

Terry O. Brown P.E.

La Mirada Mixed-Use Development
La Mirada Pl. / Wyoming Blvd.

FINAL
Traffic Impact Study

October 20, 2021

HT#G19D004
received 10/19/2021

Presented to:

Matthew Grush, P.E.
City of Albuquerque Transp. Development



Prepared for:

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A handwritten signature in blue ink that reads "Terry O. Brown".

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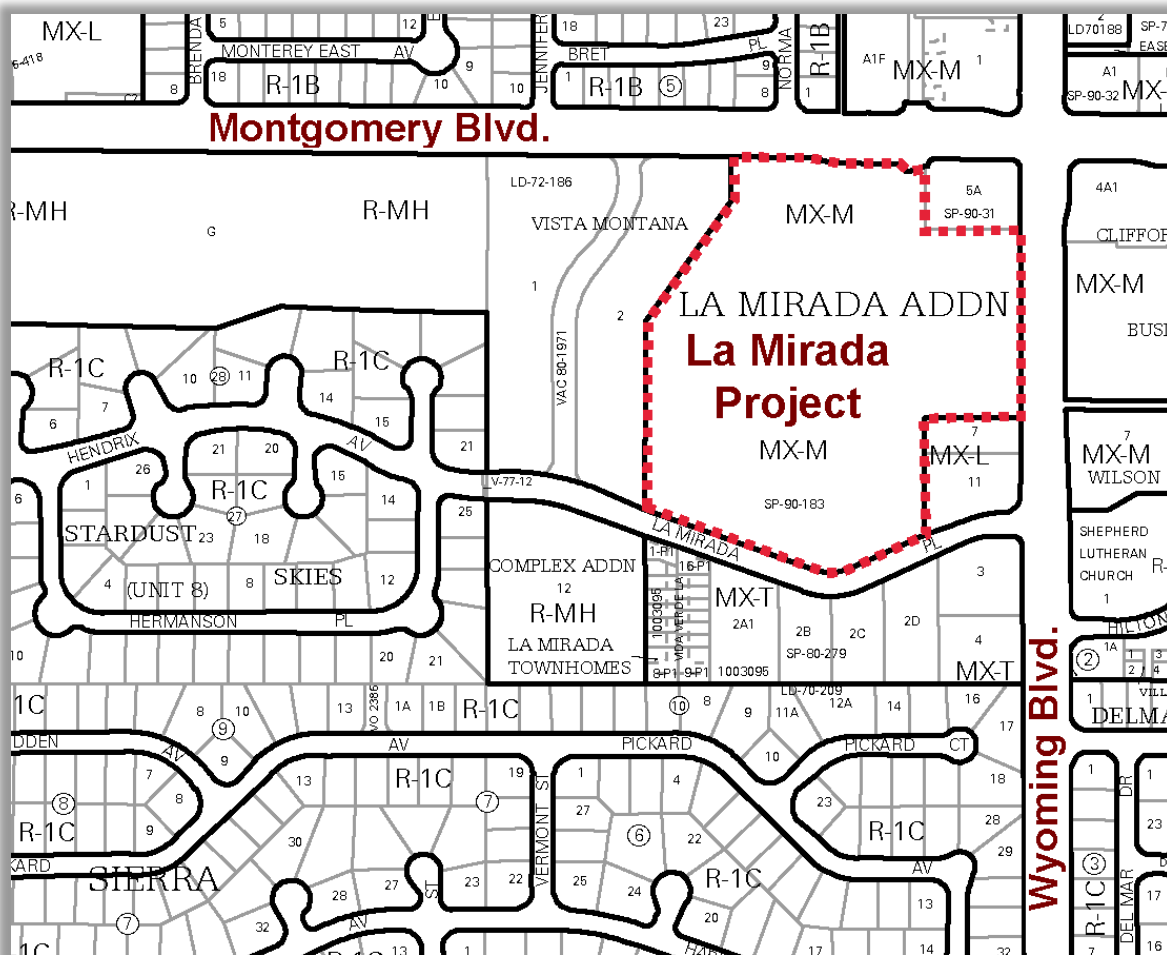
La Mirada Development (La Mirada / Wyoming Blvd.) Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed La Mirada Mixed-Use Development to determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This Center has been partially occupied over the past number of years and is being redeveloped. The City Engineer as part of his requirement requested an Traffic Impact Analysis be prepared on the surrounding streets.

The proposed development is located at the southwest corner of the intersection of Montgomery Blvd. / Wyoming Blvd. in Albuquerque, New Mexico. The study area includes analysis and evaluation of the following intersections:

- 1) Montgomery Blvd. / Wyoming Blvd. – Signalized
- 2) Comanche Rd. / Wyoming Blvd. – Signalized
- 3) La Mirada Pl. / Wyoming Blvd. – Unsignalized
- 4) Access Driveways “A”, “B”, “C”, “D”, “R” (residential driveway), and “E”.



(See Vicinity Map on Page A-1 in Appendix)

The La Mirada Mixed-Use Development is comprised of a 7.08-acre residential component in the southwest quadrant of the 15.19-acre total project area. The remainder of the 15.19 acres is to be developed with retail commercial uses. The residential component of the project is proposed to be 66-lot single-family detached homes on individual lots. Both the residential and Commercial will be developed concurrently. .

The 15.19 acres has been used as a major retail commercial center for several decades in the past. Over the past decade multiple tenants have occupied the center ranging from home improvements and other retail uses. The center has maintained approximately 24 percent of development over the life of the center and through the time of the study. As part of the redevelopment the existing tenants will be relocated and additional tenants will be added. . The first Trip Generation Data is the anticipated buildout schedule for the redevelopment. The second table shows those uses that were in operation at the time of the study. Concurrently with the residential component of the project, the retail has begun to redevelop the retail commercial component of the project area over the next few years. The targeted implementation year for the project is 2025 and the horizon year will be 2035. The implementation year analysis will evaluate the impact of the residential component as well as that of the overall development so that the recommended mitigation measures associated with the residential component can be isolated.

The calculated trip generation rate for this project is summarized in the following table:

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.			P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
	Summary Sheet	Units					
Residential	Single-Family Detached Housing (210)	66	709	13	39	43	25
Lots 1 & 2	Fast Food Restaurant w/ Drive-Thru Window (934)	5.80	2,732	119	114	99	91
Lot 4	Super Convenience Market / Gas Station (960)	16	3,688	225	225	184	184
Lots 7 & 8	High Turnover (Sit-Down) Restaurant (932)	22.37	2,509	122	100	135	83
Lots 1,5,& 6	Shopping Center (820)	18.70	1,922	100	61	75	82
Lot 3	Free-Standing Emergency Room (650)	15.00	374	43	12	15	36
	Subtotal Retail Commercial		10,851	566	500	493	440
	Internal Capture			(25)	(25)	(102)	(102)
	Net Retail Commercial Trips (Adj. for Internal Capture)		10,851	541	475	391	338
	<i>Pass-By Trips</i>	30%		-170	-150	-148	-132
	Total Primary Trips (Retail Commercial)			371	325	243	206
	Total Primary Trips (Residential)		709	13	39	43	25
	Total Medical Use Trips (Free-Standing Emergency Room)		374	43	12	15	36

(See Trip Generation Table and Worksheets on Pages A-4 through A-10 in the Appendix)

The trip generation rate calculation adjusted for internal capture (based on NCHRP 674) as well as an adjustment for pass-by trips (30%) for retail commercial uses only. As a part of the conservative nature of the study this study assumes that no traffic is currently being generated in the current retail center. In fact, as demonstrated approximately 24 percent of the stores were in operation. So the results of the study and resulting thresholds are very conservative in the estimates of delays.

Following is an estimation calculation of the trips generated by the current active uses in the La Mirada Shopping Center (most of them concentrated at the north end of the development).

La Mirada Shopping Center (Current Occupied Users)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.		
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT	
	Summary Sheet	Units					
Current Operating Shops Range Café	Shopping Center (820) - Equation	19.80	1,999	100	61	79	85
	High Turnover (Sit-Down) Restaurant (932)	8.88	996	49	40	54	33
	Subtotal Existing Uses - Trip Generation Rate		2,995	149	101	133	118
	Trip Generation Utilized in New Traffic Impact Study		11,934	622	551	551	501
	Percentage of Existing Trips to Trips Assumed in TIS		25%	24%	18%	24%	24%
Taco Cabana*	Fast Food Restaurant w/ Drive-Thru Window (934)	3.28	1,545	67	65	56	51

* - Taco Cabana trips were not a part of the La Mirada Development TIS new trips. They were included in the background traffic.

Analysis in this Study was performed using Synchro 11 software (version 11.1.0.8).

The results of the Implementation Year (2025) and Horizon Year (2035) AM and PM Peak Hour NO BUILD and BUILD Conditions are summarized in the following table:

Executive Summary Results Table						
			2025 Conditions		2035 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak	AM Peak	PM Peak
1 - Montgomery Blvd. / Wyoming Blvd.	Signalized	NO BUILD	E - 72.0	D - 50.9	F - 84.5	E - 55.1
		BUILD	C - 71.3	E - 55.9	F - 101.3	E - 60.1
		MIT	E - 64.2	E - 56.5	F - 88.1	E - 62.1
2 - Commanche Rd. / Wyoming Blvd.	Signalized	NO BUILD	C - 21.3	C - 28.4	C - 22.1	C - 29.7
		BUILD	C - 21.4	C - 25.1	C - 24.9	C - 26.5
3 - La Mirada Pl. / Wyoming Blvd.	Unsignalized	NO BUILD	B - 14.1	C - 17.9	B - 14.3	C - 19.1
		BUILD	B - 14.5	21.5	C - 17.9	C - 23.3
4 - Montgomery Blvd. / Driveway "A"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	F - 879	F - 722	F - 999	F - 976
5 - Montgomery Blvd. / Driveway "B"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	F - 103*	D - 29.8*	F - 129*	E - 36.3*
6 - Driveway "C" / Wyoming Blvd.	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	E - 38.8	D - 29.4	E - 44.4	D - 32.3
7 - Driveway "D" / Wyoming Blvd.	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	D - 28.7	C - 22.4	D - 30.9	C - 23.7
8 - La Mirada Pl. / Driveway "R"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	A - 9.4	A - 9.2	A - 9.5	A - 9.3
9 - La Mirada Pl. / Driveway "E"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	A - 9.8	A - 9.5	A - 9.8	A - 9.6

* - Calculated delay for the eastbound left turn into McDonald's

There are three areas of concern with respect to the Executive Summary Results Table above.

Summary of impacts and recommendations (based on full development of La Mirada):

- Using the very conservative approach the first is the signalized intersection of Montgomery Blvd. / Wyoming Blvd. Analysis indicates that the signalized intersection is stressed and

fairly congested. Assuming existing signal timing, the intersection delay is calculated to remain fairly constant (Implementation Year AM analysis) or increase by about 17 seconds (Horizon Year AM analysis) as a result of the new traffic generated by the La Mirada Development (Full Development). The calculated intersection delay is projected to increase by approximately 5 seconds for both the Implementation Year and the Horizon Year as a result of this project. Still, though, the intersection Levels-of-Service are “E” for the PM BUILD Conditions in both the Implementation Year and the Horizon Year. The calculated delay for the intersection is less than 1 second beyond LOS “D” and there is no single turning movement that is projected to be at LOS “F”. As indicated in the assumptions this is a very marginal increase when you factor in that a* percent of the center is already in the traffic numbers. **This report concludes with a recommendation to revise the timing splits for the Horizon Year AM Peak Hour conditions. The Implementation Year AM Peak Hour analysis resulted in no significant impact. Also, the Implementation Year and Horizon Year PM Peak Hour analysis resulted in a moderate impact, but marginally acceptable levels-of-service for the overall intersection and the individual turning movements. Therefore, the only recommendation is signal timing modification.**

- The second is the operation of the full access unsignalized Driveway “A” on Montgomery Blvd. This analysis shows it to experience long delays for both the Implementation Year and the Horizon Year conditions. This report attributes those long delays to two factors. First, the annual background growth rate utilized in this Study is the minimum required by the City of Albuquerque (0.5% annually) and is not supported by the historic data on the roadways. Therefore, the base volumes used in this Study are probably slightly overstated. Second, the effect of the existing traffic signal at Montgomery Blvd. / Pennsylvania to the west of Driveway “A” are not considered in the analysis. The effect of an upstream signal on the operation of a driveway can and often is quite significant. The traffic volumes on Montgomery Blvd. are comparable to the traffic volumes on Wyoming Blvd. Generated traffic should distribute to Driveway “A” and Driveway “C” pretty evenly. Therefore, the results of the analyses of Driveway “A” and Driveway “C” should be similar since both have similar volumes and both have existing traffic signals on either side of the driveway to platoon the traffic flow and create gaps in main street traffic, thus allowing side street traffic to turn onto the main street with lower delays. **Therefore, it projected that the operation of Driveway “A” should be similar to that of Driveway “C” and it is concluded that the operation of both driveways will be marginally acceptable. Also, Driveway “A” aligns with a full access public road (Norma Dr.) on the north side of Montgomery Blvd. It is therefore recommended that both Driveway “A” and Norma Dr. remain full access. A supplemental analysis of Driveway “A” was performed and is contained in Appendix “B” and summarized below. Limiting access at Driveway “A” causes excessive delays at Driveway “C” and Montgomery / Wyoming. The intersection of Montgomery / Wyoming already is expected to operation at LOS “E” or “F” with Driveway “A” as full access.**
- The third is that Driveway “C” is projected to operate at just within the acceptable levels-of-service and delays. This analysis proposes two reasons that the operation of the driveway should be acceptable. First, as previously stated, the annual background traffic growth rate utilized in this Study is unrealistically high in that it is not supported by the historic data in this area of town coupled with existing traffic from the center not being accounted for in the study. Therefore, the volumes assumed on Wyoming Blvd. are slightly overstated. Secondly, on high volume arterial roadways, it is common for unsignalized driveways to experience long delays during peak periods. Therefore, it should be acknowledged that unsignalized driveways along Montgomery Blvd. and along Wyoming Blvd. will experience long delays during the peak periods of travel.

Recommendations:

Montgomery Blvd. / Wyoming Blvd. – Provide a recommended signal timing splits in the future near the Horizon Year (2035) to optimize operation of the traffic signal.

Montgomery Blvd. / Driveway “A” – Driveway “A” is an existing full-access unsignalized driveway on the south side of Montgomery Blvd. that should continue to operate as a full-access unsignalized driveway. It aligns with an existing public roadway (Norma Dr.) on the north side of

Montgomery Blvd. The geometry of Driveway “A” should remain as it currently exists with a northbound right turn lane and a northbound thru / left turn lane. Throat depth for Driveway “A” should be as long as possible.

Montgomery Blvd. / Driveway “B” – Driveway “B” is an existing partial-access unsignalized driveway on the south side of Montgomery Blvd. that should continue to operate as a partial-access unsignalized driveway. Driveway “B” should continue to operate as it is currently constructed. It is a right-in, right-out only driveway on the south side of Montgomery Blvd. and as a right-in, right-out, left-in only on the north side of Montgomery Blvd. The geometry of Driveway “B” should remain as it currently exists with one lane entering and one lane exiting. Throat depth for Driveway “B” is recommended to be 30 feet.

Driveway “C” / Wyoming Blvd. – Driveway “C” is an existing full-access unsignalized driveway on the west side of Wyoming Blvd. It aligns with another commercial full-access unsignalized driveway that exists on the east side of Wyoming Blvd. The geometry of Driveway “C” should remain as it currently exists with an eastbound right turn lane and an eastbound thru / left turn lane. Throat depth for Driveway “C” is recommended to be 75 feet.

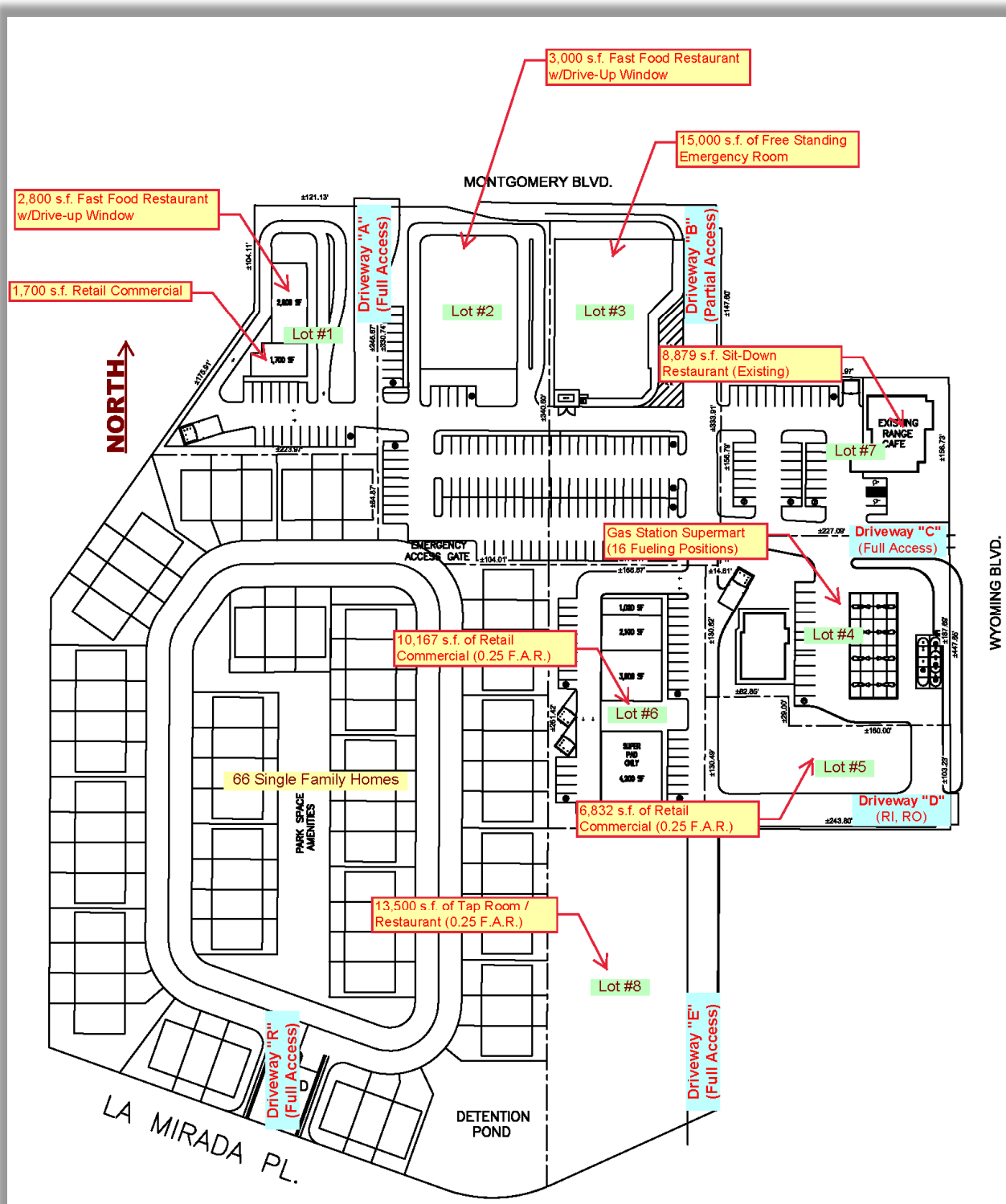
Driveway “D” / Wyoming Blvd. - Driveway “D” is an existing right-in, right-out unsignalized driveway on the west side of Wyoming Blvd. The geometry of Driveway “D” should remain as it currently exists with one entering lane and one exiting lane. Throat depth for Driveway “D” should be 30 feet.

La Mirada Pl. / Driveway “E” – Driveway “E” is an existing full access unsignalized driveway on the north side of La Mirada Pl. The geometry of Driveway “E” may remain as it currently exists with one entering lane and one exiting lane. Throat depth for Driveway “E” should be 30 feet.

La Mirada Pl. / Driveway “R” – Driveway “R” is a new full-access unsignalized driveway that will be to sole vehicular access to the residential component of the La Mirada Development. Throat depth for Driveway “R” should be 30 feet.

La Mirada Pl. / Wyoming Blvd. – construct striping for the eastbound approach on La Mirada Pl. at Wyoming to provide an exclusive eastbound right turn lane and a thru / left turn lane. The length of the striping should be extended to at least 50 feet west of the stop bar.

The following page contains a conceptual site plan with the driveways labelled:



(See Conceptual Site Plan on Page A-3 in Appendix)

Supplemental Analysis:

Comments from the City of Albuquerque (dated September 13, 2021) are on the following pages:

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

September 13, 2021

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199
Via email terryobrown@outlook.com

Re: La Mirada Mixed-Use Development Traffic Impact Study
Engineer's Stamp dated August 27, 2021 (G19D004)
Received 8/27/2021
CABQ Planning Transportation comments

Dear Mr. Brown:

The subject Traffic Impact Study for the La Mirada Mixed-Use Development dated August 27, 2021 has been reviewed by the City's Transportation Development Section. The following should be addressed in the next submittal.

- PO Box 1293
- Albuquerque
- NM 87103
- www.cabq.gov
1. Driveway A has poor LOS in all conditions existing and proposed. The failing movements are the northbound combination through/left-turn LOS F, southbound right/left/through movements LOS F and the westbound left LOS F. The opposing traffic volume on Norma Dr. (southbound) is very low but results in a LOS of F. Recommendation is prohibiting the southbound left turn and through movement from Norma Dr and the northbound left turn from driveway A and the westbound left turn from Montgomery into the development. The median opening on Montgomery across from driveway A should be removed.
 2. Show the access for Taco Cabana on the site plans. At driveway B relocate the access for Taco Cabana at least 75 feet away from Montgomery Blvd.
 3. Define the acronym F.A.R in the conceptual site plan (0.25 F.A.R.)

Warranted right turn lanes:

- Driveway A
 - Eastbound Montgomery at Driveway A, Montgomery no turn lane in existing condition.
 - Northbound Driveway A, not required if right-in/right-out access
- Driveway B
 - Eastbound Montgomery at Driveway B; the existing right turn lane is shorter than recommended in the DPM. Combining the transition and deceleration length is allowed and results in approximately 240 feet which can be permitted.
 - Northbound Driveway B, not required it is right-in/right-out access
- Driveway C
 - Eastbound at driveway C on Wyoming, can be done with lane striping.
 - Southbound Wyoming at driveway C

La Mirada Mixed-Use Development TIS

Page 1 of 2

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

- Northbound Wyoming at driveway C. The existing length is acceptable when combining the transition and deceleration lengths.
- Montgomery/ Wyoming intersection
 - Montgomery/ Wyoming intersection all right turn movements warrant turn lanes. The development contributes traffic to the eastbound right-turn movement at Wyoming. The other right turn movement have little or no traffic due to the development. A eastbound right turn lane should be added at the Montgomery/Wyoming intersection.
- Wyoming/ La Mirada
 - Wyoming/ La Mirada, eastbound re-stripe with a right-turn lane, thru/left lane

Warranted left turn lanes:

- Northbound Wyoming
 - Northbound Wyoming at La Mirada existing shorter than recommended. Provide expected queue length to assess the existing condition acceptability
- Driveway A
 - Driveway A Northbound left turn, not needed if changed to a right-in/right-out access.
- Montgomery/ Wyoming intersection
 - All left turns have dual left lanes, no change required.

PO Box 1293

Provide a revised site plan with the driveway and turn lane additions.

Albuquerque

If you have any questions, please feel free to contact me at (505) 924-3362.

NM 87103

Sincerely,

www.cabq.gov

Matt Grush, P.E., PTOE
Traffic Engineer, Planning Dept.
Development Review Services

via: email
C: Applicant, File

As a result of the September 13 comments from the City, a supplemental letter of analysis (dated October 7, 2021) was performed to address the concerns expressed in the letter of comments. The supplemental letter of analysis is contained in Appendix “B” of this Study.

The basic approach of the supplemental analysis was to include the effects of the existing traffic signal at Montgomery Blvd. / Pennsylvania realized with the eastbound platooning resulting from the operation of the signal. The platooning effect on the eastbound traffic serves to improve the operation of the unsignalized Driveway “A” (full access) and Driveway “B” (right-in, right-out) by creating gaps in the eastbound traffic, thus allowing left turn and right turn traffic at the driveways to operate with lower delays and lower queue lengths. The results of the supplemental analysis demonstrated that the operation of Driveway “A” and Driveway “B” were dramatically improved when considering the effects of platooning of eastbound traffic resulting from the operation of the signalized intersection of Montgomery Blvd. / Pennsylvania. Additionally, the analysis demonstrated that there would be a significant adverse impact that would be realized if the left turns in and the left turns out were prohibited at Driveway “A”. Restricting access at Driveway “A” would push the left turn movement from Driveway “A” to Driveway “C” resulting in worse delays than would be encountered at Driveway “A” as a full access driveway. Additionally, restricting access at Driveway “A” changes the traffic patterns at the signalized intersection of Montgomery Blvd. / Wyoming Blvd. resulting in adverse impact as well. The result is that the volume of northbound left turn movements on Wyoming Blvd. at Montgomery Blvd. is increased substantially resulting in significantly longer delays for the northbound left turn movement as well as the overall delay at the signalized intersection. Therefore, the supplemental analysis recommended that Driveway “A” be maintained as a full access driveway. It is projected to operate at LOS “F” during peak hour periods, but the calculated delays for the driveway are not astronomical and it should be considered that many driveways on arterial streets in Albuquerque operate at LOS “F” to various degrees. It must be considered that Albuquerque is a highly urbanized metro area with high volumes of traffic on arterial streets. Driveways along these congested arterial streets cannot be expected to operate at the same levels-of-service as those driveways in more rural and small town areas.

The City reviewed the supplemental analysis and, as a result, issued an additional letter of comments (dated October 14, 2021). The second letter of comments is on the following page.

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

October 14, 2021

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199
Via email terryobrown@outlook.com

**Re: La Mirada Mixed-Use Development Traffic Impact Study
Supplemental Analysis**
Dated October 7, 2021 (G19D004)
Received 10/7/2021
CABQ Planning Transportation comments

Dear Mr. Brown:

The subject Traffic Impact Study Supplemental Analysis for the La Mirada Mixed-Use Development dated October 7, 2021 has been reviewed by the City's Transportation Development Section. The following should be addressed in the next submittal of the TIS.

- Insert the Study Supplemental Analysis dated 10/7/2021 into the appendix of the TIS
- Show the access for Taco Cabana on the site plans. At driveway B relocate the access for Taco Cabana at least 75 feet away from Montgomery Blvd.

Recommendations for Mitigation:

1. Montgomery/ Wyoming intersection
 - a. Montgomery/ Wyoming intersection all right turn movements warrant turn lanes. The development contributes traffic to the eastbound right-turn movement at Wyoming. **An eastbound right turn lane on Montgomery Blvd. should be constructed at the Montgomery/Wyoming intersection.**
2. Wyoming/ La Mirada
 - a. Wyoming/ La Mirada, eastbound re-stripe with a right-turn lane, thru/left lane
3. Adjust the traffic signal timing and phasing along Montgomery Blvd. with emphasis on the traffic progression on Montgomery Blvd. The limits of the traffic signal timing plan will be defined by the City's Traffic Engineering Operation.

If you have any questions, please feel free to contact me at (505) 924-3362.

Sincerely,

Matt Grush, P.E., PTOE
Traffic Engineer, Planning Dept.
Development Review Services

via: email
C: Applicant, File

La Mirada Mixed-Use Development Supplemental Analysis

Page 1 of 1

The following issues were raised in the October 14 letter of comments from the City:

- 1) Relocated the Taco Cabana driveway to be at least 75 feet away from Montgomery Blvd.
- 2) An eastbound right turn lane should be constructed on Montgomery Blvd. at Wyoming Blvd.
- 3) Restripe the eastbound approach on La Mirada at Wyoming to incorporate a right turn lane and a thru / left turn lane.
- 4) Adjust the signal timing / phasing along Montgomery Blvd. at Pennsylvania and at Wyoming Blvd.

Following are responses to those four basic comments:

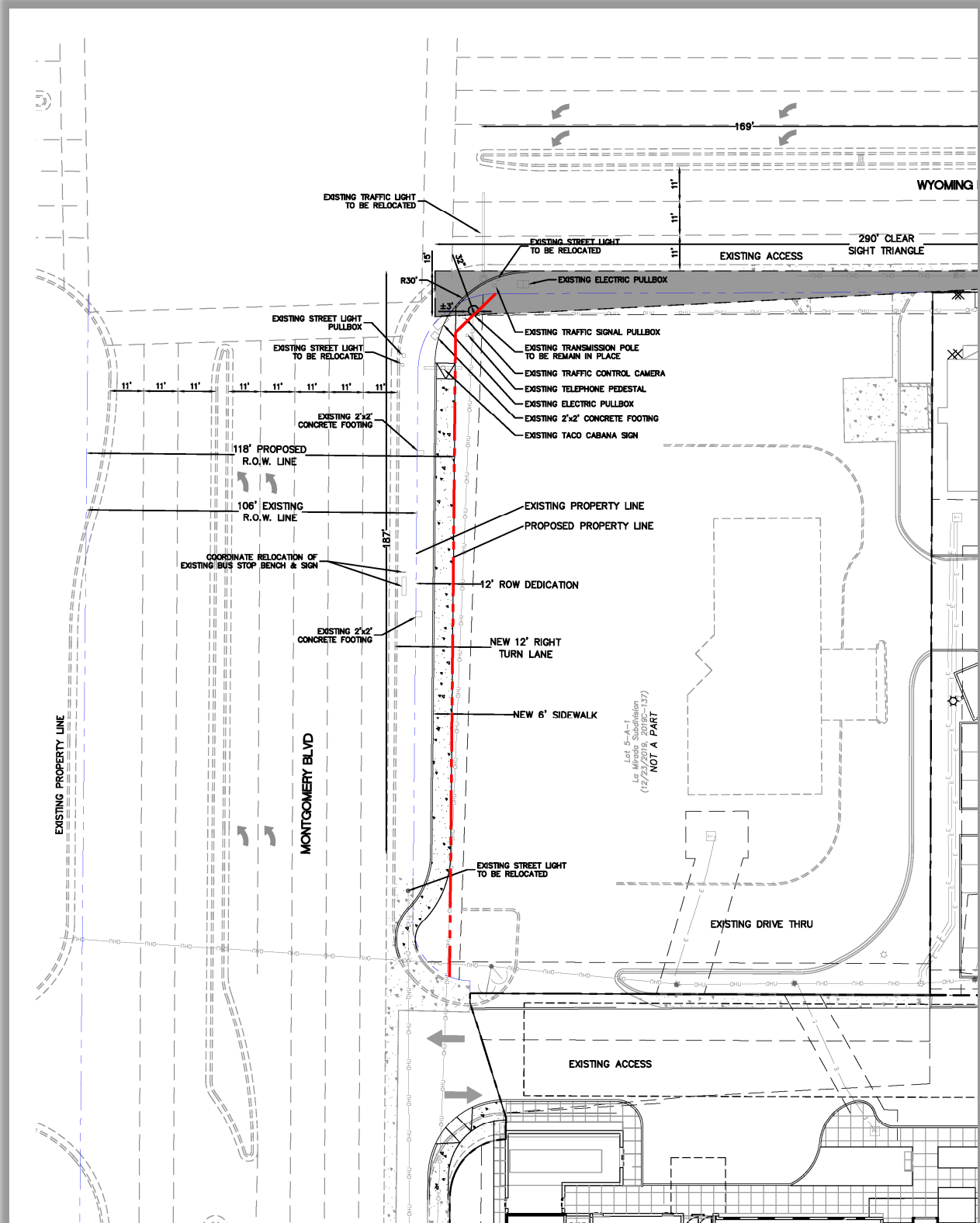
- 1) The original Traffic Impact Study calculated the 95th Percentile queue length at Driveway "B" (northbound right turn movement) to be 75 feet long. However, the analysis of Driveway "B" in the initial Traffic Impact Study did not account for the platooning effect realized as a result of the operation of the existing traffic signal at Montgomery Blvd. at Pennsylvania St. As demonstrated in the supplemental analysis, re-calculation of the 95th Percentile queuing for the northbound right turn movement at Driveway "B" was reduced from 2.4 vehicles (75 feet) to 0.9 vehicles (25 feet). Therefore, the recommended queuing needed at Driveway "B" should be 25 feet and not 75 feet. Current available queuing storage at Driveway "B" is at least 30 feet.
- 2) New analysis of the signalized intersection of Montgomery Blvd. / Wyoming Blvd. demonstrates that construction of a new eastbound right turn lane would provide a benefit to the operation of the intersection as demonstrated in the following table:

2025 Conditions	EB RT Movement LOS / Delay	Intersection LOS / Delay
AM Peak Hour (TIS)	D – 52.6	F – 88.4
AM Peak Hour (Supplement)	D – 43.2	F – 87.6
PM Peak Hour (TIS)	F – 83.1	E – 59.4
PM Peak Hour (Supplement)	D – 49.1	D – 54.5

The preceding table shows signalized intersection analysis of the intersection of Montgomery Blvd. / Wyoming with existing geometry (TIS) and re-analysis of the same intersection assuming an eastbound right turn lane is implemented (**Supplement**). Implementation of the eastbound right turn lane on Montgomery at Wyoming improves the operation of the overall intersection marginally. (See Appendix "C")

There are a couple reasons, though, why construction of the eastbound right turn lane on Montgomery Blvd. at Wyoming is not feasible. First, the existing south right-of-way line on Montgomery Blvd. is at the south edge of the existing sidewalk. There is not sufficient right-of-way to construct the eastbound right turn lane and the property there is owned by Taco Cabana which is not a part of the La Madera Development. The developer does not have right of eminent domain and cannot acquire the right-of-way. Secondly, there is a major power pole structure located at the southwest corner of Montgomery Blvd. / Wyoming Blvd. that is positioned approximately 20 feet south of the existing outside eastbound thru lane on Montgomery Blvd. Constructing a new eastbound right turn lane may not allow sufficient curb return radii and sidewalk to be designed and constructed at the southwest corner of Montgomery Blvd. / Wyoming Blvd. Two conceptual designs of the new right turn lane below (one based on existing lanes widths on Montgomery Blvd. and one based on reduced lane widths on Montgomery Blvd.) demonstrate the complications associated with such design and construction:

Exhibit "A" – Conceptual Design of Eastbound Right Turn Lane (Existing Lane Widths)



[illegible]

Page xiii

at the new back of curb along the new right turn lane to provide a safety barrier between travelling vehicles and the major PNM power pole structure at the southwest corner of Montgomery / Wyoming. Apart from the guardrail, the two designs above would require either 12 feet of additional right-of-way (based on existing lane widths) or 7 feet of additional right-of-way (based on reduced lane widths). If guardrail were to be required by the City of Albuquerque during the design process, an additional three feet of right-of-way would need to be added to each.

For reasons stated above, it is not recommended that the eastbound right turn lane on Montgomery Blvd. at Wyoming Blvd. be constructed.

- 3) The developer of the La Mirada project will be responsible to re-stripe the eastbound approach on La Mirada at Wyoming to configure the approach with one right turn lane and one thru / left turn lane.
- 4) The analysis for the implementation year assumed existing signal timing and phasing. The recommendation in the original Traffic Impact Study to modify the signal timing splits was only for the horizon year analysis. The signal timing issues should be re-visited in about 15 years based on actual traffic volumes present at the time. The Traffic Impact Study and the supplemental analysis provided herein are based on assumptions of a 0.5% annual growth rate through the year 2035. It may be that the assume growth rate may be conservatively high. This report does not recommend a change in signal timing at this time and recommends signal timing adjustments in the future only after collecting new turning movements volumes data at that time.

