	155	113	1135	123
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	326	90	497	515	24	389	177	1849	104	149	1953	211
Arrive On Green	0.09	0.36	0.36	0.03	0.30	0.30	0.02	0.75	0.75	0.06	0.42	0.42
Sat Flow, veh/h	1090	250	1373	1739	78	1291	1810	4946	278	1654	4640	502
Grp Volume(v), veh/h	170	0	39	55	0	140	15	1849	1014	113	826	432
Grp Sat Flow(s),veh/h/ln	1090	0	1623	1739	0	1370	1810	1702	1820	1654	1689	1765
Q Serve(g_s), s	12.1	0.0	2.0	2.8	0.0	10.3	0.7	48.6	48.6	5.3	24.4	24.4
Cycle Q Clear(g_c), s	12.1	0.0	2.0	2.8	0.0	10.3	0.7	48.6	48.6	5.3	24.4	24.4
Prop In Lane	1.00		0.85	1.00		0.94	1.00		0.15	1.00		0.28
Lane Grp Cap(c), veh/h	326	0	587	515	0	413	177	1273	681	149	1421	743
V/C Ratio(X)	0.52	0.00	0.07	0.11	0.00	0.34	0.08	1.45	1.49	0.76	0.58	0.58
Avail Cap(c_a), veh/h	326	0	587	620	0	413	328	1273	681	209	1421	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	27.1	29.7	0.0	35.3	26.0	16.4	16.4	31.3	28.9	28.9
Incr Delay (d2), s/veh	2.9	0.0	0.2	0.2	0.0	2.2	0.4	208.3	228.2	16.6	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.0	1.5	2.2	0.0	6.7	0.5	65.6	75.8	4.8	14.8	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	0.0	27.3	29.9	0.0	37.5	26.4	224.7	244.6	47.8	29.8	30.7
LnGrp LOS	C	A	C	C	A	D	C	F	F	D	C	C
Approach Vol, veh/h		209			195			2878			1371	
Approach Delay, s/veh		31.0			35.4			230.7			31.6	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	52.0	4.8	60.7	15.6	44.2	10.9	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	4.8	4.0	2.7	26.4	14.1	12.3	7.3	50.6
Green Ext Time (p_c), s	0.1	0.3	0.0	14.0	0.0	1.6	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	154.9
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

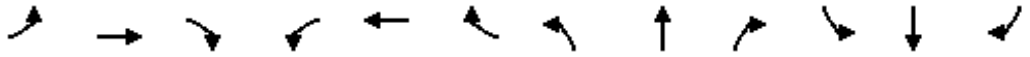
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	17	90	0	513	1974	0	1346	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1603	-	-	0	-	-	-	0
Stage 1	1346	-	-	-	-	-	-	-
Stage 2	257	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	96	0	0	-	0	0	-	0
Stage 1	207	0	0	-	0	0	-	0
Stage 2	762	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	96	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	96	-	-	-	-	-	-	-
Stage 1	207	-	-	-	-	-	-	-
Stage 2	762	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	50.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	96	-	-
HCM Lane V/C Ratio	-	0.177	-	-
HCM Control Delay (s)	-	50.4	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				885	0	0	86	435	0	0	783	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				980	0		286	1941	0	0	2283	
Arrive On Green				0.29	0.00	0.00	0.05	0.55	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				885	0	0	86	435	0	0	783	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				32.6	0.0	0.0	4.7	8.2	0.0	0.0	13.0	0.0
Cycle Q Clear(g_c), s				32.6	0.0	0.0	4.7	8.2	0.0	0.0	13.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				980	0		286	1941	0	0	2283	
V/C Ratio(X)				0.90	0.00		0.30	0.22	0.00	0.00	0.34	
Avail Cap(c_a), veh/h				1240	0		297	1941	0	0	2283	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				44.5	0.0	0.0	17.7	15.3	0.0	0.0	23.5	0.0
Incr Delay (d2), s/veh				8.0	0.0	0.0	0.6	0.3	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				20.5	0.0	0.0	2.4	5.8	0.0	0.0	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.5	0.0	0.0	18.3	15.5	0.0	0.0	23.9	0.0
LnGrp LOS				D	A		B	B	A	A	C	
Approach Vol, veh/h					885	A		521			783	A
Approach Delay, s/veh					52.5			16.0			23.9	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.9	64.1		43.0		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	6.7	15.0		34.6		10.2						
Green Ext Time (p_c), s	0.0	5.7		2.9		2.9						

Intersection Summary		
HCM 6th Ctrl Delay		33.6
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

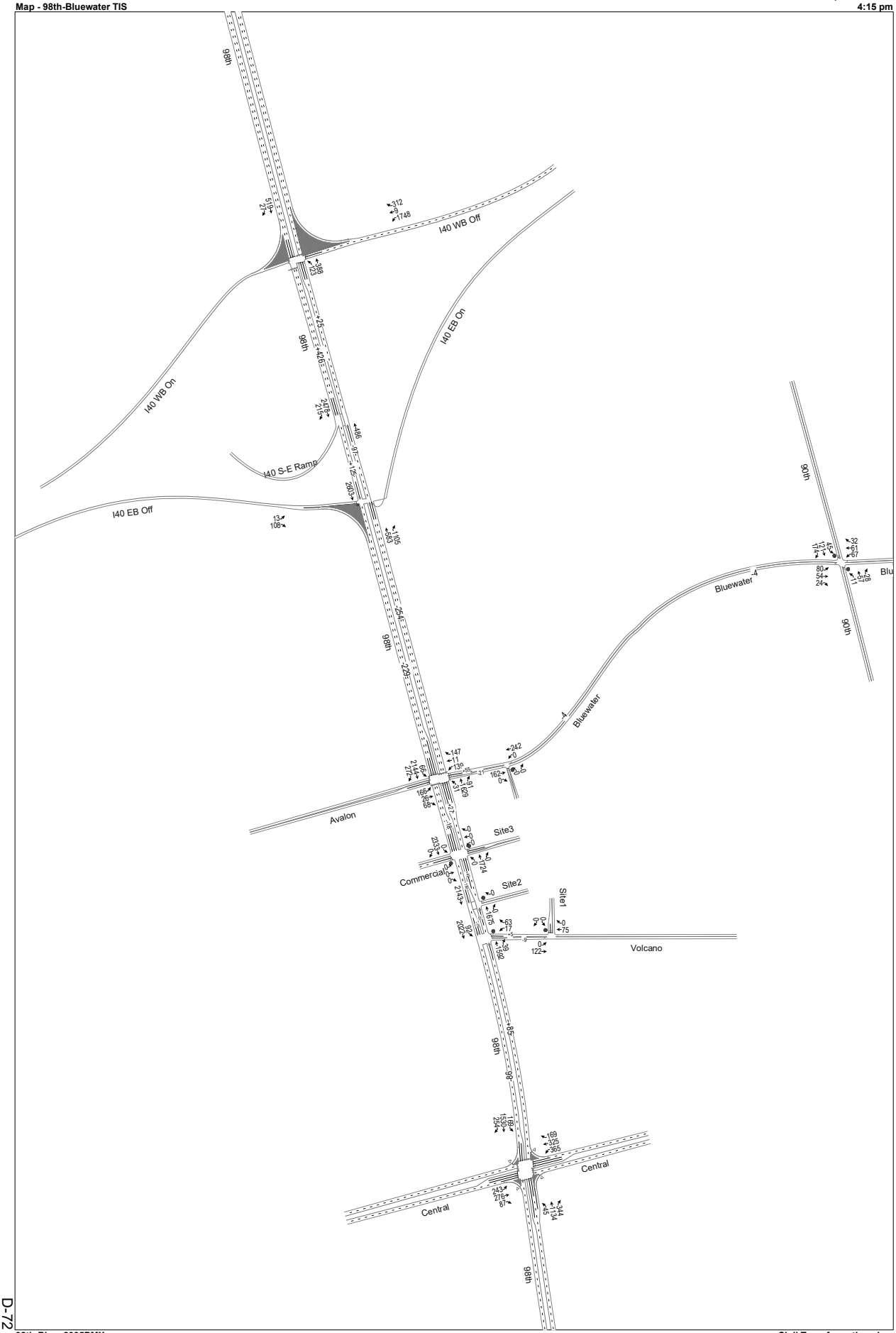
Intersection	
Int Delay, s/veh	36.4

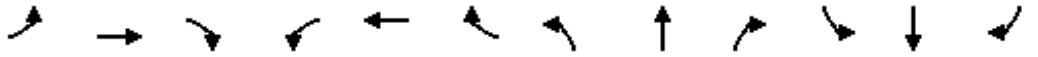
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	168	43	7	86	42	61	10	161	116	21	53	64
Future Vol, veh/h	168	43	7	86	42	61	10	161	116	21	53	64
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	211	54	9	108	53	77	13	203	146	26	67	81

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	63	0	0	863	832	59	968	798	97
Stage 1	-	-	-	-	-	-	481	481	-	313	313	-
Stage 2	-	-	-	-	-	-	382	351	-	655	485	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1419	-	-	1540	-	-	275	305	1004	223	316	907
Stage 1	-	-	-	-	-	-	566	554	-	675	652	-
Stage 2	-	-	-	-	-	-	640	632	-	437	547	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1412	-	-	1540	-	-	167	239	1004	47	247	903
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	239	-	47	247	-
Stage 1	-	-	-	-	-	-	482	471	-	572	599	-
Stage 2	-	-	-	-	-	-	479	581	-	181	465	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.2	3.4	79.6	39.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	167	351	1412	-	-	1540	-	-	47	410
HCM Lane V/C Ratio	0.075	0.993	0.15	-	-	0.07	-	-	0.562	0.359
HCM Control Delay (s)	28.3	81.5	8	-	-	7.5	0	-	153.7	18.6
HCM Lane LOS	D	F	A	-	-	A	A	-	F	C
HCM 95th %tile Q(veh)	0.2	11.3	0.5	-	-	0.2	-	-	2.1	1.6


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central
90th



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	255	291	0	384	343	0	48	1194	0	178	1610	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	316	905		393	968		112	1260		215	1433	
Arrive On Green	0.09	0.25	0.00	0.11	0.28	0.00	0.03	0.35	0.00	0.15	0.81	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	255	291	0	384	343	0	48	1194	0	178	1610	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	8.0	7.3	0.0	12.2	8.7	0.0	2.1	35.9	0.0	7.0	44.4	0.0
Cycle Q Clear(g_c), s	8.0	7.3	0.0	12.2	8.7	0.0	2.1	35.9	0.0	7.0	44.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	316	905		393	968		112	1260		215	1433	
V/C Ratio(X)	0.81	0.32		0.98	0.35		0.43	0.95		0.83	1.12	
Avail Cap(c_a), veh/h	424	905		393	968		191	1260		215	1433	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.0	33.3	0.0	48.6	31.9	0.0	28.5	34.5	0.0	23.9	10.6	0.0
Incr Delay (d2), s/veh	5.9	0.9	0.0	39.3	1.0	0.0	1.0	15.6	0.0	21.5	65.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	5.6	0.0	11.5	6.4	0.0	1.4	24.0	0.0	6.6	25.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	34.2	0.0	87.9	32.9	0.0	29.5	50.1	0.0	45.4	75.8	0.0
LnGrp LOS	D	C		F	C		C	D		D	F	
Approach Vol, veh/h		546	A		727	A		1242	A		1788	A
Approach Delay, s/veh		43.9			62.0			49.3			72.8	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.0	7.6	50.4	14.6	37.4	13.0	45.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	14.2	9.3	4.1	46.4	10.0	10.7	9.0	37.9
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.1	1.6	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	60.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	7.4

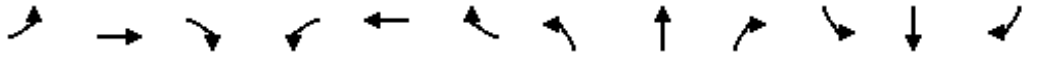
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	15	55	1054	34	80	1339
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	18	67	1675	41	97	2128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2955	859	0	0	1717	0
Stage 1	1697	-	-	-	-	-
Stage 2	1258	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	~ 11	300	-	-	352	-
Stage 1	134	-	-	-	-	-
Stage 2	231	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	300	-	-	352	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	134	-	-	-	-	-
Stage 2	167	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 332.4	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	8	300	352	-
HCM Lane V/C Ratio	-	-	2.27	0.222	0.275	-
HCM Control Delay (s)	-	-	$ 1476.4	20.4	19.1	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	3.3	0.8	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	130	10	137	29	1079	85	62	1420	254
Future Volume (veh/h)	155	24	64	130	10	137	29	1079	85	62	1420	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	169	26	70	142	11	150	32	1663	93	68	2188	277
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	166	51	138	304	14	188	113	2854	159	188	2716	337
Arrive On Green	0.07	0.15	0.15	0.08	0.16	0.16	0.01	0.19	0.19	0.03	0.59	0.59
Sat Flow, veh/h	1076	338	909	1753	86	1171	1428	4948	277	1697	4600	571
Grp Volume(v), veh/h	169	0	96	142	0	161	32	1144	612	68	1608	857
Grp Sat Flow(s),veh/h/ln	1076	0	1247	1753	0	1257	1428	1702	1821	1697	1702	1768
Q Serve(g_s), s	7.5	0.0	7.8	7.5	0.0	13.6	1.0	33.7	33.7	1.8	40.3	42.4
Cycle Q Clear(g_c), s	7.5	0.0	7.8	7.5	0.0	13.6	1.0	33.7	33.7	1.8	40.3	42.4
Prop In Lane	1.00		0.73	1.00		0.93	1.00		0.15	1.00		0.32
Lane Grp Cap(c), veh/h	166	0	189	304	0	202	113	1964	1050	188	2009	1043
V/C Ratio(X)	1.02	0.00	0.51	0.47	0.00	0.80	0.28	0.58	0.58	0.36	0.80	0.82
Avail Cap(c_a), veh/h	166	0	431	304	0	446	237	1964	1050	252	2009	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	42.9	35.9	0.0	44.5	20.4	32.5	32.5	15.8	17.5	17.9
Incr Delay (d2), s/veh	74.2	0.0	4.5	2.4	0.0	14.1	2.9	1.3	2.4	2.5	3.5	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	0.0	4.8	6.1	0.0	8.7	0.8	22.0	23.7	1.3	20.9	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.8	0.0	47.4	38.3	0.0	58.6	23.3	33.7	34.9	18.3	21.0	25.2
LnGrp LOS	F	A	D	D	A	E	C	C	C	B	C	C
Approach Vol, veh/h		265			303			1788			2533	
Approach Delay, s/veh		93.6			49.1			33.9			22.3	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	21.7	5.4	70.9	11.0	22.7	6.9	69.5
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	9.5	9.8	3.0	44.4	9.5	15.6	3.8	35.7
Green Ext Time (p_c), s	0.0	1.0	0.1	0.0	0.0	1.8	0.1	2.2

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	3.6

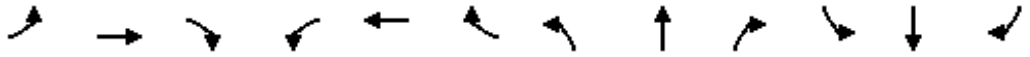
Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	13	113	0	607	1151	0	2712	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	3016	-	-	0	-	-	-	0
Stage 1	2712	-	-	-	-	-	-	-
Stage 2	304	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 10	0	0	-	0	0	-	0
Stage 1	36	0	0	-	0	0	-	0
Stage 2	722	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	~ 10	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 10	-	-	-	-	-	-	-
Stage 1	36	-	-	-	-	-	-	-
Stage 2	722	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 904	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	10	-	-
HCM Lane V/C Ratio	-	1.318	-	-
HCM Control Delay (s)	-	$ 904	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	2.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1885	0	0	132	417	0	0	559	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				2025	0		228	1129	0	0	973	
Arrive On Green				0.58	0.00	0.00	0.07	0.32	0.00	0.00	0.19	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1885	0	0	132	417	0	0	559	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				54.0	0.0	0.0	7.5	10.0	0.0	0.0	10.9	0.0
Cycle Q Clear(g_c), s				54.0	0.0	0.0	7.5	10.0	0.0	0.0	10.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				2025	0		228	1129	0	0	973	
V/C Ratio(X)				0.93	0.00		0.58	0.37	0.00	0.00	0.57	
Avail Cap(c_a), veh/h				2231	0		228	1129	0	0	973	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				21.2	0.0	0.0	33.2	29.0	0.0	0.0	40.5	0.0
Incr Delay (d2), s/veh				7.3	0.0	0.0	3.6	0.9	0.0	0.0	2.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				28.6	0.0	0.0	5.2	7.6	0.0	0.0	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.5	0.0	0.0	36.8	29.9	0.0	0.0	42.9	0.0
LnGrp LOS				C	A		D	C	A	A	D	
Approach Vol, veh/h					1885	A		549			559	A
Approach Delay, s/veh					28.5			31.6			42.9	
Approach LOS					C			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	26.5		69.5		40.5						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	9.5	12.9		56.0		12.0						
Green Ext Time (p_c), s	0.0	0.5		7.5		2.2						

Intersection Summary		
HCM 6th Ctrl Delay		31.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

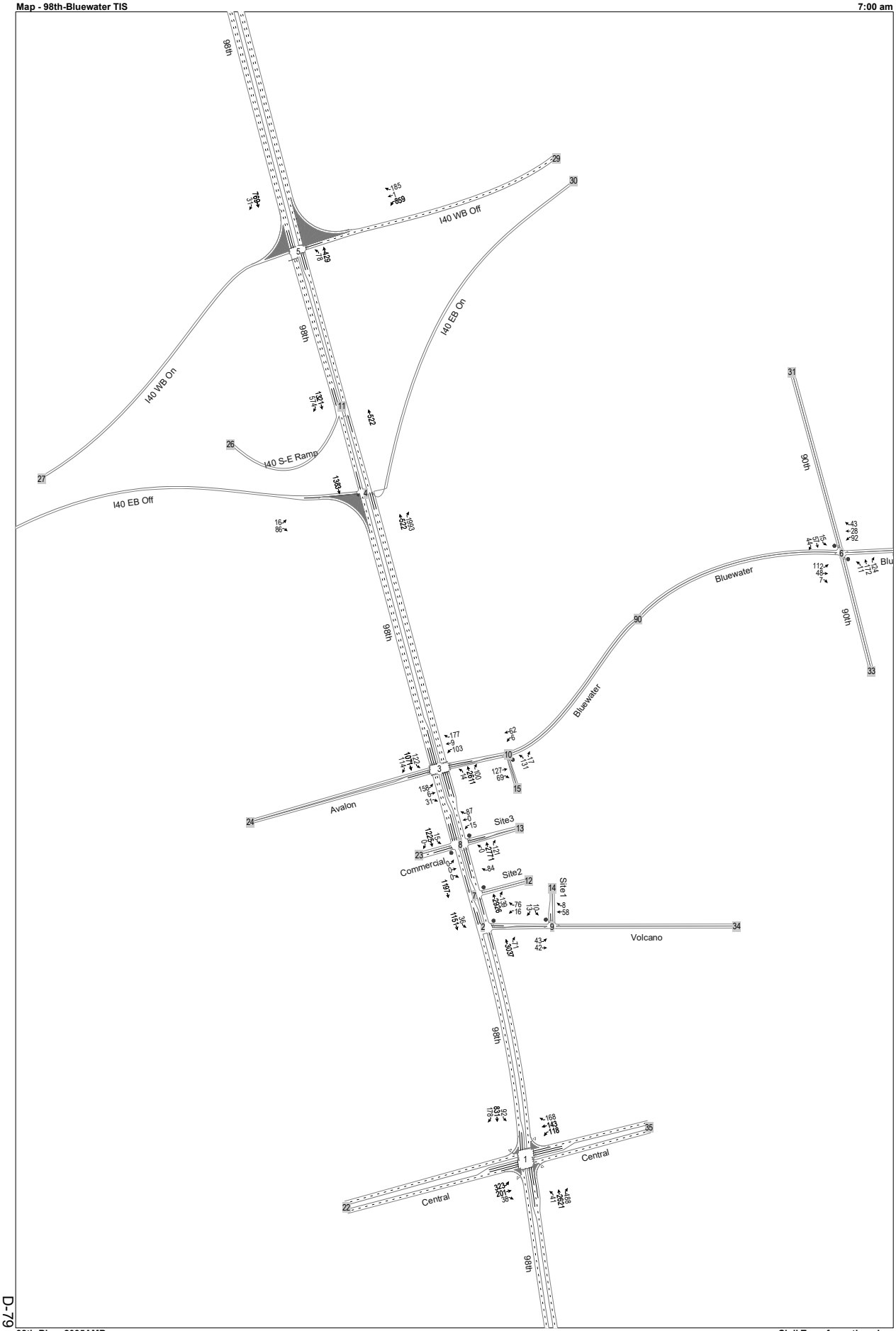
Intersection	
Int Delay, s/veh	11.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	50	22	63	57	30	10	53	26	42	113	163
Future Vol, veh/h	75	50	22	63	57	30	10	53	26	42	113	163
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	61	27	77	69	36	12	64	32	51	137	198

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	88	0	0	666	516	75	546	511	87
Stage 1	-	-	-	-	-	-	257	257	-	241	241	-
Stage 2	-	-	-	-	-	-	409	259	-	305	270	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1450	-	-	1508	-	-	373	463	986	448	466	971
Stage 1	-	-	-	-	-	-	748	695	-	762	706	-
Stage 2	-	-	-	-	-	-	619	694	-	705	686	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1508	-	-	202	410	986	349	413	971
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	410	-	349	413	-
Stage 1	-	-	-	-	-	-	701	651	-	714	668	-
Stage 2	-	-	-	-	-	-	370	657	-	576	643	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.9	3.2	14.9	17.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	202	508	1450	-	-	1508	-	-	349	625
HCM Lane V/C Ratio	0.06	0.189	0.063	-	-	0.051	-	-	0.146	0.537
HCM Control Delay (s)	24	13.7	7.6	-	-	7.5	0	-	17.1	17.2
HCM Lane LOS	C	B	A	-	-	A	A	-	C	C
HCM 95th %tile Q(veh)	0.2	0.7	0.2	-	-	0.2	-	-	0.5	3.2


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
98th
90th
Bluewater
Bluewater
90th
Avalon
Site3
Commercial
Site2
Site1
Volcano
98th
Central
Central
98th

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	281	175	33	103	124	146	27	1736	323	61	550	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	351	219	0	129	155	0	44	2849	0	100	903	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	401	637		178	411		263	1531		132	1636	
Arrive On Green	0.12	0.19	0.00	0.05	0.12	0.00	0.02	0.43	0.00	0.05	0.46	0.00
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	3554	1572	1555	3676	0
Grp Volume(v), veh/h	351	219	0	129	155	0	44	2849	0	100	903	0
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1777	1572	1555	1791	0
Q Serve(g_s), s	13.1	7.3	0.0	5.0	5.6	0.0	1.8	56.0	0.0	4.6	23.8	0.0
Cycle Q Clear(g_c), s	13.1	7.3	0.0	5.0	5.6	0.0	1.8	56.0	0.0	4.6	23.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	401	637		178	411		263	1531		132	1636	
V/C Ratio(X)	0.87	0.34		0.73	0.38		0.17	1.86		0.76	0.55	
Avail Cap(c_a), veh/h	462	859		294	685		323	1531		145	1636	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.5	45.8	0.0	60.6	52.3	0.0	21.6	37.0	0.0	30.7	25.7	0.0
Incr Delay (d2), s/veh	14.0	0.3	0.0	2.1	0.6	0.0	0.1	390.0	0.0	15.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	5.4	0.0	3.7	4.1	0.0	1.3	167.1	0.0	3.9	15.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.5	46.1	0.0	62.7	52.8	0.0	21.7	427.0	0.0	46.6	27.0	0.0
LnGrp LOS	E	D		E	D		C	F		D	C	
Approach Vol, veh/h		570	A		284	A		2893	A		1003	A
Approach Delay, s/veh		61.1			57.3			420.9			29.0	
Approach LOS		E			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	31.5	7.5	65.4	19.7	23.2	10.9	62.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	33.0	7.5	56.0	17.5	27.0	7.5	56.0
Max Q Clear Time (g_c+I1), s	7.0	9.3	3.8	25.8	15.1	7.6	6.6	58.0
Green Ext Time (p_c), s	0.0	1.1	0.0	4.0	0.1	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	273.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	54.2

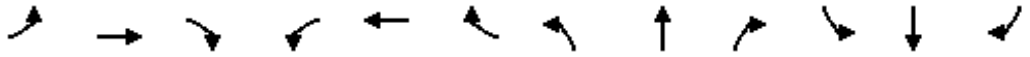
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	14	66	2011	62	31	762
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	17	82	3265	77	38	1237

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4000	1672	0	0	3343	0
Stage 1	3305	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.8	6.98	-	-	4.18	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.34	-	-	2.24	-
Pot Cap-1 Maneuver	~ 2	83	-	-	79	-
Stage 1	~ 17	-	-	-	-	-
Stage 2	462	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	83	-	-	79	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	~ 17	-	-	-	-	-
Stage 2	240	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	2551.9	0	2.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	1	83	79	-
HCM Lane V/C Ratio	-	-	17.312	0.983	0.485	-
HCM Control Delay (s)	-	-	$ 13718.4	183.2	87.6	-
HCM Lane LOS	-	-	F	F	F	-
HCM 95th %tile Q(veh)	-	-	3.8	5.4	2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Future Volume (veh/h)	148	6	29	96	8	165	13	1729	93	114	709	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	170	7	33	110	9	190	15	2807	107	131	1151	123
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	289	96	451	560	19	394	178	1888	71	161	1988	212
Arrive On Green	0.09	0.34	0.34	0.06	0.30	0.30	0.02	0.75	0.75	0.06	0.43	0.43
Sat Flow, veh/h	1090	285	1344	1739	62	1305	1810	5050	190	1654	4647	496
Grp Volume(v), veh/h	170	0	40	110	0	199	15	1881	1033	131	836	438
Grp Sat Flow(s),veh/h/ln	1090	0	1629	1739	0	1367	1810	1702	1836	1654	1689	1766
Q Serve(g_s), s	12.1	0.0	2.2	5.6	0.0	15.5	0.7	48.6	48.6	6.1	24.5	24.5
Cycle Q Clear(g_c), s	12.1	0.0	2.2	5.6	0.0	15.5	0.7	48.6	48.6	6.1	24.5	24.5
Prop In Lane	1.00		0.82	1.00		0.95	1.00		0.10	1.00		0.28
Lane Grp Cap(c), veh/h	289	0	547	560	0	412	178	1273	686	161	1445	756
V/C Ratio(X)	0.59	0.00	0.07	0.20	0.00	0.48	0.08	1.48	1.51	0.82	0.58	0.58
Avail Cap(c_a), veh/h	289	0	547	620	0	412	329	1273	686	209	1445	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	29.4	28.4	0.0	37.1	25.9	16.4	16.4	31.0	28.3	28.3
Incr Delay (d2), s/veh	4.8	0.0	0.3	0.4	0.0	4.0	0.4	219.3	234.9	23.2	0.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	1.6	4.4	0.0	9.6	0.5	68.8	78.5	6.0	14.8	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	29.7	28.7	0.0	41.1	26.3	235.7	251.3	54.2	29.2	30.1
LnGrp LOS	D	A	C	C	A	D	C	F	F	D	C	C
Approach Vol, veh/h		210			309			2929			1405	
Approach Delay, s/veh		34.2			36.7			240.2			31.8	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	48.6	4.8	61.6	15.6	44.2	11.8	54.6
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	12.1	39.2	12.1	48.6	12.1	39.2	12.1	48.6
Max Q Clear Time (g_c+I1), s	7.6	4.2	2.7	26.5	14.1	17.5	8.1	50.6
Green Ext Time (p_c), s	0.2	0.4	0.0	14.1	0.0	2.2	0.2	0.0

Intersection Summary			
HCM 6th Ctrl Delay		158.0	
HCM 6th LOS		F	

Notes

User approved pedestrian interval to be less than phase max green.