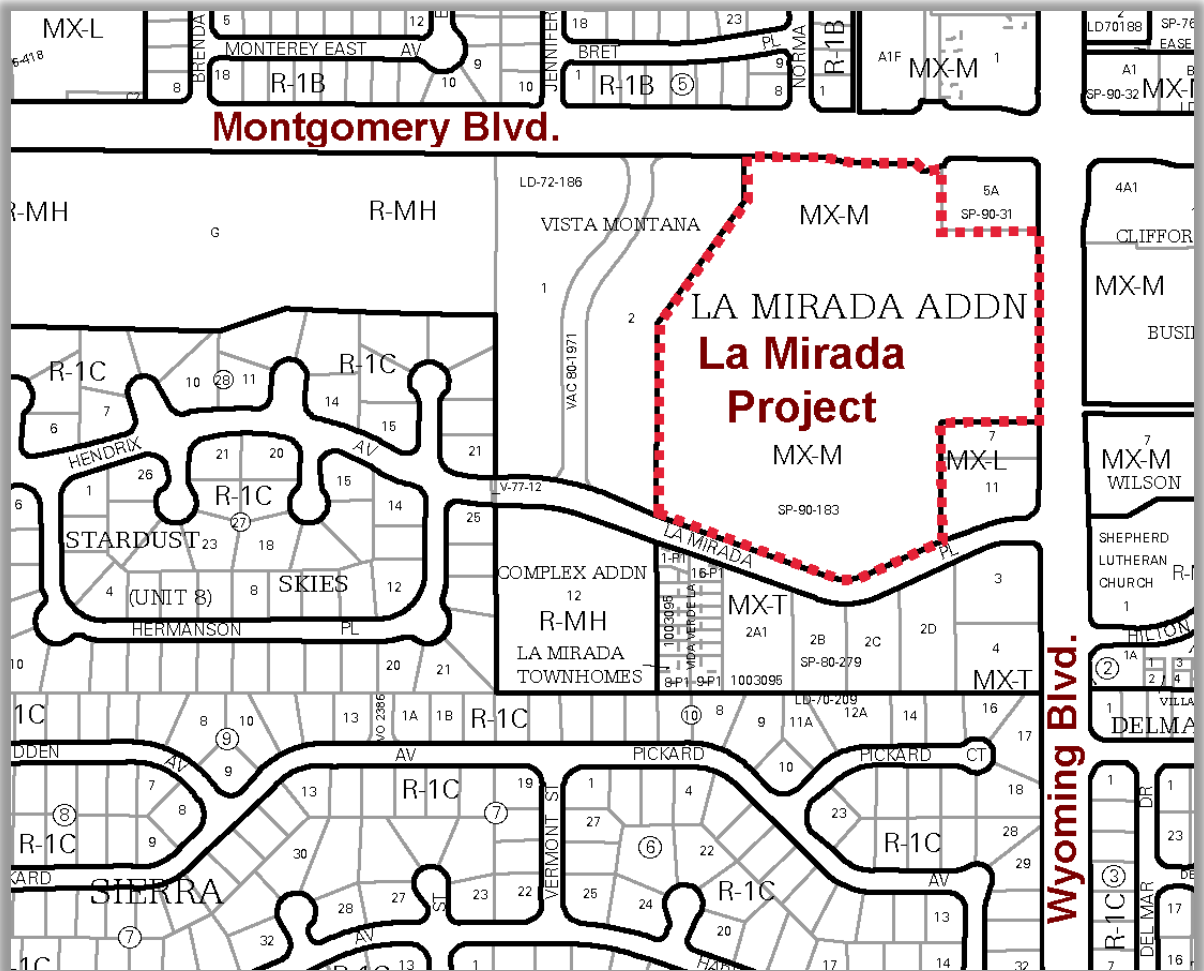
La Mirada Development (La Mirada / Wyoming Blvd.) Traffic Impact Study

Introduction

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed La Mirada Mixed-Use Development to determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary.

The proposed development is located at the southwest corner of the intersection of Montgomery Blvd. / Wyoming Blvd. in Albuquerque, New Mexico. The study area includes analysis and evaluation of the following intersections:

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- 4) Access Driveways “A”, “B”, “C”, “D”, “E”, and “R” (residential driveway)



(See Vicinity Map on Page A-1 in Appendix)

Description of Proposed Development

The La Mirada Mixed-Use Development is comprised of a 7.08-acre residential component in the southwest quadrant of the 15.19-acre total project area. The remainder of the 15.19 acres is to be developed with retail commercial uses. The residential component of the project is proposed to be 66-lot single-family detached homes on individual lots. The residential and the commercial components of this project will be developed concurrently.

The 15.19 acres has previously been used as a major retail commercial center for several decades in the past. Over the past decade or so, the center has dwindled in use such that there are numerous vacancies and a greatly reduced trip generation rate. This project will be for the purpose of regenerating and reinvigorating the development. Subsequent to development of the residential component of the project, efforts will begin to redevelop the retail commercial component of the project area over the next few years. The targeted implementation year for the project is 2025 and the horizon year will be 2035. The implementation year analysis will evaluate the impact of the residential component as well as that of the overall development so that the recommended mitigation measures associated with the residential component can be isolated.

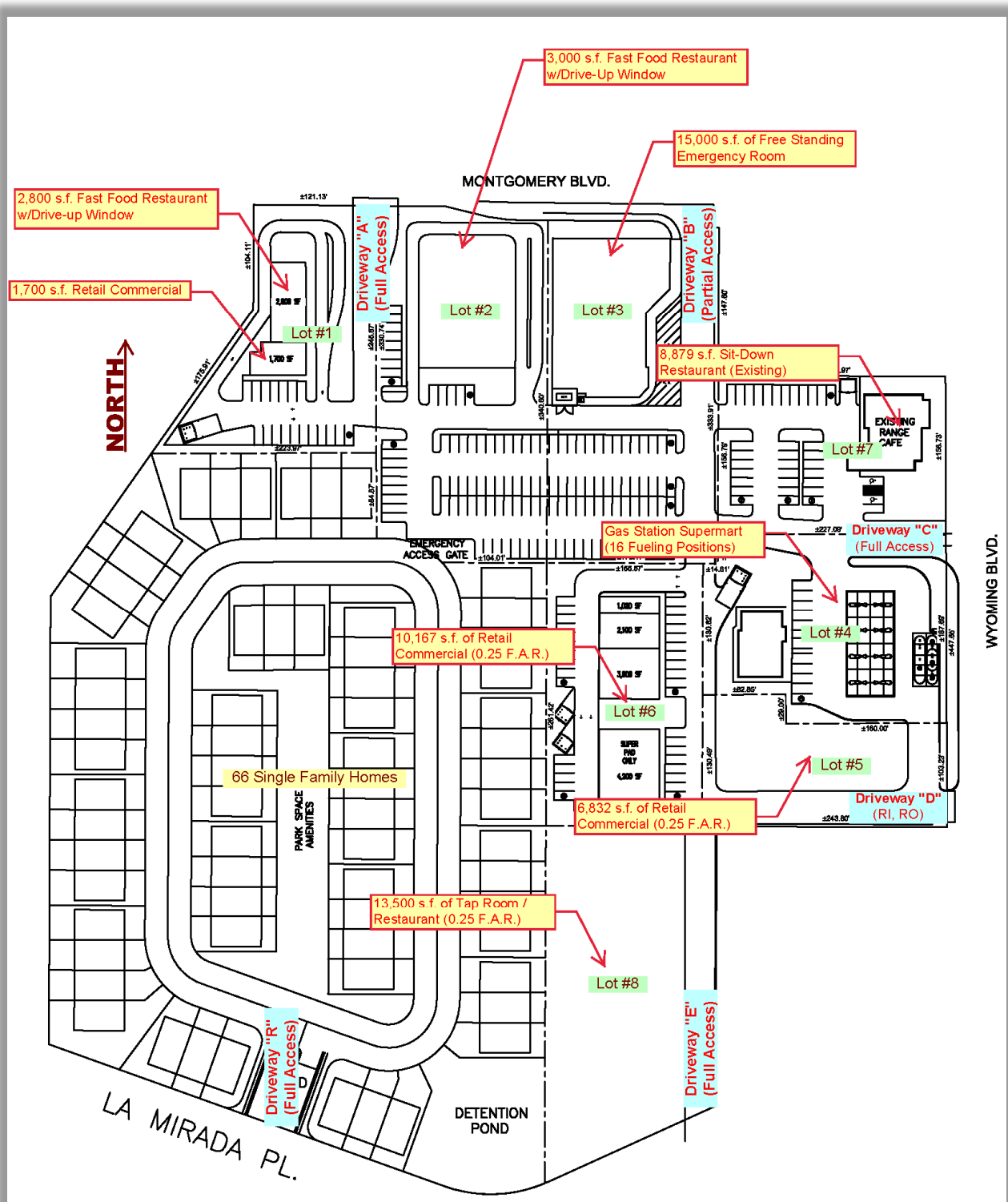
The current zoning of the property under the City of Albuquerque Integrated Development Ordinance (IDO) is MX-M (Mixed-Use – Moderate Intensity). No zone change is proposed.

The project will be accessed in the same manner as it currently is today. There are three driveways along Montgomery Blvd. described as follows:

- A minor service-type of driveway (right-in, right-out only) located near the west property line of the project approximately 720 feet west of Wyoming Blvd. (centerline to centerline). This driveway is a minor driveway that will serve as service driveway for delivery trucks, so will not be analyzed in this study.
- Driveway “A” (full access) located approximately 615 feet west of Wyoming Blvd. (centerline to centerline). Driveway “A” aligns with Norma Dr. NE, a public street on the north side of Montgomery Blvd. that serves a residential neighborhood.
- Driveway “B” (partial access) located approximately 300 feet west of Wyoming Blvd. (centerline to centerline). The south leg of Driveway “B” into the La Mirada Development will be restricted to right-in, right-out only driveway. The north side of Driveway “B” is restricted to a right-in, right-out, left-in only driveway.
- Driveway “C” (full access) located approximately 375 feet south of Montgomery Blvd. on Wyoming Blvd. (centerline to centerline). It aligns with another full access retail commercial driveway on the east side of Wyoming Blvd.
- Driveway “D” (right-in, right-out only) located approximately 640 feet south of Montgomery Blvd. (centerline to centerline).
- Driveway “E” (full access) located approximately 300 feet west of Wyoming Blvd. (centerline to centerline) on the north side of La Mirada Pl.
- Driveway “R” (full access) located approximately 750 feet west of Wyoming Blvd. (centerline to centerline) on the north side of La Mirada Pl. Driveway “R” will be the sole access to the residential component of this project.

All of the driveways associated with this project are unsignalized driveways controlled by stop signs.

Following is the conceptual site plan for the La Mirada Development. The initial phase will be the residential portion followed by gradual redevelopment of the retail commercial component based on market driven needs:



A copy of the site plan can also be found in the Appendix on Page A-3.

Study Area Conditions

The Study Area for this Traffic Impact Study was established at the scoping meeting held on Tuesday, April 13, 2021. Based on the scoping meeting and subsequent e-mails, the scope of the Traffic Impact Study was defined to evaluate the implementation year (2025) and the horizon year (2035) at the following intersections:

- Montgomery Blvd. / Wyoming Blvd.
- Comanche Rd. / Wyoming Blvd.
- La Mirada Pl. / Wyoming Blvd.
- Montgomery Blvd. / Pennsylvania St.*
- Hendrix Ave. / Pennsylvania St.*
- Access Driveways (Driveways “A”, “B”, “C”, “D”, “E”, and “R”)

* The intersections of Montgomery Blvd. / Pennsylvania St. and Hendrix Ave. / Pennsylvania St. were removed from the Study via an e-mail dated 05/10/2021 from Matt Grush after it was brought to everyone's attention that La Mirada Pl. / Hendrix Ave. were not connected. There is a physical barrier in the roadway that prevents La Mirada Pl. traffic from accessing Hendrix Ave.

Historically, the La Mirada Development has been an exclusively retail commercial land use center. Historical uses include a supermarket, a Hobby Lobby, a Hastings Entertainment Superstore, and associates small shops and retail uses. The retail center has been deteriorating over the past decade or so and is mostly vacant at present. This project intends to redevelop the center and repopulate it with residential and retail uses. The southwest quadrant of the existing center will be designated for approximately 66 residential units (single-family homes / townhomes).

There is no other known development activity in the area that needs to be considered in this Study.

Montgomery Blvd. is classified as a Regional Principal Arterial Roadway on the Futures 2040 Long Range Roadway System Map. It is generally a six-lane paved roadway in the study area with raised curbs and gutters, sidewalks, and raised medians. The posted speed limit on Montgomery Blvd. in the study area is 40 MPH.

Wyoming Blvd. is classified as a Regional Principal Arterial Roadway on the Futures 2040 Long Range Roadway System Map. It is generally a six-lane paved roadway in the study area with raised curbs and gutters, sidewalks, and raised medians. The posted speed limit on Wyoming Blvd. in the study area is 40 MPH.

La Mirada Pl. is a local roadway that is not classified on the Futures 2040 Long Range Roadway System Map. It is generally a two-lane paved roadway with raised curbs and gutters and sidewalks and no medians in the study area. The posted speed limit on La Mirada Pl. is 25 MPH.

There are no known programmed transportation implements planned for the study area.

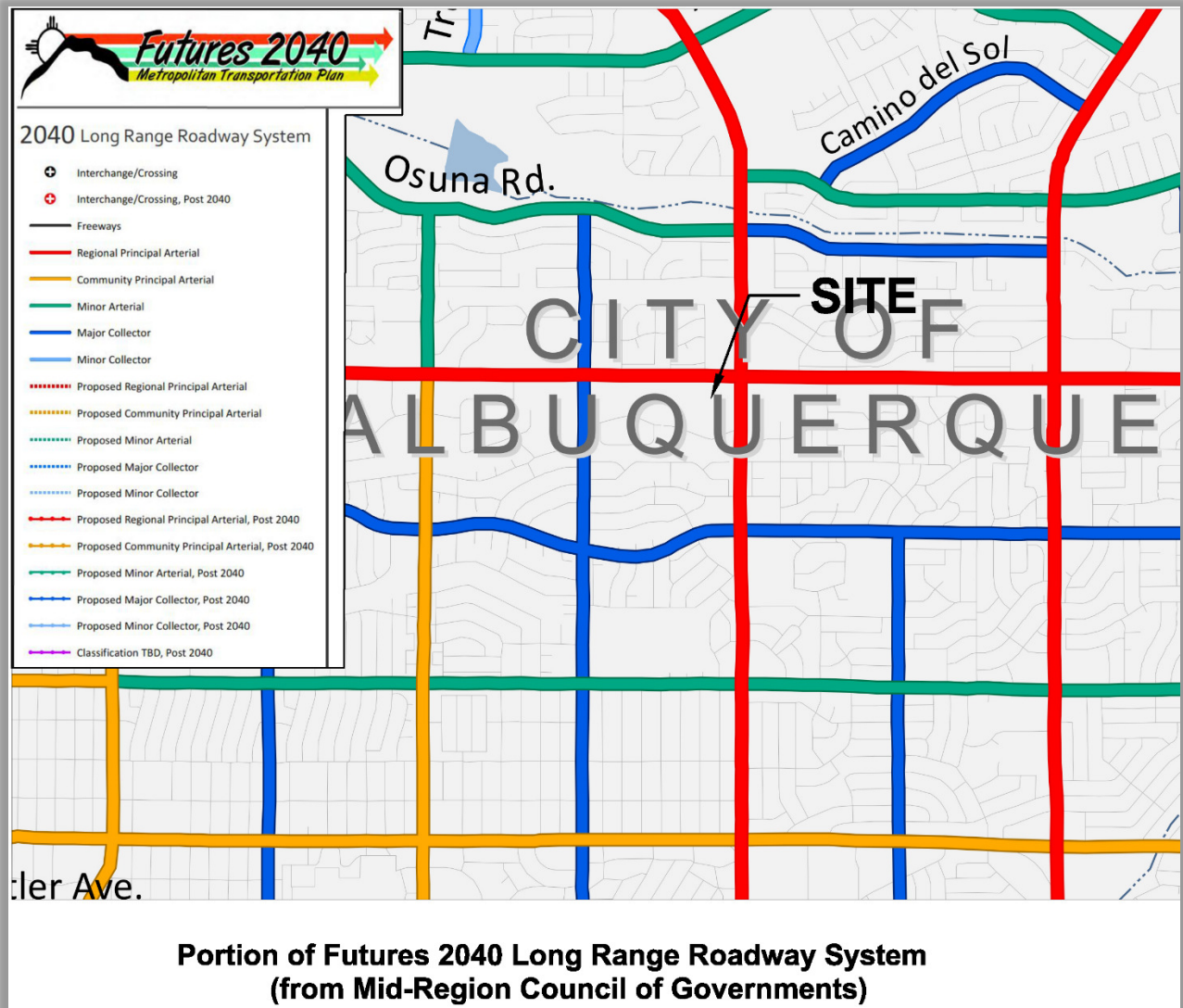
The intersections of Montgomery Blvd. / Wyoming Blvd. and Comanche Rd. / Wyoming Blvd. are the only two signalized intersections in the study area. Both signals are fully actuated traffic signals that are coordinated in the north-south direction along Wyoming Blvd.

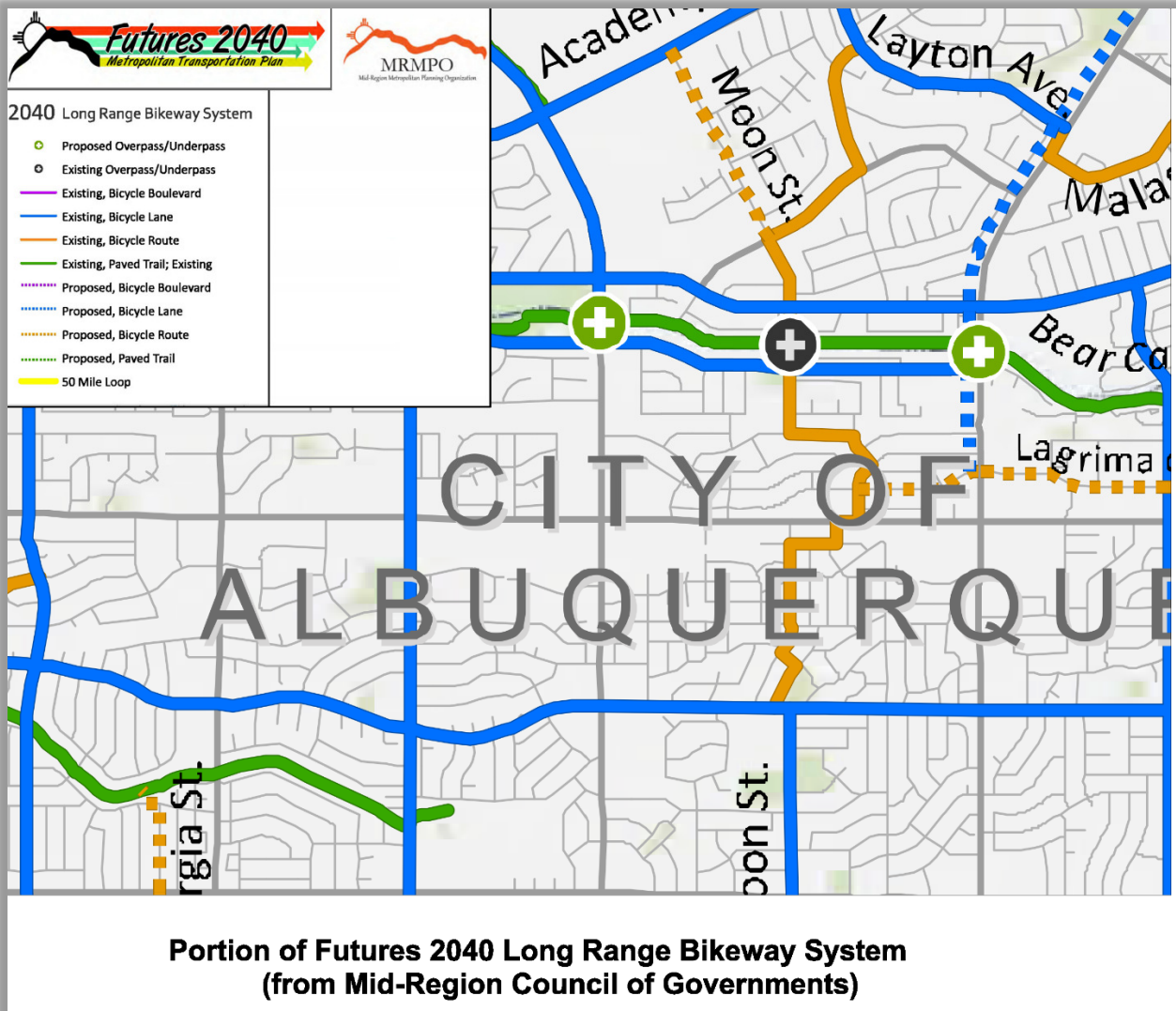
Neither Montgomery Blvd. nor Wyoming Blvd. are equipped with bicycle facilities and neither of them are planned for future bicycle facilities according to the Futures 2040 Long Range Bikeway System Map. Comanche Rd. is generally equipped with bicycle lanes as designated on the Bikeway map.

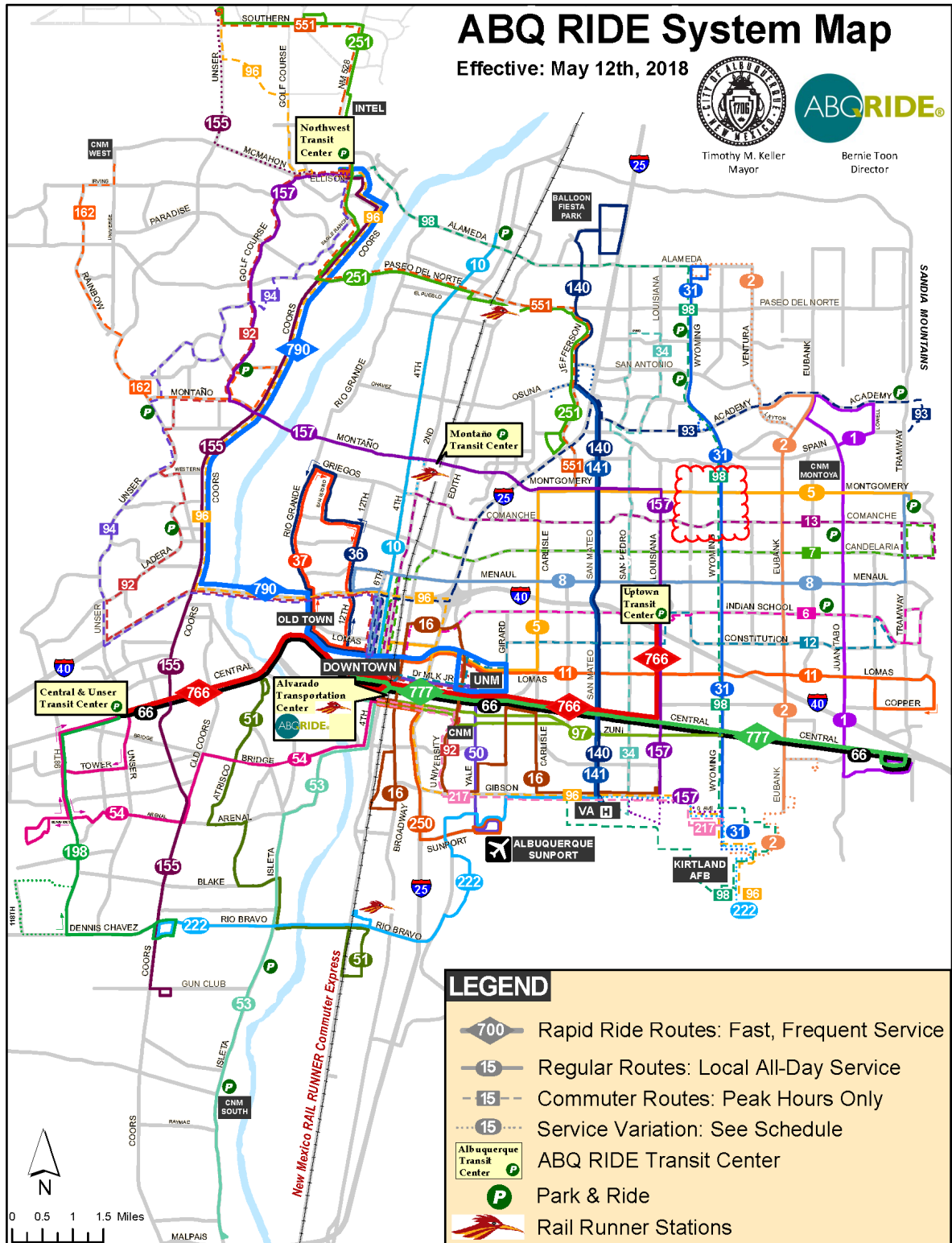
Montgomery Blvd., Wyoming Blvd., and Comanche Rd. all have designated transit routes.

Montgomery Blvd. is served by ABQ RIDE Route 5. Wyoming Blvd. is served by ABQ RIDE Routes 31 and 98. Comanche Rd. is served by ABQ RIDE Route 13.

Following are the Futures 2040 maps for the Long Range Roadway System, the Bike Route System, and the ABQ RIDE Master bus route map:







Analysis of Existing Conditions

Starting in March of 2020 a shutdown of all non-essential businesses was ordered by the Governor of New Mexico due to the COVID-19 virus. It is estimated that traffic volumes in New Mexico are reduced from 20% to 40% on average due to the employment layoffs and furloughs and the high percentage of people working from their homes during this crisis period. Since normal traffic counts could not be obtained due the COVID-19 shutdown, existing traffic volumes (turning movement counts) used in this study were determined using the Streetlight Data Model and Transportation Analysis & Querying Application (TAQA) data provided by the Mid-Region Council of Governments (MRCOG). The methodology used for producing the existing traffic volume data is as follows.

1. The Streetlight Data Model was used to generate 2019 (pre COVID-19) traffic volumes for each movement at each intersection for the AM and PM Peak Hours. Streetlight data was also obtained for current conditions (summer 2021). A ratio was established for each turning movement volume to adjust current field traffic counts to pre-COVID conditions and to adjust at the same time for the school year. Since the field counts were collected in July, 2021 then it is acknowledge that the field counts did not include school traffic. The Streetlightdata.com adjustment will adjust the volumes for both COVID conditions and for school traffic.
2. The field volumes were then multiplied by calibration factors to obtain the existing traffic volumes for each movement adjusted to pre-COVID conditions and school conditions. (Based turning movements volumes are on Pages A-120 through A-122 in the Appendix).

An analysis of existing conditions was not conducted for this Study because the implementation year analysis is only a few years into the future.

Analysis of Implementation Year and Horizon Year Conditions

Adjusted based volumes for this Study were grown annually at a minimum growth rate. A historic annual growth rate analysis resulted in a slightly negative or flat growth rate, so a minimum annual growth rate of 0.5% per year was utilized to grow the base traffic volumes to the implementation year (2025) and to the horizon year (2035). The historic data, however, does not support this annual growth rate. The minimum annual growth rate is a requirement of the City of Albuquerque.

Background AM and PM Peak Hour traffic volumes (i.e., turning movements volumes) for this study were determined using an approved methodology making use of big data (in this case, Streetlightdata.com). Current data and 2019 data (when school was in session) from Streetlightdata.com was collected to establish an adjustment factor for the recently collected turning movement counts for this project. The adjustment factor for each turning movement was applied to the new turning movements count data to adjust for both COVID conditions and school year conditions. If Streetlightdata.com showed an adjustment factor of less than 1.0, then 1.0 was utilized. No volume was adjusted downward (i.e., less than 1.0).

An analysis of the major intersections associated with this study are presented assuming only the residential portion of the project is implemented since it will likely be implemented first. The goal is to isolate the impact of the residential development from the rest of the project to establish mitigation measures related to it.

Trip generation rates were calculated based in the Institute of Transportation Engineers' Trip

Generation Manual (10th Edition). Adjustments were made for internal capture (based on NCHRP 684) and a 30% pass-by trip adjustment was assumed for the retail commercial component only (excluding the medical use). The following table shows the calculated trip generation rate utilized for this Study:

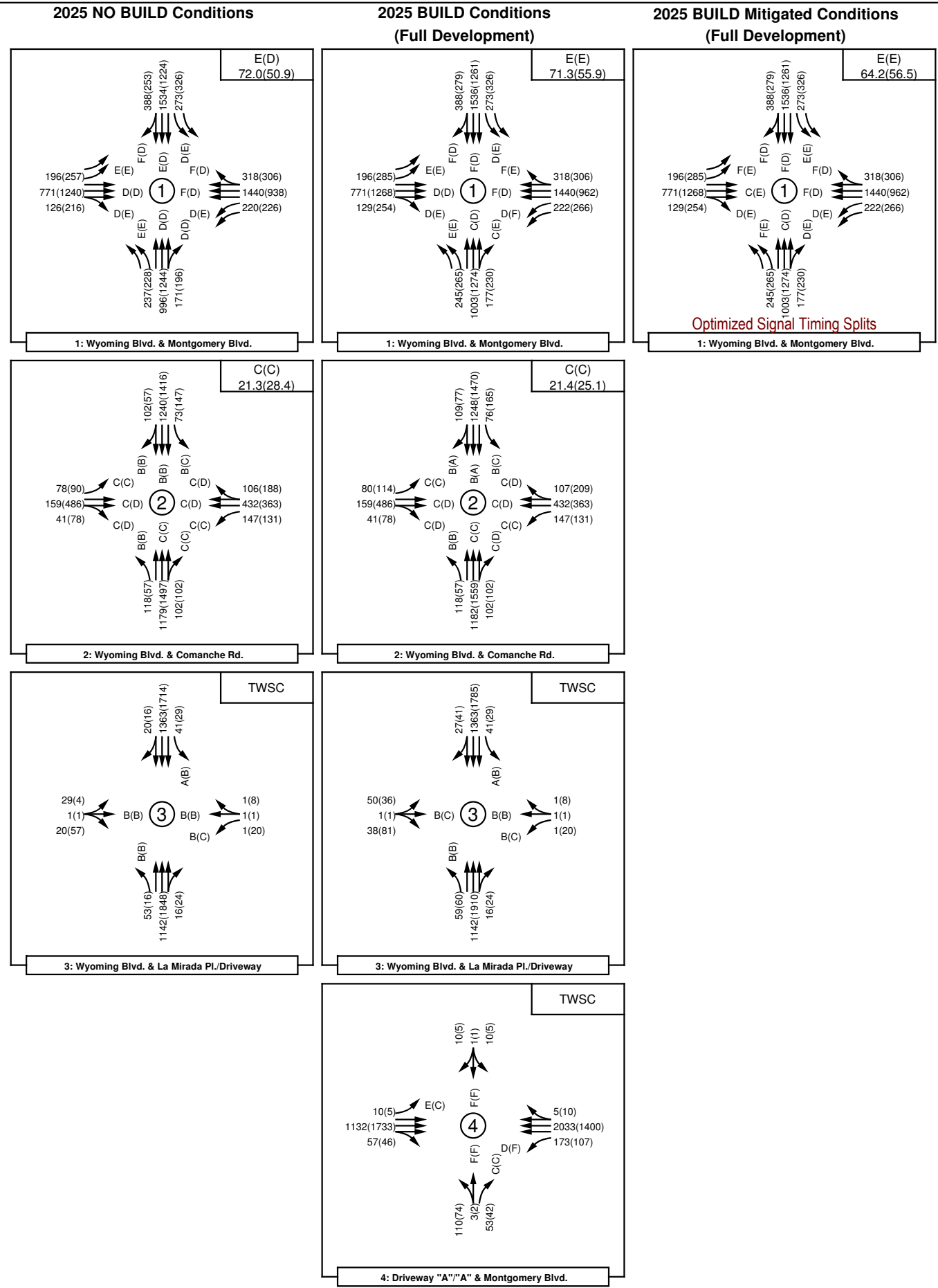
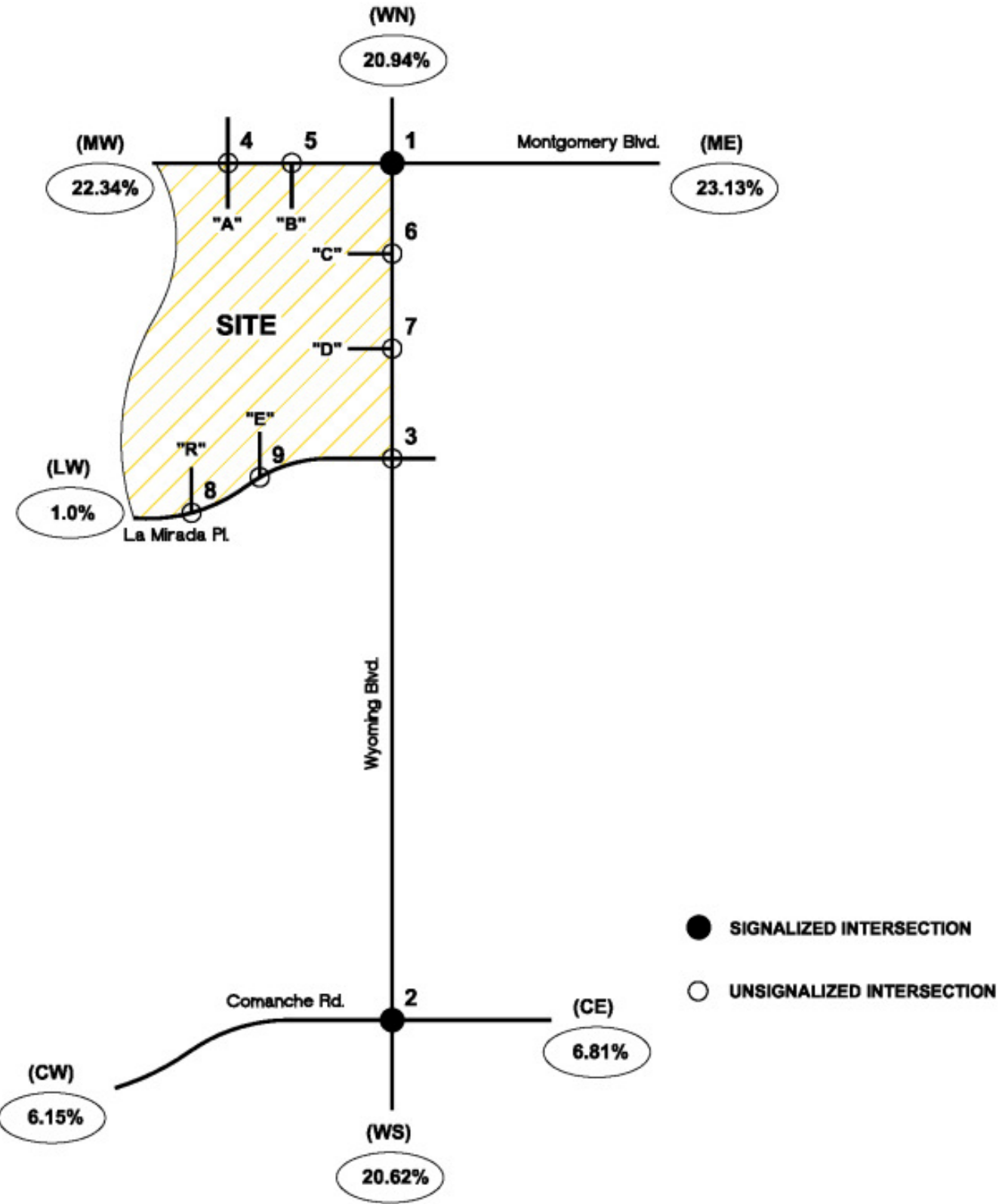
La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units				
Residential	Single-Family Detached Housing (210)	66	709	13	39	43
Lots 1 & 2	Fast Food Restaurant w/ Drive-Thru Window (934)	5.80	2,732	119	114	99
Lot 4	Super Convenience Market / Gas Station (960)	16	3,688	225	225	184
Lots 7 & 8	High Turnover (Sit-Down) Restaurant (932)	22.37	2,509	122	100	135
Lots 1,5,& 6	Shopping Center (820)	18.70	1,922	100	61	75
Lot 3	Free-Standing Emergency Room (650)	15.00	374	43	12	15
Subtotal Retail Commercial			10,851	566	500	493
Internal Capture				(25)	(25)	(102)
Net Retail Commercial Trips (Adj. for Internal Capture)			10,851	541	475	391
<i>Pass-By Trips</i>		30%		-170	-150	-148
Total Primary Trips (Retail Commercial)				371	325	243
Total Primary Trips (Residential)			709	13	39	43
Total Medical Use Trips (Free-Standing Emergency Room)			374	43	12	15

See Trip Generation Summary Table and Worksheets on Pages A-4 through A-10 in the Appendix.