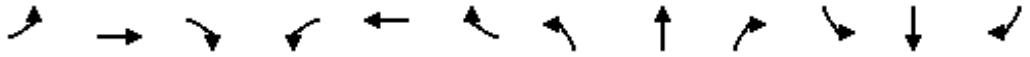
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	75	0	346	1733	0	916	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	17	91	0	550	2098	0	1456	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1731	-	-	0	-	-	-	0
Stage 1	1456	-	-	-	-	-	-	-
Stage 2	275	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	79	0	0	-	0	0	-	0
Stage 1	181	0	0	-	0	0	-	0
Stage 2	747	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	79	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-	-	-
Stage 1	181	-	-	-	-	-	-	-
Stage 2	747	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	62.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	79	-	-
HCM Lane V/C Ratio	-	0.215	-	-
HCM Control Delay (s)	-	62.6	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	698	1	150	68	284	0	0	509	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				934	0	0	85	466	0	0	835	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				1027	0		274	1941	0	0	2286	
Arrive On Green				0.30	0.00	0.00	0.05	0.55	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				934	0	0	85	466	0	0	835	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				34.4	0.0	0.0	4.6	8.9	0.0	0.0	14.0	0.0
Cycle Q Clear(g_c), s				34.4	0.0	0.0	4.6	8.9	0.0	0.0	14.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1027	0		274	1941	0	0	2286	
V/C Ratio(X)				0.91	0.00		0.31	0.24	0.00	0.00	0.37	
Avail Cap(c_a), veh/h				1240	0		286	1941	0	0	2286	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				43.6	0.0	0.0	17.8	15.4	0.0	0.0	23.7	0.0
Incr Delay (d2), s/veh				8.9	0.0	0.0	0.6	0.3	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				21.6	0.0	0.0	2.4	6.3	0.0	0.0	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.5	0.0	0.0	18.5	15.7	0.0	0.0	24.2	0.0
LnGrp LOS				D	A		B	B	A	A	C	
Approach Vol, veh/h					934	A		551			835	A
Approach Delay, s/veh					52.5			16.1			24.2	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	64.2		44.8		77.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	7.5	* 58		47.5		71.0						
Max Q Clear Time (g_c+I1), s	6.6	16.0		36.4		10.9						
Green Ext Time (p_c), s	0.0	6.1		2.9		3.1						

Intersection Summary		
HCM 6th Ctrl Delay		33.7
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Future Vol, veh/h	105	45	7	86	26	40	10	161	116	14	53	41
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	132	57	9	108	33	50	13	203	146	18	67	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	66	0	0	660	630	62	779	609	63
Stage 1	-	-	-	-	-	-	326	326	-	279	279	-
Stage 2	-	-	-	-	-	-	334	304	-	500	330	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1477	-	-	1536	-	-	376	399	1000	300	406	948
Stage 1	-	-	-	-	-	-	687	648	-	704	674	-
Stage 2	-	-	-	-	-	-	680	663	-	533	640	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1470	-	-	1536	-	-	267	334	1000	118	340	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	334	-	118	340	-
Stage 1	-	-	-	-	-	-	625	590	-	638	621	-
Stage 2	-	-	-	-	-	-	531	611	-	272	582	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	4.3	32.4	18.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	267	463	1470	-	-	1536	-	-	118	472
HCM Lane V/C Ratio	0.047	0.753	0.09	-	-	0.07	-	-	0.149	0.251
HCM Control Delay (s)	19.1	32.9	7.7	-	-	7.5	0	-	40.8	15.2
HCM Lane LOS	C	D	A	-	-	A	A	-	E	C
HCM 95th %tile Q(veh)	0.1	6.3	0.3	-	-	0.2	-	-	0.5	1

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1927	0	0	721
Future Vol, veh/h	0	84	1938	139	0	793
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	90	3147	149	0	1288

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1648	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	~ 88	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 88	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	189.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	88	-
HCM Lane V/C Ratio	-	-	1.026	-
HCM Control Delay (s)	-	-	189.4	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	25.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1861	0	0	754	0
Future Vol, veh/h	0	0	0	15	0	87	0	1835	121	15	811	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	16	0	94	0	2979	130	16	1317	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2839	4458	659	3735	4393	1555	1317	0	0	3109	0	0
Stage 1	1349	1349	-	3044	3044	-	-	-	-	-	-	-
Stage 2	1490	3109	-	691	1349	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	8	1	406	~ 2	2	102	521	-	-	102	-	-
Stage 1	159	217	-	~ 13	29	-	-	-	-	-	-	-
Stage 2	130	27	-	401	217	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	1	406	~ 2	2	102	521	-	-	102	-	-
Mov Cap-2 Maneuver	1	1	-	~ 2	2	-	-	-	-	-	-	-
Stage 1	159	183	-	~ 13	29	-	-	-	-	-	-	-
Stage 2	11	27	-	338	183	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1064.5	0	0.6
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	521	-	-	-	-	2	102	102	-	-
HCM Lane V/C Ratio	-	-	-	-	-	8.065	0.917	0.158	-	-
HCM Control Delay (s)	0	-	-	0	$	6404.3	143.8	46.8	-	-
HCM Lane LOS	A	-	-	A	A	F	F	E	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	3.5	5.4	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	46	57	0	0	0
Future Vol, veh/h	43	39	54	8	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	45	62	9	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	71	0	-	0	204	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1529	-	-	-	784	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1529	-	-	-	760	997
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1529	-	-	-	760	997
HCM Lane V/C Ratio	0.03	-	-	-	0.014	0.014
HCM Control Delay (s)	7.4	0	-	-	9.8	8.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0

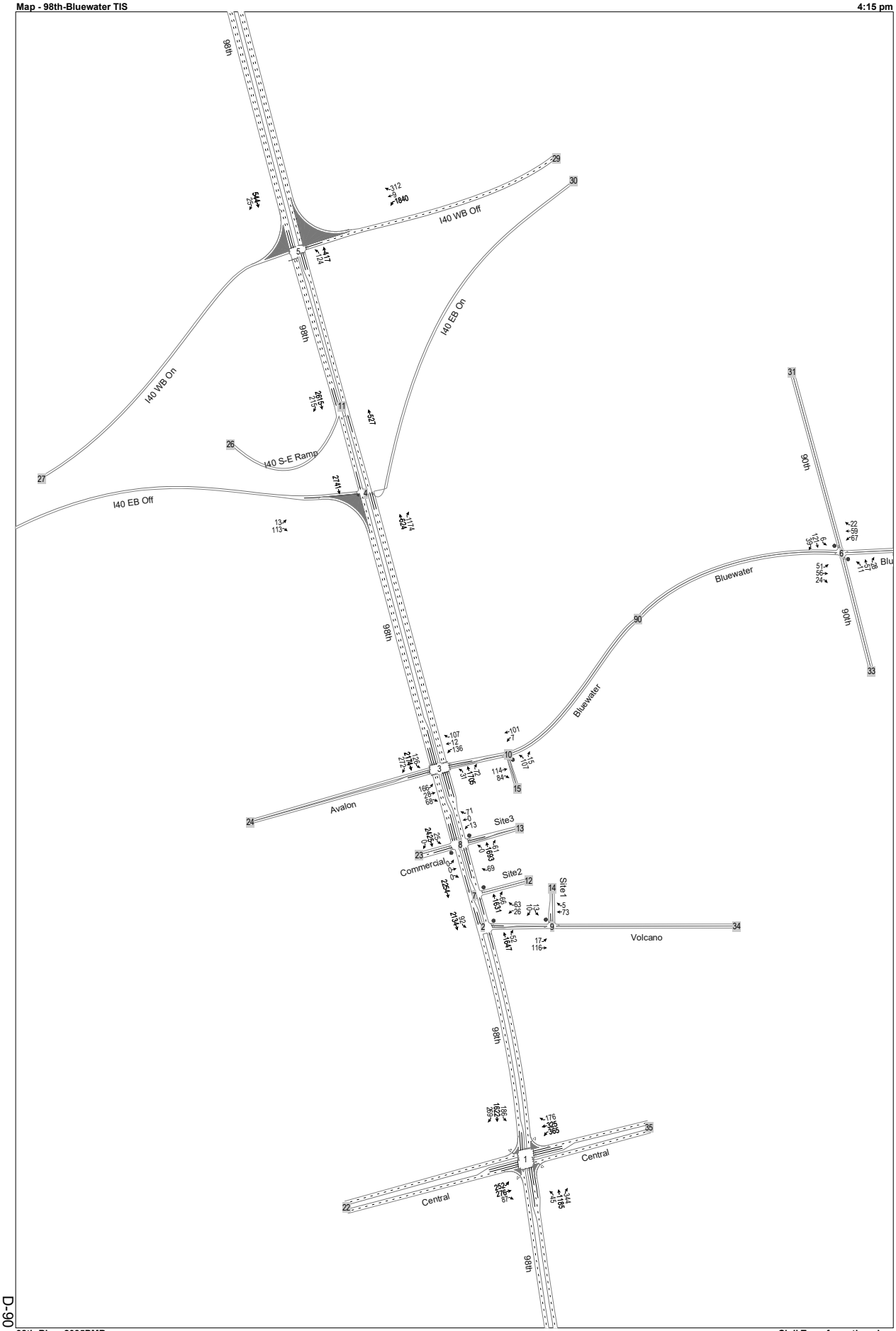
Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	127	0	0	62	0	0
Future Vol, veh/h	119	69	6	58	131	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	74	6	67	141	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	211	0	253	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1360	-	736	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1360	-	732	869
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	939	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	746	-	-	1360	-
HCM Lane V/C Ratio	0.213	-	-	0.005	-
HCM Control Delay (s)	11.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
98th
90th
Bluewater
90
Avalon
Site3
Commercial
Site2
Site1
Volcano
98th
Central
Central
98th

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	219	240	76	317	283	153	30	785	228	123	1074	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	265	291	0	384	343	0	48	1248	0	196	1707	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	326	905		393	958		112	1260		204	1433	
Arrive On Green	0.09	0.25	0.00	0.11	0.27	0.00	0.03	0.35	0.00	0.15	0.81	0.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	3554	1585	1767	3647	0
Grp Volume(v), veh/h	265	291	0	384	343	0	48	1248	0	196	1707	0
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1777	1585	1767	1777	0
Q Serve(g_s), s	8.3	7.3	0.0	12.2	8.7	0.0	2.1	38.4	0.0	7.9	44.4	0.0
Cycle Q Clear(g_c), s	8.3	7.3	0.0	12.2	8.7	0.0	2.1	38.4	0.0	7.9	44.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	326	905		393	958		112	1260		204	1433	
V/C Ratio(X)	0.81	0.32		0.98	0.36		0.43	0.99		0.96	1.19	
Avail Cap(c_a), veh/h	424	905		393	958		191	1260		204	1433	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	33.3	0.0	48.6	32.2	0.0	28.5	35.3	0.0	24.2	10.6	0.0
Incr Delay (d2), s/veh	6.9	0.9	0.0	39.3	1.0	0.0	1.0	23.2	0.0	50.9	93.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	5.6	0.0	11.5	6.5	0.0	1.4	26.9	0.0	9.4	33.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	34.2	0.0	87.9	33.2	0.0	29.5	58.5	0.0	75.1	103.8	0.0
LnGrp LOS	E	C		F	C		C	E		E	F	
Approach Vol, veh/h		556	A		727	A		1296	A		1903	A
Approach Delay, s/veh		44.5			62.1			57.4			100.8	
Approach LOS		D			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.0	7.6	50.4	14.9	37.1	13.0	45.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	4.5	6.0
Max Green Setting (Gmax), s	12.5	28.0	8.5	39.0	13.5	27.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	14.2	9.3	4.1	46.4	10.3	10.7	9.9	40.4
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.1	1.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	75.0
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	19.3

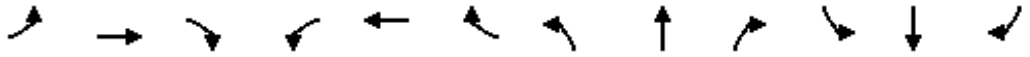
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	23	55	1091	45	80	1413
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	28	67	1734	54	97	2246

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3079	895	0	0	1789	0
Stage 1	1762	-	-	-	-	-
Stage 2	1317	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	~ 9	284	-	-	330	-
Stage 1	123	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	284	-	-	330	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	123	-	-	-	-	-
Stage 2	152	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 844.1	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	6	284	330	-
HCM Lane V/C Ratio	-	-	4.64	0.234	0.293	-
HCM Control Delay (s)	-	-	$ 2811.1	21.5	20.4	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	4.9	0.9	1.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	26	64	127	11	100	29	1129	67	118	1440	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	169	28	70	139	12	109	32	1740	73	129	2219	277
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	165	42	105	255	16	144	118	2991	125	214	2880	352
Arrive On Green	0.07	0.12	0.12	0.08	0.13	0.13	0.01	0.20	0.20	0.05	0.62	0.62
Sat Flow, veh/h	1076	357	893	1753	125	1137	1428	5026	211	1697	4609	564
Grp Volume(v), veh/h	169	0	98	139	0	121	32	1178	635	129	1627	869
Grp Sat Flow(s),veh/h/ln	1076	0	1250	1753	0	1262	1428	1702	1832	1697	1702	1769
Q Serve(g_s), s	7.5	0.0	8.3	7.6	0.0	10.2	1.0	34.5	34.6	3.1	37.8	39.9
Cycle Q Clear(g_c), s	7.5	0.0	8.3	7.6	0.0	10.2	1.0	34.5	34.6	3.1	37.8	39.9
Prop In Lane	1.00		0.71	1.00		0.90	1.00		0.11	1.00		0.32
Lane Grp Cap(c), veh/h	165	0	147	255	0	159	118	2026	1091	214	2127	1105
V/C Ratio(X)	1.03	0.00	0.67	0.55	0.00	0.76	0.27	0.58	0.58	0.60	0.76	0.79
Avail Cap(c_a), veh/h	165	0	432	255	0	448	243	2026	1091	250	2127	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	0.0	46.5	39.1	0.0	46.4	17.4	31.8	31.8	19.2	14.8	15.2
Incr Delay (d2), s/veh	77.4	0.0	10.7	4.3	0.0	14.5	2.6	1.2	2.3	5.9	2.7	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.0	0.0	5.4	6.4	0.0	6.9	0.7	22.5	24.3	3.8	19.0	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.7	0.0	57.2	43.4	0.0	60.9	20.1	33.0	34.1	25.2	17.5	20.9
LnGrp LOS	F	A	E	D	A	E	C	C	C	C	B	C
Approach Vol, veh/h		267			260			1845			2625	
Approach Delay, s/veh		99.9			51.5			33.1			19.0	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	17.9	5.4	74.7	11.0	18.9	8.6	71.5
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	38.0	11.5	34.0	7.5	39.0	7.5	38.0
Max Q Clear Time (g_c+I1), s	9.6	10.3	3.0	41.9	9.5	12.2	5.1	36.6
Green Ext Time (p_c), s	0.0	1.0	0.1	0.0	0.0	1.3	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	4.5

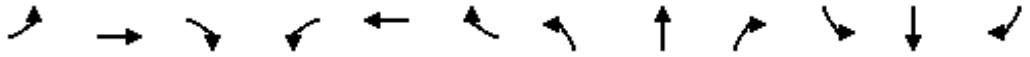
Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	98	0	413	1021	0	1815	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	13	117	0	650	1223	0	2855	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	3180	-	-	0	-	-	-	0
Stage 1	2855	-	-	-	-	-	-	-
Stage 2	325	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 8	0	0	-	0	0	-	0
Stage 1	30	0	0	-	0	0	-	0
Stage 2	705	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	~ 8	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-	-	-
Stage 1	30	-	-	-	-	-	-	-
Stage 2	705	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1196.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	8	-	-
HCM Lane V/C Ratio	-	1.647	-	-
HCM Control Delay (s)	-	$ 1196.2	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	2.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1496	7	254	108	276	0	0	360	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1985	0	0	134	448	0	0	585	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				2105	0		206	1049	0	0	857	
Arrive On Green				0.60	0.00	0.00	0.07	0.30	0.00	0.00	0.17	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1985	0	0	134	448	0	0	585	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				57.4	0.0	0.0	7.5	11.2	0.0	0.0	11.8	0.0
Cycle Q Clear(g_c), s				57.4	0.0	0.0	7.5	11.2	0.0	0.0	11.8	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				2105	0		206	1049	0	0	857	
V/C Ratio(X)				0.94	0.00		0.65	0.43	0.00	0.00	0.68	
Avail Cap(c_a), veh/h				2231	0		206	1049	0	0	857	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				20.3	0.0	0.0	36.1	31.3	0.0	0.0	43.0	0.0
Incr Delay (d2), s/veh				8.8	0.0	0.0	7.1	1.3	0.0	0.0	4.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				30.1	0.0	0.0	5.8	8.4	0.0	0.0	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.0	0.0	0.0	43.2	32.5	0.0	0.0	47.4	0.0
LnGrp LOS				C	A		D	C	A	A	D	
Approach Vol, veh/h					1985	A		582			585	A
Approach Delay, s/veh					29.0			35.0			47.4	
Approach LOS					C			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.0	24.0		72.0		38.0						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	7.5	14.5		70.0		28.5						
Max Q Clear Time (g_c+I1), s	9.5	13.8		59.4		13.2						
Green Ext Time (p_c), s	0.0	0.3		6.6		2.3						

Intersection Summary		
HCM 6th Ctrl Delay		33.5
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	48	52	22	63	55	21	10	53	26	6	113	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	63	27	77	67	26	12	64	32	7	137	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	90	0	0	518	440	77	475	440	80
Stage 1	-	-	-	-	-	-	193	193	-	234	234	-
Stage 2	-	-	-	-	-	-	325	247	-	241	206	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1505	-	-	468	511	984	500	511	980
Stage 1	-	-	-	-	-	-	809	741	-	769	711	-
Stage 2	-	-	-	-	-	-	687	702	-	762	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1464	-	-	1505	-	-	322	464	984	403	464	980
Mov Cap-2 Maneuver	-	-	-	-	-	-	322	464	-	403	464	-
Stage 1	-	-	-	-	-	-	777	711	-	738	673	-
Stage 2	-	-	-	-	-	-	494	664	-	644	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	3.4	13.1	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	322	562	1464	-	-	1505	-	-	403	532
HCM Lane V/C Ratio	0.038	0.171	0.04	-	-	0.051	-	-	0.018	0.341
HCM Control Delay (s)	16.6	12.7	7.6	-	-	7.5	0	-	14.1	15.2
HCM Lane LOS	C	B	A	-	-	A	A	-	B	C
HCM 95th %tile Q(veh)	0.1	0.6	0.1	-	-	0.2	-	-	0.1	1.5

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1109	0	0	1419
Future Vol, veh/h	0	69	1080	66	0	1493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	1754	71	0	2424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	913	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	276	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	276	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	276	-
HCM Lane V/C Ratio	-	-	0.269	-
HCM Control Delay (s)	-	-	22.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.1	-

Intersection	
Int Delay, s/veh	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1142	0	0	1545	0
Future Vol, veh/h	0	0	0	13	0	71	0	1121	61	25	1606	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	76	0	1820	66	27	2608	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3572	4548	1304	3211	4515	943	2608	0	0	1886	0	0
Stage 1	2662	2662	-	1853	1853	-	-	-	-	-	-	-
Stage 2	910	1886	-	1358	2662	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	2	1	151	~ 4	1	264	162	-	-	314	-	-
Stage 1	23	47	-	76	122	-	-	-	-	-	-	-
Stage 2	296	118	-	157	47	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	1	151	~ 4	1	264	162	-	-	314	-	-
Mov Cap-2 Maneuver	1	1	-	~ 4	1	-	-	-	-	-	-	-
Stage 1	23	43	-	76	122	-	-	-	-	-	-	-
Stage 2	210	118	-	144	43	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 450.9	0	0.2
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	162	-	-	-	-	4	264	314	-	-
HCM Lane V/C Ratio	-	-	-	-	-	3.495	0.289	0.086	-	-
HCM Control Delay (s)	0	-	-	0	$	2781.7	24.1	17.5	-	-
HCM Lane LOS	A	-	-	A	A	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	3	1.2	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	114	70	0	0	0
Future Vol, veh/h	17	108	68	5	13	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	124	78	5	14	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	-	0	241	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1514	-	-	-	747	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	737	979
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1514	-	-	-	737	979
HCM Lane V/C Ratio	0.012	-	-	-	0.019	0.011
HCM Control Delay (s)	7.4	0	-	-	10	8.7
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	3.3

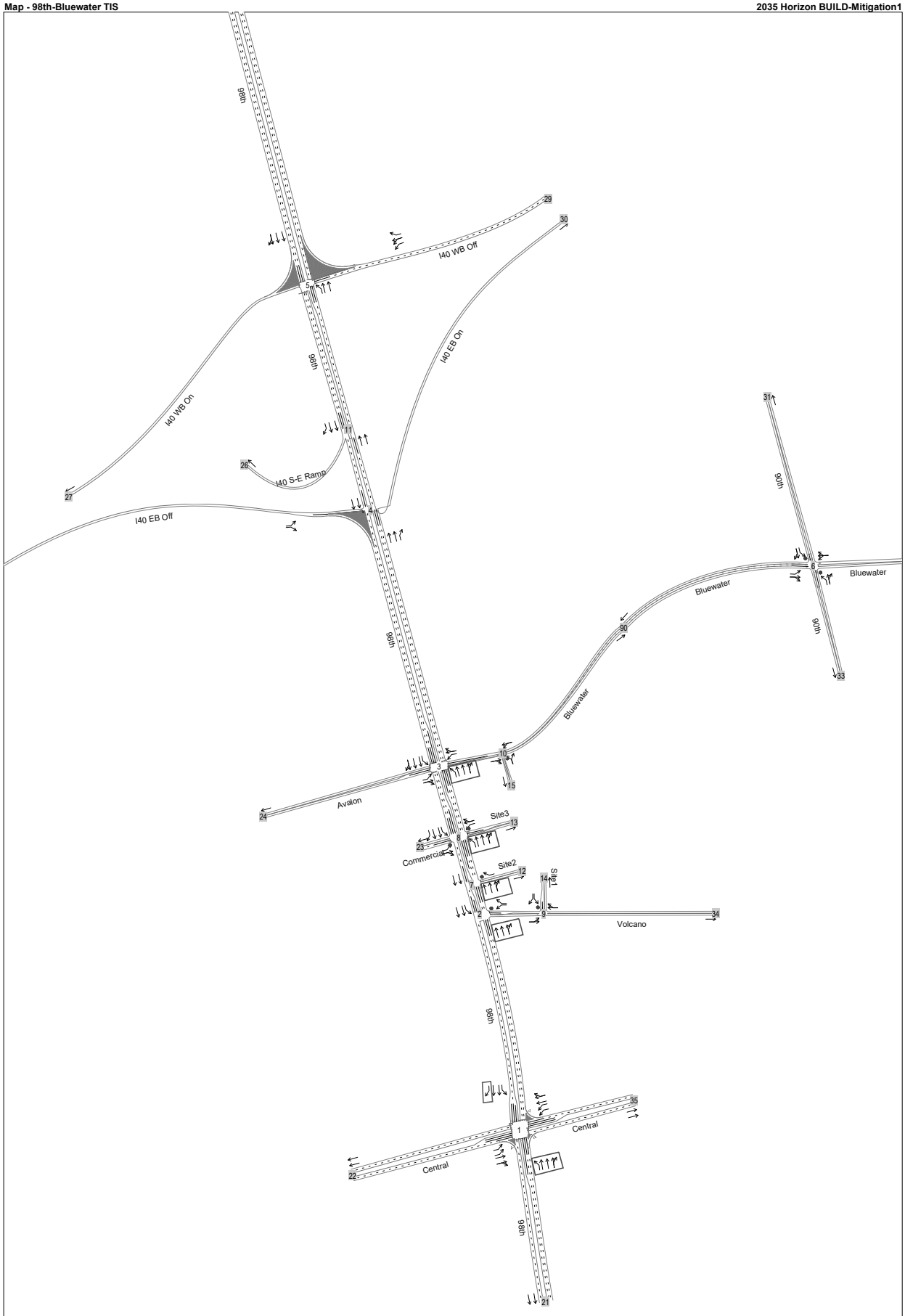
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	97	0	0
Future Vol, veh/h	107	84	7	94	107	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	90	8	108	115	16

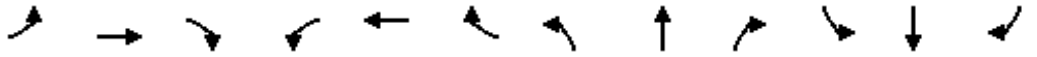
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	213	0	292	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1357	-	699	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1357	-	695	876
Mov Cap-2 Maneuver	-	-	-	-	695	-
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	-	-	1357	-
HCM Lane V/C Ratio	0.184	-	-	0.006	-
HCM Control Delay (s)	11.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

APPENDIX E
Mitigation Analysis LOS Worksheets


98th
I40 WB Off
I40 EB On
I40 WB On
I40 S-E Ramp
I40 EB Off
98th
98th
90th
Bluewater
Bluewater
Bluewater
90th
Avalon
Site3
Commercial
Site2
Site1
Volcano
98th
Central
Central
93rd
29
30
31
33
34
35
27
26
24
23
22
21
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
90



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	281	175	33	103	124	146	27	1736	323	61	550	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	351	219	0	129	155	0	44	2849	0	100	903	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	345	532		171	357		255	2723		109	2009	991
Arrive On Green	0.10	0.16	0.00	0.05	0.11	0.00	0.02	0.53	0.00	0.04	0.56	0.56
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	5106	1572	1555	3582	1497
Grp Volume(v), veh/h	351	219	0	129	155	0	44	2849	0	100	903	194
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1702	1572	1555	1791	1497
Q Serve(g_s), s	15.1	8.7	0.0	5.8	6.6	0.0	1.9	80.0	0.0	5.0	22.2	7.6
Cycle Q Clear(g_c), s	15.1	8.7	0.0	5.8	6.6	0.0	1.9	80.0	0.0	5.0	22.2	7.6
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	532		171	357		255	2723		109	2009	991
V/C Ratio(X)	1.02	0.41		0.75	0.43		0.17	1.05		0.92	0.45	0.20
Avail Cap(c_a), veh/h	345	706		239	594		276	2723		109	2009	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	57.0	0.0	70.2	62.6	0.0	20.1	35.0	0.0	70.4	19.3	9.9
Incr Delay (d2), s/veh	52.8	0.5	0.0	4.7	0.8	0.0	0.1	30.9	0.0	59.2	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.9	6.6	0.0	4.5	4.9	0.0	1.4	50.7	0.0	9.3	14.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.3	57.5	0.0	74.9	63.4	0.0	20.2	65.9	0.0	129.6	20.1	10.3
LnGrp LOS	F	E		E	E		C	F		F	C	B
Approach Vol, veh/h		570	A		284	A		2893	A		1197	
Approach Delay, s/veh		96.2			68.6			65.2			27.6	
Approach LOS		F			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	30.6	7.7	90.2	19.6	23.2	11.9	86.0
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	6.0	* 6
Max Green Setting (Gmax), s	10.8	31.3	5.1	80.8	15.1	27.0	5.9	* 80
Max Q Clear Time (g_c+I1), s	7.8	10.7	3.9	24.2	17.1	8.6	7.0	82.0
Green Ext Time (p_c), s	0.0	1.1	0.0	3.1	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.2

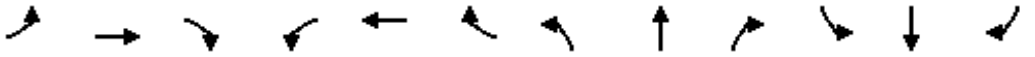
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	14	66	2011	62	31	762
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	17	82	3265	77	38	1237