Both residential and retail commercial trips were distributed based on Mid-Region Council of Governments' Socio-economic data (2040 data set). The residential trips were distributed based on the employment distribution regionally inversely proportional to the distance of the subarea from the project. The retail commercial trips (including medical use) were distributed based on population distribution within a two-mile radius of the project. The residential and commercial trip distribution and trip assignments maps can be found in the Appendix of this report on Pages A-14 through A-29.

The following pages contain the Lanes / Volumes Analysis Maps for this study. The Lanes / Volumes Analysis Maps summarize graphically and numerically how this project and the proposed mitigation measures impact the adjacent roadway system, and how the project driveways are expected to perform. Also, the maps show the Implementation Year (2025) and the Horizon Year (2035) NO BUILD and BUILD AM and PM Peak Hour turning movements volumes utilized in the analyses for this Study. Also shown graphically are the intersection geometries (i.e., lane groups). Further detail is found in the individual Intersection analysis summary tables for each intersection in the next section of the report.

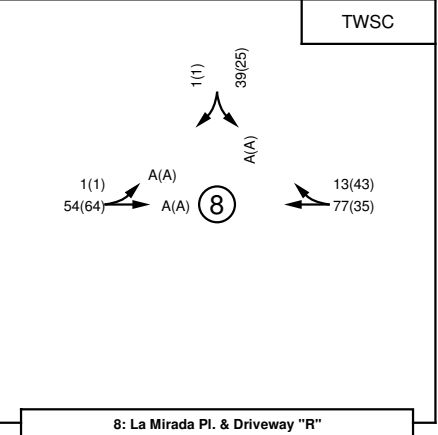
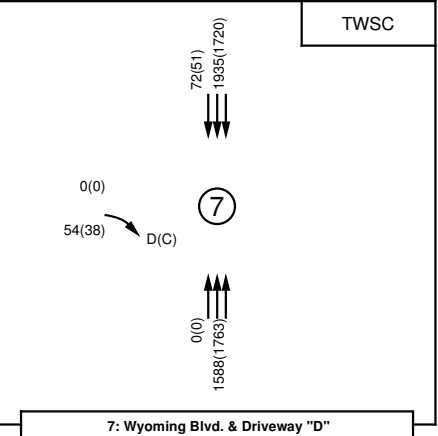
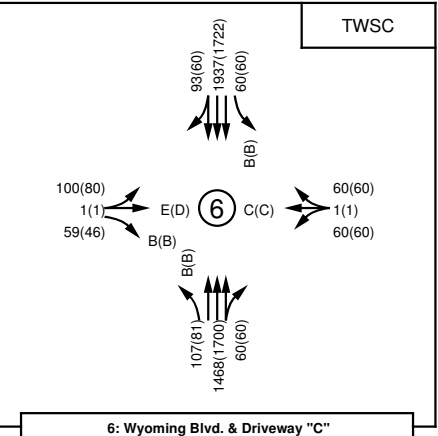
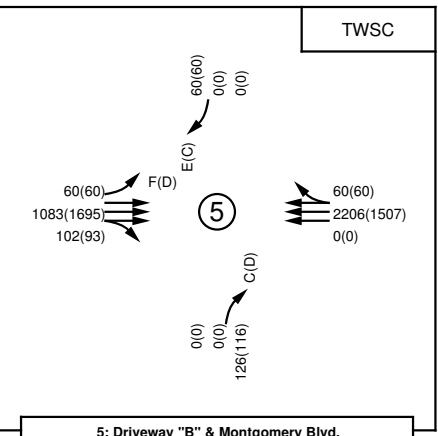
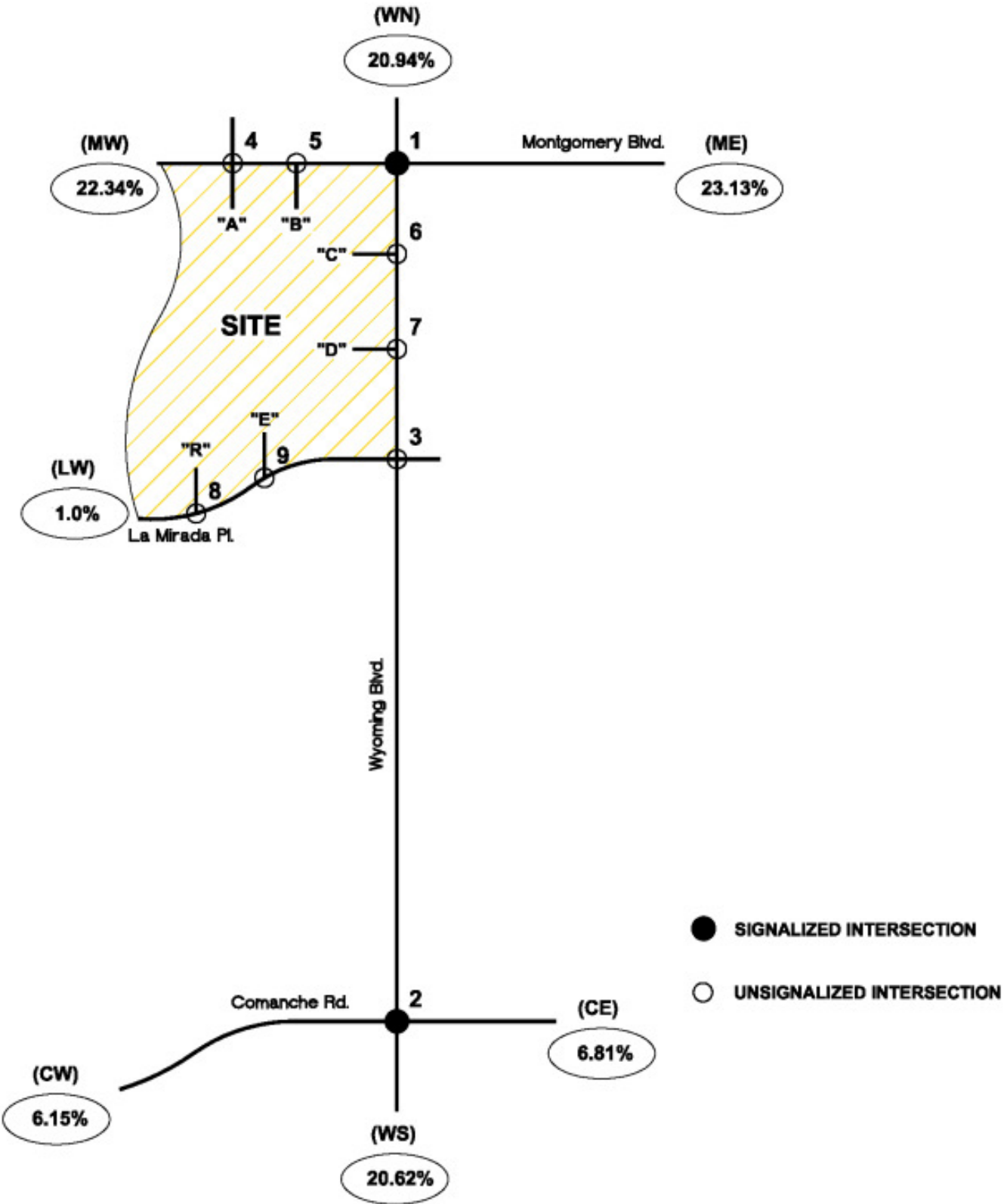


La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

2025 NO BUILD Conditions

2025 BUILD Conditions
(Full Development)

2025 BUILD Mitigated Conditions
(Full Development)



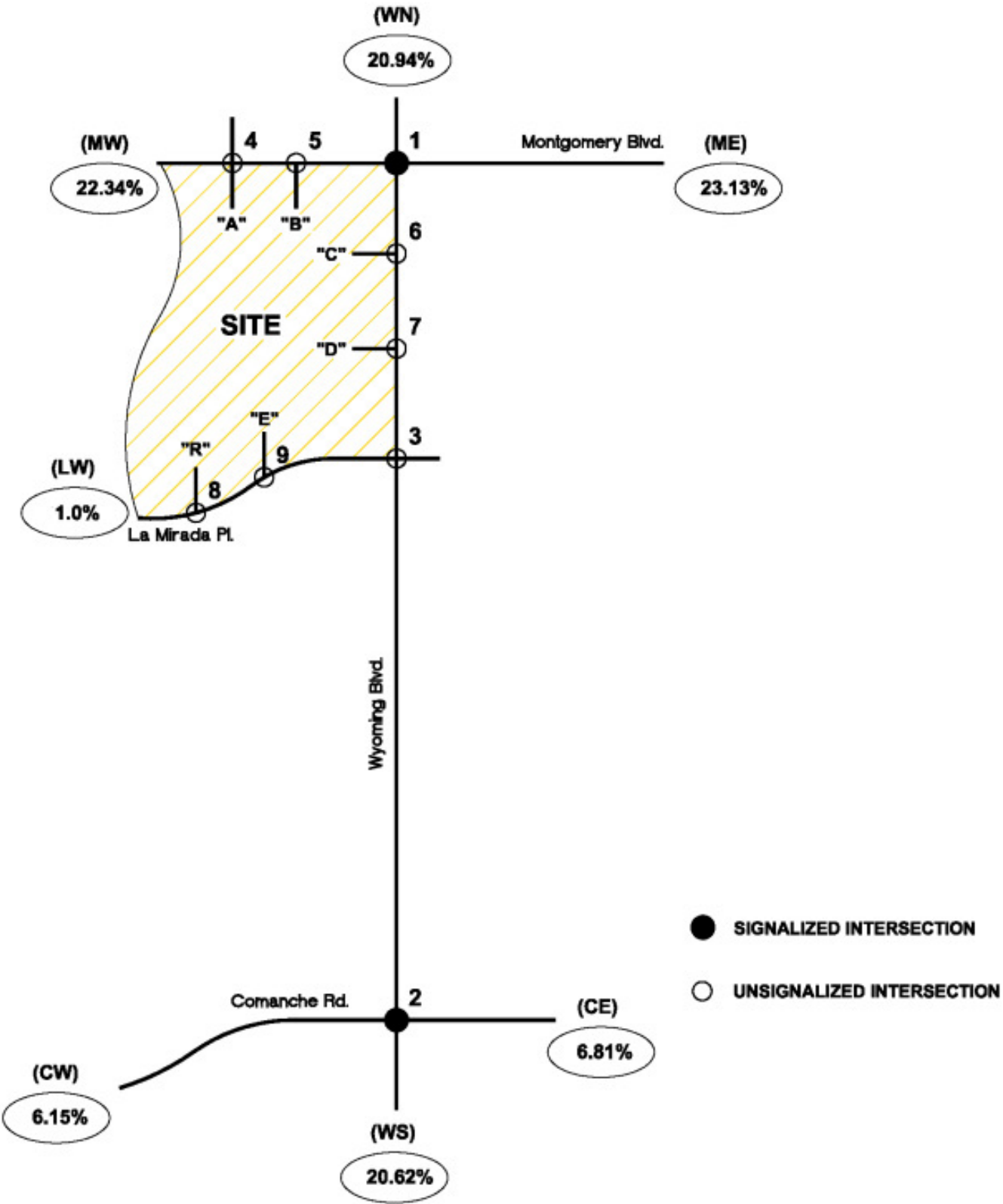
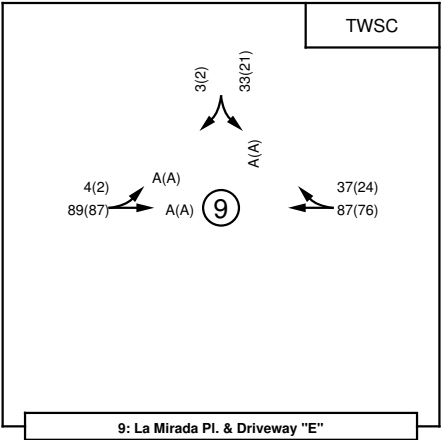
La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

AM(PM)

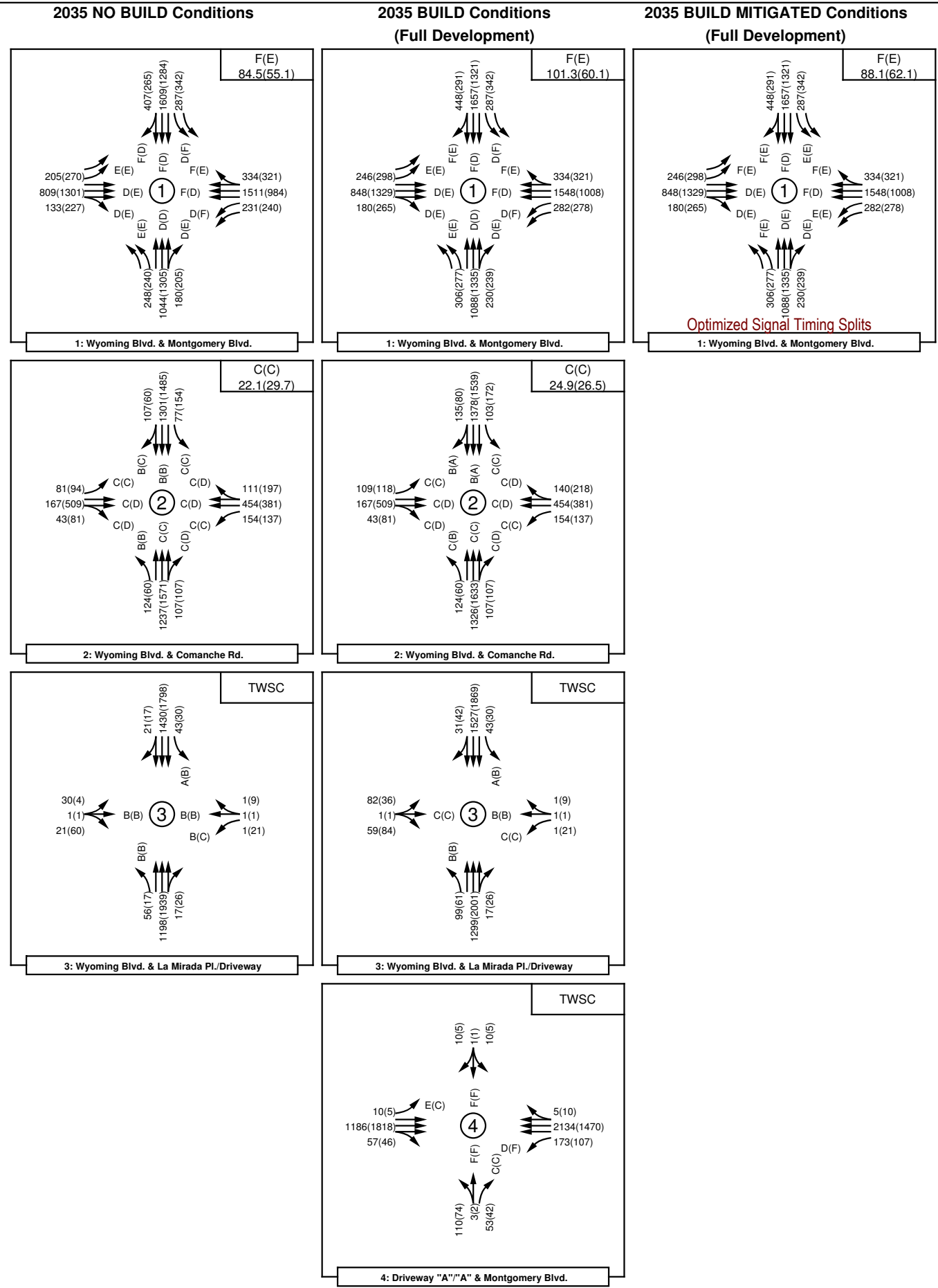
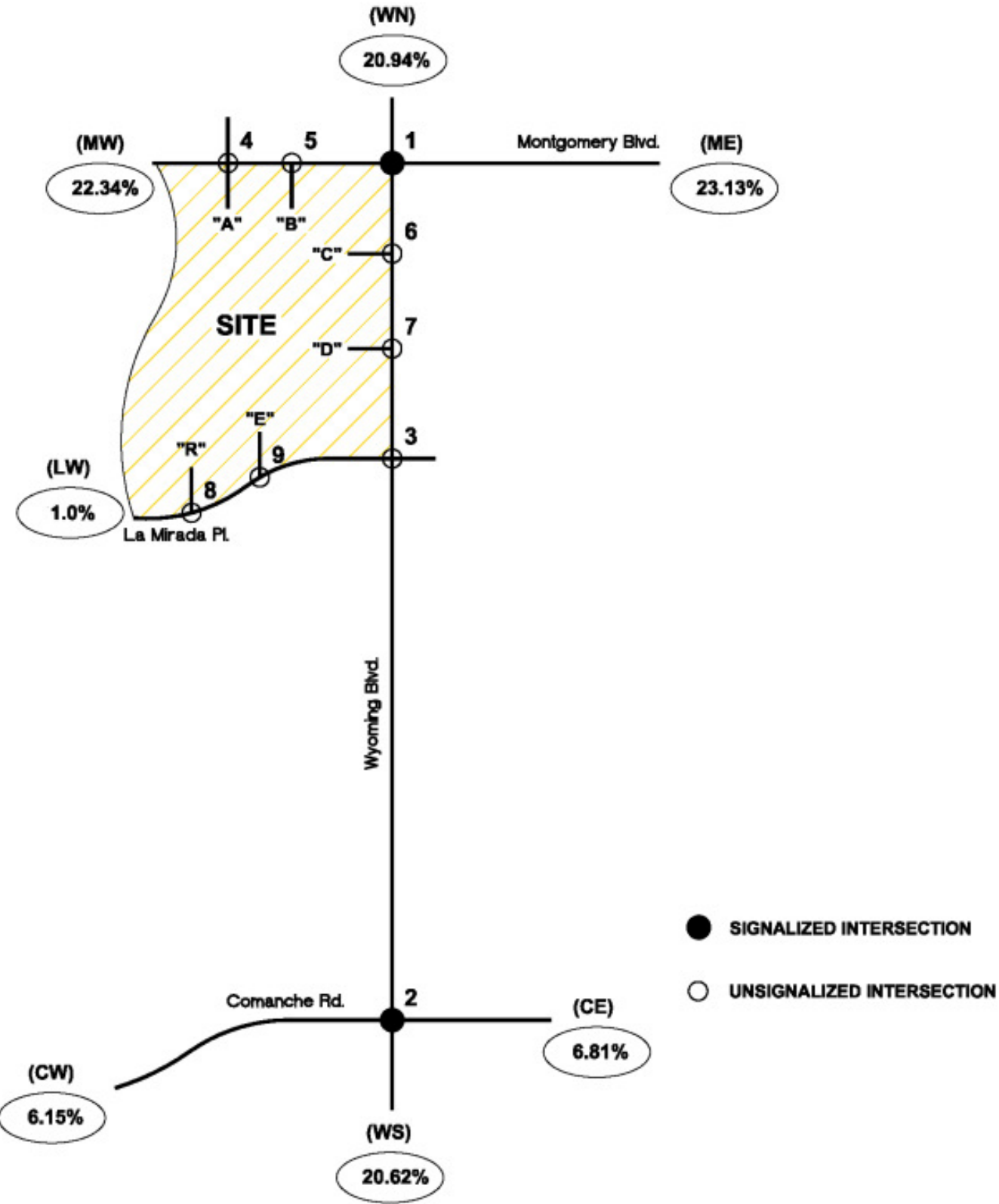
2025 NO BUILD Conditions

2025 BUILD Conditions
(Full Development)

2025 BUILD Mitigated Conditions
(Full Development)



La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

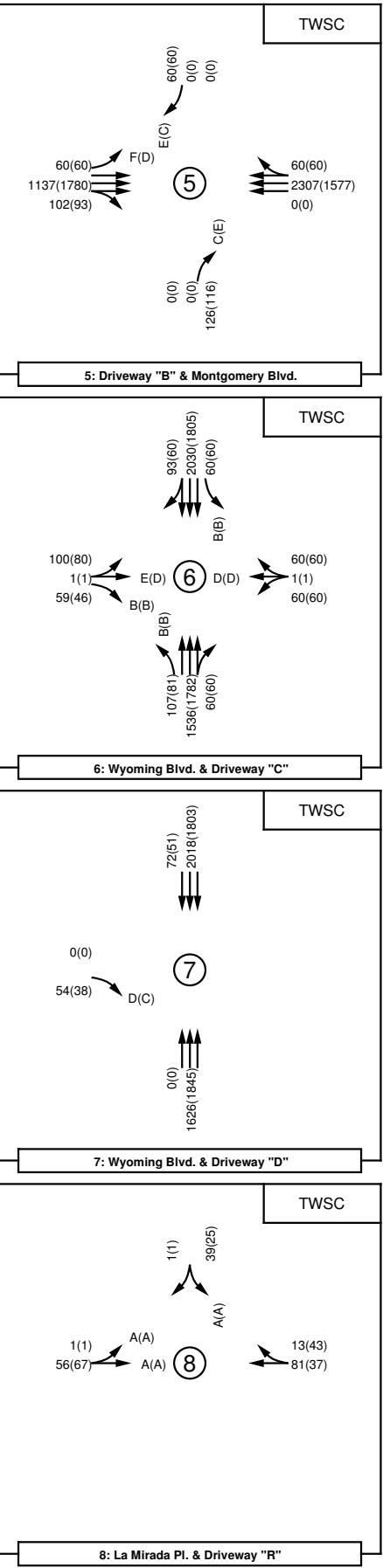
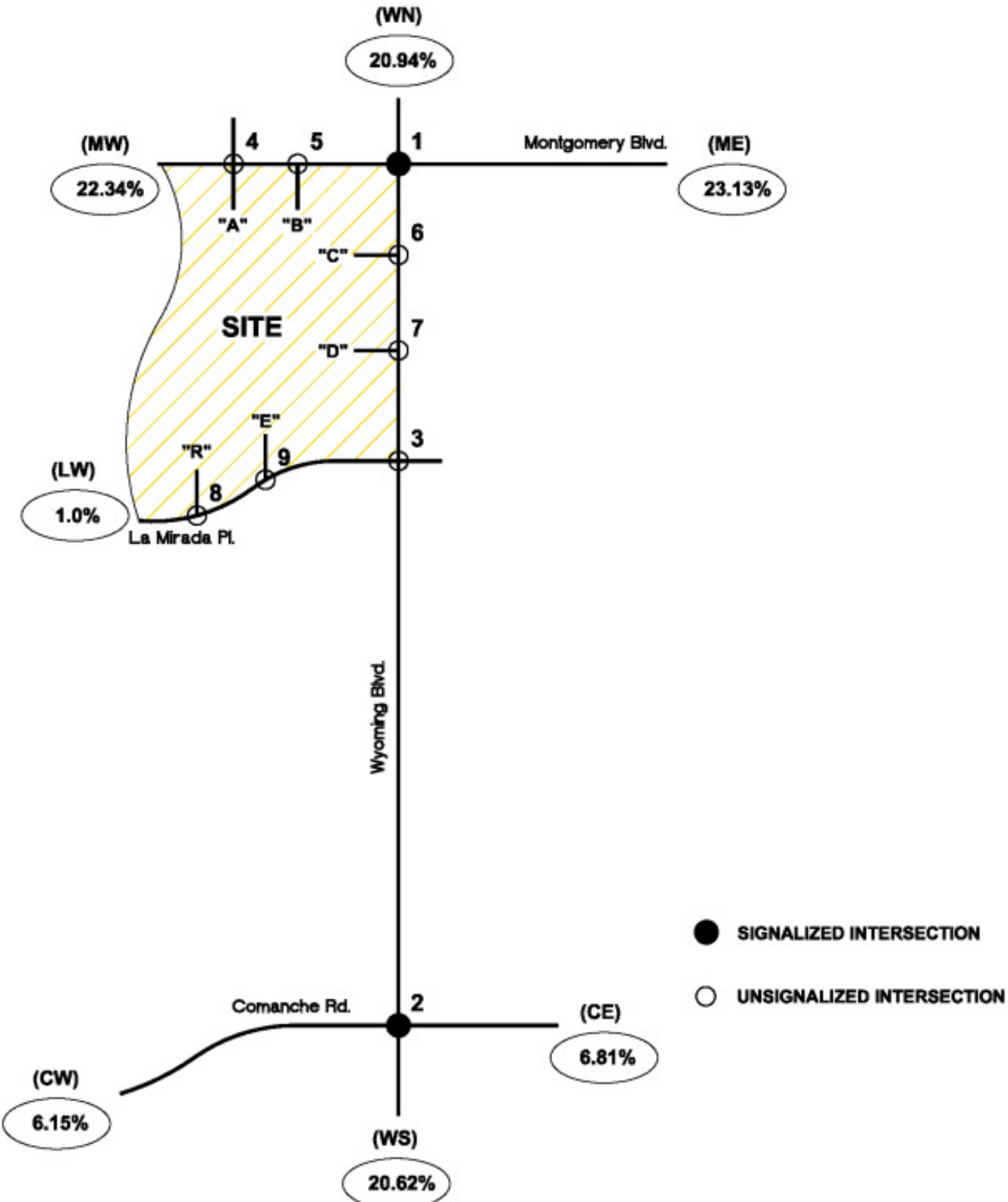


La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

2035 NO BUILD Conditions

2035 BUILD Conditions
(Full Development)

2035 BUILD MITIGATED Conditions
(Full Development)



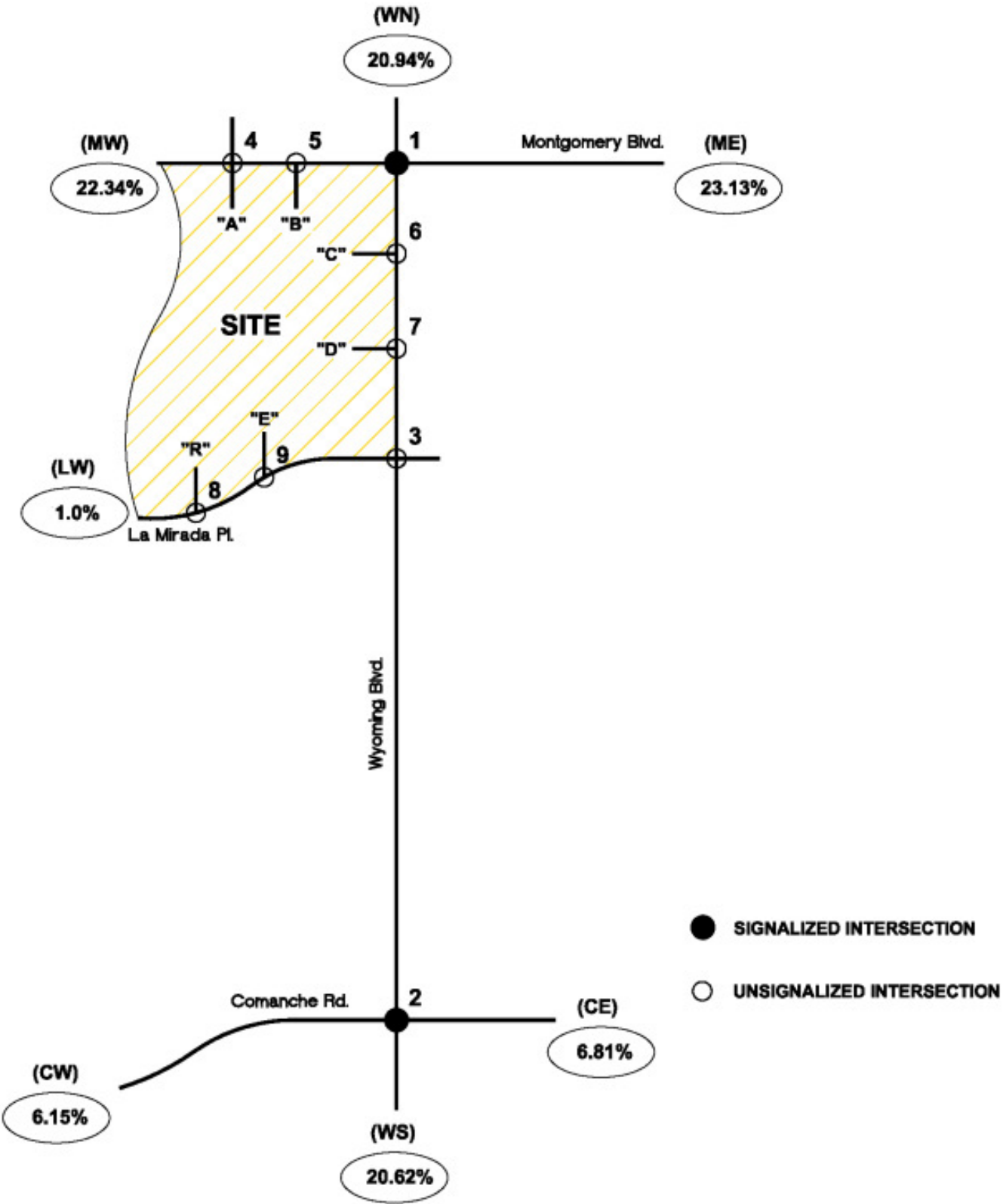
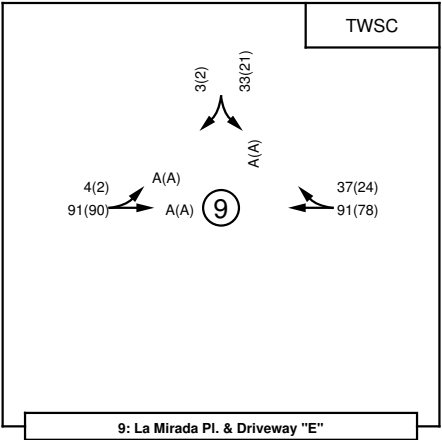
La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

AM(PM)

2035 NO BUILD Conditions

2035 BUILD Conditions
(Full Development)

2035 BUILD MITIGATED Conditions
(Full Development)



La Mirada Development (Full Development)
(La Mirada Pl. / Wyoming Blvd.)
LOS / Volume Analysis Map

#1 – Montgomery Blvd. / Wyoming Blvd. – Signalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the signalized intersection of Montgomery Blvd. / Wyoming Blvd. are summarized in the following tables:

Montgomery Bd / Wyoming Blvd. 2025 Conditions - Full Development	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	196	771	126	220	1,440	318	237	996	171	273	1,534	388
V/C Ratio	0.77	0.61	0.61	0.78	1.17	1.18	0.79	0.62	0.62	0.81	1.00	1.01
Level-of-Service	E	D	D	D	F	F	E	D	D	D	E	F
Control Delay (Seconds)	55.7	36.7	39.5	51.3	127.0	138.0	58.9	36.9	39.2	51.7	59.3	72.3
Intersection LOS	E - 72.0											
95th Percentile Queue (veh)	5.0	11.3	12.1	5.4	36.6	38.7	6.4	15.0	15.8	6.7	28.1	30.8
2025 BUILD Conditions Volumes	196	771	129	222	1,440	318	245	1,003	177	273	1,536	388
V/C Ratio	0.77	0.61	0.62	0.78	1.17	1.18	0.80	0.63	0.63	0.81	1.01	1.02
Level-of-Service	E	D	D	D	F	F	E	C	C	D	F	F
Control Delay (Seconds)	55.7	36.8	39.7	51.2	127.0	138.0	58.4	30.9	33.3	51.7	60.9	74.1
Intersection LOS	E - 71.3											
95th Percentile Queue (veh)	5.0	11.4	12.2	5.4	36.6	38.7	6.5	13.3	14.1	6.7	28.4	31.1
Mitigated Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
2025 BUILD Mitigated Conditions Volumes	196	771	129	222	1,440	318	245	1,003	177	273	1,536	388
V/C Ratio	0.89	0.57	0.58	0.78	1.07	1.07	0.92	0.66	0.66	0.82	1.03	1.04
Level-of-Service	F	C	D	D	F	F	F	C	D	E	F	F
Control Delay (Seconds)	82.1	34.4	36.7	53.8	84.3	96.1	85.7	33.1	35.9	60.1	67.0	80.6
Intersection LOS	E - 64.2											
95th Percentile Queue (veh)	6.4	11.0	11.7	5.6	30.0	32.3	8.1	13.8	14.6	7.4	29.5	32.3
PM Peak Hour												
2025 NO BUILD Conditions Volumes	257	1,240	216	226	938	306	228	1,244	196	326	1,224	253
V/C Ratio	0.82	0.89	0.89	0.83	0.80	0.81	0.80	0.82	0.82	0.91	0.79	0.79
Level-of-Service	E	D	E	E	D	D	E	D	D	E	D	D
Control Delay (Seconds)	55.5	49.8	57.9	72.8	44.8	51.2	61.5	48.8	54.1	79.7	39.2	43.9
Intersection LOS	D - 50.9											
95th Percentile Queue (veh)	6.9	21.0	22.8	7.2	17.6	18.3	6.6	21.0	22.5	10.1	19.2	20.3
2025 BUILD Conditions Volumes	285	1,268	254	266	962	306	265	1,274	230	326	1,261	279
V/C Ratio	0.83	0.93	0.93	0.98	0.84	0.84	0.82	0.85	0.85	0.91	0.85	0.85
Level-of-Service	E	D	E	F	D	E	E	D	E	E	D	D
Control Delay (Seconds)	56.8	54.9	64.7	104.0	47.8	55.5	65.2	51.2	57.7	79.7	43.5	50.0
Intersection LOS	E - 55.9											
95th Percentile Queue (veh)	7.7	22.9	24.8	9.7	18.4	19.3	7.9	22.3	23.9	10.1	20.9	22.3
Mitigated Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
2025 BUILD Mitigated Conditions Volumes	285	1,268	254	266	962	306	265	1,274	230	326	1,261	279
V/C Ratio	0.84	0.96	0.96	0.85	0.83	0.83	0.85	0.88	0.88	0.86	0.85	0.85
Level-of-Service	E	E	E	E	D	D	E	D	E	E	D	D
Control Delay (Seconds)	65.5	59.9	70.5	72.9	46.6	53.8	74.3	53.8	61.2	69.2	43.6	50.2
Intersection LOS	E - 56.5											
95th Percentile Queue (veh)	8.3	23.7	25.8	8.3	18.2	19.0	8.4	22.8	24.5	9.5	20.9	22.3

Montgomery Bd / Wyoming Blvd. 2035 Conditions	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	205	809	133	231	1,511	334	248	1,044	180	287	1,609	407
V/C Ratio	0.77	0.64	0.65	0.79	1.23	1.24	0.80	0.66	0.66	0.82	1.06	1.08
Level-of-Service	E	D	D	D	F	F	E	D	D	D	F	F
Control Delay (Seconds)	56.7	37.5	40.7	51.1	151.0	162.0	60.0	38.5	41.2	52.6	78.4	93.5
Intersection LOS	F - 84.5											
95th Percentile Queue (veh)	5.3	11.9	12.8	5.6	41.9	44.1	6.8	15.9	16.8	7.2	33.0	36.2
2035 BUILD Conditions Volumes	246	848	180	282	1,548	334	306	1,088	230	287	1,657	448
V/C Ratio	0.81	0.71	0.72	0.82	1.25	1.26	0.85	0.74	0.74	0.82	1.19	1.22
Level-of-Service	E	D	D	D	F	F	E	D	D	D	F	F
Control Delay (Seconds)	61.1	39.8	44.3	53.8	161.0	172.0	65.4	35.6	39.5	52.6	131.0	149.0
Intersection LOS	F - 101.3											
95th Percentile Queue (veh)	6.8	13.3	14.2	7.1	44.1	46.4	8.5	15.8	16.6	7.2	44.2	47.8
Mitigated Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
2035 BUILD MITIGATED Conditions Volume	246	848	180	282	1,548	334	306	1,088	230	287	1,657	448
V/C Ratio	1.05	0.72	0.72	0.83	1.18	1.19	1.16	0.73	0.74	0.83	1.10	1.12
Level-of-Service	F	D	D	E	F	F	F	D	D	E	F	F
Control Delay (Seconds)	125.0	40.1	44.6	59.9	129.0	140.0	155.0	35.1	38.9	59.9	91.1	109.0
Intersection LOS	F - 88.1											
95th Percentile Queue (veh)	9.5	13.4	14.3	7.6	39.3	41.8	12.4	15.7	16.5	7.7	36.8	40.6
PM Peak Hour												
2035 NO BUILD Conditions Volumes	270	1,301	227	240	984	321	240	1,305	205	342	1,284	265
V/C Ratio	0.82	0.93	0.93	0.88	0.86	0.86	0.81	0.85	0.85	0.96	0.84	0.84
Level-of-Service	E	E	E	F	D	E	E	D	E	F	D	D
Control Delay (Seconds)	55.7	55.0	64.7	81.2	48.3	56.3	62.7	51.3	57.7	89.7	42.0	48.0
Intersection LOS	E - 55.1											
95th Percentile Queue (veh)	7.3	22.9	25.0	8.0	19.0	19.9	7.0	22.4	24.1	11.1	20.7	22.0
2035 BUILD Conditions Volumes	298	1,329	265	278	1,008	321	277	1,335	239	342	1,321	291
V/C Ratio	0.84	0.98	0.98	1.02	0.89	0.90	0.84	0.89	0.89	0.96	0.90	0.90
Level-of-Service	E	E	E	F	D	E	E	D	E	F	D	E
Control Delay (Seconds)	57.6	62.8	73.9	116.0	52.6	62.1	64.7	47.7	55.6	89.7	47.7	56.0
Intersection LOS	E - 60.1											
95th Percentile Queue (veh)	8.1	25.3	27.5	10.5	20.0	21.1	8.1	22.1	24.0	11.1	22.8	24.4
Mitigated Lane Geometry	2	3>	0	2	3>	0	2	3>	0	2	3>	0
2035 BUILD MITIGATED Conditions Volume	298	1,329	265	278	1,008	321	277	1,335	239	342	1,321	291
V/C Ratio	0.85	0.98	0.98	0.88	0.85	0.86	0.88	0.95	0.95	0.89	0.92	0.92
Level-of-Service	E	E	E	E	D	E	E	E	E	E	D	E
Control Delay (Seconds)	68.2	62.8	73.9	77.6	47.7	55.5	78.9	63.6	73.8	73.1	50.6	59.7
Intersection LOS	E - 62.1											
95th Percentile Queue (veh)	8.8	25.3	27.5	8.8	19.2	20.1	9.0	25.4	27.6	10.1	23.3	25.1

Both the Implementation Year and the Horizon Year analysis in the above tables show that the signalized intersection of Montgomery Blvd. / Wyoming Blvd. is stressed. The operation of the intersection can be mitigated for the AM Peak Hour conditions by adjusting the timing splits, especially in the implementation year. Optimizing the timing splits of the signal will largely mitigate the impact at the horizon year. The impact of this project on the PM Peak Hour analysis of the

intersection is about a 5 second increase in average intersection delay. Optimizing the timing splits associated with the PM Peak Hour analysis results in about the same delay, but some individual turning movements delays are improved from LOS “F” to LOS “E”. The overall intersection delay associated with the Implementation Year and the Horizon Year PM BUILD analysis is LOS “E”. It is recommended that the AM signal timing splits be optimized.