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4000	1672	0	0	3343	0
Stage 1	3305	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.25	7.18	-	-	5.38	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.94	-	-	3.14	-
Pot Cap-1 Maneuver	~ 4	~ 71	-	-	~ 24	-
Stage 1	~ 8	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 71	-	-	~ 24	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	~ 8	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	19.4
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	71	~ 24	-
HCM Lane V/C Ratio	-	-	-	1.149	1.597	-
HCM Control Delay (s)	-	-	-	254.7$	644.2	-
HCM Lane LOS	-	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	-	6.2	4.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Future Volume (veh/h)	148	6	29	96	8	165	13	1729	93	114	709	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	170	7	33	110	9	190	15	2807	107	131	1151	123
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	226	86	405	500	19	392	397	2458	93	131	1675	179
Arrive On Green	0.04	0.30	0.30	0.04	0.30	0.30	0.32	0.97	0.97	0.05	0.36	0.36
Sat Flow, veh/h	1090	285	1344	1739	62	1305	1810	5050	190	1654	4647	496
Grp Volume(v), veh/h	170	0	40	110	0	199	15	1881	1033	131	836	438
Grp Sat Flow(s),veh/h/ln	1090	0	1629	1739	0	1367	1810	1702	1836	1654	1689	1766
Q Serve(g_s), s	6.5	0.0	2.6	6.3	0.0	17.9	0.0	73.0	73.0	7.5	31.6	31.6
Cycle Q Clear(g_c), s	6.5	0.0	2.6	6.3	0.0	17.9	0.0	73.0	73.0	7.5	31.6	31.6
Prop In Lane	1.00		0.82	1.00		0.95	1.00		0.10	1.00		0.28
Lane Grp Cap(c), veh/h	226	0	491	500	0	410	397	1657	894	131	1217	637
V/C Ratio(X)	0.75	0.00	0.08	0.22	0.00	0.49	0.04	1.14	1.16	1.00	0.69	0.69
Avail Cap(c_a), veh/h	226	0	491	500	0	410	397	1657	894	131	1677	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	37.5	34.8	0.0	43.0	31.0	2.0	2.0	44.1	40.8	40.8
Incr Delay (d2), s/veh	15.6	0.0	0.3	0.5	0.0	4.1	0.1	68.9	83.0	79.3	1.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.2	0.0	2.0	5.3	0.0	10.8	0.6	25.4	32.1	10.3	19.0	20.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.8	0.0	37.9	35.3	0.0	47.1	31.1	70.9	85.0	123.4	42.3	43.6
LnGrp LOS	E	A	D	D	A	D	C	F	F	F	D	D
Approach Vol, veh/h		210			309			2929			1405	
Approach Delay, s/veh		61.3			42.9			75.7			50.2	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	50.2	29.9	60.1	10.0	50.0	11.0	79.0
Change Period (Y+Rc), s	3.5	5.0	6.0	* 6	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	6.3	45.2	6.0	* 75	6.5	45.0	7.5	73.0
Max Q Clear Time (g_c+I1), s	8.3	4.6	2.0	33.6	8.5	19.9	9.5	75.0
Green Ext Time (p_c), s	0.0	0.4	0.0	20.5	0.0	2.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.6
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

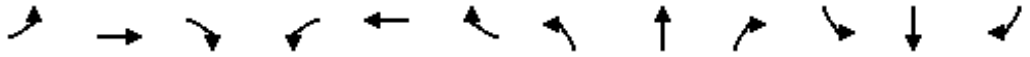
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	75	0	346	1733	0	916	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	17	91	0	550	2098	0	1456	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1731	-	-	0	-	-	-	0
Stage 1	1456	-	-	-	-	-	-	-
Stage 2	275	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	79	0	0	-	0	0	-	0
Stage 1	181	0	0	-	0	0	-	0
Stage 2	747	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	79	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-	-	-
Stage 1	181	-	-	-	-	-	-	-
Stage 2	747	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	62.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	79	-	-
HCM Lane V/C Ratio	-	0.215	-	-
HCM Control Delay (s)	-	62.6	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	698	1	150	68	284	0	0	509	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				934	0	0	85	466	0	0	835	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				1029	0		216	1564	0	0	1744	
Arrive On Green				0.30	0.00	0.00	0.06	0.44	0.00	0.00	0.34	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				934	0	0	85	466	0	0	835	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				39.7	0.0	0.0	6.4	12.7	0.0	0.0	19.3	0.0
Cycle Q Clear(g_c), s				39.7	0.0	0.0	6.4	12.7	0.0	0.0	19.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1029	0		216	1564	0	0	1744	
V/C Ratio(X)				0.91	0.00		0.39	0.30	0.00	0.00	0.48	
Avail Cap(c_a), veh/h				1640	0		302	1564	0	0	1744	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				50.2	0.0	0.0	29.9	27.1	0.0	0.0	38.9	0.0
Incr Delay (d2), s/veh				5.0	0.0	0.0	1.2	0.5	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				23.9	0.0	0.0	3.6	9.2	0.0	0.0	12.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.2	0.0	0.0	31.0	27.6	0.0	0.0	39.8	0.0
LnGrp LOS				E	A		C	C	A	A	D	
Approach Vol, veh/h					934	A		551			835	A
Approach Delay, s/veh					55.2			28.1			39.8	
Approach LOS					E			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.8	57.2		51.0		72.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	18.5	* 42		72.5		66.0						
Max Q Clear Time (g_c+I1), s	8.4	21.3		41.7		14.7						
Green Ext Time (p_c), s	0.1	5.3		3.8		3.1						

Intersection Summary		
HCM 6th Ctrl Delay		43.2
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Future Vol, veh/h	105	45	7	86	26	40	10	161	116	14	53	41
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	132	57	9	108	33	50	13	203	146	18	67	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	66	0	0	660	630	62	779	609	63
Stage 1	-	-	-	-	-	-	326	326	-	279	279	-
Stage 2	-	-	-	-	-	-	334	304	-	500	330	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1477	-	-	1536	-	-	376	399	1000	300	406	948
Stage 1	-	-	-	-	-	-	687	648	-	704	674	-
Stage 2	-	-	-	-	-	-	680	663	-	533	640	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1470	-	-	1536	-	-	267	334	1000	118	340	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	334	-	118	340	-
Stage 1	-	-	-	-	-	-	625	590	-	638	621	-
Stage 2	-	-	-	-	-	-	531	611	-	272	582	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	4.3	32.4	18.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	267	463	1470	-	-	1536	-	-	118	472
HCM Lane V/C Ratio	0.047	0.753	0.09	-	-	0.07	-	-	0.149	0.251
HCM Control Delay (s)	19.1	32.9	7.7	-	-	7.5	0	-	40.8	15.2
HCM Lane LOS	C	D	A	-	-	A	A	-	E	C
HCM 95th %tile Q(veh)	0.1	6.3	0.3	-	-	0.2	-	-	0.5	1

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1927	0	0	721
Future Vol, veh/h	0	84	1938	139	0	793
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	90	3147	149	0	1288

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1648	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	~ 75	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 75	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	266.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	75	-
HCM Lane V/C Ratio	-	-	1.204	-
HCM Control Delay (s)	-	-	266.7	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	6.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1861	0	0	754	0
Future Vol, veh/h	0	0	0	15	0	87	0	1835	121	15	811	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	16	0	94	0	2979	130	16	1317	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2541	4458	659	3735	4393	1555	1317	0	0	3109	0	0
Stage 1	1349	1349	-	3044	3044	-	-	-	-	-	-	-
Stage 2	1192	3109	-	691	1349	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	20	1	406	~ 3	2	~ 87	521	-	-	33	-	-
Stage 1	156	217	-	~ 6	29	-	-	-	-	-	-	-
Stage 2	182	27	-	389	217	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	1	406	~ 2	1	~ 87	521	-	-	33	-	-
Mov Cap-2 Maneuver	-	1	-	~ 2	1	-	-	-	-	-	-	-
Stage 1	156	112	-	~ 6	29	-	-	-	-	-	-	-
Stage 2	-	27	-	200	112	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1117.3	0	2.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	521	-	-	-	-	2	87	33	-	-
HCM Lane V/C Ratio	-	-	-	-	-	8.065	1.075	0.489	-	-
HCM Control Delay (s)	0	-	-	0	$	6404.3	205.8	192	-	-
HCM Lane LOS	A	-	-	A	A	F	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	3.5	6.3	1.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	46	57	0	0	0
Future Vol, veh/h	43	39	54	8	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	45	62	9	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	71	0	-	0	204	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1529	-	-	-	784	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1529	-	-	-	760	997
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1529	-	-	-	760	997
HCM Lane V/C Ratio	0.03	-	-	-	0.014	0.014
HCM Control Delay (s)	7.4	0	-	-	9.8	8.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0

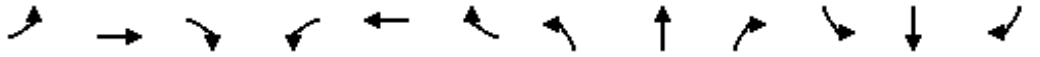
Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	127	0	0	62	0	0
Future Vol, veh/h	119	69	6	58	131	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	74	6	67	141	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	211	0	253	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1360	-	736	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1360	-	732	869
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	939	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	746	-	-	1360	-
HCM Lane V/C Ratio	0.213	-	-	0.005	-
HCM Control Delay (s)	11.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	219	240	76	317	283	153	30	785	228	123	1074	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	265	291	0	384	343	0	48	1248	0	196	1707	283
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	310	691		417	728		94	2120		416	1963	993
Arrive On Green	0.09	0.19	0.00	0.12	0.21	0.00	0.03	0.42	0.00	0.10	0.37	0.37
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	5106	1585	1767	3554	1547
Grp Volume(v), veh/h	265	291	0	384	343	0	48	1248	0	196	1707	283
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1702	1585	1767	1777	1547
Q Serve(g_s), s	11.0	10.4	0.0	15.9	12.5	0.0	2.7	27.4	0.0	2.9	64.7	2.5
Cycle Q Clear(g_c), s	11.0	10.4	0.0	15.9	12.5	0.0	2.7	27.4	0.0	2.9	64.7	2.5
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	691		417	728		94	2120		416	1963	993
V/C Ratio(X)	0.85	0.42		0.92	0.47		0.51	0.59		0.47	0.87	0.28
Avail Cap(c_a), veh/h	341	691		417	728		106	2120		416	1963	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.1	51.2	0.0	63.1	50.4	0.0	37.0	32.8	0.0	47.9	40.8	9.5
Incr Delay (d2), s/veh	16.2	1.9	0.0	25.1	2.2	0.0	1.6	1.2	0.0	0.3	5.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.2	8.2	0.0	12.9	9.4	0.0	1.9	16.7	0.0	10.6	39.5	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.2	53.1	0.0	88.2	52.6	0.0	38.6	34.0	0.0	48.2	46.4	10.2
LnGrp LOS	F	D		F	D		D	C		D	D	B
Approach Vol, veh/h		556	A		727	A		1296	A		2186	
Approach Delay, s/veh		66.5			71.4			34.2			41.9	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.2	8.5	86.3	20.0	37.2	28.6	66.2
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	7.0	* 7	6.0	* 6
Max Green Setting (Gmax), s	17.5	27.0	5.0	73.5	14.3	* 30	18.3	* 60
Max Q Clear Time (g_c+I1), s	17.9	12.4	4.7	66.7	13.0	14.5	4.9	29.4
Green Ext Time (p_c), s	0.0	1.3	0.0	4.1	0.0	1.6	0.1	6.1

Intersection Summary	
HCM 6th Ctrl Delay	47.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	20.3

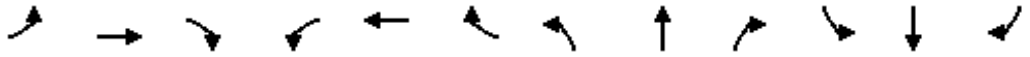
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	23	55	1091	45	80	1413
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	28	67	1734	54	97	2246

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3079	895	0	0	1789	0
Stage 1	1762	-	-	-	-	-
Stage 2	1317	-	-	-	-	-
Critical Hdwy	6.29	7.14	-	-	5.4	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	-	-	3.15	-
Pot Cap-1 Maneuver	~ 15	244	-	-	155	-
Stage 1	82	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	244	-	-	155	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	82	-	-	-	-	-
Stage 2	79	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 846.7	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	6	244	155	-
HCM Lane V/C Ratio	-	-	4.64	0.273	0.625	-
HCM Control Delay (s)	-	-	$ 2811.1	25.2	60.7	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	4.9	1.1	3.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	26	64	127	11	100	29	1129	67	118	1440	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	169	28	70	139	12	109	32	1740	73	129	2219	277
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	124	43	107	196	15	136	357	3249	136	246	2181	267
Arrive On Green	0.05	0.12	0.12	0.05	0.12	0.12	0.43	1.00	1.00	0.06	0.47	0.47
Sat Flow, veh/h	1076	357	893	1753	125	1137	1428	5026	211	1697	4609	564
Grp Volume(v), veh/h	169	0	98	139	0	121	32	1178	635	129	1627	869
Grp Sat Flow(s),veh/h/ln	1076	0	1250	1753	0	1262	1428	1702	1832	1697	1702	1769
Q Serve(g_s), s	7.3	0.0	10.9	7.3	0.0	13.5	0.0	0.0	0.0	6.4	68.6	68.6
Cycle Q Clear(g_c), s	7.3	0.0	10.9	7.3	0.0	13.5	0.0	0.0	0.0	6.4	68.6	68.6
Prop In Lane	1.00		0.71	1.00		0.90	1.00		0.11	1.00		0.32
Lane Grp Cap(c), veh/h	124	0	150	196	0	152	357	2201	1185	246	1610	837
V/C Ratio(X)	1.36	0.00	0.65	0.71	0.00	0.80	0.09	0.54	0.54	0.52	1.01	1.04
Avail Cap(c_a), veh/h	124	0	388	196	0	392	357	2201	1185	285	1610	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	0.0	60.9	57.8	0.0	62.1	32.4	0.0	0.0	22.7	38.2	38.2
Incr Delay (d2), s/veh	205.1	0.0	9.8	14.1	0.0	18.2	0.2	0.9	1.7	3.7	24.9	41.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.9	0.0	7.0	4.2	0.0	8.8	1.2	0.5	1.0	5.0	42.3	49.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	268.1	0.0	70.7	71.8	0.0	80.2	32.6	0.9	1.7	26.4	63.1	79.8
LnGrp LOS	F	A	E	E	A	F	C	A	A	C	F	F
Approach Vol, veh/h		267			260			1845			2625	
Approach Delay, s/veh		195.7			75.8			1.8			66.8	
Approach LOS		F			E			A			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	22.4	37.2	74.6	10.8	22.4	12.1	99.7
Change Period (Y+Rc), s	3.5	5.0	6.0	* 6	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	7.3	45.0	6.1	* 69	7.3	45.0	11.9	62.8
Max Q Clear Time (g_c+I1), s	9.3	12.9	2.0	70.6	9.3	15.5	8.4	2.0
Green Ext Time (p_c), s	0.0	1.1	0.0	0.0	0.0	1.4	0.2	40.3

Intersection Summary	
HCM 6th Ctrl Delay	50.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