#2 – Comanche Rd. / Wyoming Blvd. – Signalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the signalized intersection of Comanche Rd. / Wyoming Blvd. are summarized in the following tables:

Comanche Rd. / Wyoming Blvd. 2025 Conditions - Full Development	EB (Comanche Rd.)			WB (Comanche Rd.)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2>	0	1	2>	0	1	3>	0	1	3>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	78	159	41	147	432	106	118	1,179	102	73	1,240	102
V/C Ratio	0.24	0.18	0.19	0.29	0.45	0.45	0.42	0.59	0.59	0.32	0.65	0.65
Level-of-Service	C	C	C	C	C	C	B	C	C	B	B	B
Control Delay (Seconds)	24.5	28.3	28.4	21.9	30.6	30.8	18.5	26.6	28.2	19.6	10.1	12.2
Intersection LOS	C - 21.3											
95th Percentile Queue (veh)	2.4	3.6	3.7	4.4	9.8	9.8	3.0	13.1	14.2	1.8	5.1	6.1
2025 BUILD Conditions Volumes	80	159	41	147	432	107	118	1,182	102	76	1,248	109
V/C Ratio	0.24	0.18	0.19	0.29	0.45	0.46	0.42	0.60	0.60	0.33	0.66	0.66
Level-of-Service	C	C	C	C	C	C	B	C	C	B	B	B
Control Delay (Seconds)	24.4	28.2	28.3	21.9	30.6	30.8	18.7	26.9	28.5	19.6	10.4	12.6
Intersection LOS	C - 21.4											
95th Percentile Queue (veh)	2.5	3.6	3.7	4.4	9.8	9.8	3.1	13.3	14.3	1.9	5.2	6.3

PM Peak Hour												
2025 NO BUILD Conditions Volumes	90	486	78	131	363	188	57	1,497	102	147	1,416	57
V/C Ratio	0.31	0.55	0.56	0.43	0.52	0.54	0.26	0.70	0.70	0.65	0.60	0.60
Level-of-Service	C	D	D	C	D	D	B	C	C	C	B	B
Control Delay (Seconds)	28.9	40.5	40.7	28.4	38.2	38.7	19.2	30.2	32.6	23.8	17.4	18.9
Intersection LOS	C - 28.4											
95th Percentile Queue (veh)	3.3	12.0	12.1	4.7	11.7	11.4	1.5	17.9	19.5	3.7	10.8	11.9
2025 BUILD Conditions Volumes	114	486	78	131	363	209	57	1,559	102	165	1,470	77
V/C Ratio	0.39	0.55	0.56	0.43	0.57	0.58	0.23	0.74	0.75	0.72	0.64	0.64
Level-of-Service	C	D	D	C	D	D	B	C	D	C	A	A
Control Delay (Seconds)	28.9	40.5	40.7	28.6	40.3	41.0	18.2	32.1	35.1	26.7	4.0	5.7
Intersection LOS	C - 25.1											
95th Percentile Queue (veh)	4.1	12.0	12.1	4.7	12.4	12.0	1.6	19.1	21.0	4.3	2.3	3.2

Comanche Rd. / Wyoming Blvd. 2035 Conditions	EB (Comanche Rd.)			WB (Comanche Rd.)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2>	0	1	2>	0	1	3>	0	1	3>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	81	167	43	154	454	111	124	1,237	107	77	1,301	107
V/C Ratio	0.25	0.19	0.20	0.30	0.47	0.48	0.46	0.63	0.63	0.35	0.69	0.69
Level-of-Service	C	C	C	C	C	C	B	C	C	C	B	B
Control Delay (Seconds)	24.6	28.5	28.6	21.9	31.1	31.3	19.1	27.6	29.5	20.1	11.1	13.6
Intersection LOS	C - 22.1											
95th Percentile Queue (veh)	2.6	3.8	3.9	4.6	10.3	10.3	3.2	14.0	15.1	2.0	5.7	6.9
2035 BUILD Conditions Volumes	109	167	43	154	454	140	124	1,326	107	103	1,378	135
V/C Ratio	0.33	0.18	0.19	0.30	0.50	0.50	0.51	0.71	0.71	0.48	0.77	0.77
Level-of-Service	C	C	C	C	C	C	C	C	C	C	B	B
Control Delay (Seconds)	23.6	27.5	27.6	21.8	31.7	32.0	21.3	31.4	34.2	21.9	14.3	18.0
Intersection LOS	C - 24.9											
95th Percentile Queue (veh)	3.3	3.7	3.8	4.6	10.9	10.7	3.4	15.8	17.2	2.6	7.3	8.6

PM Peak Hour												
2035 NO BUILD Conditions Volumes	94	509	81	137	381	197	60	1,571	107	154	1,485	60
V/C Ratio	0.33	0.58	0.58	0.46	0.55	0.56	0.29	0.75	0.75	0.70	0.64	0.64
Level-of-Service	C	D	D	C	D	D	B	C	D	C	B	C
Control Delay (Seconds)	29.0	41.3	41.4	28.4	38.8	39.4	19.8	32.0	35.0	26.6	18.4	20.1
Intersection LOS	C - 29.7											
95th Percentile Queue (veh)	3.4	12.6	12.7	4.9	12.3	11.9	1.6	19.3	21.1	4.1	11.7	12.9
2035 BUILD Conditions Volumes	118	509	81	137	381	218	60	1,633	107	172	1,539	80
V/C Ratio	0.41	0.58	0.58	0.45	0.59	0.60	0.25	0.79	0.79	0.77	0.67	0.67
Level-of-Service	C	D	D	C	D	D	B	C	D	C	A	A
Control Delay (Seconds)	29.0	41.3	41.4	28.7	41.0	41.7	18.6	34.3	38.0	31.0	4.7	6.7
Intersection LOS	C - 26.5											
95th Percentile Queue (veh)	4.3	12.6	12.7	4.9	13.0	12.6	1.7	20.6	22.8	4.8	2.7	3.7

Analysis of the signalized intersection of Comanche Rd. / Wyoming Blvd. demonstrates that the operation will be acceptable for all conditions evaluated in this Study. The intersection is projected to operate acceptably through the horizon year and beyond.

#3 – La Mirada Pl. / Wyoming Blvd. – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of La Mirada Pl. / Wyoming Blvd. are summarized in the following tables:

La Mirada Pl. / Wyoming Blvd. 2025 Conditions - Full Development	EB (La Mirada Pl.)			WB (La Mirada Pl.)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	1	1>	0	1	3>	0	1	3>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	29	1	20	1	1	1	53	1,142	16	41	1,363	20
V/C Ratio		0.11		0.00	0.00		0.07			0.05		
Level-of-Service		B		B	B		B			A		
Control Delay (Seconds)		13.6		14.1	12.5		10.1			9.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.4		0.0	0.0		0.2			0.2		
2025 BUILD Conditions Volumes	50	1	38	1	1	1	59	1,142	16	41	1,363	27
V/C Ratio		0.19		0.00	0.00		0.08			0.05		
Level-of-Service		B		B	B		B			A		
Control Delay (Seconds)		14.4		14.5	12.6		10.1			9.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.7		0.0	0.0		0.3			0.2		
PM Peak Hour												
2025 NO BUILD Conditions Volumes	4	1	57	20	1	8	16	1,848	24	29	1,714	16
V/C Ratio		0.13		0.07	0.02		0.02			0.05		
Level-of-Service		B		C	B		B			B		
Control Delay (Seconds)		13.4		17.9	13.6		10.6			11.3		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.4		0.2	0.1		0.1			0.2		
2025 BUILD Conditions Volumes	36	1	81	20	1	8	60	1,910	24	29	1,785	41
V/C Ratio		0.30		0.08	0.02		0.10			0.05		
Level-of-Service		C		C	B		B			B		
Control Delay (Seconds)		18.0		21.5	13.9		11.3			11.3		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		1.2		0.3	0.1		0.3			0.2		

La Mirada Pl. / Wyoming Blvd. 2035 Conditions	EB (La Mirada Pl.)			WB (La Mirada Pl.)			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	1	1>	0	1	3>	0	1	3>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	30	1	21	1	1	1	56	1,198	17	43	1,430	21
V/C Ratio		0.11		0.00	0.00		0.07			0.05		
Level-of-Service		B		B	B		B			A		
Control Delay (Seconds)		13.7		14.3	12.8		10.1			9.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.4		0.0	0.0		0.2			0.2		
2035 BUILD Conditions Volumes	82	1	59	1	1	1	99	1,299	17	43	1,527	31
V/C Ratio		0.34		0.00	0.01		0.14			0.06		
Level-of-Service		C		C	B		B			A		
Control Delay (Seconds)		17.9		17.0	14.4		10.7			9.8		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		1.5		0.0	0.0		0.5			0.2		
PM Peak Hour												
2035 NO BUILD Conditions Volumes	4	1	60	21	1	9	17	1,939	26	30	1,798	17
V/C Ratio		0.14		0.08	0.02		0.03			0.05		
Level-of-Service		B		C	B		B			B		
Control Delay (Seconds)		13.9		19.1	14.0		10.9			11.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.5		0.2	0.1		0.1			0.2		
2035 BUILD Conditions Volumes	36	1	84	21	1	9	61	2,001	26	30	1,869	42
V/C Ratio		0.33		0.10	0.03		0.10			0.05		
Level-of-Service		C		C	B		B			B		
Control Delay (Seconds)		19.3		23.3	14.3		11.7			11.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		1.4		0.3	0.1		0.3			0.2		

Analysis of the unsignalized intersection of La Mirada Pl. / Wyoming Blvd. demonstrates that the intersection will operate acceptably for all conditions analyzed in this report. The unsignalized driveway is located between two signalized intersections on Wyoming Blvd. – Montgomery Blvd. and Comanche Rd. The two signals on each side of La Mirada Pl. serve to control the flow of traffic northbound and southbound on Wyoming Blvd. The effect of the two signals is to platoon the northbound and southbound traffic on Wyoming and create gaps in the Wyoming traffic to allow side street traffic on La Mirada Pl. to turn onto Wyoming Blvd. northbound or southbound. Additionally, left turn traffic from La Mirada Pl. (eastbound to northbound) can execute as a staged left turn which further assists traffic operations at the intersection. This report concludes that the unsignalized intersection of La Mirada Pl. / Wyoming Blvd. will operate at acceptable levels-of-service through the horizon year (2035) and beyond.

#4 – Montgomery Blvd. / Driveway “A” – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of Montgomery Blvd. / Driveway “A” are summarized in the following tables:

Montgomery Bd / Driveway "A" 2025 Conditions - Full Development	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Driveway "A")			SB (Driveway "A")		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3	>	1	3	>	<	1	1	<	1	>
AM Peak Hour												
2025 BUILD Conditions Volumes	10	1,132	57	173	2,033	5	110	3	53	10	1	10
V/C Ratio	0.09			0.55				2.51	0.14		0.72	
Level-of-Service	E			D				F	C		F	
Control Delay (Seconds)	38.3			29.7				879.0	16.0		278.0	
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.3			3.1				12.0	0.5		2.4	

PM Peak Hour												
2025 BUILD Conditions Volumes	5	1,733	46	107	1,400	10	74	2	42	5	1	5
V/C Ratio	0.02			0.67				2.05	0.17		0.19	
Level-of-Service	C			F				F	C		F	
Control Delay (Seconds)	20.0			64.0				722.0	22.8		79.5	
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.1			3.8				8.3	0.6		0.6	

Montgomery Bd / Driveway "A" 2035 Conditions	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Driveway "A")			SB (Driveway "A")		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3	>	1	3	>	<	1	1	<	1	>
AM Peak Hour												
2035 BUILD Conditions Volumes	10	1,186	57	173	2,134	5	110	3	53	10	1	10
V/C Ratio	0.10			0.58				2.90	0.15		0.88	
Level-of-Service	E			D				F	C		F	
Control Delay (Seconds)	42.9			32.9				999.0	16.5		372.0	
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.3			3.4				12.6	0.5		2.6	

PM Peak Hour												
2035 BUILD Conditions Volumes	5	1,818	46	107	1,470	10	74	2	42	5	1	5
V/C Ratio	0.02			0.74				2.53	0.18		0.30	
Level-of-Service	C			F				F	C		F	
Control Delay (Seconds)	21.3			79.1				976.0	24.2		139.0	
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.1			4.4				8.9	0.7		1.0	

Analysis of the unsignalized Driveway “A” results in excessive delays for the side street traffic attempting to turn onto Montgomery Blvd. and for the westbound traffic turning left into the driveway. Volumes at Driveway “A” are not vastly different than volumes at La Mirada Pl. / Wyoming Blvd. (and Driveway “C”). La Mirada Pl. / Wyoming and Driveway “C” both operate much better than Driveway “A”. The difference is that La Mirada Pl. and Driveway “C” consider the effects of the two existing traffic signals – one to the north and one to the south. Driveway “A” considers the effect of the existing signal to the east (Montgomery / Wyoming) which helps

improve the operation of the eastbound left turn movement. It is likely that the existing traffic signal to the west of Driveway "A" (Montgomery Blvd. / Pennsylvania) would help with the operation of Driveway "A" and the calculated delays would be much less than what is shown in this report. Therefore, no recommendation is made regarding implementation and construction of Driveway "A" except that it should be constructed with one entering lane and two exiting lanes minimum (one lane for exiting right turns and one lane for exiting thru / left turns).

#5 – Montgomery Blvd. / Driveway "B" – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of Montgomery Blvd. / Driveway "B" are summarized in the following tables:

Montgomery Bd / Driveway "B" 2025 Conditions - Full Development	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Driveway "B")			SB (Driveway "B")		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3	>		3	1			1			1
AM Peak Hour												
2025 BUILD Conditions Volumes	60	1,083	102	0	2,206	60	0	0	126	0	0	60
V/C Ratio	0.67								0.33			0.36
Level-of-Service	F								C			E
Control Delay (Seconds)	103.0								18.9			37.9
Intersection LOS	TWSC											
95th Percentile Queue (veh)	3.2								1.4			1.5

PM Peak Hour												
2025 BUILD Conditions Volumes	60	1,695	93	0	1,507	60	0	0	116	0	0	60
V/C Ratio	0.29								0.48			0.21
Level-of-Service	D								D			C
Control Delay (Seconds)	29.8								32.9			20.8
Intersection LOS	TWSC											
95th Percentile Queue (veh)	1.2								2.4			0.8

Montgomery Bd / Driveway "B" 2035 Conditions	EB (Montgomery Bd)			WB (Montgomery Bd)			NB (Driveway "B")			SB (Driveway "B")		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3	>		3	1			1			1
AM Peak Hour												
2035 BUILD Conditions Volumes	60	1,137	102	0	2,307	60	0	0	126	0	0	60
V/C Ratio	0.75								0.34			0.39
Level-of-Service	F								C			E
Control Delay (Seconds)	129.0								19.9			42.2
Intersection LOS	TWSC											
95th Percentile Queue (veh)	3.7								1.5			1.7

PM Peak Hour												
2035 BUILD Conditions Volumes	60	1,780	93	0	1,577	60	0	0	116	0	0	60
V/C Ratio	0.32								0.51			0.22
Level-of-Service	D								E			C
Control Delay (Seconds)	32.9								36.3			21.9
Intersection LOS	TWSC											
95th Percentile Queue (veh)	1.3								2.6			0.8

The unsignalized Driveway "B" on Montgomery Blvd. is projected to operate acceptably for all conditions analyzed in this report with the exception of the eastbound left turn movement (eastbound to northbound) into the existing McDonalds' on the north side of Montgomery west of Wyoming Blvd. The calculated LOS "E" for the horizon year is probably over-stated for two reasons: 1) the annual growth rate utilized in the report is more than what is supported by the historic data and 2) the effect of the existing signal at Montgomery / Pennsylvania has not been considered. Therefore, no recommendation is made with regard to Driveway "B".

#6 – Driveway "C" / Wyoming Blvd. – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of Driveway "C" / Wyoming Blvd. are summarized in the following tables:

Driveway "C" / Wyoming Blvd. 2025 Conditions - Full Development	EB (Driveway "C")			WB (Driveway "C")			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1	1	<	1	>	1	3	>	1	3	>
AM Peak Hour												
2025 BUILD Conditions Volumes	100	1	59	60	1	60	107	1,468	60	60	1,937	93
V/C Ratio		0.50	0.13		0.39		0.18			0.08		
Level-of-Service		E	B		C		B			B		
Control Delay (Seconds)		38.8	13.9		24.0		12.6			10.4		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		2.5	0.4		1.8		0.7			0.3		

PM Peak Hour												
2025 BUILD Conditions Volumes	80	1	46	60	1	60	81	1,700	60	60	1,722	60
V/C Ratio		0.36	0.09		0.38		0.12			0.09		
Level-of-Service		D	B		C		B			B		
Control Delay (Seconds)		29.4	12.5		22.9		11.3			11.0		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		1.5	0.3		1.7		0.4			0.3		

Driveway "C" / Wyoming Blvd. 2035 Conditions	EB (Driveway "C")			WB (Driveway "C")			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1	1	<	1	>	1	3	>	1	3	>
AM Peak Hour												
2035 BUILD Conditions Volumes	100	1	59	60	1	60	107	1,536	60	60	2,030	93
V/C Ratio		0.54	0.13		0.42		0.19			0.09		
Level-of-Service		E	B		D		B			B		
Control Delay (Seconds)		44.4	14.4		25.9		13.1			10.6		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		2.8	0.5		2.0		0.7			0.3		

PM Peak Hour												
2035 BUILD Conditions Volumes	80	1	46	60	1	60	81	1,782	60	60	1,805	60
V/C Ratio		0.38	0.09		0.41		0.13			0.10		
Level-of-Service		D	B		D		B			B		
Control Delay (Seconds)		32.3	12.9		25.0		11.6			11.3		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		1.7	0.3		1.9		0.4			0.3		

Analysis of the unsignalized Driveway “C” results in marginally excessive delays for the side street traffic (eastbound) attempting to turn onto Montgomery Blvd. during the AM Peak Hour, but not the PM Peak. It is anticipated that delays for the eastbound left turn movement (eastbound to northbound) at Driveway “C” is marginally high, but the calculated delay for the movement for the implementation year is only 3.8 seconds more than LOS “D”. Also, the horizon year calculated delay is also overstated in the above table since the minimum annual background traffic growth rate utilized in this report to calculate the horizon year volumes is overstated and not supported by historic data. Instead, the minimum annual growth rate required by the City of Albuquerque was utilized to forecast horizon year volumes.

#7 – Driveway “D” / Wyoming Blvd. – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of Driveway “D” are summarized in the following tables:

Driveway "D" / Wyoming Blvd. 2025 Conditions - Full Development	EB (Driveway "D")			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry			1		3			3	>
AM Peak Hour									
2025 BUILD Conditions Volumes	0		54	0	1,588			1,935	72
V/C Ratio			0.26						
Level-of-Service			D						
Control Delay (Seconds)			28.7						
Intersection LOS	TWSC								
95th Percentile Queue (veh)			1.0						
PM Peak Hour									
2025 BUILD Conditions Volumes	0		38	0	1,763			1,720	51
V/C Ratio			0.16						
Level-of-Service			C						
Control Delay (Seconds)			22.4						
Intersection LOS	TWSC								
95th Percentile Queue (veh)			0.5						

Driveway "D" / Wyoming Blvd. 2035 Conditions	EB (Driveway "D")			NB (Wyoming Blvd.)			SB (Wyoming Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry			1		3			3	>
AM Peak Hour									
2035 BUILD Conditions Volumes	0		54	0	1,626			2,018	72
V/C Ratio			0.28						
Level-of-Service			D						
Control Delay (Seconds)			30.9						
Intersection LOS	TWSC								
95th Percentile Queue (veh)			1.1						

PM Peak Hour									
2035 BUILD Conditions Volumes	0		38	0	1,845			1,803	51
V/C Ratio			0.17						
Level-of-Service			C						
Control Delay (Seconds)			23.7						
Intersection LOS	TWSC								
95th Percentile Queue (veh)			0.6						

Analysis of Driveway "D" / Wyoming Blvd. shows that the operation will be acceptable for all conditions to the horizon year and beyond. Therefore, no recommendation is made with regard to Driveway "D".

#8 – La Mirada Pl. / Driveway "R" – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of Driveway "R" are summarized in the following tables:

La Mirada Pl. / Driveway "R" 2025 Conditions - Full Development	EB (La Mirada Pl.)			WB (La Mirada Pl.)			SB (Driveway "R")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1			1	>	<	1	>
AM Peak Hour									
2025 BUILD Conditions Volumes	1	54			77	13	39		1
V/C Ratio	0.00						0.05		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.4		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

PM Peak Hour									
2025 BUILD Conditions Volumes	1	64			35	43	25		1
V/C Ratio	0.00						0.03		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.2		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

La Mirada Pl. / Driveway "R" 2035 Conditions	EB (La Mirada Pl.)			WB (La Mirada Pl.)			SB (Driveway "R")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1			1	>	<	1	>
AM Peak Hour									
2035 BUILD Conditions Volumes	1	56			81	13	39		1
V/C Ratio	0.00						0.05		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.5		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

PM Peak Hour									
2035 BUILD Conditions Volumes	1	67			37	43	25		1
V/C Ratio	0.00						0.03		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.3		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

Analysis of La Mirada Pl. / Driveway "R" shows that the operation will be acceptable for all conditions to the horizon year and beyond. Therefore, no recommendation is made with regard to Driveway "R".

#9 – La Mirada Pl. / Driveway "E" – Unsignalized (Appendix Pages A-72 thru A-119)

The results of the 2025 (Implementation Year) and 2035 (Horizon Year) analysis of the unsignalized intersection of La Mirada Pl. / Driveway "E" are summarized in the following tables:

La Mirada Pl. / Driveway "E" 2025 Conditions - Full Development	EB (La Mirada Pl.)			WB (La Mirada Pl.)			SB (Driveway "E")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1			1	>	<	1	>
AM Peak Hour									
2025 BUILD Conditions Volumes	4	89			87	37	33		3
V/C Ratio	0.00						0.05		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.5	0.0					9.8		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

PM Peak Hour									
2025 BUILD Conditions Volumes	2	87			76	24	21		2
V/C Ratio	0.00						0.03		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.5		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

La Mirada Pl. / Driveway "E" 2035 Conditions	EB (La Mirada Pl.)			WB (La Mirada Pl.)			SB (Driveway "E")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	<	1			1	>	<	1	>
AM Peak Hour									
2035 BUILD Conditions Volumes	4	91			91	37	33		3
V/C Ratio	0.00						0.05		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.5	0.0					9.8		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

PM Peak Hour									
2035 BUILD Conditions Volumes	2	90			78	24	21		2
V/C Ratio	0.00						0.03		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.4	0.0					9.6		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.0						0.1		

Analysis of La Mirada Pl. / Driveway "E" shows that the operation will be acceptable for all conditions to the horizon year and beyond. Therefore, no recommendation is made with regard to Driveway "E".

Summary of Deficiencies, Impacts, and Recommendations

Summary of impacts and recommendations (based on full development of La Mirada):

- The first is the signalized intersection of Montgomery Blvd. / Wyoming Blvd. Analysis indicates that the signalized intersection is stressed and fairly congested. Assuming existing signal timing, the intersection delay is calculated to remain fairly constant (Implementation Year AM analysis) or increase by about 17 seconds (Horizon Year AM analysis) as a result of the new traffic generated by the La Mirada Development (Full Development). The calculated intersection delay is projected to increase by approximately 5 seconds for both the Implementation Year and the Horizon Year as a result of this project. Still, though, the intersection Levels-of-Service are "E" for the PM BUILD Conditions in both the Implementation Year and the Horizon Year. The calculated delay for the intersection is less than 1 second beyond LOS "D" and there is no single turning movement that is projected to be at LOS "F". This report concludes with a recommendation to revise the timing splits for the Horizon Year AM Peak Hour conditions. The Implementation Year AM Peak Hour analysis resulted in no significant impact. Also, the Implementation Year and Horizon Year PM Peak Hour analysis resulted in a moderate impact, but marginally acceptable levels-of-service for the overall intersection and the individual turning movements. Therefore, the only recommendation is signal timing modification.
- The second is the operation of the full access unsignalized Driveway "A" on Montgomery Blvd. This analysis shows it to experience excessively long delays for both the Implementation Year and the Horizon Year conditions. This report attributes those long delays to two factors. First, the annual background growth rate utilized in this Study is the minimum required by the City of Albuquerque (0.5% annually) and is not supported by the historic data on the roadways. Therefore, the base volumes used in this Study are probably slightly overstated. Second, the effect of the existing traffic signal at Montgomery Blvd. / Pennsylvania to the west of Driveway "A" are not considered in the analysis. The effect of an upstream signal on the operation of a driveway can and often is quite

significant. The traffic volumes on Montgomery Blvd. are comparable to the traffic volumes on Wyoming Blvd. Generated traffic should distribute to Driveway “A” and Driveway “C” pretty evenly. Therefore, the results of the analyses of Driveway “A” and Driveway “C” should be similar since both have similar volumes and both have existing traffic signals on either side of the driveway to platoon the traffic flow and create gaps in main street traffic, thus allowing side street traffic to turn onto the main street with lower delays. Therefore, it is projected that the operation of Driveway “A” should be similar to that of Driveway “C” and it is concluded that the operation of both driveways will be marginally acceptable. Also, Driveway “A” aligns with a full access public road (Norma Dr.) on the north side of Montgomery Blvd. It is therefore recommended that both Driveway “A” and Norma Dr. remain full access.

- The third is that Driveway “C” is projected to operate at marginally acceptable levels-of-service and delays. This analysis proposes two reasons that the operation of the driveway should be acceptable. First, as previously stated, the annual background traffic growth rate utilized in this Study is unrealistically high in that it is not supported by the historic data in this area of town. Therefore, the volumes assumed on Wyoming Blvd. are slightly overstated. Secondly, on high volume arterial roadways, it is common for unsignalized driveways to experience long delays during peak periods. Therefore, it should be acknowledged that unsignalized driveways along Montgomery Blvd. and along Wyoming Blvd. will experience long delays during the peak periods of travel.

Recommendations:

Montgomery Blvd. / Wyoming Blvd. – Provide a recommended signal timing splits in the future near the Horizon Year (2035) to optimize operation of the traffic signal.

Montgomery Blvd. / Driveway “A” – Driveway “A” is an existing full-access unsignalized driveway on the south side of Montgomery Blvd. that should continue to operate as a full-access unsignalized driveway. It aligns with an existing public roadway (Norma Dr.) on the north side of Montgomery Blvd. The geometry of Driveway “A” should remain as it currently exists with a northbound right turn lane and a northbound thru / left turn lane. Throat depth for Driveway “A” should be as long as possible.

Montgomery Blvd. / Driveway “B” – Driveway “B” is an existing partial-access unsignalized driveway on the south side of Montgomery Blvd. that should continue to operate as a partial-access unsignalized driveway. Driveway “B” should continue to operate as it is currently constructed. It is a right-in, right-out only driveway on the south side of Montgomery Blvd. and as a right-in, right-out, left-in only on the north side of Montgomery Blvd. The geometry of Driveway “B” should remain as it currently exists with one lane entering and one lane exiting. Throat depth for Driveway “B” is recommended to be 30 feet.

Driveway “C” / Wyoming Blvd. – Driveway “C” is an existing full-access unsignalized driveway on the west side of Wyoming Blvd. It aligns with another commercial full-access unsignalized driveway that exists on the east side of Wyoming Blvd. The geometry of Driveway “C” should remain as it currently exists with an eastbound right turn lane and an eastbound thru / left turn lane. Throat depth for Driveway “C” is recommended to be 75 feet.

Driveway “D” / Wyoming Blvd. – Driveway “D” is an existing right-in, right-out unsignalized driveway on the west side of Wyoming Blvd. The geometry of Driveway “D” should remain as it currently exists with one entering lane and one exiting lane. Throat depth for Driveway “D” should be 30 feet.

La Mirada Pl. / Driveway “E” – Driveway “E” is an existing full access unsignalized driveway on the north side of La Mirada Pl. The geometry of Driveway “E” may remain as it currently exists with one entering lane and one exiting lane. Throat depth for Driveway “E” should be 30 feet.

La Mirada Pl. / Driveway “R” – Driveway “R” is a new full-access unsignalized driveway that will be to sole vehicular access to the residential component of the La Mirada Development. Throat depth for Driveway “R” should be 30 feet.

La Mirada Pl. / Wyoming Blvd. – construct striping for the eastbound approach on La Mirada Pl. at Wyoming to provide an exclusive eastbound right turn lane and a thru / left turn lane. The

length of the striping should be extended to at least 50 feet west of the stop bar.

Appendix

<u>SITE INFORMATION</u>	
Vicinity Map	A-1
Aerial Photo of Adjacent Transportation System	A-2
Conceptual Site Development Plan	A-3
<u>TRIP GENERATION</u>	
Trip Generation Summary Table / Trip Generation Worksheets	A-4 thru A-10
<u>BACKGROUND TRAFFIC GROWTH</u>	
Historic Growth Data Table / Traffic Flow Graphs	A-11 thru A-13
<u>TRIP DISTRIBUTION / TRIP ASSIGNMENTS</u>	
Trip Distribution Worksheet – Residential Trips	A-14 thru A-17
Trip Distribution Map – Residential	A-18
Trip Assignments Map - % Entering – Residential	A-19
Trip Assignments Maps – % Exiting – Residential	A-20
Trip Distribution Worksheet – Commercial Trips	A-21
Trip Distribution Map – Commercial	A-22
Trip Assignments Map - % Entering – Commercial	A-23 thru A-24
Trip Assignments Maps – % Exiting – Commercial	A-25 thru A-26
Driveway Trips / Pass-by Trip Map (%)	A-27
Trip Assignments Map - % Entering – Medical Trips	A-28
Trip Assignments Maps – % Exiting – Medical Trips	A-29
<u>TURNING MOVEMENT COUNTS</u>	
IMPLEMENTATION YEAR (2025)	
2025 AM / PM Peak Hour Turning Movements Summary Table	A-30 thru A-32
Individual Intersection Turning Movement Volumes Worksheets	A-33 thru A-50
HORIZON YEAR (2035)	
2035 AM / PM Peak Hour Turning Movements Summary Table	A-51 thru A-53
Individual Intersection Turning Movement Volumes Worksheets	A-54 thru A-71
<u>SIGNALIZED / UNSIGNALIZED INTERSECTION ANALYSES</u>	
IMPLEMENTATION YEAR (2025)	
Intersection #1 – Montgomery Blvd. / Wyoming Blvd.	A-72 thru A-75
Intersection #2 – Comanche Rd. / Wyoming Blvd.	A-76 thru A- 79
Intersection #3 – La Mirada Pl. / Wyoming Blvd.	A-80 thru A-83
Intersection #4 – Montgomery Blvd. / Driveway “A”	A-84 thru A-85
Intersection #5 – Montgomery Blvd. / Driveway “B”	A-86 thru A-87
Intersection #6 – Driveway “C” / Wyoming Blvd.	A-88 thru A-89
Intersection #7 – Driveway “D” / Wyoming Blvd.	A-90 thru A-91
Intersection #8 – La Mirada Pl. / Driveway “R”	A-92 thru A-93
Intersection #9 – La Mirada Pl. / Driveway “E”	A-94 thru A-95
HORIZON YEAR (2035)	
Intersection #1 – Montgomery Blvd. / Wyoming Blvd.	A-96 thru A-99
Intersection #2 – Comanche Rd. / Wyoming Blvd.	A-100 thru A- 103
Intersection #3 – La Mirada Pl. / Wyoming Blvd.	A-104 thru A-107
Intersection #4 – Montgomery Blvd. / Driveway “A”	A-108 thru A-109
Intersection #5 – Montgomery Blvd. / Driveway “B”	A-110 thru A-111
Intersection #6 – Driveway “C” / Wyoming Blvd.	A-112 thru A-113
Intersection #7 – Driveway “D” / Wyoming Blvd.	A-114 thru A-115
Intersection #8 – La Mirada Pl. / Driveway “R”	A-116 thru A-117
Intersection #9 – La Mirada Pl. / Driveway “E”	A-118 thru A-119
<u>MISCELLANEOUS DATA</u>	
Base Traffic Count Data	A-120 thru A-122

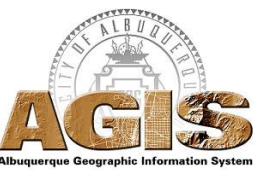
APPENDICES



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

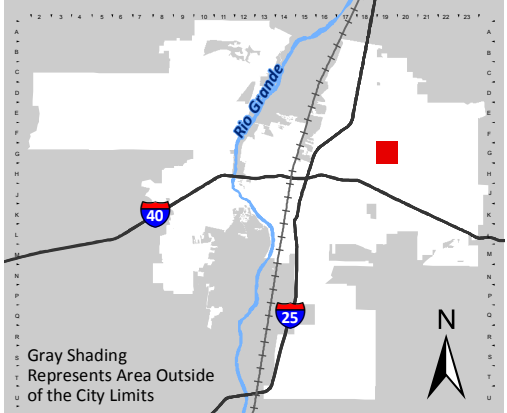
IDO Zone Atlas

May 2018



IDO Zoning information as of May 17, 2018

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



Gray Shading
Represents Area Outside of the City Limits

Zone Atlas Page:
G-19-Z

- Easement
- 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

Escarpment
 Feet
0 250 500 1,000



**La Mirada Development
Vicinity Map on Aerial Photo**

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

COMMENT	USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet			Units				
Residential	Single-Family Detached Housing (210)	66	709	13	39	43	25
Lots 1 & 2	Fast Food Restaurant w/ Drive-Thru Window (934)	5.80	2,732	119	114	99	91
Lot 4	Gas Station Supermart (960)	16	3,688	225	225	184	184
Lots 7 & 8	High Turnover (Sit-Down) Restaurant (932)	22.37	2,509	122	100	135	83
Lots 1,5,& 6	Shopping Center (820)	18.70	1,922	100	61	75	82
Lot 3	Free-Standing Emergency Room (650)	15.00	374	43	12	15	36
Subtotal Retail Commercial			10,851	566	500	493	440
Internal Capture				(25)	(25)	(102)	(102)
Net Retail Commercial Trips (Adj. for Internal Capture)			10,851	541	475	391	338
<i>Pass-By Trips</i>				-170	-150	-148	-132
Total Primary Trips (Retail Commercial)				371	325	243	206
Total Primary Trips (Residential)			709	13	39	43	25
Total Medical Use Trips (Free-Standing Emergency Room)			374	43	12	15	36

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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					
Single-Family Detached Housing (210)	709	13	39	43	25
Dwelling Units					

66.00

ITE Trip Generation Equations:

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

$$\begin{matrix} \text{Ln(T)} = & 0.92 & \text{Ln(X)} + & 2.71 \\ 50\% & \text{Enter,} & & 50\% \text{ Exit} \end{matrix}$$

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

$$\begin{matrix} \text{T} = & 0.71 & (\text{X}) + & 4.8 \\ 25\% & \text{Enter,} & & 75\% \text{ Exit} \end{matrix}$$

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

$$\begin{matrix} \text{Ln(T)} = & 0.96 & \text{Ln(X)} + & 0.2 \\ 63\% & \text{Enter,} & & 37\% \text{ Exit} \end{matrix}$$

Comments:

Residential

Based on ITE Trip Generation Manual - 10th Edition

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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
Fast Food Restaurant w/ Drive-Thru Window (934)	Units 5.80 1,000 S.F.	2,732	119	114	99
				91	

ITE Trip Generation Equations:

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

$$T = 470.95 (X) + 0$$

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)

$$T = 40.19 (X) + 0$$

51% Enter, 49% Exit

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

$$T = 32.67 (X) + 0$$

52% Enter, 48% Exit

Comments:

Lots 1 & 2

Based on ITE Trip Generation Manual - 10th Edition

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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					
Super Convenience Market / Gas Station (960)	16 3,688	225	225	184	184
Fueling Positions					

ITE Trip Generation Equations:

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

$$T = 230.52 (X) + 0$$

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)

$$T = 28.08 (X) + 0$$

50% Enter, 50% Exit

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

$$T = 22.96 (X) + 0$$

50% Enter, 50% Exit

Comments:

Lot 4

Based on ITE Trip Generation Manual - 10th Edition

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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					
High Turnover (Sit-Down) Restaurant (932)	22.37	2,509	122	100	135
1,000 S.F.					
		83			

ITE Trip Generation Equations:

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

$$T = 112.18 (X) + 0$$

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)

$$T = 9.94 (X) + 0$$

55% Enter, 45% Exit

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

$$T = 9.77 (X) + 0$$

62% Enter, 38% Exit

Comments:

Lots 7 & 8

Based on ITE Trip Generation Manual - 10th Edition

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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
Shopping Center (820)	Units 18.70 1,000 S.F.	1,922	100	61	75	82

ITE Trip Generation Equations:

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

$$\text{Ln}(T) = 0.68 \text{ Ln}(X) + 5.57$$

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)

$$T = 0.5 (X) + 151.78$$

62% Enter, 38% Exit

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

$$\text{Ln}(T) = 0.74 \text{ Ln}(X) + 2.89$$

48% Enter, 52% Exit

Comments:

Lots 1,5,& 6

Based on ITE Trip Generation Manual - 10th Edition

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)
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
Free-Standing Emergency Room (650)	374	43	12	15	36

Units
15.00
 1,000 S.F.

ITE Trip Generation Equations:

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

$$T = 24.94 (X) + 0$$

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)

$$T = 3.69 (X) + 0$$

78% Enter, 22% Exit

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

$$\ln(T) = 0.72 \ln(X) + 1.97$$

29% Enter, 71% Exit

Comments:

Lot 3

Based on ITE Trip Generation Manual - 10th Edition

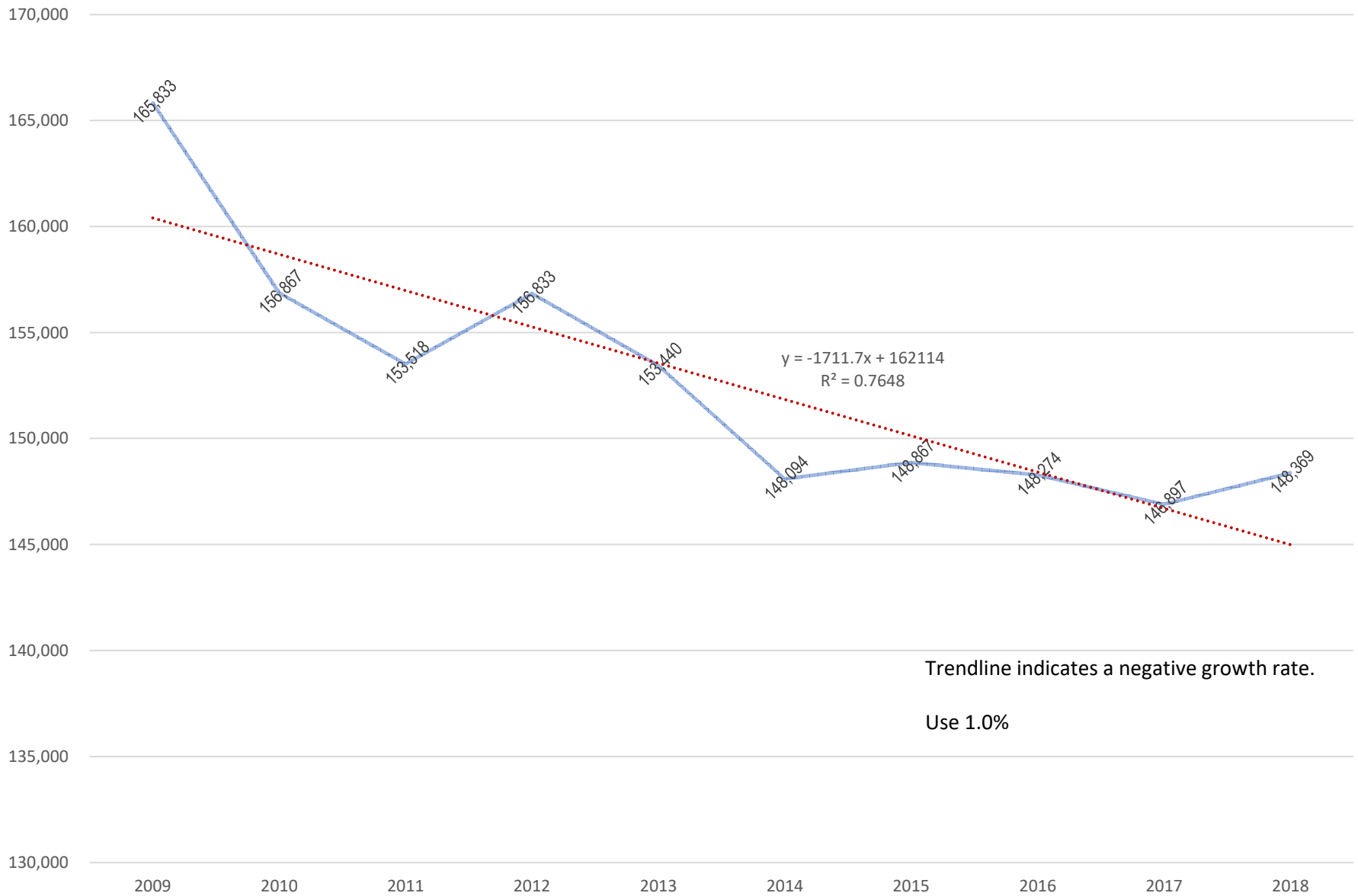
Historic Growth Data Table
La Mirada Development
(La Mirada Pl. / Wyoming Blvd.)

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

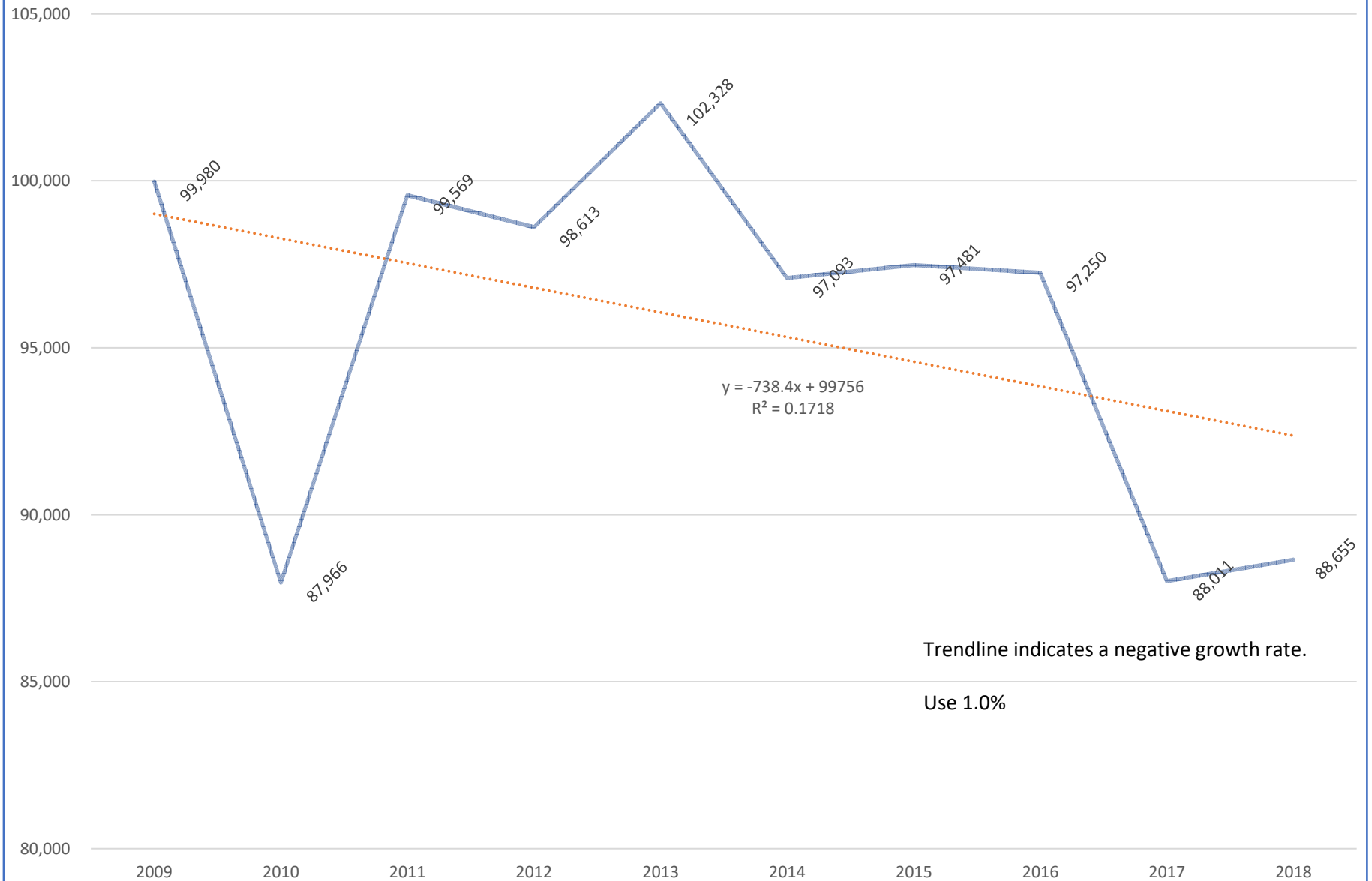
COG ID	Location												
Intersection #1: MONTGOMERY / WYOMING													
Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
21788 MONTGOMERY	EAST OF PENNSYLVANIA	WEST OF WYOMING	47,782	47,017	38,125	37,347	36,813	36,445	36,263	35,145	35,162	35,830	
21792 MONTGOMERY	EAST OF WYOMING	WEST OF MOON	35,479	30,007	29,467	35,750	33,163	32,831	32,667	33,168	33,184	33,814	
21972 WYOMING	NORTH OF COMANCHE	SOUTH OF MONTGOMERY	37,968	37,436	43,148	43,019	42,104	36,595	36,741	36,851	35,527	35,787	
21784 WYOMING	NORTH OF MONTGOMERY	SOUTH OF OSUNA	44,604	42,407	42,778	40,717	41,360	42,223	43,196	43,110	43,024	42,938	
Total Intersection Traffic Flows			165,833	156,867	153,518	156,833	153,440	148,094	148,867	148,274	146,897	148,369	

COG ID	Location												
Intersection #2: COMANCHE / WYOMING													
Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
22060 COMANCHE	EAST OF PENNSYLVANIA	WEST OF WYOMING	11,158	11,002	10,980	10,289	10,248	10,312	10,353	10,384	8,000	8,058	
21976 COMANCHE	EAST OF WYOMING	WEST OF MOON	11,889	11,723	13,085	13,046	12,994	13,022	13,074	13,113	13,777	13,878	
22144 WYOMING	NORTH OF CANDELARIA	SOUTH OF COMANCHE	38,965	27,805	32,356	32,259	36,982	37,164	37,313	36,902	30,707	30,932	
21972 WYOMING	NORTH OF COMANCHE	SOUTH OF MONTGOMERY	37,968	37,436	43,148	43,019	42,104	36,595	36,741	36,851	35,527	35,787	
Total Intersection Traffic Flows			99,980	87,966	99,569	98,613	102,328	97,093	97,481	97,250	88,011	88,655	

Historic Traffic Flow Graph
Intersection #1: Montgomery Blvd. / Wyoming Blvd.



Historic Traffic Flow Graph Intersection #2: Comanche Rd. / Wyoming Blvd.



Trip Distribution Table

La Mirada Development (La Mirada / Wyoming Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Residential 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

									(WN) Wyoming Blvd. North			(ME) Montgomery Blvd. 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
		2012	2040	2025										
1	100%	6,537	25,963	15,556	15,556	11.9	1,307	1.20%	40%	0.48%	523	0%	0.00%	0
2	100%	17,489	33,517	24,931	24,931	11.1	2,246	2.06%	40%	0.82%	898	0%	0.00%	0
3	100%	1,518	2,100	1,788	1,788	8	224	0.20%	40%	0.08%	89	0%	0.00%	0
4	100%	3,550	6,305	4,829	4,829	12.8	377	0.35%	40%	0.14%	151	0%	0.00%	0
5	100%	12,899	22,103	17,172	17,172	8.7	1,974	1.81%	40%	0.72%	790	0%	0.00%	0
6	100%	1,888	3,935	2,838	2,838	18.1	157	0.14%	0%	0.00%	0	0%	0.00%	0
7	100%	8,784	16,098	12,180	12,180	8.4	1,450	1.33%	0%	0.00%	0	0%	0.00%	0
8	100%	9,396	15,659	12,304	12,304	9.4	1,309	1.20%	0%	0.00%	0	0%	0.00%	0
9	100%	1,002	1,815	1,379	1,379	24.7	56	0.05%	0%	0.00%	0	0%	0.00%	0
10	100%	3,954	7,907	5,789	5,789	12.3	471	0.43%	0%	0.00%	0	0%	0.00%	0
11	100%	5,772	7,560	6,602	6,602	10.5	629	0.58%	0%	0.00%	0	0%	0.00%	0
12	100%	7,107	9,021	7,996	7,996	5.4	1,481	1.36%	40%	0.54%	592	0%	0.00%	0
13	100%	31,747	47,896	39,245	39,245	4.1	9,572	8.76%	40%	3.50%	3,829	0%	0.00%	0
14	100%	36,255	47,165	41,320	41,320	2.1	19,676	18.01%	70%	12.61%	13,773	30%	5.40%	5,903
15	100%	15,719	25,356	20,193	20,193	6	3,366	3.08%	0%	0.00%	0	0%	0.00%	0
16*	100%	55,543	67,295	60,999	60,999	1.9	32,105	29.39%	0%	0.00%	0	30%	8.82%	9,631
17	100%	37,312	52,468	44,349	44,349	6.4	6,929	6.34%	0%	0.00%	0	0%	0.00%	0
18	100%	49,455	58,200	53,515	53,515	4.7	11,386	10.42%	0%	0.00%	0	0%	0.00%	0
19	100%	25,348	33,772	29,259	29,259	3.6	8,128	7.44%	0%	0.00%	0	0%	0.00%	0
20	100%	5,536	13,277	9,130	9,130	8.9	1,026	0.94%	0%	0.00%	0	0%	0.00%	0
21	100%	412	10,347	5,025	5,025	10.5	479	0.44%	0%	0.00%	0	0%	0.00%	0
22	100%	26,765	26,990	26,869	26,869	8.8	3,053	2.80%	0%	0.00%	0	0%	0.00%	0
23	100%	2,514	3,393	2,922	2,922	10.7	273	0.25%	0%	0.00%	0	0%	0.00%	0
24	100%	1,196	1,765	1,460	1,460	18.1	81	0.07%	0%	0.00%	0	0%	0.00%	0
25	100%	77	137	105	105	20.2	5	0.00%	0%	0.00%	0	0%	0.00%	0
26	100%	15,527	25,035	19,941	19,941	24.2	824	0.75%	0%	0.00%	0	0%	0.00%	0
27	100%	5,361	7,954	6,565	6,565	18.2	361	0.33%	40%	0.13%	144	0%	0.00%	0
28	100%	4,139	4,864	4,476	4,476	22.2	202	0.18%	0%	0.00%	0	0%	0.00%	0
29	100%	1,563	2,486	1,992	1,992	20.6	97	0.09%	0%	0.00%	0	0%	0.00%	0
		394,365	580,383	480,731	480,731		109,241	100.00%		19.03%	20,790		14.22%	15,534
											19.03%			14.22%

* - Subarea in which the site is located.

Trip Distribution Table

La Mirada Development (La Mirada / Wyoming Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Residential 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) Comanche Rd. East			(WS) Wyoming Blvd. 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
		2012	2040	2025										
1	100%	6,537	25,963	15,556	15,556	11.9	1,307	1.20%	0%	0.00%	0	0%	0.00%	0
2	100%	17,489	33,517	24,931	24,931	11.1	2,246	2.06%	0%	0.00%	0	0%	0.00%	0
3	100%	1,518	2,100	1,788	1,788	8	224	0.20%	0%	0.00%	0	0%	0.00%	0
4	100%	3,550	6,305	4,829	4,829	12.8	377	0.35%	0%	0.00%	0	0%	0.00%	0
5	100%	12,899	22,103	17,172	17,172	8.7	1,974	1.81%	0%	0.00%	0	0%	0.00%	0
6	100%	1,888	3,935	2,838	2,838	18.1	157	0.14%	0%	0.00%	0	40%	0.06%	63
7	100%	8,784	16,098	12,180	12,180	8.4	1,450	1.33%	0%	0.00%	0	40%	0.53%	580
8	100%	9,396	15,659	12,304	12,304	9.4	1,309	1.20%	0%	0.00%	0	40%	0.48%	524
9	100%	1,002	1,815	1,379	1,379	24.7	56	0.05%	0%	0.00%	0	60%	0.03%	34
10	100%	3,954	7,907	5,789	5,789	12.3	471	0.43%	0%	0.00%	0	60%	0.26%	282
11	100%	5,772	7,560	6,602	6,602	10.5	629	0.58%	0%	0.00%	0	60%	0.35%	377
12	100%	7,107	9,021	7,996	7,996	5.4	1,481	1.36%	0%	0.00%	0	0%	0.00%	0
13	100%	31,747	47,896	39,245	39,245	4.1	9,572	8.76%	0%	0.00%	0	0%	0.00%	0
14	100%	36,255	47,165	41,320	41,320	2.1	19,676	18.01%	0%	0.00%	0	0%	0.00%	0
15	100%	15,719	25,356	20,193	20,193	6	3,366	3.08%	0%	0.00%	0	0%	0.00%	0
16*	100%	55,543	67,295	60,999	60,999	1.9	32,105	29.39%	20%	5.88%	6,421	0%	0.00%	0
17	100%	37,312	52,468	44,349	44,349	6.4	6,929	6.34%	0%	0.00%	0	50%	3.17%	3,465
18	100%	49,455	58,200	53,515	53,515	4.7	11,386	10.42%	0%	0.00%	0	60%	6.25%	6,832
19	100%	25,348	33,772	29,259	29,259	3.6	8,128	7.44%	20%	1.49%	1,626	60%	4.46%	4,877
20	100%	5,536	13,277	9,130	9,130	8.9	1,026	0.94%	0%	0.00%	0	80%	0.75%	821
21	100%	412	10,347	5,025	5,025	10.5	479	0.44%	0%	0.00%	0	80%	0.35%	383
22	100%	26,765	26,990	26,869	26,869	8.8	3,053	2.80%	10%	0.28%	305	80%	2.24%	2,443
23	100%	2,514	3,393	2,922	2,922	10.7	273	0.25%	20%	0.05%	55	80%	0.20%	218
24	100%	1,196	1,765	1,460	1,460	18.1	81	0.07%	0%	0.00%	0	70%	0.05%	56
25	100%	77	137	105	105	20.2	5	0.00%	0%	0.00%	0	70%	0.00%	4
26	100%	15,527	25,035	19,941	19,941	24.2	824	0.75%	0%	0.00%	0	70%	0.53%	577
27	100%	5,361	7,954	6,565	6,565	18.2	361	0.33%	0%	0.00%	0	0%	0.00%	0
28	100%	4,139	4,864	4,476	4,476	22.2	202	0.18%	30%	0.06%	60	70%	0.13%	141
29	100%	1,563	2,486	1,992	1,992	20.6	97	0.09%	30%	0.03%	29	70%	0.06%	68
		394,365	580,383	480,731	480,731		109,241	100.00%		7.78%	8,496 7.78%		19.90%	21,743 19.90%

* - Subarea in which the site is located.

Trip Distribution Table

La Mirada Development (La Mirada / Wyoming Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Residential 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

									(CW) Comanche Rd. West			(LW) La Mirada Pl. 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
		2012	2040	2025										
1	100%	6,537	25,963	15,556	15,556	11.9	1,307	1.20%	0%	0.00%	0	0%	0.00%	0
2	100%	17,489	33,517	24,931	24,931	11.1	2,246	2.06%	0%	0.00%	0	0%	0.00%	0
3	100%	1,518	2,100	1,788	1,788	8	224	0.20%	0%	0.00%	0	0%	0.00%	0
4	100%	3,550	6,305	4,829	4,829	12.8	377	0.35%	0%	0.00%	0	0%	0.00%	0
5	100%	12,899	22,103	17,172	17,172	8.7	1,974	1.81%	0%	0.00%	0	0%	0.00%	0
6	100%	1,888	3,935	2,838	2,838	18.1	157	0.14%	30%	0.04%	47	0%	0.00%	0
7	100%	8,784	16,098	12,180	12,180	8.4	1,450	1.33%	30%	0.40%	435	0%	0.00%	0
8	100%	9,396	15,659	12,304	12,304	9.4	1,309	1.20%	30%	0.36%	393	0%	0.00%	0
9	100%	1,002	1,815	1,379	1,379	24.7	56	0.05%	20%	0.01%	11	0%	0.00%	0
10	100%	3,954	7,907	5,789	5,789	12.3	471	0.43%	20%	0.09%	94	0%	0.00%	0
11	100%	5,772	7,560	6,602	6,602	10.5	629	0.58%	20%	0.12%	126	0%	0.00%	0
12	100%	7,107	9,021	7,996	7,996	5.4	1,481	1.36%	0%	0.00%	0	0%	0.00%	0
13	100%	31,747	47,896	39,245	39,245	4.1	9,572	8.76%	0%	0.00%	0	0%	0.00%	0
14	100%	36,255	47,165	41,320	41,320	2.1	19,676	18.01%	0%	0.00%	0	0%	0.00%	0
15	100%	15,719	25,356	20,193	20,193	6	3,366	3.08%	30%	0.92%	1,010	0%	0.00%	0
16*	100%	55,543	67,295	60,999	60,999	1.9	32,105	29.39%	30%	8.82%	9,631	0%	0.00%	0
17	100%	37,312	52,468	44,349	44,349	6.4	6,929	6.34%	30%	1.90%	2,079	0%	0.00%	0
18	100%	49,455	58,200	53,515	53,515	4.7	11,386	10.42%	40%	4.17%	4,554	0%	0.00%	0
19	100%	25,348	33,772	29,259	29,259	3.6	8,128	7.44%	20%	1.49%	1,626	0%	0.00%	0
20	100%	5,536	13,277	9,130	9,130	8.9	1,026	0.94%	20%	0.19%	205	0%	0.00%	0
21	100%	412	10,347	5,025	5,025	10.5	479	0.44%	20%	0.09%	96	0%	0.00%	0
22	100%	26,765	26,990	26,869	26,869	8.8	3,053	2.80%	10%	0.28%	305	0%	0.00%	0
23	100%	2,514	3,393	2,922	2,922	10.7	273	0.25%	0%	0.00%	0	0%	0.00%	0
24	100%	1,196	1,765	1,460	1,460	18.1	81	0.07%	30%	0.02%	24	0%	0.00%	0
25	100%	77	137	105	105	20.2	5	0.00%	30%	0.00%	2	0%	0.00%	0
26	100%	15,527	25,035	19,941	19,941	24.2	824	0.75%	30%	0.23%	247	0%	0.00%	0
27	100%	5,361	7,954	6,565	6,565	18.2	361	0.33%	0%	0.00%	0	0%	0.00%	0
28	100%	4,139	4,864	4,476	4,476	22.2	202	0.18%	0%	0.00%	0	0%	0.00%	0
29	100%	1,563	2,486	1,992	1,992	20.6	97	0.09%	0%	0.00%	0	0%	0.00%	0
		394,365	580,383	480,731	480,731		109,241	100.00%		19.12%	20,885		0.00%	0
										19.12%				0.00%

* - Subarea in which the site is located.

Trip Distribution Table

La Mirada Development (La Mirada / Wyoming Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Residential 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

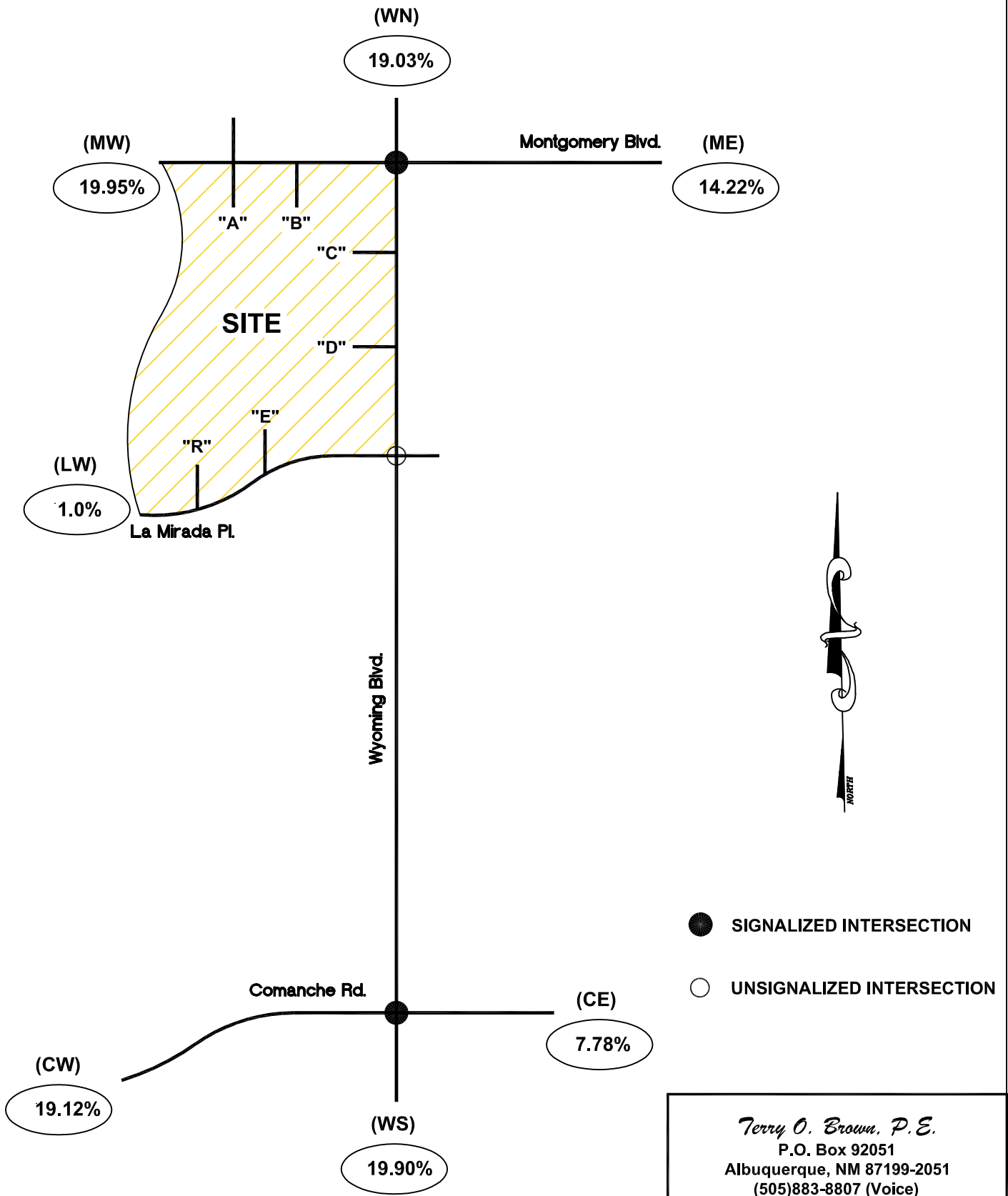
									(MW) Montgomery Blvd. West		
Sub Area I.D.#	% Sub Area in Study	2012 Employment	2040 Employment	Interpolated Employment for the Year	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	2040	2025							
1	100%	6,537	25,963	15,556	15,556	11.9	1,307	1.20%	60%	0.72%	784
2	100%	17,489	33,517	24,931	24,931	11.1	2,246	2.06%	60%	1.23%	1,348
3	100%	1,518	2,100	1,788	1,788	8	224	0.20%	60%	0.12%	134
4	100%	3,550	6,305	4,829	4,829	12.8	377	0.35%	60%	0.21%	226
5	100%	12,899	22,103	17,172	17,172	8.7	1,974	1.81%	60%	1.08%	1,184
6	100%	1,888	3,935	2,838	2,838	18.1	157	0.14%	30%	0.04%	47
7	100%	8,784	16,098	12,180	12,180	8.4	1,450	1.33%	30%	0.40%	435
8	100%	9,396	15,659	12,304	12,304	9.4	1,309	1.20%	30%	0.36%	393
9	100%	1,002	1,815	1,379	1,379	24.7	56	0.05%	20%	0.01%	11
10	100%	3,954	7,907	5,789	5,789	12.3	471	0.43%	20%	0.09%	94
11	100%	5,772	7,560	6,602	6,602	10.5	629	0.58%	20%	0.12%	126
12	100%	7,107	9,021	7,996	7,996	5.4	1,481	1.36%	60%	0.81%	888
13	100%	31,747	47,896	39,245	39,245	4.1	9,572	8.76%	60%	5.26%	5,743
14	100%	36,255	47,165	41,320	41,320	2.1	19,676	18.01%	0%	0.00%	0
15	100%	15,719	25,356	20,193	20,193	6	3,366	3.08%	70%	2.16%	2,356
16*	100%	55,543	67,295	60,999	60,999	1.9	32,105	29.39%	20%	5.88%	6,421
17	100%	37,312	52,468	44,349	44,349	6.4	6,929	6.34%	20%	1.27%	1,386
18	100%	49,455	58,200	53,515	53,515	4.7	11,386	10.42%	0%	0.00%	0
19	100%	25,348	33,772	29,259	29,259	3.6	8,128	7.44%	0%	0.00%	0
20	100%	5,536	13,277	9,130	9,130	8.9	1,026	0.94%	0%	0.00%	0
21	100%	412	10,347	5,025	5,025	10.5	479	0.44%	0%	0.00%	0
22	100%	26,765	26,990	26,869	26,869	8.8	3,053	2.80%	0%	0.00%	0
23	100%	2,514	3,393	2,922	2,922	10.7	273	0.25%	0%	0.00%	0
24	100%	1,196	1,765	1,460	1,460	18.1	81	0.07%	0%	0.00%	0
25	100%	77	137	105	105	20.2	5	0.00%	0%	0.00%	0
26	100%	15,527	25,035	19,941	19,941	24.2	824	0.75%	0%	0.00%	0
27	100%	5,361	7,954	6,565	6,565	18.2	361	0.33%	60%	0.20%	216
28	100%	4,139	4,864	4,476	4,476	22.2	202	0.18%	0%	0.00%	0
29	100%	1,563	2,486	1,992	1,992	20.6	97	0.09%	0%	0.00%	0
		394,365	580,383	480,731	480,731		109,241	100.00%		19.95%	21,793
											19.95%

* - Subarea in which the site is located.