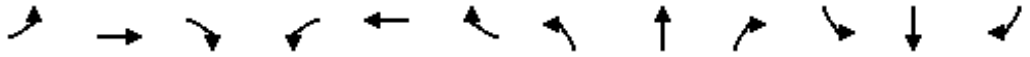
Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	98	0	413	1021	0	1815	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	13	117	0	650	1223	0	2855	0	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	3180	-	-	0	-	-	-	0	
Stage 1	2855	-	-	-	-	-	-	-	
Stage 2	325	-	-	-	-	-	-	-	
Critical Hdwy	6.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	
Follow-up Hdwy	3.52	-	-	-	-	-	-	-	
Pot Cap-1 Maneuver	~ 8	0	0	-	0	0	-	0	
Stage 1	30	0	0	-	0	0	-	0	
Stage 2	705	0	0	-	0	0	-	0	
Platoon blocked, %				-			-		
Mov Cap-1 Maneuver	~ 8	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-	-	-	
Stage 1	30	-	-	-	-	-	-	-	
Stage 2	705	-	-	-	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, $	1196.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	8	-	-
HCM Lane V/C Ratio	-	1.647	-	-
HCM Control Delay (s)	-	$ 1196.2	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	2.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1496	7	254	108	276	0	0	360	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1985	0	0	134	448	0	0	585	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				2101	0		196	1004	0	0	771	
Arrive On Green				0.60	0.00	0.00	0.06	0.28	0.00	0.00	0.15	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1985	0	0	134	448	0	0	585	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				50.9	0.0	0.0	6.3	10.1	0.0	0.0	10.7	0.0
Cycle Q Clear(g_c), s				50.9	0.0	0.0	6.3	10.1	0.0	0.0	10.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				2101	0		196	1004	0	0	771	
V/C Ratio(X)				0.94	0.00		0.68	0.45	0.00	0.00	0.76	
Avail Cap(c_a), veh/h				2197	0		196	1004	0	0	771	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				18.0	0.0	0.0	34.3	28.7	0.0	0.0	39.6	0.0
Incr Delay (d2), s/veh				9.1	0.0	0.0	9.3	1.4	0.0	0.0	6.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				26.4	0.0	0.0	5.4	7.6	0.0	0.0	8.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.1	0.0	0.0	43.6	30.1	0.0	0.0	46.5	0.0
LnGrp LOS				C	A		D	C	A	A	D	
Approach Vol, veh/h					1985	A		582			585	A
Approach Delay, s/veh					27.1			33.2			46.5	
Approach LOS					C			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	20.2		64.3		33.0						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	6.3	14.7		61.0		27.5						
Max Q Clear Time (g_c+I1), s	8.3	12.7		52.9		12.1						
Green Ext Time (p_c), s	0.0	0.7		5.4		2.3						

Intersection Summary		
HCM 6th Ctrl Delay		31.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	48	52	22	63	55	21	10	53	26	6	113	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	63	27	77	67	26	12	64	32	7	137	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	90	0	0	518	440	77	475	440	80
Stage 1	-	-	-	-	-	-	193	193	-	234	234	-
Stage 2	-	-	-	-	-	-	325	247	-	241	206	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1505	-	-	468	511	984	500	511	980
Stage 1	-	-	-	-	-	-	809	741	-	769	711	-
Stage 2	-	-	-	-	-	-	687	702	-	762	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1464	-	-	1505	-	-	322	464	984	403	464	980
Mov Cap-2 Maneuver	-	-	-	-	-	-	322	464	-	403	464	-
Stage 1	-	-	-	-	-	-	777	711	-	738	673	-
Stage 2	-	-	-	-	-	-	494	664	-	644	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	3.4	13.1	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	322	562	1464	-	-	1505	-	-	403	532
HCM Lane V/C Ratio	0.038	0.171	0.04	-	-	0.051	-	-	0.018	0.341
HCM Control Delay (s)	16.6	12.7	7.6	-	-	7.5	0	-	14.1	15.2
HCM Lane LOS	C	B	A	-	-	A	A	-	B	C
HCM 95th %tile Q(veh)	0.1	0.6	0.1	-	-	0.2	-	-	0.1	1.5

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1109	0	0	1419
Future Vol, veh/h	0	69	1080	66	0	1493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	1754	71	0	2424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	913	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	237	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	237	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	237	-
HCM Lane V/C Ratio	-	-	0.313	-
HCM Control Delay (s)	-	-	27	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	1.3	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1142	0	0	1545	0
Future Vol, veh/h	0	0	0	13	0	71	0	1121	61	25	1606	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	76	0	1820	66	27	2608	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3390	4548	1304	3211	4515	943	2608	0	0	1886	0	0
Stage 1	2662	2662	-	1853	1853	-	-	-	-	-	-	-
Stage 2	728	1886	-	1358	2662	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	5	1	151	~ 7	1	226	162	-	-	143	-	-
Stage 1	23	47	-	50	122	-	-	-	-	-	-	-
Stage 2	356	118	-	154	47	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	3	1	151	~ 6	1	226	162	-	-	143	-	-
Mov Cap-2 Maneuver	3	1	-	~ 6	1	-	-	-	-	-	-	-
Stage 1	23	38	-	50	122	-	-	-	-	-	-	-
Stage 2	236	118	-	125	38	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	295.5	0	0.4
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	162	-	-	-	-	6	226	143	-	-
HCM Lane V/C Ratio	-	-	-	-	-	2.33	0.338	0.188	-	-
HCM Control Delay (s)	0	-	-	0	$	1751.9	28.8	35.9	-	-
HCM Lane LOS	A	-	-	A	A	F	D	E	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	2.8	1.4	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	114	70	0	0	0
Future Vol, veh/h	17	108	68	5	13	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	124	78	5	14	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	-	0	241	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1514	-	-	-	747	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	737	979
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1514	-	-	-	737	979
HCM Lane V/C Ratio	0.012	-	-	-	0.019	0.011
HCM Control Delay (s)	7.4	0	-	-	10	8.7
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

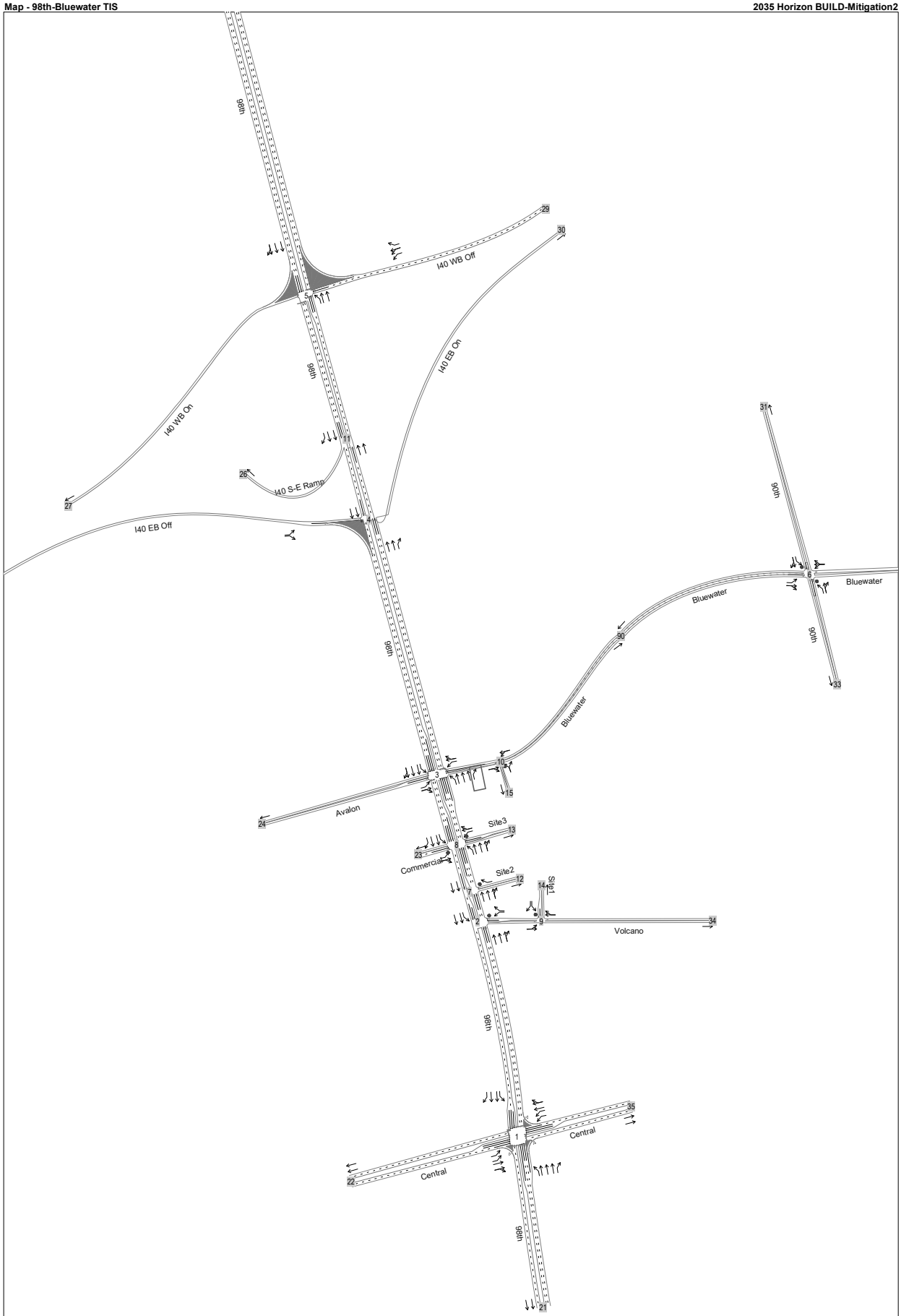
Intersection	
Int Delay, s/veh	3.3

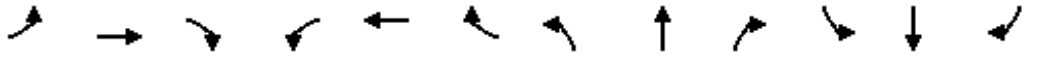
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	97	0	0
Future Vol, veh/h	107	84	7	94	107	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	90	8	108	115	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	213	0	292	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1357	-	699	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1357	-	695	876
Mov Cap-2 Maneuver	-	-	-	-	695	-
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	-	-	1357	-
HCM Lane V/C Ratio	0.184	-	-	0.006	-
HCM Control Delay (s)	11.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-


98th
I40 WB Off
I40 WB On
I40 EB On
I40 S-E Ramp
I40 EB Off
90th
Bluewater
Avalon
Site3
Commercial
Site2
Site1
Volcano
Central
29
30
5
11
26
27
4
31
6
33
90
10
15
3
24
13
8
23
12
14
7
2
9
34
35
1
22
21



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	175	33	103	124	135	27	1590	323	55	483	109
Future Volume (veh/h)	281	175	33	103	124	146	27	1736	323	61	550	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1707	1796	1737	1796	1841	1870	1856	1633	1885	1767
Adj Flow Rate, veh/h	351	219	0	129	155	0	44	2849	0	100	903	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	8	13	7	11	7	4	2	3	18	1	9
Cap, veh/h	358	577		169	335		314	2783		180	2067	1020
Arrive On Green	0.10	0.17	0.00	0.05	0.10	0.00	0.06	0.54	0.00	0.09	0.58	0.58
Sat Flow, veh/h	3428	3474	0	3319	3387	0	1753	5106	1572	1555	3582	1497
Grp Volume(v), veh/h	351	219	0	129	155	0	44	2849	0	100	903	194
Grp Sat Flow(s),veh/h/ln	1714	1692	0	1659	1650	0	1753	1702	1572	1555	1791	1497
Q Serve(g_s), s	16.3	9.2	0.0	6.1	7.1	0.0	1.9	87.2	0.0	5.1	22.8	2.2
Cycle Q Clear(g_c), s	16.3	9.2	0.0	6.1	7.1	0.0	1.9	87.2	0.0	5.1	22.8	2.2
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	577		169	335		314	2783		180	2067	1020
V/C Ratio(X)	0.98	0.38		0.76	0.46		0.14	1.02		0.56	0.44	0.19
Avail Cap(c_a), veh/h	358	681		239	557		314	2783		180	2067	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	58.8	0.0	75.0	67.8	0.0	20.3	36.4	0.0	67.9	19.1	2.7
Incr Delay (d2), s/veh	42.2	0.4	0.0	5.1	1.0	0.0	0.1	23.4	0.0	2.3	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.0	7.0	0.0	4.8	5.3	0.0	1.4	51.4	0.0	7.1	14.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.7	59.3	0.0	80.0	68.8	0.0	20.4	59.8	0.0	70.2	19.8	3.1
LnGrp LOS	F	E		F	E		C	F		E	B	A
Approach Vol, veh/h		570	A		284	A		2893	A		1197	
Approach Delay, s/veh		92.8			73.9			59.2			21.3	
Approach LOS		F			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	34.3	14.7	98.3	23.7	23.2	19.9	93.2
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	7.0	* 7	6.0	* 6
Max Green Setting (Gmax), s	11.5	32.2	5.9	88.4	16.7	* 27	7.1	* 87
Max Q Clear Time (g_c+I1), s	8.1	11.2	3.9	24.8	18.3	9.1	7.1	89.2
Green Ext Time (p_c), s	0.0	1.1	0.0	3.1	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.2

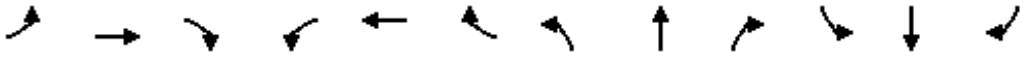
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	66	1861	26	31	690
Future Vol, veh/h	14	66	2011	62	31	762
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	4	2	0	4	6
Mvmt Flow	17	82	3265	77	38	1237