La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

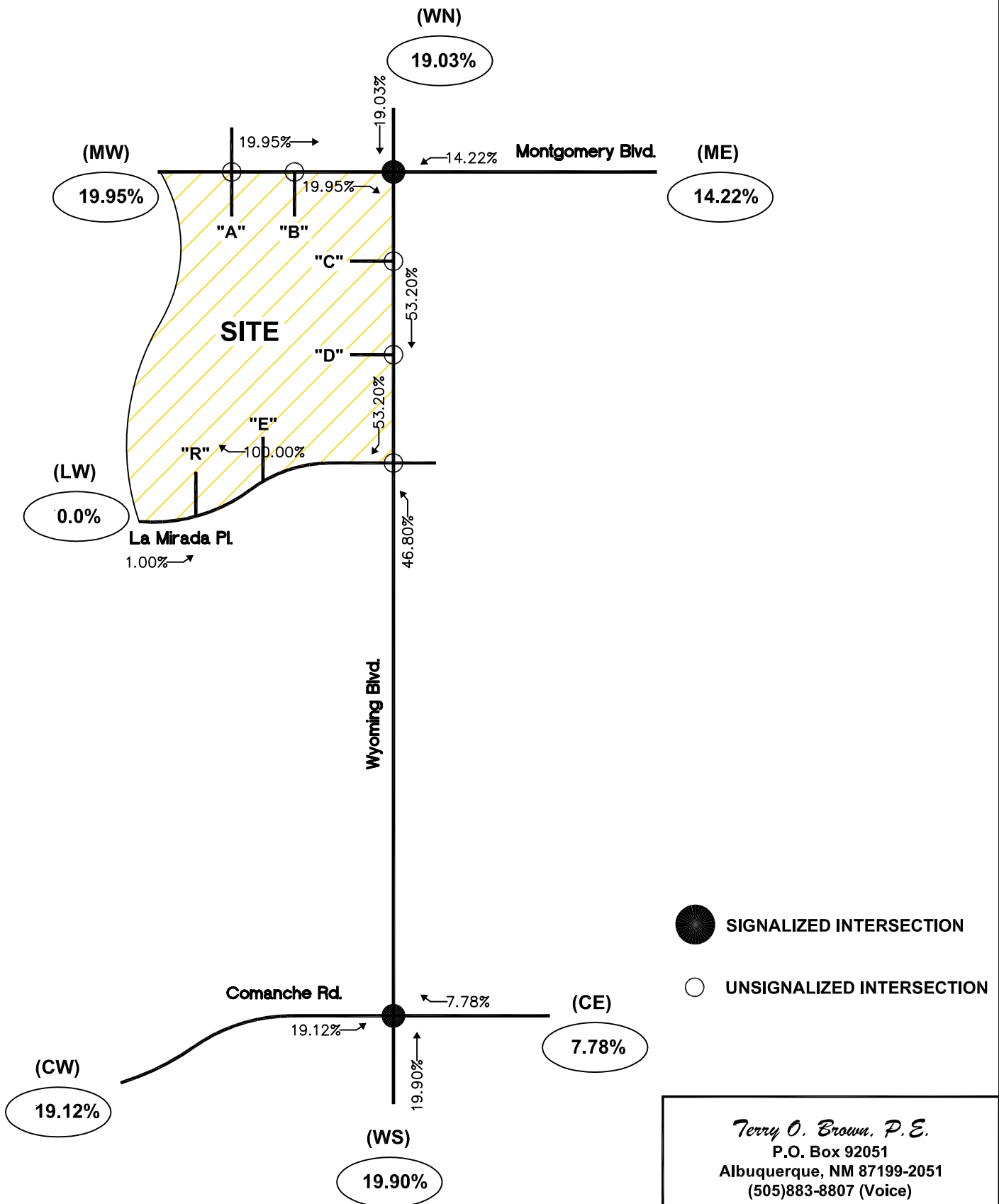
Trip Distribution Map (%) - Residential Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

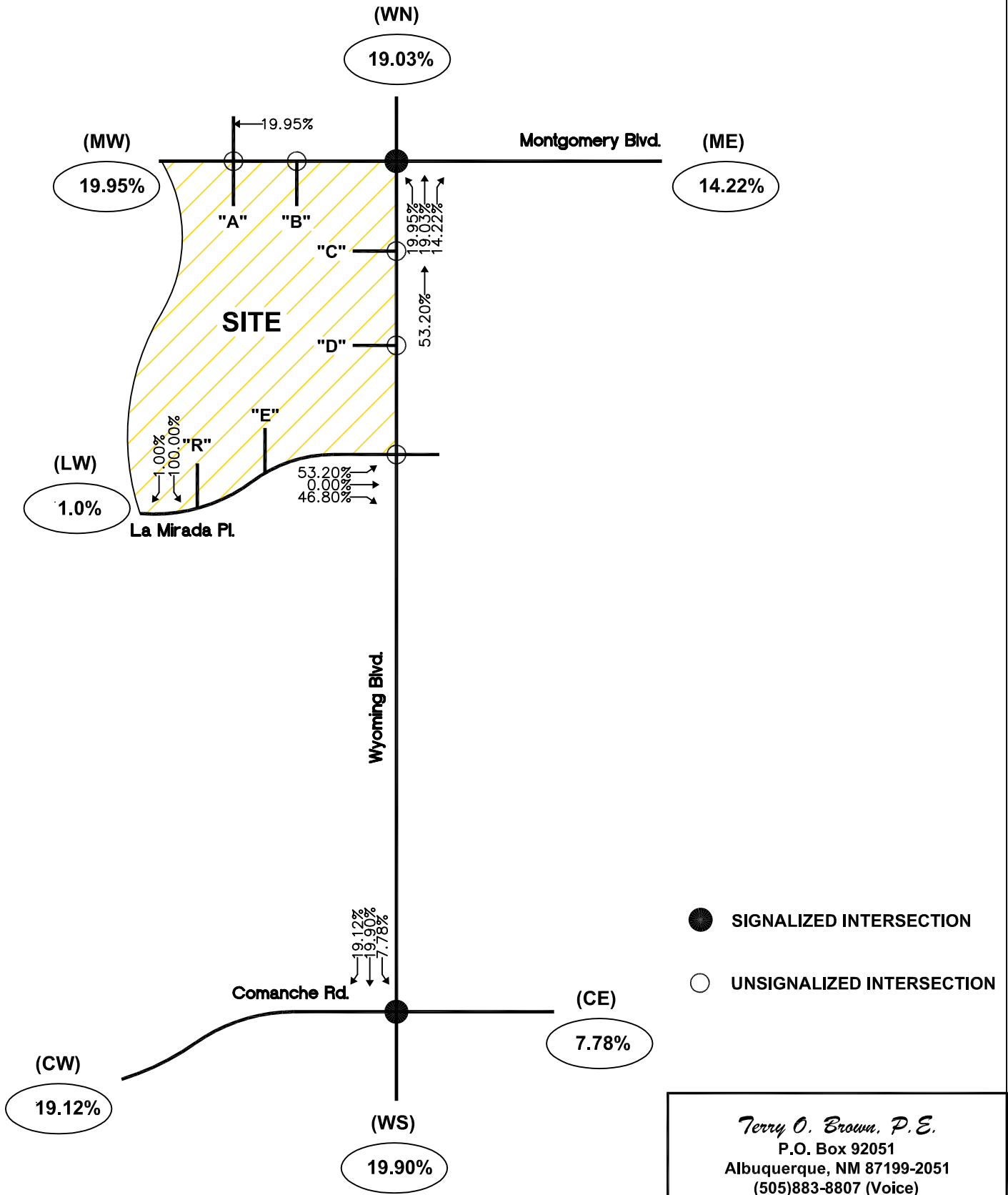
Trip Assignments (% Entering) - Residential Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

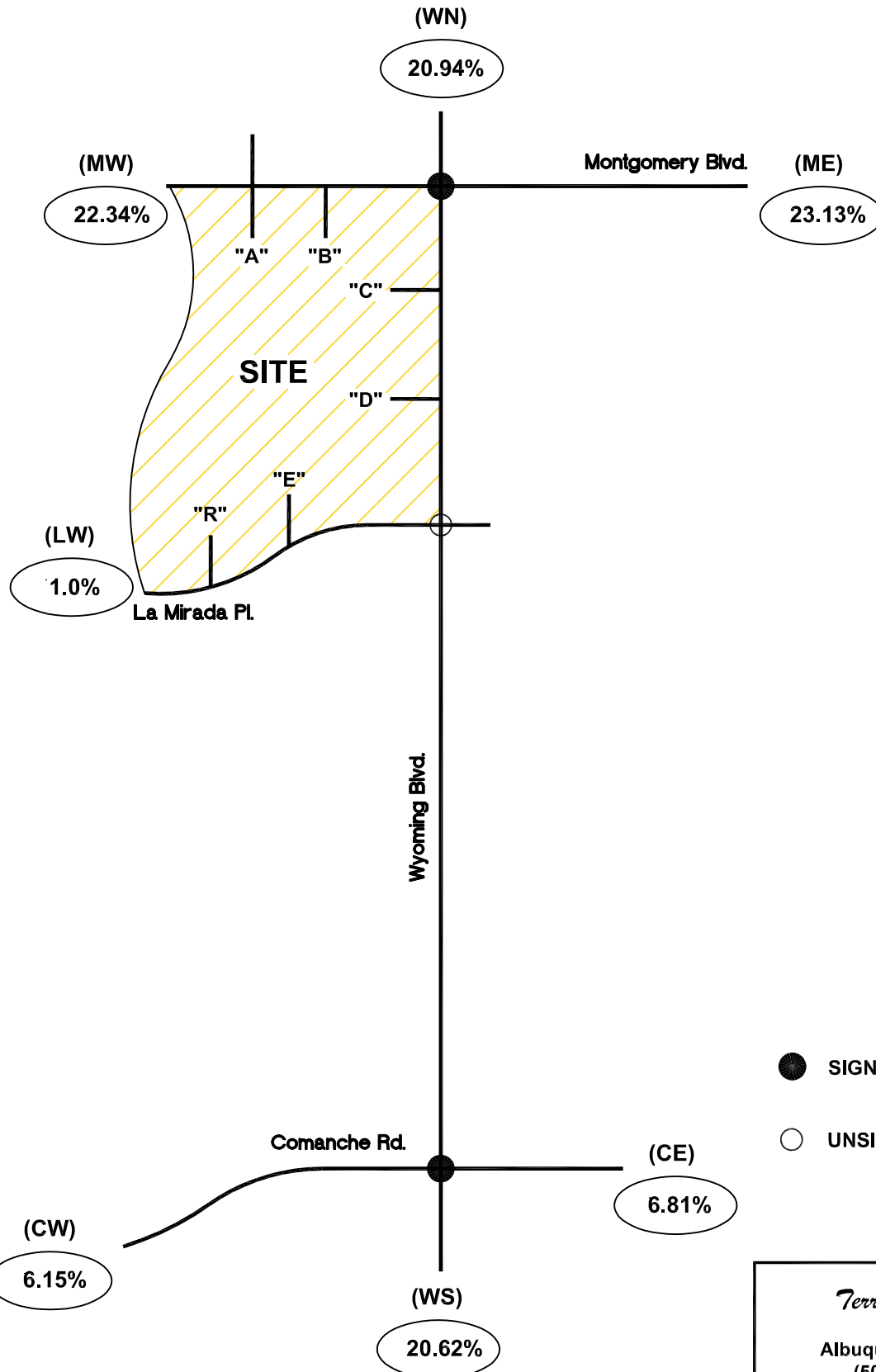
Trip Assignments (% Exiting) - Residential Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Trip Distribution Map (%) - Commercial Trips

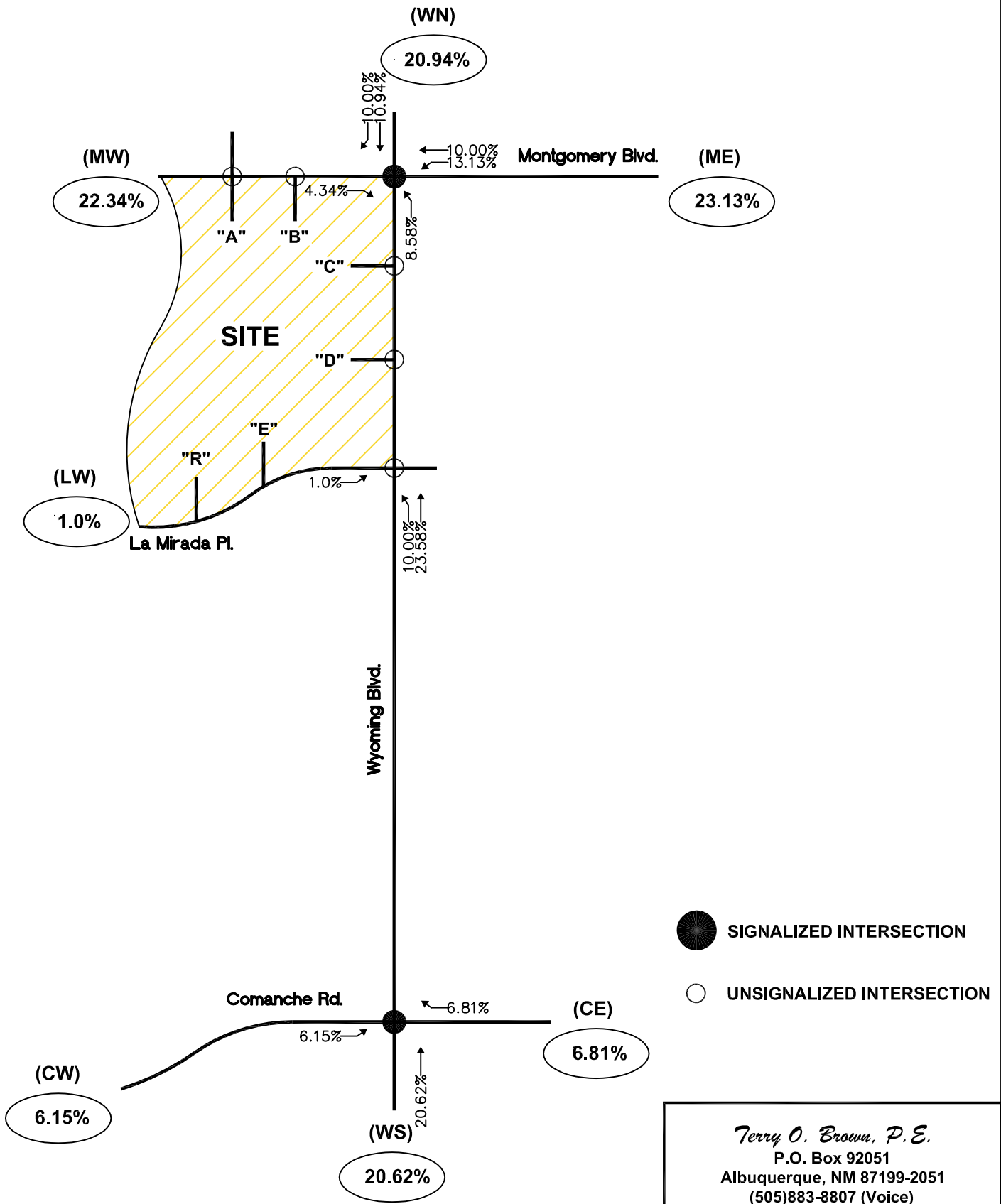


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La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Trip Assignments (% Entering) - Commercial Trips

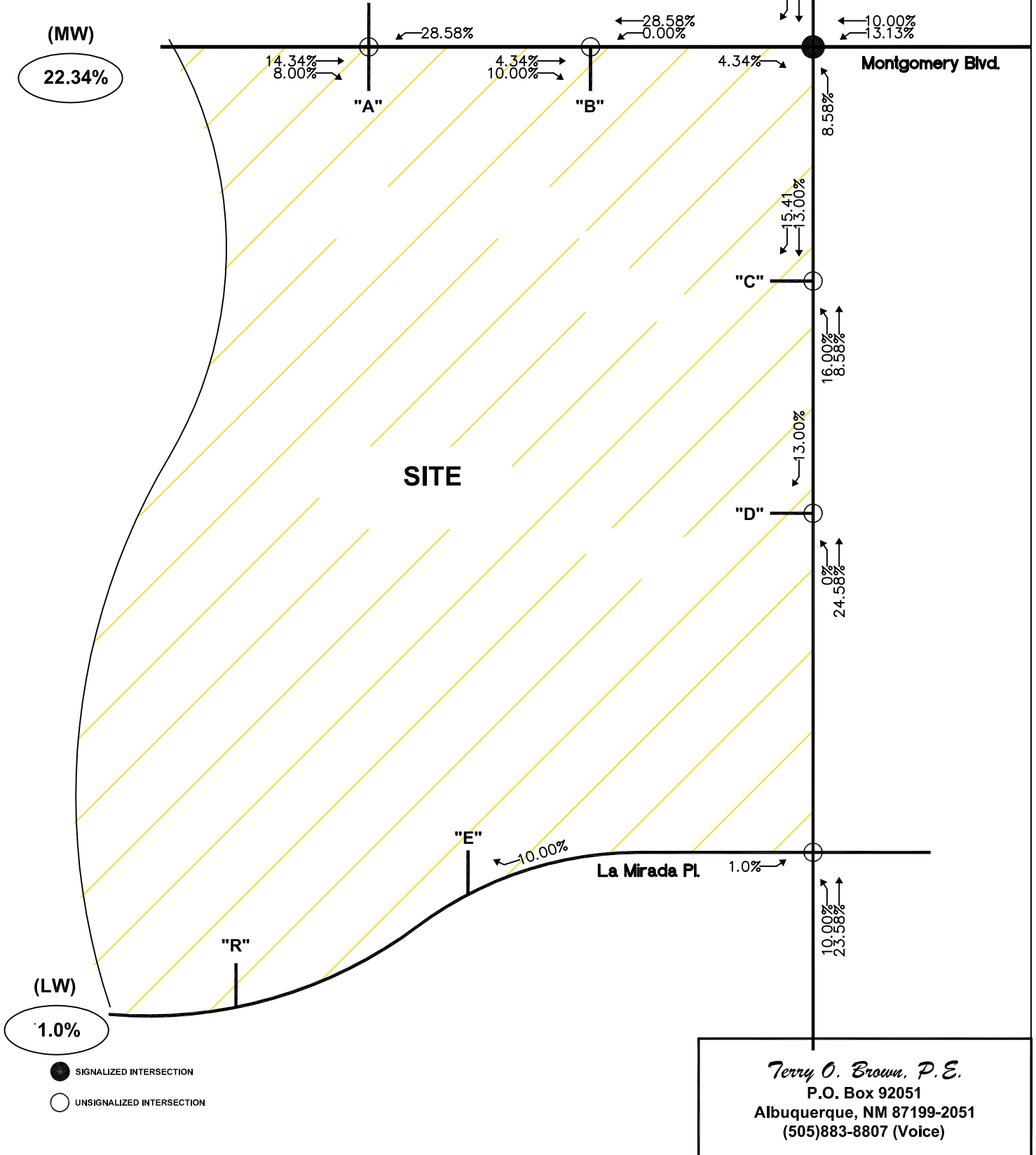


La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Driveway Trip Assignments (% Entering)

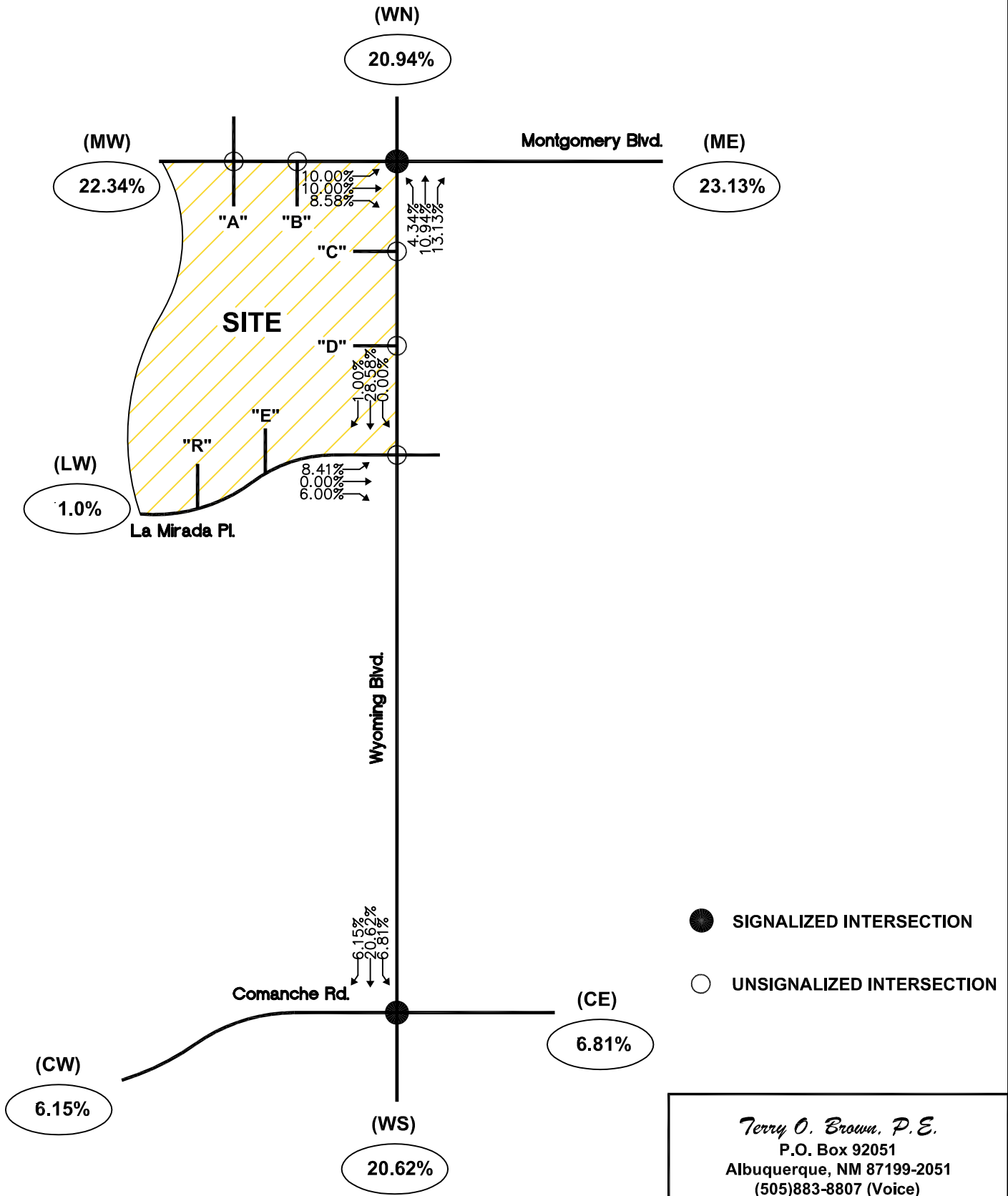
Commercial Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Trip Assignments (% Exiting) - Commercial Trips

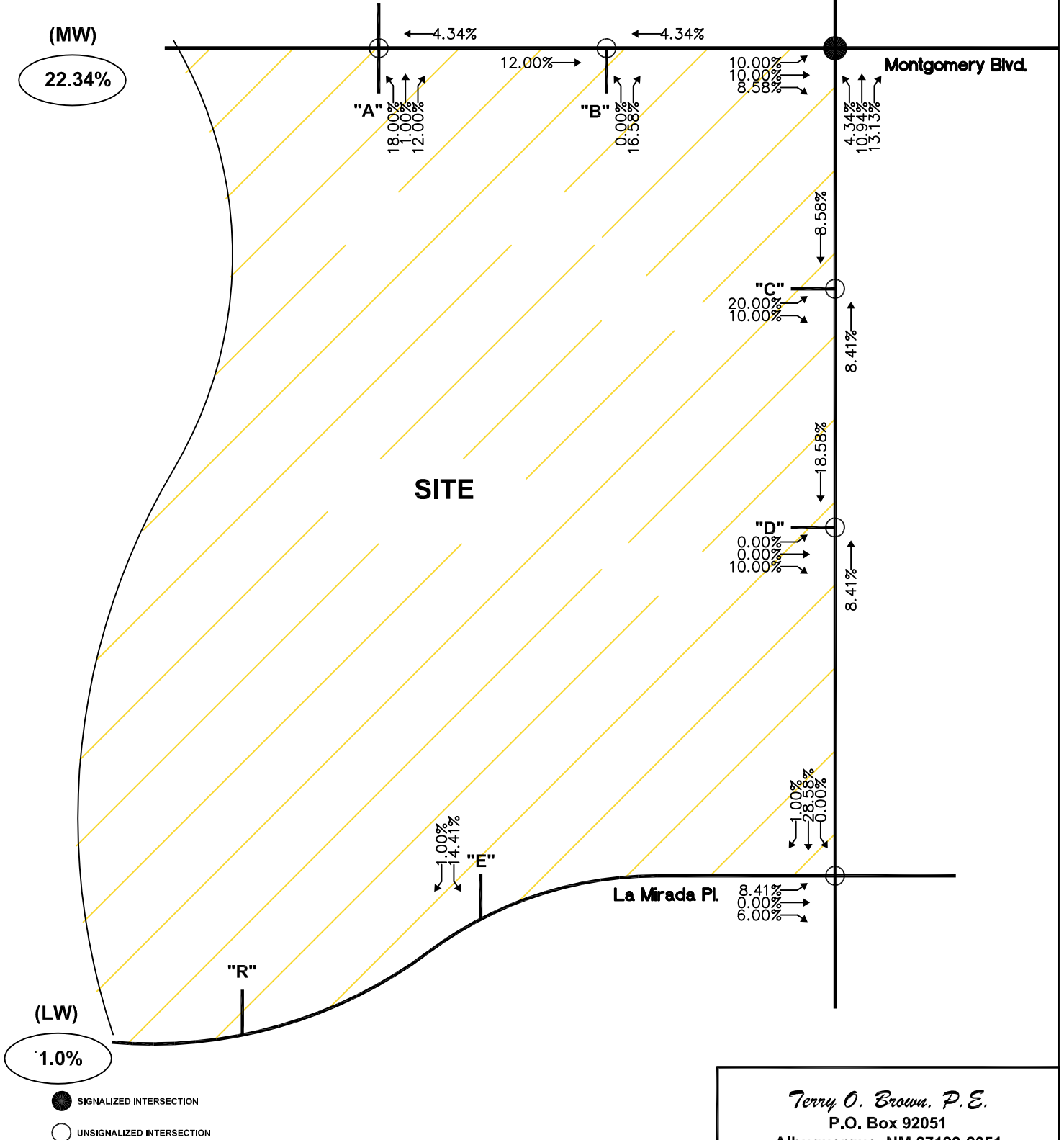


La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Driveway Trip Assignments (% Exiting)

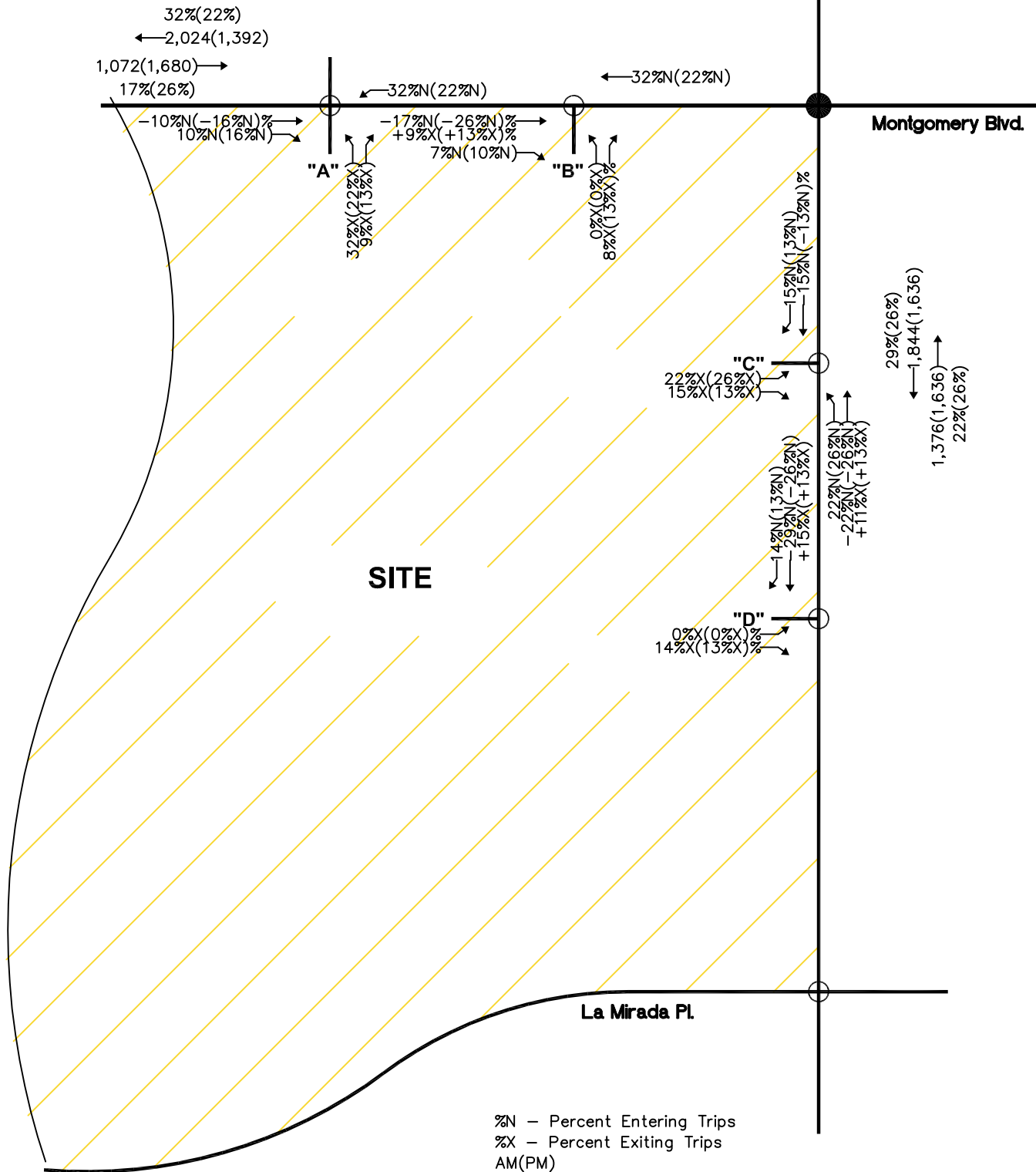
Commercial Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

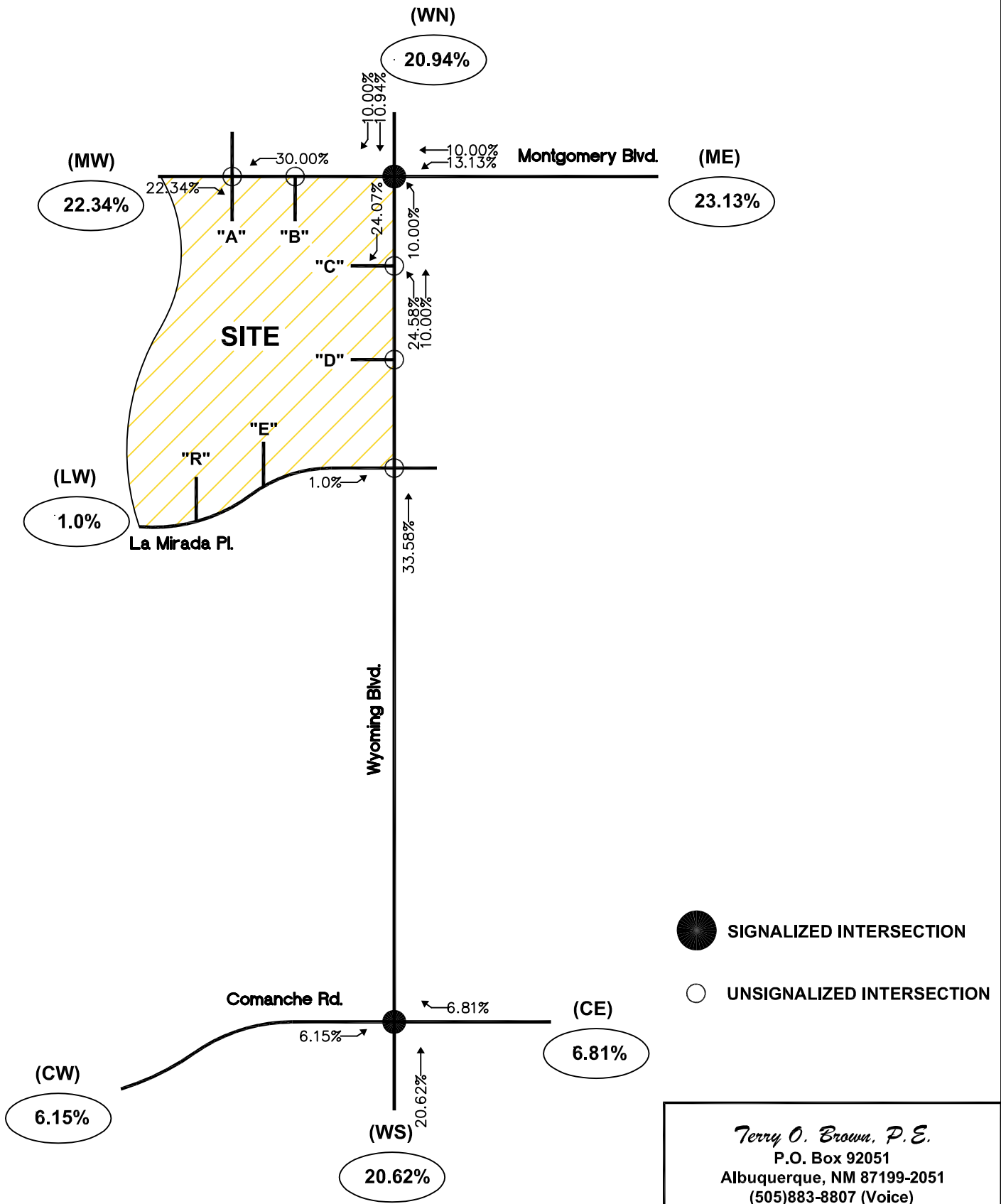
Pass-by Trips (%)



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(La Mirada Pl. / Wyoming Blvd.)

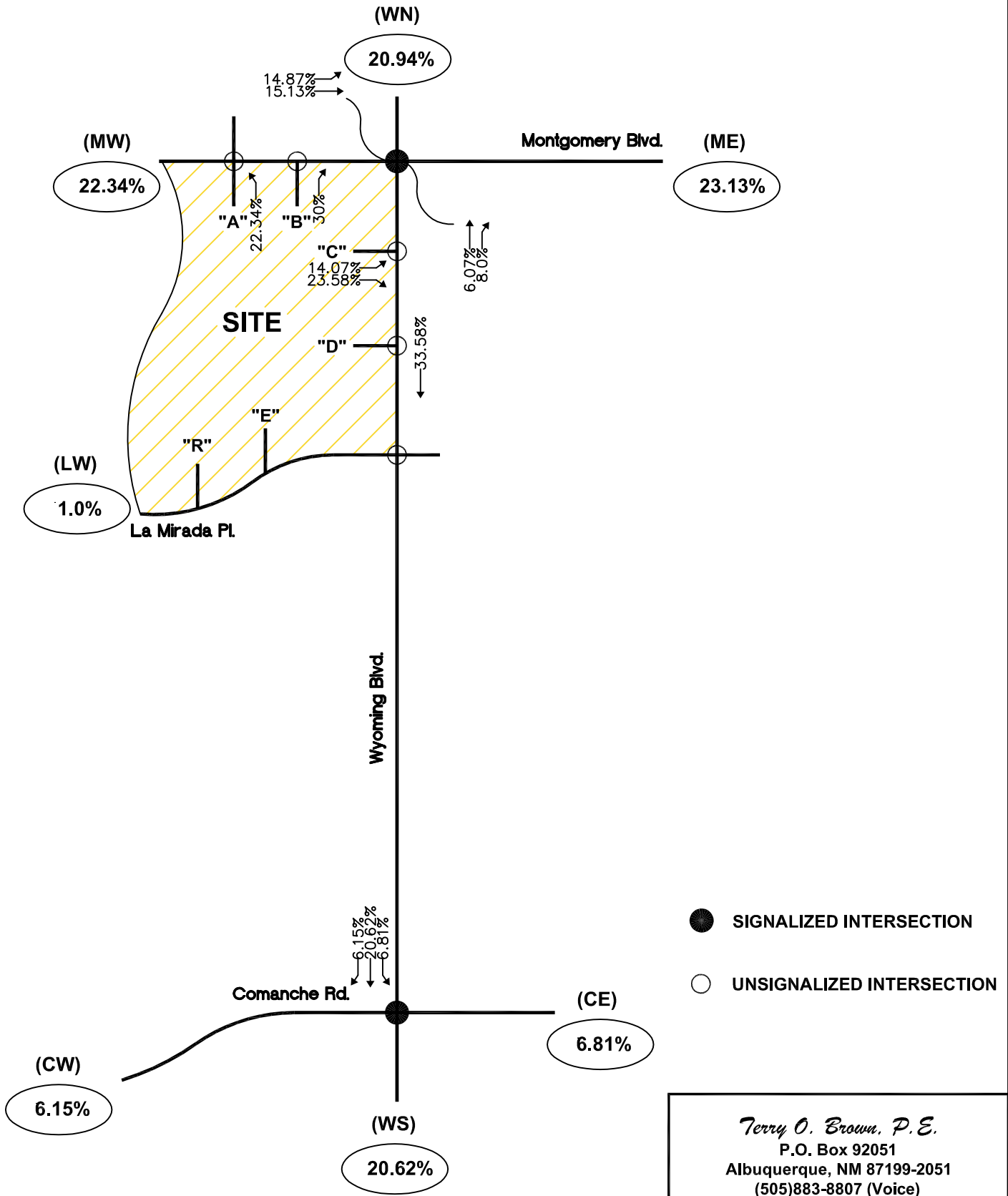
Trip Assignments (% Entering) - Medical Use Trips



La Mirada Development

(La Mirada Pl. / Wyoming Blvd.)

Trip Assignments (% Exiting) - Medical Use Trips



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY **PROPOSED DEVELOPMENT (2025) - 100% Development** *(Residential and Commercial)*

INTERSECTION: **Summary**

Montgomery Blvd. / Wyoming Blvd.				1.00	1.00	1.00	1.00	PHF					
(1)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	3.0% Truck												
	Existing (2021)	192	756	124	216	1,412	312	232	976	168	268	1,504	380
	2025 (NO BUILD - A.M.)	196	771	126	220	1,440	318	237	996	171	273	1,534	388
	2025 (BUILD - A.M.)	237	810	173	271	1,477	318	295	1,040	221	273	1,582	429

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2025 (NO BUILD - P.M.) 2025 (BUILD - P.M.)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	252	1,216	212	224	920	300	224	1,220	192	320	1,200	248	
	257	1,240	216	228	938	306	228	1,244	196	326	1,224	253	
	285	1,268	254	266	962	306	265	1,274	230	326	1,261	279	

Comanche Rd. / Wyoming Blvd.				1.00			1.00			1.00			1.00			PHF
(2)																
3.0% Truck																

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2025 (NO BUILD - P.M.) 2025 (BUILD - P.M.)	Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	88	476	76	128	356	184	56	1,468	100	144	1,388	56	
	90	486	78	131	363	188	57	1,497	102	147	1,416	57	
	114	486	78	131	363	209	57	1,559	102	165	1,470	77	

La Mirada Pl. / Wyoming Blvd.				1.00				1.00				1.00				1.00				PHF					
(3)																									
	Eastbound (La Mirada Pl.)						Westbound (La Mirada Pl.)						Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)								
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		
	28		1		20		1		1		1		52		1,120		16		40		1,336		20		
	29		1		20		1		1		1		53		1,142		16		41		1,363		20		
Existing (2021)		28		1		20		1		1		1		52		1,120		16		40		1,336		20	
2025 (NO BUILD - A.M.)		29		1		20		1		1		1		53		1,142		16		41		1,363		20	
2025 (BUILD - A.M.)		81		1		58		1		1		1		96		1,243		16		41		1,460		30	

	1.00			1.00			1.00			1.00			PHF
Existing (2021)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4	1	56	20	1	8	16	1,812	24	28	1,680	16	
	4	1	57	20	1	8	16	1,848	24	29	1,714	16	
2025 (NO BUILD - P.M.)													
2025 (BUILD - P.M.)	36	1	81	20	1	8	60	1,910	24	29	1,785	41	

Montgomery Blvd. / Driveway "A"				1.00			1.00			1.00			1.00			PHF																						
(4)																																						
	Eastbound (Montgomery Blvd.)						Westbound (Montgomery Blvd.)						Northbound (Driveway "A")						Southbound (Norma Dr.)																			
	Left			Thru			Right			Left			Thru			Right			Left			Thru			Right													
	Existing (2021)			0			0			0			0			0			0			0			0			0										
	2025 (NO BUILD - A.M.)			0			1,093			0			0			2,065			5			0			0			0			10			0			10	
2025 (BUILD - A.M.)			0			1,132			57			173			2,033			5			110			3			53			10			0			10		

	1.00			1.00			1.00			1.00			PHF
Existing (2021)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	1,713	0	0	1,419	10	0	0	0	5	0	5	5
	5	1,733	46	107	1,400	10	74	2	42	5	0	5	5

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY **PROPOSED DEVELOPMENT (2025) - 100% Development** *(Residential and Commercial)*

INTERSECTION: **Summary**

Montgomery Blvd. / Driveway "B"			1.00	1.00	1.00	1.00	PHF					
(5)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
3.0% Truck	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	1,093	50	0	2,065	0	0	0	50	0	0	0
2025 (BUILD - A.M.)	0	1,083	102	0	2,206	0	0	0	126	0	0	0

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2025 (NO BUILD - P.M.) 2025 (BUILD - P.M.)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1,713	50	0	1,419	0	0	0	50	0	0	0	0
	0	1,695	93	0	1,507	0	0	0	116	0	0	0	0

Driveway "C" / Wyoming Blvd.			1.00	1.00	1.00	1.00	PHF					
(6)	Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
	3.0% Truck			3.0% Truck			3.0% Truck			3.0% Truck		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1,404	0	0	1,880	0
Existing (2021)	2025 (NO BUILD - A.M.)			2025 (NO BUILD - A.M.)			2025 (NO BUILD - A.M.)			2025 (NO BUILD - A.M.)		
	100	0	59	0	0	0	107	1,468	0	0	1,937	93

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2025 (NO BUILD - P.M.) 2025 (BUILD - P.M.)	Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1,668	0	0	1,668	0	0
	80	0	46	0	0	0	81	1,700	0	0	1,722	60	

Driveway "D" / Wyoming Blvd.			1.00	1.00	1.00	1.00	PHF							
(7)	Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)				
	3.0% Truck													
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	1,404	0	0	1,880	0		
Existing (2021)														
2025 (NO BUILD - A.M.)														
2025 (BUILD - A.M.)														
			0	0	54	0	0	0	0	1,558	0	0	1,925	72

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2025 (NO BUILD - P.M.) 2025 (BUILD - P.M.)	Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1,668	0	0	1,668	0	0
	0	0	38	0	0	0	0	1,763	0	0	1,720	51	

La Mirada Pl. / Driveway "R"			1.00	1.00	1.00	1.00	PHF					
(8)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")		
	3.0% Truck											
	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
	2025 (NO BUILD - A.M.)	0	50	0	0	74	0	0	0	0	0	0
2025 (BUILD - A.M.)	0	54	0	0	77	13	0	0	0	39	0	0

	1.00			1.00			1.00			1.00			PHF
Existing (2021)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	62	0	0	33	0	0	0	0	0	0	0	0
2025 (NO BUILD - P.M.)	0	64	0	0	35	43	0	0	0	25	0	0	
2025 (BUILD - P.M.)	0	64	0	0	35	43	0	0	0	25	0	0	

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2025) - 100% Development

(Residential and Commercial)

INTERSECTION: **Summary**

La Mirada Pl. / Driveway "E"

(9)

3.0% Truck

Existing (2021)

2025 (NO BUILD - A.M.)

2025 (BUILD - A.M.)

1.00			1.00			1.00			1.00			PHF
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	50	0	0	74	0	0	0	0	0	0	0	0
4	89	0	0	87	37	0	0	0	33	0	3	

Existing (2021)

2025 (NO BUILD - P.M.)

2025 (BUILD - P.M.)

1.00			1.00			1.00			1.00			PHF
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	62	0	0	33	0	0	0	0	0	0	0	0
2	87	0	0	76	24	0	0	0	21	0	2	

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Wyoming Blvd.

(Residential and Commercial)

INTERSECTION :

E-W Street: **Montgomery Blvd.**

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

(1)

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
192	756	124	216	1,412	312	232	976	168	268	1,504	380
4	15	2	4	28	6	5	20	3	5	30	8
196	771	126	220	1,440	318	237	996	171	273	1,534	388
0.00%	0.00%	19.95%	14.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.03%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.95%	19.03%	14.22%	0.00%	0.00%	0.00%
0.00%	0.00%	4.34%	13.13%	10.00%	0.00%	8.58%	0.00%	0.00%	0.00%	10.94%	10.00%
10.00%	10.00%	8.58%	0.00%	0.00%	0.00%	4.34%	10.94%	13.13%	0.00%	0.00%	0.00%
13.13%	10.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	10.94%	10.00%
14.87%	15.13%	0.00%	0.00%	0.00%	0.00%	0.00%	6.07%	8.00%	0.00%	0.00%	0.00%
41	39	47	51	37	0	58	44	50	0	48	41
237	810	173	271	1,477	318	295	1,040	221	273	1,582	429

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
252	1,216	212	224	920	300	224	1,220	192	320	1,200	248
5	24	4	4	18	6	4	24	4	6	24	5
257	1,240	216	228	938	306	228	1,244	196	326	1,224	253
0.00%	0.00%	19.95%	14.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.03%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.95%	19.03%	14.22%	0.00%	0.00%	0.00%
0.00%	0.00%	4.34%	13.13%	10.00%	0.00%	8.58%	0.00%	0.00%	0.00%	10.94%	10.00%
10.00%	10.00%	8.58%	0.00%	0.00%	0.00%	4.34%	10.94%	13.13%	0.00%	0.00%	0.00%
13.13%	10.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	10.94%	10.00%
14.87%	15.13%	0.00%	0.00%	0.00%	0.00%	0.00%	6.07%	8.00%	0.00%	0.00%	0.00%
28	28	38	38	24	0	37	30	34	0	37	26
285	1,268	254	266	962	306	265	1,274	230	326	1,261	279

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

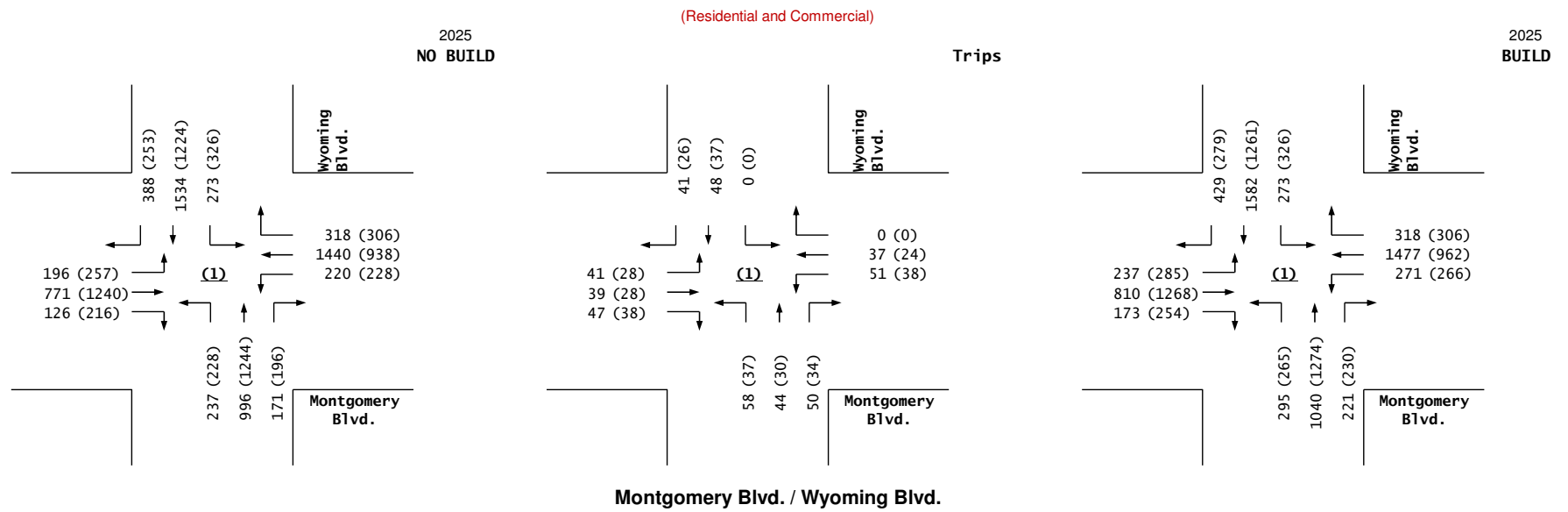
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Comanche Rd. / Wyoming Blvd.**(Residential and Commercial)**

(2)

INTERSECTION :E-W Street: **Comanche Rd.**N-S Street: **Wyoming Blvd.**

Year of Existing Counts

2021 **(Adjusted for COVID and School)**

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
76	156	40	144	424	104	116	1,156	100	72	1,216	100
2	3	1	3	8	2	2	23	2	1	24	2
78	159	41	147	432	106	118	1,179	102	73	1,240	102
19.12%	0.00%	0.00%	0.00%	0.00%	7.78%	0.00%	19.90%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.78%	19.90%	19.12%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
28	0	0	0	0	29	0	89	0	26	77	28
106	159	41	147	432	135	118	1,268	102	99	1,317	130

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
88	476	76	128	356	184	56	1,468	100	144	1,388	56
2	10	2	3	7	4	1	29	2	3	28	1
90	486	78	131	363	188	57	1,497	102	147	1,416	57
19.12%	0.00%	0.00%	0.00%	0.00%	7.78%	0.00%	19.90%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.78%	19.90%	19.12%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
24	0	0	0	0	21	0	62	0	18	54	20
114	486	78	131	363	209	57	1,559	102	165	1,470	77

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

A.M.

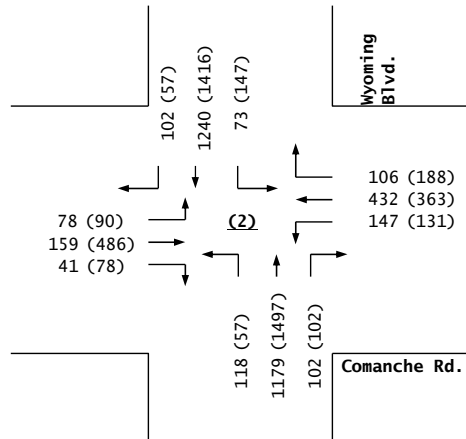
100% Medical Development

15

36

P.M.

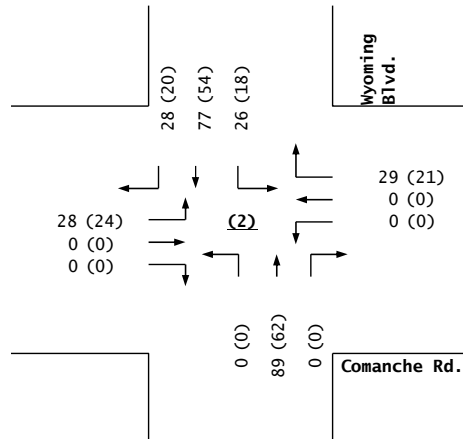
2025
NO BUILD



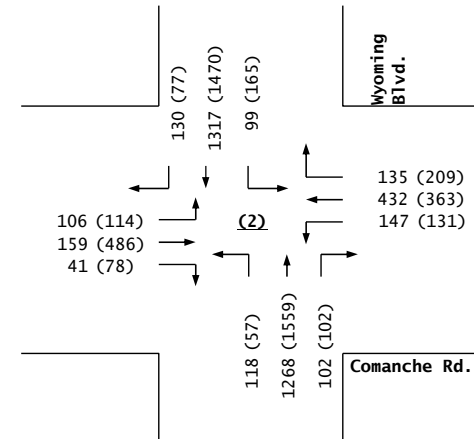
(Residential and Commercial)

Trips

2025
BUILD



Comanche Rd. / Wyoming Blvd.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Wyoming Blvd.

(Residential and Commercial)

(3)

INTERSECTION :

E-W Street: **La Mirada Pl.**

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

Year of Existing Counts

2021 **(Adjusted for COVID and School)**

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
28	1	20	1	1	1	52	1,120	16	40	1,336	20
1	0	0	0	0	0	1	22	0	1	27	0
29	1	20	1	1	1	53	1,142	16	41	1,363	20
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	53.20%
53.20%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	23.58%	0.00%	0.00%	0.00%	0.00%
8.41%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.58%	1.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	1.00%
52	0	38	0	0	0	43	101	0	0	97	10
81	1	58	1	1	1	96	1,243	16	41	1,460	30

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4	1	56	20	1	8	16	1,812	24	28	1,680	16
0	0	1	0	0	0	0	36	0	1	34	0
4	1	57	20	1	8	16	1,848	24	29	1,714	16
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	53.20%
53.20%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	23.58%	0.00%	0.00%	0.00%	0.00%
8.41%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.58%	1.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	1.00%
32	0	24	0	0	0	44	62	0	0	71	25
36	1	81	20	1	8	60	1,910	24	29	1,785	41

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13 39 A.M. 100% Residential Development

43 25 P.M.

Number of Commercial Trips Generated

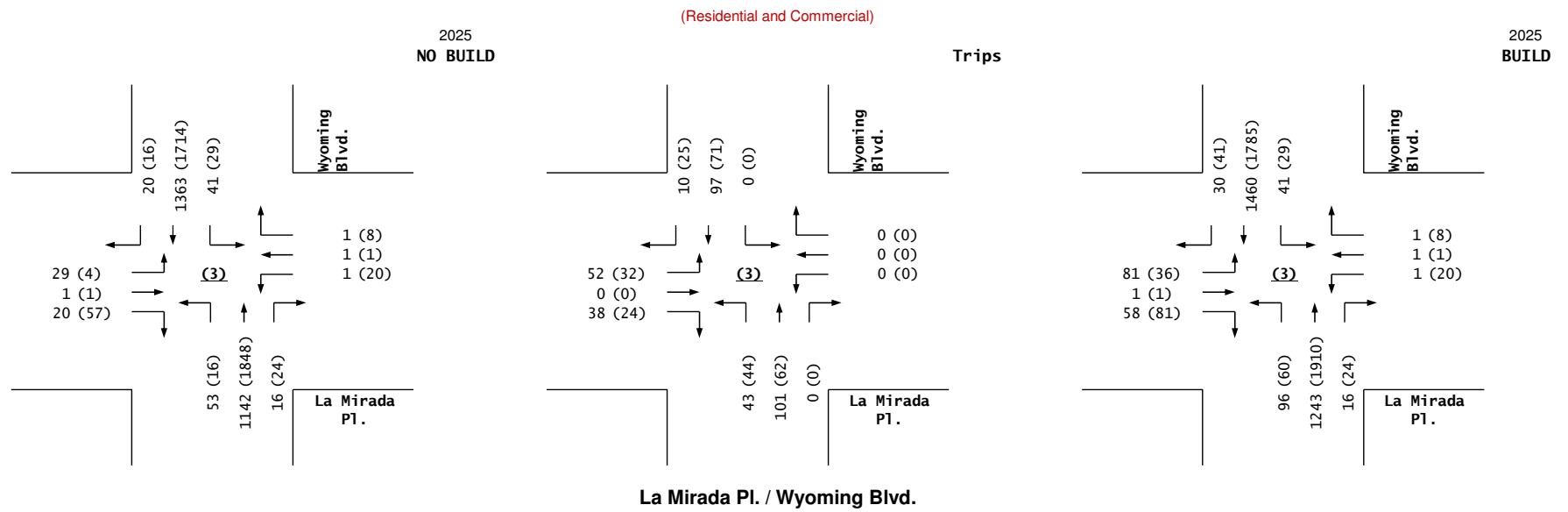
371 325 A.M. 100% Commercial Development

243 206 P.M.

Number of Medical Trips Generated

43 12 A.M. 100% Medical Development

15 36 P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Driveway "A"

(Residential and Commercial)

INTERSECTION :

E-W Street: **Montgomery Blvd.**
N-S Street: **Driveway "A"** (Norma Dr.)

Year of Existing Counts: 2021
Horizon Year: 2025 (Adjusted for COVID and School)

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,093	0	0	2,065	5	0	0	0	10	0	10
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	14.34%	8.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	18.00%	1.00%	12.00%	0.00%	0.00%	0.00%
0.00%	0.00%	22.34%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.34%	0.00%	0.00%	0.00%	0.00%	0.00%
0	56	40	119	22	0	62	3	39	0	0	0
0	1,132	57	173	2,033	5	110	3	53	10	0	10

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,713	0	0	1,419	10	0	0	0	5	0	5
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	14.34%	8.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	18.00%	1.00%	12.00%	0.00%	0.00%	0.00%
0.00%	0.00%	22.34%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.34%	0.00%	0.00%	0.00%	0.00%	0.00%
0	44	22	74	14	0	45	2	25	0	0	0
5	1,733	46	107	1,400	10	74	2	42	5	0	5

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

Entering: 13, Exiting: 39 A.M. 100% Residential Development

Number of Commercial Trips Generated

43, 25 P.M. 100% Commercial Development

Number of Medical Trips Generated

371, 325 A.M. 100% Medical Development

243, 206 P.M.

43, 12 A.M. 100% Medical Development

15, 36 P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
0.00%	-10.00%	10.00%	32.00%	-32.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-17	17	54	-54	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	32.00%	0.00%	9.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	48	0	14	0	0	0
0	-17	17	54	-54	0	48	0	14	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

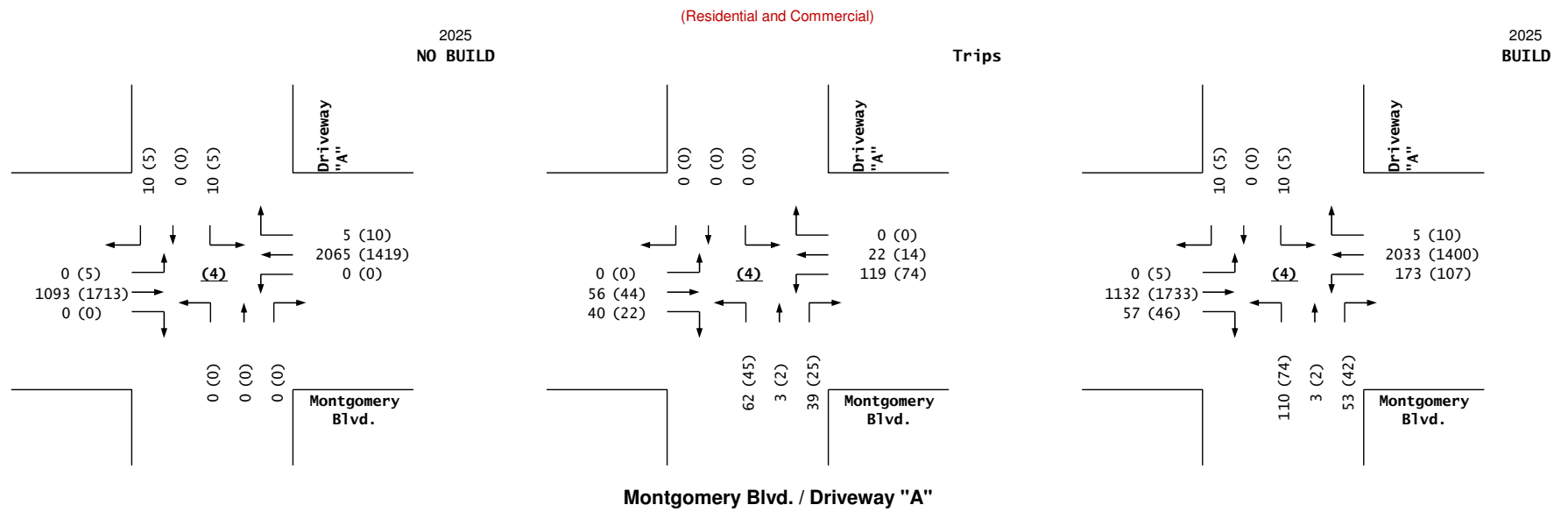
Net PM Passby Trips

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
0.00%	-16.00%	16.00%	22.00%	-22.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-24	24	33	-33	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.00%	0.00%	13.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	29	0	17	0	0	0
0	-24	24	33	-33	0	29	0	17	0	0	0

Entering: 170, Exiting: 150 AM

148, 132 PM

Pass-by Trips



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Driveway "B"

(Residential and Commercial)

(5)

INTERSECTION :

E-W Street: **Montgomery Blvd.**

N-S Street: **Driveway "B"**

Year of Existing Counts

2021

(Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal

Taco Cabana Trips

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	50	0	0	0	0	0	50	0	0	0
0	1,093	50	0	2,065	0	0	0	50	0	0	0
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	4.34%	10.00%	0.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	0.00%	0.00%	18.58%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%
0	19	37	0	141	0	0	0	64	0	0	0
0	1,083	102	0	2,206	0	0	0	126	0	0	0

Existing Volumes

Background Traffic Growth

Subtotal

Taco Cabana Trips

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	50	0	0	0	0	0	50	0	0	0
0	1,713	50	0	1,419	0	0	0	50	0	0	0
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	4.34%	10.00%	0.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	0.00%	0.00%	18.58%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%
0	20	24	0	88	0	0	0	49	0	0	0
0	1,695	93	0	1,507	0	0	0	116	0	0	0

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

13 39

A.M.

100% Residential Development

Number of Commercial Trips Generated

43 25

P.M.

100% Commercial Development

Number of Medical Trips Generated

243 206

P.M.

100% Medical Development

43 12

A.M.

15 36

P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

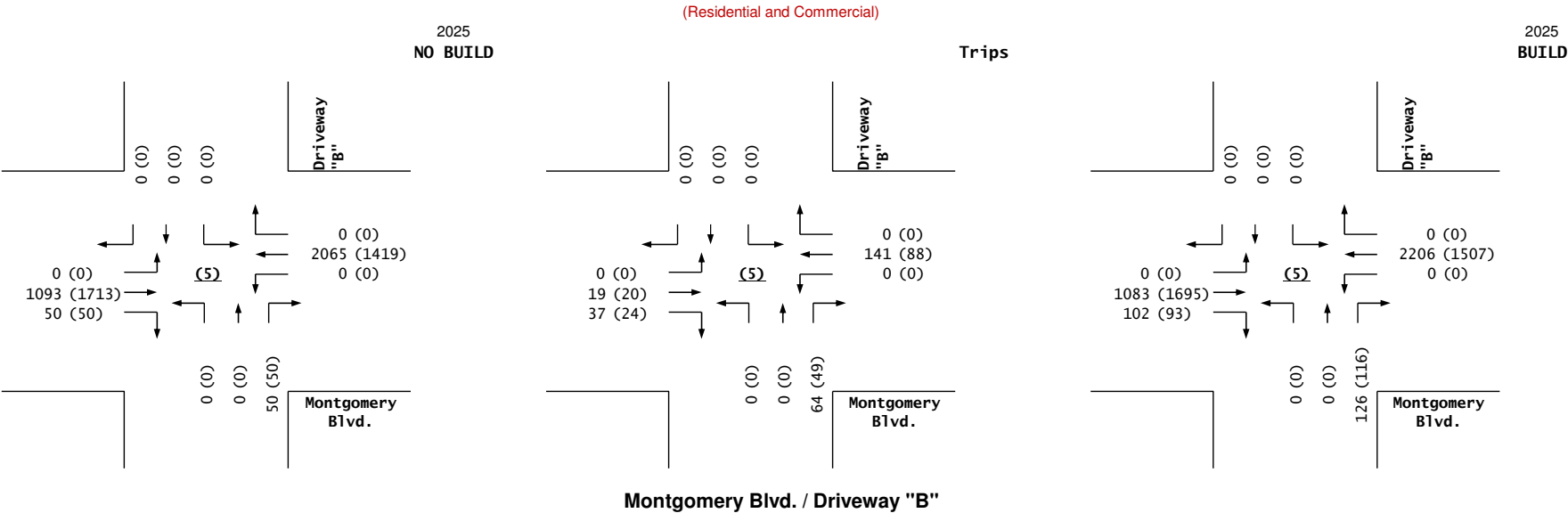
Net PM Passby Trips

Pass-by Trips

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
0.00%	-17.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-29	15	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	12	0	0	0
0	-29	15	0	0	0	0	0	12	0	0	0

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
0.00%	-26.00%	13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-38	19	0	0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	0	0	17	0	0	0
0	-38	19	0	0	0	0	0	17	0	0	0

Entering	Exiting										
170	150	AM									
148	132	PM									



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Driveway "C" / Wyoming Blvd.

(Residential and Commercial)

(6)

INTERSECTION :

E-W Street: **Driveway "C"**

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

Year of Existing Counts

2021

(Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,404	0	0	1,880	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	8.58%	0.00%	0.00%	13.00%	15.41%
20.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	8.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	10.00%	0.00%	0.00%	0.00%	24.07%
14.07%	0.00%	23.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
67	0	36	0	0	0	70	84	0	0	83	67
100	0	59	0	0	0	107	1,468	0	0	1,937	93

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,668	0	0	1,668	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	8.58%	0.00%	0.00%	13.00%	15.41%
20.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	8.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	10.00%	0.00%	0.00%	0.00%	24.07%
14.07%	0.00%	23.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
46	0	29	0	0	0	43	53	0	0	73	41
80	0	46	0	0	0	81	1,700	0	0	1,722	60

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

Entering

Exiting

A.M.

100% Residential Development

13

39

P.M.

Number of Commercial Trips Generated

43

25

A.M.

100% Commercial Development

371

325

P.M.

Number of Medical Trips Generated

243

206

A.M.

100% Medical Development

43

12

P.M.

15

36

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.00%	-22.00%	0.00%	0.00%	-15.00%	15.00%
0	0	0	0	0	0	37	-37	0	0	-26	26
22.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	0.00%	0.00%	0.00%
33	0	23	0	0	0	0	17	0	0	0	0
33	0	23	0	0	0	37	-20	0	0	-26	26

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net PM Passby Trips

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26.00%	-26.00%	0.00%	0.00%	-13.00%	13.00%
0	0	0	0	0	0	38	-38	0	0	-19	19
26.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%
34	0	17	0	0	0	0	17	0	0	0	0
34	0	17	0	0	0	38	-21	0	0	-19	19

Entering

Exiting

Pass-by Trips

170

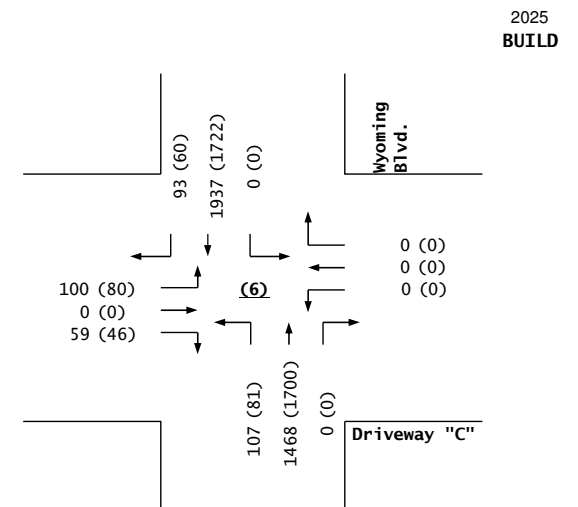
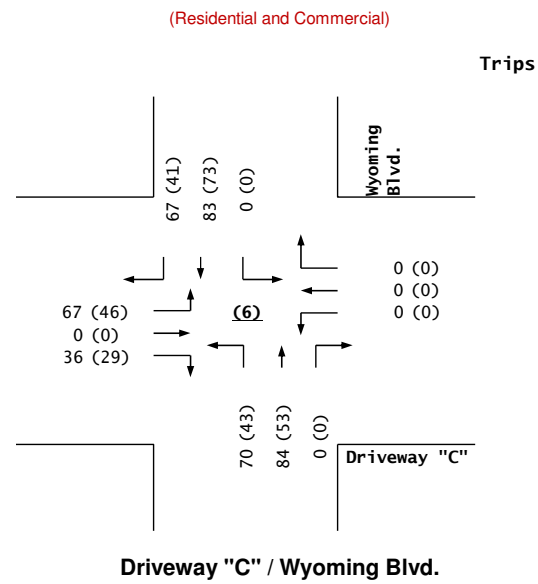
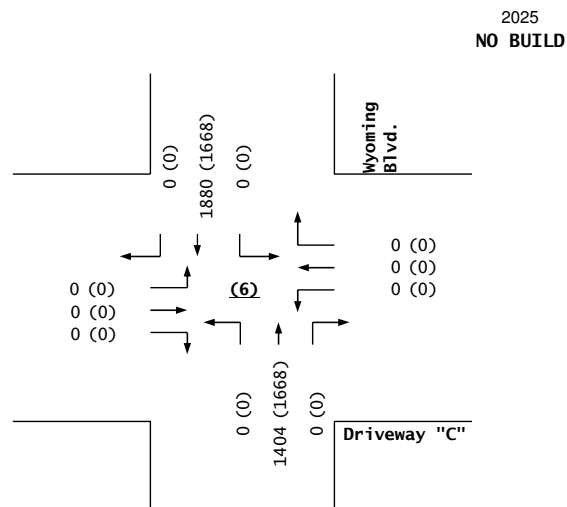
150

AM

148

132

PM



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Driveway "D" / Wyoming Blvd.