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4000	1672	0	0	3343	0
Stage 1	3305	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.25	7.18	-	-	5.38	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.94	-	-	3.14	-
Pot Cap-1 Maneuver	~ 4	~ 71	-	-	~ 24	-
Stage 1	~ 8	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 71	-	-	~ 24	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	~ 8	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	19.4
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	71	~ 24	-
HCM Lane V/C Ratio	-	-	-	1.149	1.597	-
HCM Control Delay (s)	-	-	-	254.7$	644.2	-
HCM Lane LOS	-	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	-	6.2	4.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	5	29	34	7	101	13	1668	93	54	699	107
Future Volume (veh/h)	148	6	29	96	8	165	13	1729	93	114	709	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1144	1870	1633	1826	1604	1752	1900	1870	1841	1737	1856	1100
Adj Flow Rate, veh/h	170	7	33	110	9	190	15	2807	107	131	1151	123
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	51	2	18	5	20	10	0	2	4	11	3	54
Cap, veh/h	203	80	377	465	17	367	243	2630	803	131	2592	277
Arrive On Green	0.04	0.28	0.28	0.04	0.28	0.28	0.02	1.00	1.00	0.05	0.56	0.56
Sat Flow, veh/h	1090	285	1344	1739	62	1305	1810	5106	1560	1654	4647	496
Grp Volume(v), veh/h	170	0	40	110	0	199	15	2807	107	131	836	438
Grp Sat Flow(s),veh/h/ln	1090	0	1629	1739	0	1367	1810	1702	1560	1654	1689	1766
Q Serve(g_s), s	6.3	0.0	2.9	6.4	0.0	19.6	0.6	0.0	0.0	8.3	23.3	23.3
Cycle Q Clear(g_c), s	6.3	0.0	2.9	6.4	0.0	19.6	0.6	0.0	0.0	8.3	23.3	23.3
Prop In Lane	1.00		0.82	1.00		0.95	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	203	0	457	465	0	384	243	2630	803	131	1884	985
V/C Ratio(X)	0.84	0.00	0.09	0.24	0.00	0.52	0.06	1.07	0.13	1.00	0.44	0.44
Avail Cap(c_a), veh/h	203	0	457	465	0	384	305	2630	803	131	1884	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.3	0.0	42.4	39.7	0.0	48.4	19.0	0.0	0.0	51.2	20.8	20.8
Incr Delay (d2), s/veh	27.6	0.0	0.4	0.6	0.0	4.9	0.2	38.8	0.3	78.7	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.0	0.0	2.2	6.1	0.0	11.7	0.5	15.1	0.1	12.9	14.0	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.8	0.0	42.8	40.3	0.0	53.3	19.2	38.8	0.3	129.9	21.2	21.5
LnGrp LOS	F	A	D	D	A	D	B	F	A	F	C	C
Approach Vol, veh/h		210			309			2929			1405	
Approach Delay, s/veh		78.5			48.7			37.3			31.4	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	49.9	5.0	95.2	9.8	50.0	11.8	88.4
Change Period (Y+Rc), s	3.5	5.0	3.5	6.0	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	6.4	44.9	6.9	83.8	6.3	45.0	8.3	82.4
Max Q Clear Time (g_c+I1), s	8.4	4.9	2.6	25.3	8.3	21.6	10.3	2.0
Green Ext Time (p_c), s	0.0	0.4	0.0	23.9	0.0	2.3	0.0	76.3

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

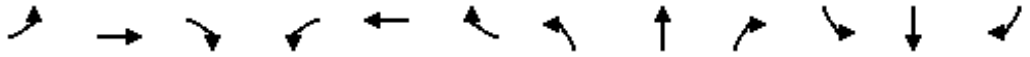
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	14	74	0	323	1631	0	847	0	0	0
Future Vol, veh/h	14	75	0	346	1733	0	916	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	45	2	9	6	2	8	2	2	2
Mvmt Flow	17	91	0	550	2098	0	1456	0	0	0

Major/Minor	Minor2	Major1			Major2			
Conflicting Flow All	1731	-	-	0	-	-	-	0
Stage 1	1456	-	-	-	-	-	-	-
Stage 2	275	-	-	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	79	0	0	-	0	0	-	0
Stage 1	181	0	0	-	0	0	-	0
Stage 2	747	0	0	-	0	0	-	0
Platoon blocked, %				-			-	
Mov Cap-1 Maneuver	79	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-	-	-
Stage 1	181	-	-	-	-	-	-	-
Stage 2	747	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	62.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	79	-	-
HCM Lane V/C Ratio	-	0.215	-	-
HCM Control Delay (s)	-	62.6	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	0.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	661	1	150	64	265	0	0	477	27
Future Volume (veh/h)	0	0	0	698	1	150	68	284	0	0	509	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1781	1870	1870	1322	1870	0	0	1870	1870
Adj Flow Rate, veh/h				934	0	0	85	466	0	0	835	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				8	2	2	39	2	0	0	2	2
Cap, veh/h				1023	0		213	1555	0	0	1747	
Arrive On Green				0.30	0.00	0.00	0.05	0.44	0.00	0.00	0.34	0.00
Sat Flow, veh/h				3393	0	1585	1259	3647	0	0	5443	0
Grp Volume(v), veh/h				934	0	0	85	466	0	0	835	0
Grp Sat Flow(s),veh/h/ln				1697	0	1585	1259	1777	0	0	1702	0
Q Serve(g_s), s				42.4	0.0	0.0	6.8	13.6	0.0	0.0	20.6	0.0
Cycle Q Clear(g_c), s				42.4	0.0	0.0	6.8	13.6	0.0	0.0	20.6	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				1023	0		213	1555	0	0	1747	
V/C Ratio(X)				0.91	0.00		0.40	0.30	0.00	0.00	0.48	
Avail Cap(c_a), veh/h				1665	0		298	1555	0	0	1747	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				53.8	0.0	0.0	31.9	29.1	0.0	0.0	41.4	0.0
Incr Delay (d2), s/veh				5.1	0.0	0.0	1.2	0.5	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				25.5	0.0	0.0	3.8	9.8	0.0	0.0	13.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.9	0.0	0.0	33.1	29.6	0.0	0.0	42.3	0.0
LnGrp LOS				E	A		C	C	A	A	D	
Approach Vol, veh/h					934	A		551			835	A
Approach Delay, s/veh					58.9			30.2			42.3	
Approach LOS					E			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.3	60.7		53.8		76.0						
Change Period (Y+Rc), s	6.5	* 6		5.5		6.0						
Max Green Setting (Gmax), s	19.5	* 45		78.5		70.0						
Max Q Clear Time (g_c+I1), s	8.8	22.6		44.4		15.6						
Green Ext Time (p_c), s	0.1	5.4		3.8		3.1						

Intersection Summary		
HCM 6th Ctrl Delay		46.1
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	43	7	86	25	40	10	161	116	14	53	40
Future Vol, veh/h	105	45	7	86	26	40	10	161	116	14	53	41
Conflicting Peds, #/hr	0	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	7	2	2	2	5	5	2	2	3	13	5	22
Mvmt Flow	132	57	9	108	33	50	13	203	146	18	67	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	66	0	0	660	630	62	779	609	63
Stage 1	-	-	-	-	-	-	326	326	-	279	279	-
Stage 2	-	-	-	-	-	-	334	304	-	500	330	-
Critical Hdwy	4.17	-	-	4.12	-	-	7.12	6.52	6.23	7.23	6.55	6.42
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.23	5.55	-
Follow-up Hdwy	2.263	-	-	2.218	-	-	3.518	4.018	3.327	3.617	4.045	3.498
Pot Cap-1 Maneuver	1477	-	-	1536	-	-	376	399	1000	300	406	948
Stage 1	-	-	-	-	-	-	687	648	-	704	674	-
Stage 2	-	-	-	-	-	-	680	663	-	533	640	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1470	-	-	1536	-	-	267	334	1000	118	340	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	334	-	118	340	-
Stage 1	-	-	-	-	-	-	625	590	-	638	621	-
Stage 2	-	-	-	-	-	-	531	611	-	272	582	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	4.3	32.4	18.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	267	463	1470	-	-	1536	-	-	118	472
HCM Lane V/C Ratio	0.047	0.753	0.09	-	-	0.07	-	-	0.149	0.251
HCM Control Delay (s)	19.1	32.9	7.7	-	-	7.5	0	-	40.8	15.2
HCM Lane LOS	C	D	A	-	-	A	A	-	E	C
HCM 95th %tile Q(veh)	0.1	6.3	0.3	-	-	0.2	-	-	0.5	1

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1927	0	0	721
Future Vol, veh/h	0	84	1938	139	0	793
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	90	3147	149	0	1288

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1648	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	~ 75	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 75	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	266.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	75	-
HCM Lane V/C Ratio	-	-	1.204	-
HCM Control Delay (s)	-	-	266.7	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	6.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1861	0	0	754	0
Future Vol, veh/h	0	0	0	15	0	87	0	1835	121	15	811	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	16	0	94	0	2979	130	16	1317	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2541	4458	659	3735	4393	1555	1317	0	0	3109	0	0
Stage 1	1349	1349	-	3044	3044	-	-	-	-	-	-	-
Stage 2	1192	3109	-	691	1349	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	20	1	406	~ 3	2	~ 87	521	-	-	33	-	-
Stage 1	156	217	-	~ 6	29	-	-	-	-	-	-	-
Stage 2	182	27	-	389	217	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	1	406	~ 2	1	~ 87	521	-	-	33	-	-
Mov Cap-2 Maneuver	-	1	-	~ 2	1	-	-	-	-	-	-	-
Stage 1	156	112	-	~ 6	29	-	-	-	-	-	-	-
Stage 2	-	27	-	200	112	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 1117.3	0	2.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	521	-	-	-	-	2	87	33	-	-
HCM Lane V/C Ratio	-	-	-	-	-	8.065	1.075	0.489	-	-
HCM Control Delay (s)	0	-	-	0	$	6404.3	205.8	192	-	-
HCM Lane LOS	A	-	-	A	A	F	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	3.5	6.3	1.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	46	57	0	0	0
Future Vol, veh/h	43	39	54	8	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	45	62	9	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	71	0	-	0	204	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1529	-	-	-	784	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1529	-	-	-	760	997
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1529	-	-	-	760	997
HCM Lane V/C Ratio	0.03	-	-	-	0.014	0.014
HCM Control Delay (s)	7.4	0	-	-	9.8	8.7
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0

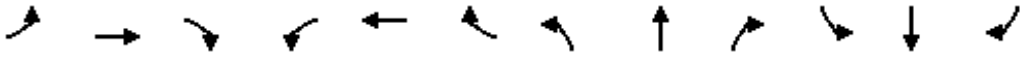
Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	127	0	0	62	0	0
Future Vol, veh/h	119	69	6	58	131	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	74	6	67	141	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	211	0	253	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1360	-	736	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1360	-	732	869
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	939	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	746	-	-	1360	-
HCM Lane V/C Ratio	0.213	-	-	0.005	-
HCM Control Delay (s)	11.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	240	76	317	283	147	30	751	228	112	1013	168
Future Volume (veh/h)	219	240	76	317	283	153	30	785	228	123	1074	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1870	1707	1870	1870	1856	1870	1826
Adj Flow Rate, veh/h	265	291	0	384	343	0	48	1248	0	196	1707	283
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	4	2	13	2	2	3	2	5
Cap, veh/h	341	685		412	747		164	2039		349	1787	930
Arrive On Green	0.10	0.19	0.00	0.12	0.21	0.00	0.03	0.40	0.00	0.24	1.00	1.00
Sat Flow, veh/h	3456	3647	0	3456	3589	0	1626	5106	1585	1767	3554	1547
Grp Volume(v), veh/h	265	291	0	384	343	0	48	1248	0	196	1707	283
Grp Sat Flow(s),veh/h/ln	1728	1777	0	1728	1749	0	1626	1702	1585	1767	1777	1547
Q Serve(g_s), s	10.5	10.1	0.0	15.4	12.0	0.0	2.6	27.2	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	10.5	10.1	0.0	15.4	12.0	0.0	2.6	27.2	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	685		412	747		164	2039		349	1787	930
V/C Ratio(X)	0.78	0.42		0.93	0.46		0.29	0.61		0.56	0.96	0.30
Avail Cap(c_a), veh/h	341	685		412	747		177	2039		368	1787	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	49.7	0.0	61.1	48.0	0.0	27.6	33.4	0.0	41.0	0.0	0.0
Incr Delay (d2), s/veh	10.0	1.9	0.0	27.5	2.0	0.0	0.4	1.4	0.0	0.9	13.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	8.0	0.0	12.8	9.0	0.0	1.9	16.6	0.0	9.0	5.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	51.6	0.0	88.5	50.0	0.0	28.0	34.8	0.0	41.9	13.1	0.8
LnGrp LOS	E	D		F	D		C	C		D	B	A
Approach Vol, veh/h		556	A		727	A		1296	A		2186	
Approach Delay, s/veh		61.1			70.4			34.6			14.1	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	34.0	8.4	76.4	18.3	36.9	22.9	61.9
Change Period (Y+Rc), s	4.5	7.0	4.5	6.0	4.5	7.0	6.0	* 6
Max Green Setting (Gmax), s	16.7	27.0	5.0	69.3	13.8	29.9	18.4	* 56
Max Q Clear Time (g_c+I1), s	17.4	12.1	4.6	2.0	12.5	14.0	3.3	29.2
Green Ext Time (p_c), s	0.0	1.3	0.0	9.2	0.0	1.6	0.1	6.0

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	20.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	55	1054	34	80	1339
Future Vol, veh/h	23	55	1091	45	80	1413
Conflicting Peds, #/hr	0	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	60	0	-	-	80	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	5	2
Mvmt Flow	28	67	1734	54	97	2246

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3079	895	0	0	1789	0
Stage 1	1762	-	-	-	-	-
Stage 2	1317	-	-	-	-	-
Critical Hdwy	6.29	7.14	-	-	5.4	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	-	-	3.15	-
Pot Cap-1 Maneuver	~ 15	244	-	-	155	-
Stage 1	82	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	244	-	-	155	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	82	-	-	-	-	-
Stage 2	79	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 846.7	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	6	244	155	-
HCM Lane V/C Ratio	-	-	4.64	0.273	0.625	-
HCM Control Delay (s)	-	-	$ 2811.1	25.2	60.7	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	4.9	1.1	3.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	24	64	61	10	63	29	1079	67	43	1420	254
Future Volume (veh/h)	155	26	64	127	11	100	29	1129	67	118	1440	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1129	1411	1841	1841	1470	1811	1500	1870	1856	1781	1870	1337
Adj Flow Rate, veh/h	169	28	70	139	12	109	32	1740	73	129	2219	277
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	52	33	4	4	29	6	27	2	3	8	2	38
Cap, veh/h	119	41	102	188	15	137	374	3308	1019	246	2140	262
Arrive On Green	0.04	0.11	0.11	0.05	0.12	0.12	0.45	1.00	1.00	0.06	0.46	0.46
Sat Flow, veh/h	1076	357	893	1753	125	1137	1428	5106	1572	1697	4609	564
Grp Volume(v), veh/h	169	0	98	139	0	121	32	1740	73	129	1627	869
Grp Sat Flow(s),veh/h/ln	1076	0	1250	1753	0	1262	1428	1702	1572	1697	1702	1769
Q Serve(g_s), s	6.0	0.0	10.5	6.9	0.0	13.0	0.0	0.0	0.0	6.3	65.0	65.0
Cycle Q Clear(g_c), s	6.0	0.0	10.5	6.9	0.0	13.0	0.0	0.0	0.0	6.3	65.0	65.0
Prop In Lane	1.00		0.71	1.00		0.90	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	119	0	143	188	0	153	374	3308	1019	246	1580	821
V/C Ratio(X)	1.42	0.00	0.68	0.74	0.00	0.79	0.09	0.53	0.07	0.52	1.03	1.06
Avail Cap(c_a), veh/h	119	0	394	188	0	406	374	3308	1019	275	1580	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.3	0.0	59.6	56.9	0.0	59.8	29.8	0.0	0.0	22.7	37.5	37.5
Incr Delay (d2), s/veh	232.3	0.0	11.7	17.1	0.0	17.6	0.2	0.6	0.1	3.7	30.5	48.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.8	0.0	6.9	4.5	0.0	8.6	1.1	0.3	0.1	4.9	42.4	49.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	294.5	0.0	71.2	74.1	0.0	77.4	30.0	0.6	0.1	26.3	68.0	85.5
LnGrp LOS	F	A	E	E	A	E	C	A	A	C	F	F
Approach Vol, veh/h		267			260			1845			2625	
Approach Delay, s/veh		212.6			75.6			1.1			71.7	
Approach LOS		F			E			A			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	21.0	37.6	71.0	9.5	21.9	11.9	96.7
Change Period (Y+Rc), s	3.5	5.0	6.0	* 6	3.5	5.0	3.5	6.0
Max Green Setting (Gmax), s	6.9	44.1	6.0	* 65	6.0	45.0	10.7	60.3
Max Q Clear Time (g_c+I1), s	8.9	12.5	2.0	67.0	8.0	15.0	8.3	2.0
Green Ext Time (p_c), s	0.0	1.1	0.0	0.0	0.0	1.4	0.1	39.3

Intersection Summary	
HCM 6th Ctrl Delay	53.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

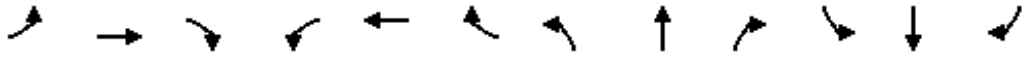
Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	11	94	0	386	961	0	1724	0	0	0
Future Vol, veh/h	11	98	0	413	1021	0	1815	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	-	Free	-	-	None	-	-
Storage Length	0	300	-	-	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	16974	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	37	2	9	5	2	4	2	2	2
Mvmt Flow	13	117	0	650	1223	0	2855	0	0	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	3180	-	-	0	-	-	-	0	
Stage 1	2855	-	-	-	-	-	-	-	
Stage 2	325	-	-	-	-	-	-	-	
Critical Hdwy	6.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-	-	
Follow-up Hdwy	3.52	-	-	-	-	-	-	-	
Pot Cap-1 Maneuver	~ 8	0	0	-	0	0	-	0	
Stage 1	30	0	0	-	0	0	-	0	
Stage 2	705	0	0	-	0	0	-	0	
Platoon blocked, %				-			-		
Mov Cap-1 Maneuver	~ 8	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-	-	-	
Stage 1	30	-	-	-	-	-	-	-	
Stage 2	705	-	-	-	-	-	-	-	

Approach	EB	NB	SB
HCM Control Delay, $	1196.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	8	-	-
HCM Lane V/C Ratio	-	1.647	-	-
HCM Control Delay (s)	-	$ 1196.2	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	2.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1421	7	254	100	257	0	0	344	22
Future Volume (veh/h)	0	0	0	1496	7	254	108	276	0	0	360	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	1870	1870	1530	1870	0	0	1870	1870
Adj Flow Rate, veh/h				1985	0	0	134	448	0	0	585	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				4	2	2	25	2	0	0	2	2
Cap, veh/h				2101	0		196	1004	0	0	771	
Arrive On Green				0.60	0.00	0.00	0.06	0.28	0.00	0.00	0.15	0.00
Sat Flow, veh/h				3506	0	1585	1457	3647	0	0	5443	0
Grp Volume(v), veh/h				1985	0	0	134	448	0	0	585	0
Grp Sat Flow(s),veh/h/ln				1753	0	1585	1457	1777	0	0	1702	0
Q Serve(g_s), s				50.9	0.0	0.0	6.3	10.1	0.0	0.0	10.7	0.0
Cycle Q Clear(g_c), s				50.9	0.0	0.0	6.3	10.1	0.0	0.0	10.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				2101	0		196	1004	0	0	771	
V/C Ratio(X)				0.94	0.00		0.68	0.45	0.00	0.00	0.76	
Avail Cap(c_a), veh/h				2197	0		196	1004	0	0	771	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				18.0	0.0	0.0	34.3	28.7	0.0	0.0	39.6	0.0
Incr Delay (d2), s/veh				9.1	0.0	0.0	9.3	1.4	0.0	0.0	6.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				26.4	0.0	0.0	5.4	7.6	0.0	0.0	8.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.1	0.0	0.0	43.6	30.1	0.0	0.0	46.5	0.0
LnGrp LOS				C	A		D	C	A	A	D	
Approach Vol, veh/h					1985	A		582			585	A
Approach Delay, s/veh					27.1			33.2			46.5	
Approach LOS					C			C			D	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	20.2		64.3		33.0						
Change Period (Y+Rc), s	6.5	5.5		6.0		5.5						
Max Green Setting (Gmax), s	6.3	14.7		61.0		27.5						
Max Q Clear Time (g_c+I1), s	8.3	12.7		52.9		12.1						
Green Ext Time (p_c), s	0.0	0.7		5.4		2.3						

Intersection Summary		
HCM 6th Ctrl Delay		31.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	50	22	63	53	21	10	53	26	6	113	34
Future Vol, veh/h	48	52	22	63	55	21	10	53	26	6	113	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	100	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	8	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	63	27	77	67	26	12	64	32	7	137	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	90	0	0	518	440	77	475	440	80
Stage 1	-	-	-	-	-	-	193	193	-	234	234	-
Stage 2	-	-	-	-	-	-	325	247	-	241	206	-
Critical Hdwy	4.18	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.272	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1505	-	-	468	511	984	500	511	980
Stage 1	-	-	-	-	-	-	809	741	-	769	711	-
Stage 2	-	-	-	-	-	-	687	702	-	762	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1464	-	-	1505	-	-	322	464	984	403	464	980
Mov Cap-2 Maneuver	-	-	-	-	-	-	322	464	-	403	464	-
Stage 1	-	-	-	-	-	-	777	711	-	738	673	-
Stage 2	-	-	-	-	-	-	494	664	-	644	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	3.4	13.1	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	322	562	1464	-	-	1505	-	-	403	532
HCM Lane V/C Ratio	0.038	0.171	0.04	-	-	0.051	-	-	0.018	0.341
HCM Control Delay (s)	16.6	12.7	7.6	-	-	7.5	0	-	14.1	15.2
HCM Lane LOS	C	B	A	-	-	A	A	-	B	C
HCM 95th %tile Q(veh)	0.1	0.6	0.1	-	-	0.2	-	-	0.1	1.5

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1109	0	0	1419
Future Vol, veh/h	0	69	1080	66	0	1493
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	1754	71	0	2424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	913	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	237	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	237	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	237	-
HCM Lane V/C Ratio	-	-	0.313	-
HCM Control Delay (s)	-	-	27	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	1.3	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1142	0	0	1545	0
Future Vol, veh/h	0	0	0	13	0	71	0	1121	61	25	1606	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	100	-	-	175	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	14	0	76	0	1820	66	27	2608	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3390	4548	1304	3211	4515	943	2608	0	0	1886	0	0
Stage 1	2662	2662	-	1853	1853	-	-	-	-	-	-	-
Stage 2	728	1886	-	1358	2662	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	5	1	151	~ 7	1	226	162	-	-	143	-	-
Stage 1	23	47	-	50	122	-	-	-	-	-	-	-
Stage 2	356	118	-	154	47	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	3	1	151	~ 6	1	226	162	-	-	143	-	-
Mov Cap-2 Maneuver	3	1	-	~ 6	1	-	-	-	-	-	-	-
Stage 1	23	38	-	50	122	-	-	-	-	-	-	-
Stage 2	236	118	-	125	38	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	295.5	0	0.4
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	162	-	-	-	-	6	226	143	-	-
HCM Lane V/C Ratio	-	-	-	-	-	2.33	0.338	0.188	-	-
HCM Control Delay (s)	0	-	-	0	$	1751.9	28.8	35.9	-	-
HCM Lane LOS	A	-	-	A	A	F	D	E	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	2.8	1.4	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	114	70	0	0	0
Future Vol, veh/h	17	108	68	5	13	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	124	78	5	14	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	-	0	241	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1514	-	-	-	747	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	737	979
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1514	-	-	-	737	979
HCM Lane V/C Ratio	0.012	-	-	-	0.019	0.011
HCM Control Delay (s)	7.4	0	-	-	10	8.7
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	97	0	0
Future Vol, veh/h	107	84	7	94	107	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	90	8	108	115	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	213	0	292	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1357	-	699	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1357	-	695	876
Mov Cap-2 Maneuver	-	-	-	-	695	-
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	-	-	1357	-
HCM Lane V/C Ratio	0.184	-	-	0.006	-
HCM Control Delay (s)	11.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

APPENDIX F
Site Traffic Proportional Calculations

98th-Bluewater TIS	Proportion of 2035 Traffic Attributed to Site												
1: 98th & Central	**2035 Horizon BUILD**												
Lane Group	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**SUM**
Lane Group Flow (vph) - AM	323	201	38	118	143	168	41	2621	488	92	831	178	5242
Site Traffic Generation (AM)	29	0	0	0	0	11	0	146	0	6	67	9	268
Site Proportion (AM)													***5%***
Lane Group Flow (vph) - PM	252	276	87	365	325	176	45	1185	344	186	1622	269	5132
Site Traffic Generation (PM)	8	0	0	0	0	6	0	34	0	11	61	10	130
Site Proportion (PM)													***3%***

The 2021 QSR® magazine Drive-Thru Study: Speed of Service

CHAIN	TOTAL TIME THROUGH DRIVETHRU SECONDS
Arby's	374
Burger King	359
Carl's Jr/Hardee's	286
Chick-fil-A	541
Dunkin'	295
KFC	272
McDonald's	311
Starbucks	409
Taco Bell	268
Wendy's	341

Note: 312 drive-thru locations, geographically balanced. Total time from entry to exit shown for drive-thru experience.

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THE 2021 QSR® MAGAZINE DRIVE-THRU STUDY METHODOLOGY:

The FoodserviceResults team, in partnership with *QSR* magazine, conducted a comprehensive, nationally representative survey of drive-thru consumers in the U.S. using an online survey sample. Additionally, onsite audits were conducted at the top 10 drive-thru chains in the U.S. Both waves of the research were conducted in July 2021. Leveraging insights from numerous industry experts, the finalized survey was completed by 1,007 drive-thru consumers during fieldwork. To ensure a relevant respondent base was achieved, all participants were screened to only include those who had at least one drive-thru occasion in the last 30 days. The onsite drive-thru audits were balanced against geographic region (West, South, Midwest, and Northeast) and were conducted to coincide with breakfast, lunch, and dinner dayparts. In total, 312 audits were conducted at 10 top quick-service restaurant chains across the U.S. An extensive cross tabulation of the respondent sample data was conducted in order to identify major trends, demographic/behavioral themes, and other nuances in the data.

THE 2021 QSR® MAGAZINE DRIVE-THRU STUDY

The Future of Fast-Food Drive-Thru Arrives Early

The Environment and Drive-Thrus: Not an Idle Con Anymore

THE CHARTS:

Speed of Service

Order Accuracy

Customer Service

Intersection Sight Distance Calculations

Reference: 2018 AASHTO "Green Book" chapter 9.5
Design Vehicle: Passenger Vehicles
Major Road Lanes:
- 98th St SB at North Access Road: 1 left turn lane and 2 through lanes
- 98th St SB at South Access Road: 2 through lanes

Major Road Speed: 45 MPH
Case B1: A stopped vehicle turning left from a minor street approach onto a major road
Case B2: A stopped vehicle turning right from a minor street approach onto a major road

Formula:

ISD= $1.47*V_{major}*t_g$
Units: ISD (ft), V_{major} (MPH), and t_g (seconds)
Time Gaps (t_g):
- 7.5 (for passenger vehicles crossing one lane of traffic)
- 0.5 (added for each additional lane crossed)
- 0.75 (for median crossed)

North Access Road

Case B1 (left turn):

Time Gap (t_g)= 7.5 + 3(0.5) + 0.75= 9.75
ISD= 1.47*45*9.75= 644.96~ **645 ft**

Case B2 (right turn):

Assumption: Design vehicle is turning into the first lane of the major roadway.
Time Gap (t_g)= 7.5s
ISD= 1.47*45*7.5= 496.13~ **500 ft**

South Access Road

Case B2 (right turn):

Assumption: Design vehicle is turning into the first lane of the major roadway.
Time Gap (t_g)= 7.5
ISD= 1.47*45*7.5= 496.13 ft~ **500 ft**

Metrics	DT Avg Time				Avg Cars Per Day			
Store	2021P13	2022P1	2022P2	**Average**	2021P13	2022P1	2022P2	**Average**
2217	2:50	2:40	2:37	**2:42**	235	227	236	**233**
2236	4:23	5:38	4:55	**4:57**	146	129	140	**139**
2294	3:30	2:57	2:38	**2:56**	49	75	93	**72**
Average	**3:26**	**3:36**	**3:18**	**3:27**	**143**	**144**	**157**	**148**