(Residential and Commercial)

(7)

INTERSECTION :

E-W Street: **Driveway "D"**

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

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,404	0	0	1,880	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	0.00%	0.00%	0.00%	13.00%
0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	18.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%
0	0	33	0	0	0	0	154	0	0	71	48
0	0	54	0	0	0	0	1,558	0	0	1,925	72

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,668	0	0	1,668	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	0.00%	0.00%	0.00%	13.00%
0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	18.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%
0	0	21	0	0	0	0	95	0	0	73	32
0	0	38	0	0	0	0	1,763	0	0	1,720	51

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

Entering 13 39 A.M. 100% Residential Development

Exiting 43 25 P.M.

Number of Commercial Trips Generated

371 325 A.M. 100% Commercial Development

243 206 P.M.

Number of Medical Trips Generated

43 12 A.M. 100% Medical Development

15 36 P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-29.00%	14.00%
0	0	0	0	0	0	0	0	0	0	-49	24
0.00%	0.00%	14.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.00%	0.00%
0	0	21	0	0	0	0	0	0	0	23	0
0	0	21	0	0	0	0	0	0	0	-26	24

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

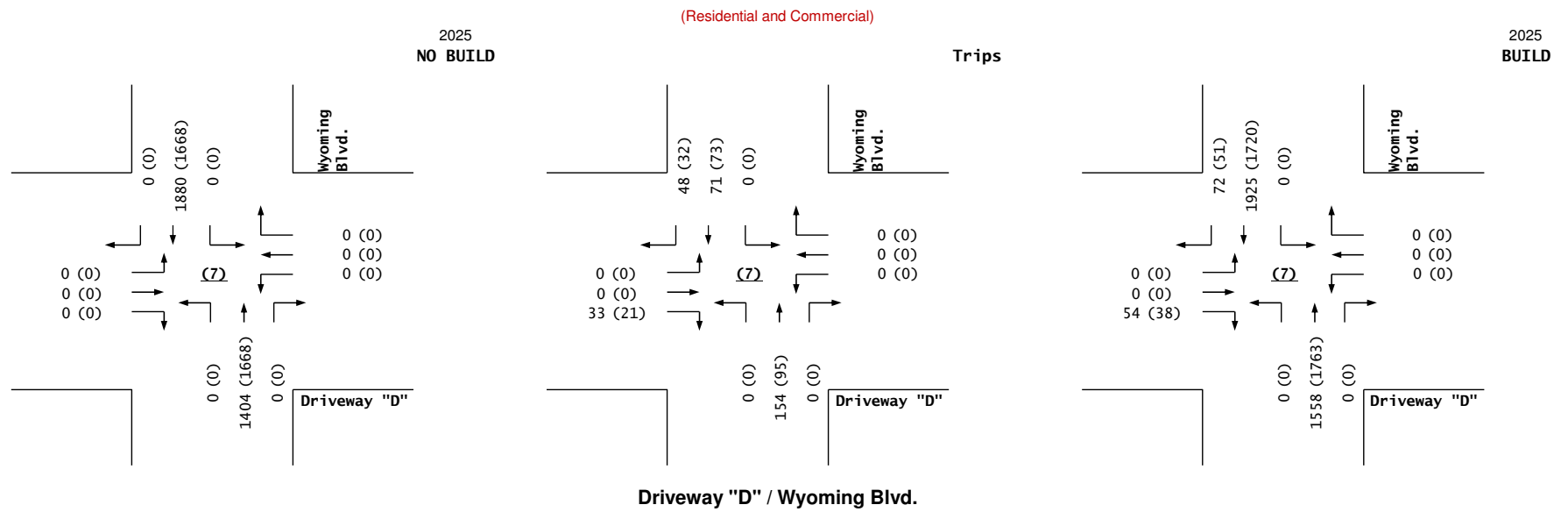
Net PM Passby Trips

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-26.00%	13.00%
0	0	0	0	0	0	0	0	0	0	-38	19
0.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%
0	0	17	0	0	0	0	0	0	0	17	0
0	0	17	0	0	0	0	0	0	0	-21	19

Entering 170 150 AM

Exiting 148 132 PM

Pass-by Trips



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Driveway "R"*(Residential and Commercial)***INTERSECTION :**E-W Street: **La Mirada Pl.**N-S Street: **Driveway "R"**

(8)

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	50	0	0	74	0	0	0	0	0	0	0
1.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	1.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	4	0	0	3	13	0	0	0	39	0	0
0	54	0	0	77	13	0	0	0	39	0	0

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	62	0	0	33	0	0	0	0	0	0	0
1.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	1.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	2	0	0	2	43	0	0	0	25	0	0
0	64	0	0	35	43	0	0	0	25	0	0

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

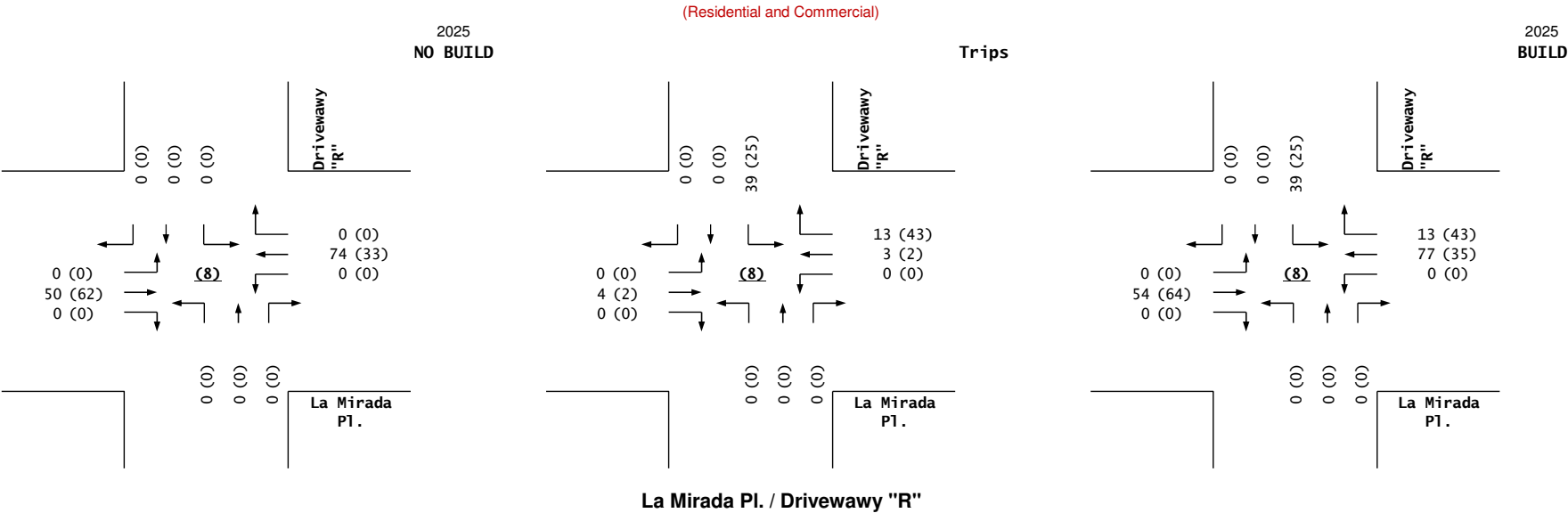
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Driveway "E"

(Residential and Commercial)

INTERSECTION :

E-W Street: **La Mirada Pl.**

N-S Street: **Driveway "E"**

(9)

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2025

Growth Rates

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

0.50%			0.50%			0.50%			0.50% *		
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	50	0	0	74	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	1.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	39	0	0	13	37	0	0	0	33	0	3
4	89	0	0	87	37	0	0	0	33	0	3

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

0.50%			0.50%			0.50%			0.50%		
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	62	0	0	33	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	1.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	25	0	0	43	24	0	0	0	21	0	2
2	87	0	0	76	24	0	0	0	21	0	2

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

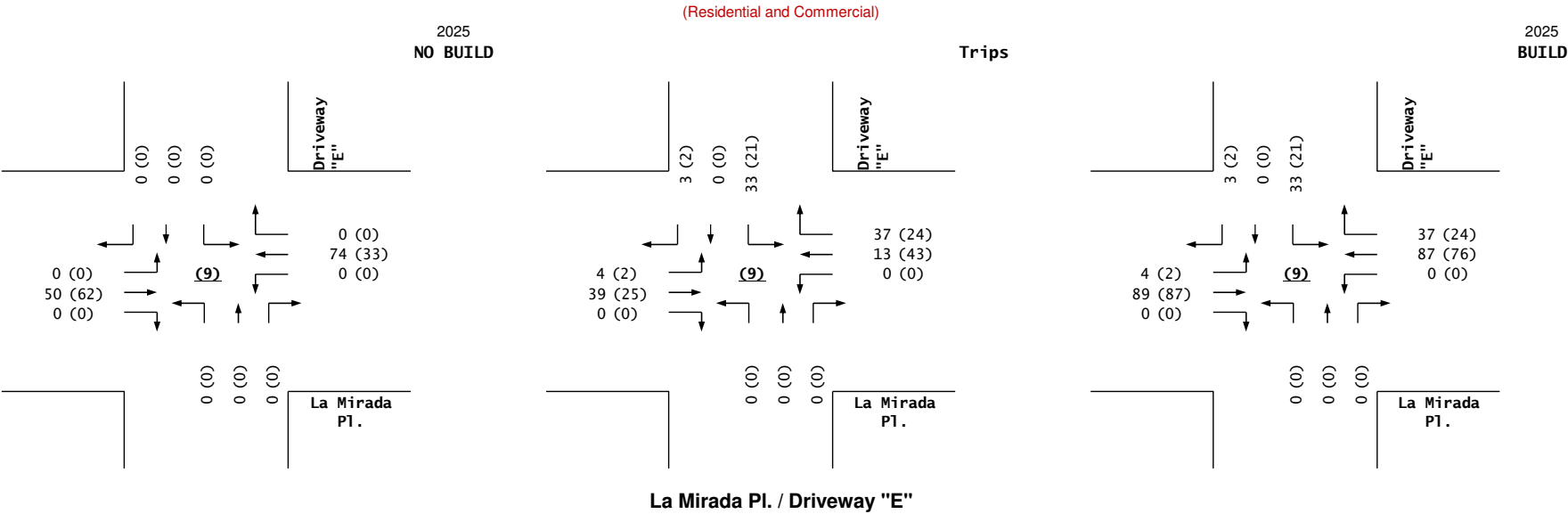
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY **PROPOSED DEVELOPMENT (2035) - 100% Development** *(Residential and Commercial)*

INTERSECTION: **Summary**

Montgomery Blvd. / Wyoming Blvd.			1.00	1.00	1.00	1.00	PHF					
(1)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	192	756	124	216	1,412	312	232	976	168	268	1,504	380
2035 (NO BUILD - A.M.)	205	809	133	231	1,511	334	248	1,044	180	287	1,609	407
2035 (BUILD - A.M.)	246	848	180	282	1,548	334	306	1,088	230	287	1,657	448

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2035 (NO BUILD - P.M.) 2035 (BUILD - P.M.)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	252	1,216	212	224	920	300	224	1,220	192	320	1,200	248	
	270	1,301	227	240	984	321	240	1,305	205	342	1,284	265	
	298	1,329	265	278	1,008	321	277	1,335	239	342	1,321	291	

<u>Comanche Rd. / Wyoming Blvd.</u>			1.00	1.00	1.00	1.00	PHF					
(2)	Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	76	156	40	144	424	104	116	1,156	100	72	1,216	100
2035 (NO BUILD - A.M.)	81	167	43	154	454	111	124	1,237	107	77	1,301	107
2035 (BUILD - A.M.)	109	167	43	154	454	140	124	1,326	107	103	1,378	135

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2035 (NO BUILD - P.M.) 2035 (BUILD - P.M.)	Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	88	476	76	128	356	184	56	1,468	100	144	1,388	56	
	94	509	81	137	381	197	60	1,571	107	154	1,485	60	
	118	509	81	137	381	218	60	1,633	107	172	1,539	80	

La Mirada Pl. / Wyoming Blvd.			1.00	1.00	1.00	1.00	PHF					
(3)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	28	1	20	1	1	1	52	1,120	16	40	1,336	20
2035 (NO BUILD - A.M.)	30	1	21	1	1	1	56	1,198	17	43	1,430	21
2035 (BUILD - A.M.)	82	1	59	1	1	1	99	1,299	17	43	1,527	31

	1.00			1.00			1.00			1.00			PHF
Existing (2021)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4	1	56	20	1	8	16	1,812	24	28	1,680	16	
	4	1	60	21	1	9	17	1,939	26	30	1,798	17	
2035 (NO BUILD - P.M.)													
2035 (BUILD - P.M.)	36	1	84	21	1	9	61	2,001	26	30	1,869	42	

Montgomery Blvd. / Driveway "A"			1.00	1.00	1.00	1.00	PHF					
(4)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)		
3.0% Truck	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
2035 (NO BUILD - A.M.)	0	1,147	0	0	2,166	5	0	0	0	10	0	10
2035 (BUILD - A.M.)	0	1,186	57	173	2,134	5	110	3	53	10	0	10

1.00			1.00			1.00			1.00			PHF			
Eastbound (Montgomery Blvd.)				Westbound (Montgomery Blvd.)				Northbound (Driveway "A")				Southbound (Norma Dr.)			
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	0	0	0
	5	1,798	0	0	1,489	10	0	0	0	5	0	5	0	0	5
	5	1,818	46	107	1,470	10	74	2	42	5	0	5	0	0	5

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY **PROPOSED DEVELOPMENT (2035) - 100% Development** *(Residential and Commercial)*

INTERSECTION: **Summary**

Montgomery Blvd. / Driveway "B"			1.00	1.00	1.00	1.00	PHF					
(5)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
3.0% Truck	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
2035 (NO BUILD - A.M.)	0	1,147	50	0	2,166	0	0	0	50	0	0	0
2035 (BUILD - A.M.)	0	1,137	102	0	2,307	0	0	0	126	0	0	0

	1.00			1.00			1.00			1.00			PHF
Existing (2021) 2035 (NO BUILD - P.M.) 2035 (BUILD - P.M.)	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1,798	50	0	1,489	0	0	0	50	0	0	0	0
	0	1,780	93	0	1,577	0	0	0	116	0	0	0	0

Driveway "C" / Wyoming Blvd.				1.00	1.00	1.00	1.00	PHF				
(6)	Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
	3.0% Truck			3.0% Truck			3.0% Truck			3.0% Truck		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1,472	0	0	1,973	0
Existing (2021)	2035 (NO BUILD - A.M.)			2035 (NO BUILD - A.M.)			2035 (NO BUILD - A.M.)			2035 (NO BUILD - A.M.)		
	100	0	59	0	0	0	107	1,536	0	0	2,030	93

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	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	0
2035 (NO BUILD - P.M.)	0	0	0	0	0	0	0	1,750	0	0	1,751	0	0
2035 (BUILD - P.M.)	80	0	46	0	0	0	81	1,782	0	0	1,805	60	

Driveway "D" / Wyoming Blvd.			1.00	1.00	1.00	1.00	PHF							
(7)	Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)				
	3.0% Truck													
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	1,472	0	0	1,973	0		
Existing (2021)			0	0	54	0	0	0	0	1,626	0	0	2,018	72
2035 (NO BUILD - A.M.)														
2035 (BUILD - A.M.)														

	1.00			1.00			1.00			1.00			PHF
	Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)			
	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	0
2035 (NO BUILD - P.M.)	0	0	0	0	0	0	0	1,750	0	0	1,751	0	0
2035 (BUILD - P.M.)	0	0	38	0	0	0	0	1,845	0	0	1,803	51	

La Mirada Pl. / Driveway "R"			1.00	1.00	1.00	1.00	PHF						
(8)	Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")			
	3.0% Truck												
	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
	2035 (NO BUILD - A.M.)	0	52	0	0	78	0	0	0	0	0	0	0
2035 (BUILD - A.M.)	0	56	0	0	81	13	0	0	0	39	0	0	

1.00			1.00			1.00			1.00			PHF					
Eastbound (La Mirada Pl.)				Westbound (La Mirada Pl.)			Northbound (Drivewayw "R")			Southbound (Drivewayw "R")							
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
2035 (NO BUILD - P.M.)				0		65	0	0		35	0	0		0	0	0	0
2035 (BUILD - P.M.)				0		67	0	0		37	43	0		0	0	25	0

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2035) - 100% Development

(Residential and Commercial)

INTERSECTION: **Summary**

La Mirada Pl. / Driveway "E"

(9)

3.0% Truck

Existing (2021)

2035 (NO BUILD - A.M.)

2035 (BUILD - A.M.)

1.00			1.00			1.00			1.00			PHF
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	52	0	0	78	0	0	0	0	0	0	0	0
4	91	0	0	91	37	0	0	0	33	0	3	

Existing (2021)

2035 (NO BUILD - P.M.)

2035 (BUILD - P.M.)

1.00			1.00			1.00			1.00			PHF
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	65	0	0	35	0	0	0	0	0	0	0	0
2	90	0	0	78	24	0	0	0	21	0	2	

La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Wyoming Blvd.*(Residential and Commercial)*

(1)

INTERSECTION :E-W Street: **Montgomery Blvd.**N-S Street: **Wyoming Blvd.**

Year of Existing Counts

2021 **(Adjusted for COVID and School)**

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
192	756	124	216	1,412	312	232	976	168	268	1,504	380
13	53	9	15	99	22	16	68	12	19	105	27
205	809	133	231	1,511	334	248	1,044	180	287	1,609	407
0.00%	0.00%	19.95%	14.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.03%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.95%	19.03%	14.22%	0.00%	0.00%	0.00%
0.00%	0.00%	4.34%	13.13%	10.00%	0.00%	8.58%	0.00%	0.00%	0.00%	10.94%	10.00%
10.00%	10.00%	8.58%	0.00%	0.00%	0.00%	4.34%	10.94%	13.13%	0.00%	0.00%	0.00%
13.13%	10.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	10.94%	10.00%
14.87%	15.13%	0.00%	0.00%	0.00%	0.00%	0.00%	6.07%	8.00%	0.00%	0.00%	0.00%
41	39	47	51	37	0	58	44	50	0	48	41
246	848	180	282	1,548	334	306	1,088	230	287	1,657	448

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
252	1,216	212	224	920	300	224	1,220	192	320	1,200	248
18	85	15	16	64	21	16	85	13	22	84	17
270	1,301	227	240	984	321	240	1,305	205	342	1,284	265
0.00%	0.00%	19.95%	14.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.03%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.95%	19.03%	14.22%	0.00%	0.00%	0.00%
0.00%	0.00%	4.34%	13.13%	10.00%	0.00%	8.58%	0.00%	0.00%	0.00%	10.94%	10.00%
10.00%	10.00%	8.58%	0.00%	0.00%	0.00%	4.34%	10.94%	13.13%	0.00%	0.00%	0.00%
13.13%	10.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	10.94%	10.00%
14.87%	15.13%	0.00%	0.00%	0.00%	0.00%	0.00%	6.07%	8.00%	0.00%	0.00%	0.00%
28	28	38	38	24	0	37	30	34	0	37	26
298	1,329	265	278	1,008	321	277	1,335	239	342	1,321	291

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

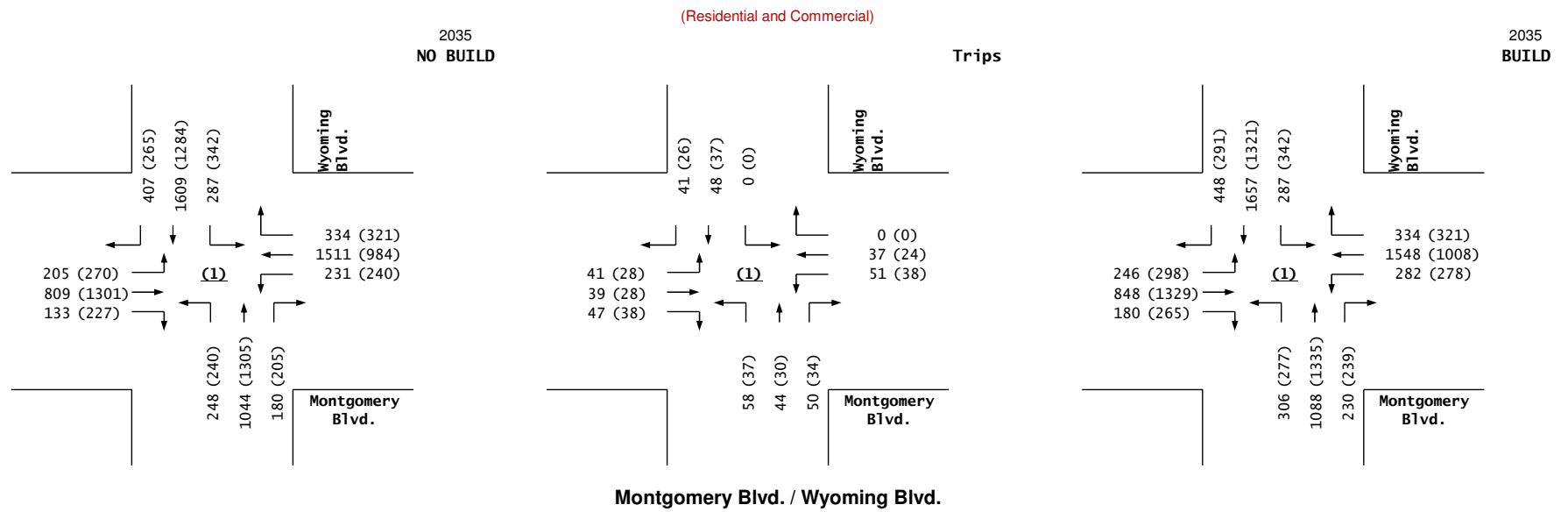
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Comanche Rd. / Wyoming Blvd.**(Residential and Commercial)**

(2)

INTERSECTION :E-W Street: **Comanche Rd.**N-S Street: **Wyoming Blvd.**

Year of Existing Counts

2021 **(Adjusted for COVID and School)**

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
76	156	40	144	424	104	116	1,156	100	72	1,216	100
5	11	3	10	30	7	8	81	7	5	85	7
81	167	43	154	454	111	124	1,237	107	77	1,301	107
19.12%	0.00%	0.00%	0.00%	0.00%	7.78%	0.00%	19.90%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.78%	19.90%	19.12%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
28	0	0	0	0	29	0	89	0	26	77	28
109	167	43	154	454	140	124	1,326	107	103	1,378	135

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Comanche Rd.)			Westbound (Comanche Rd.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
88	476	76	128	356	184	56	1,468	100	144	1,388	56
6	33	5	9	25	13	4	103	7	10	97	4
94	509	81	137	381	197	60	1,571	107	154	1,485	60
19.12%	0.00%	0.00%	0.00%	0.00%	7.78%	0.00%	19.90%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.78%	19.90%	19.12%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
6.15%	0.00%	0.00%	0.00%	0.00%	6.81%	0.00%	20.62%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.81%	20.62%	6.15%
24	0	0	0	0	21	0	62	0	18	54	20
118	509	81	137	381	218	60	1,633	107	172	1,539	80

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

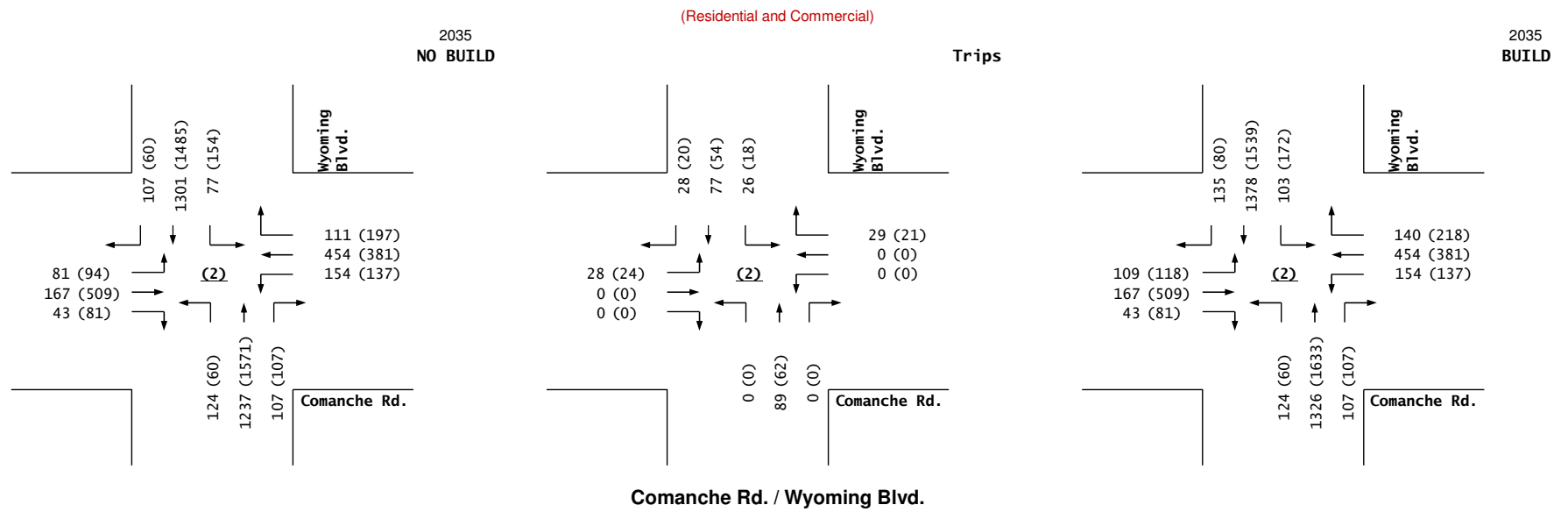
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Wyoming Blvd.*(Residential and Commercial)*

(3)

INTERSECTION :E-W Street: **La Mirada Pl.**N-S Street: **Wyoming Blvd.**

Year of Existing Counts

2021 **(Adjusted for COVID and School)**

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
28	1	20	1	1	1	52	1,120	16	40	1,336	20
2	0	1	0	0	0	4	78	1	3	94	1
30	1	21	1	1	1	56	1,198	17	43	1,430	21
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	53.20%
53.20%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	23.58%	0.00%	0.00%	0.00%	0.00%
8.41%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.58%	1.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	1.00%
52	0	38	0	0	0	43	101	0	0	97	10
82	1	59	1	1	1	99	1,299	17	43	1,527	31

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4	1	56	20	1	8	16	1,812	24	28	1,680	16
0	0	4	1	0	1	1	127	2	2	118	1
4	1	60	21	1	9	17	1,939	26	30	1,798	17
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	53.20%
53.20%	0.00%	46.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	23.58%	0.00%	0.00%	0.00%	0.00%
8.41%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.58%	1.00%
1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.58%	1.00%
32	0	24	0	0	0	44	62	0	0	71	25
36	1	84	21	1	9	61	2,001	26	30	1,869	42

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

43

25

P.M.

Number of Commercial Trips Generated

371

325

A.M.

100% Commercial Development

243

206

P.M.

Number of Medical Trips Generated

43

12

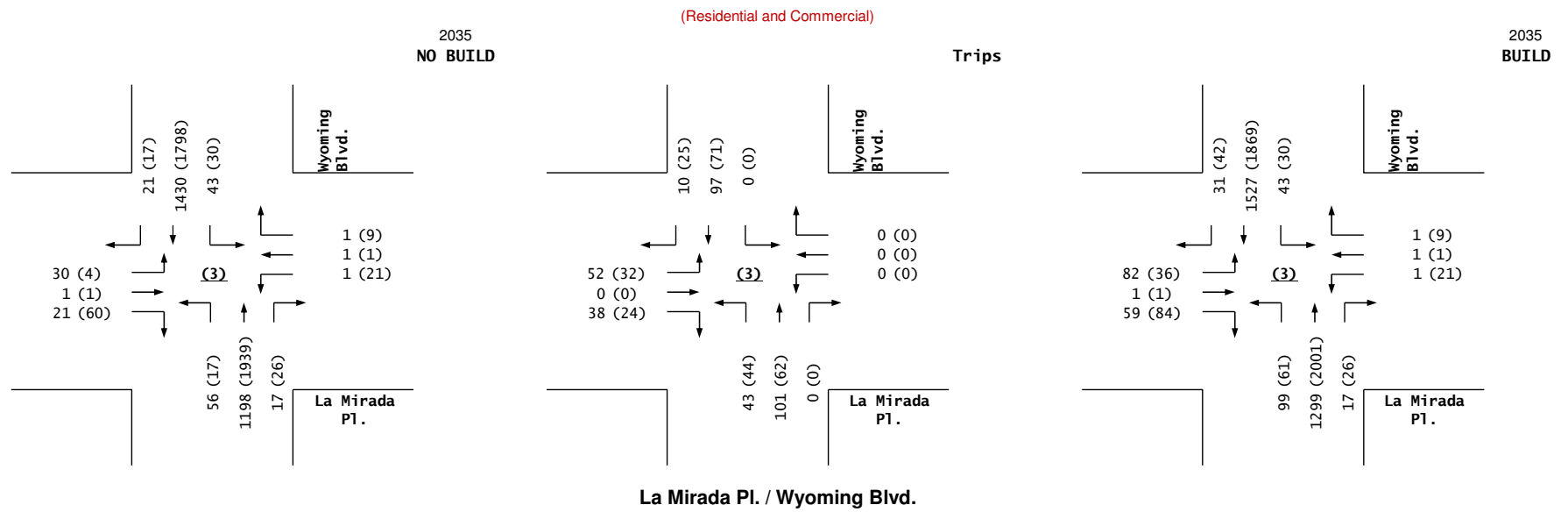
A.M.

100% Medical Development

15

36

P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Driveway "A"

(Residential and Commercial)

INTERSECTION :

E-W Street: **Montgomery Blvd.** (4)
N-S Street: **Driveway "A"** (Norma Dr.)

Year of Existing Counts 2021 (Adjusted for COVID and School)

Horizon Year 2035

Growth Rates 0.50% 0.50% 0.50% 0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,147	0	0	2,166	5	0	0	0	10	0	10
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	14.34%	8.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	18.00%	1.00%	12.00%	0.00%	0.00%	0.00%
0.00%	0.00%	22.34%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.34%	0.00%	0.00%	0.00%	0.00%	0.00%
0	56	40	119	22	0	62	3	39	0	0	0
0	1,203	40	119	2,188	5	62	3	39	10	0	10
0	-17	17	54	-54	0	48	0	14	0	0	0
0	1,186	57	173	2,134	5	110	3	53	10	0	10

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Norma Dr.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,798	0	0	1,489	10	0	0	0	5	0	5
0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	14.34%	8.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	18.00%	1.00%	12.00%	0.00%	0.00%	0.00%
0.00%	0.00%	22.34%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.34%	0.00%	0.00%	0.00%	0.00%	0.00%
0	44	22	74	14	0	45	2	25	0	0	0
5	1,842	22	74	1,503	10	45	2	25	5	0	5
0	-24	24	33	-33	0	29	0	17	0	0	0
5	1,818	46	107	1,470	10	74	2	42	5	0	5

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13 39 A.M. 100% Residential Development

43 25 P.M.

Number of Commercial Trips Generated

371 325 A.M. 100% Commercial Development

243 206 P.M.

Number of Medical Trips Generated

43 12 A.M. 100% Medical Development

15 36 P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
0.00%	-10.00%	10.00%	32.00%	-32.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-17	17	54	-54	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	32.00%	0.00%	9.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	48	0	14	0	0	0
0	-17	17	54	-54	0	48	0	14	0	0	0

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

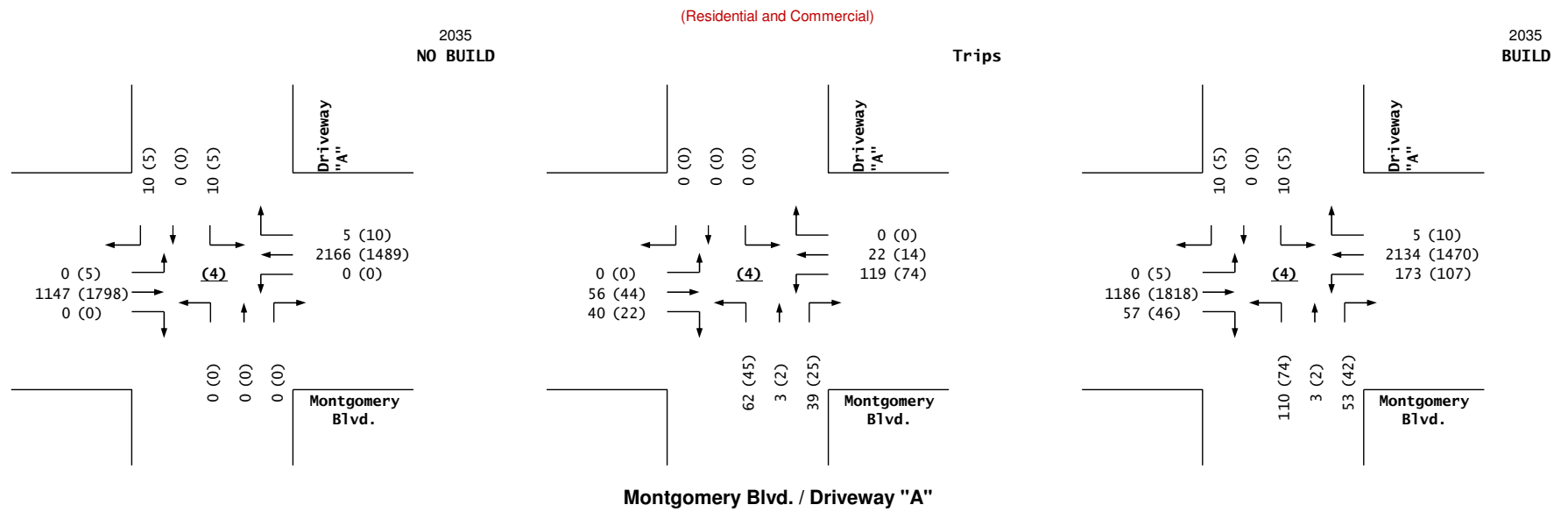
Net PM Passby Trips

Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
0.00%	-16.00%	16.00%	22.00%	-22.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	-24	24	33	-33	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.00%	0.00%	13.00%	0.00%	0.00%	0.00%
0	0	0	0	0	0	29	0	17	0	0	0
0	-24	24	33	-33	0	29	0	17	0	0	0

Entering Exiting

Pass-by Trips 170 150 AM

148 132 PM



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Montgomery Blvd. / Driveway "B"

(Residential and Commercial)

INTERSECTION :

E-W Street: **Montgomery Blvd.**

(5)

N-S Street: **Driveway "B"**

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Taco Cabana Trips	0	0	50	0	0	0	0	0	50	0	0	0
Subtotal (NO BUILD - A.M.)	0	1,147	50	0	2,166	0	0	0	50	0	0	0
Percent Residential Trips Generated(Entering)	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	4.34%	10.00%	0.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	0.00%	0.00%	18.58%	0.00%	0.00%	0.00%
Percent Medical Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Medical Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	19	37	0	141	0	0	0	64	0	0	0
Subtotal AM Pk Hr. BUILD Volumes	0	1,166	87	0	2,307	0	0	0	114	0	0	0
Pass-by Trip Adjustments	0	-29	15	0	0	0	0	0	12	0	0	0
Total AM Peak Hour BUILD Volumes	0	1,137	102	0	2,307	0	0	0	126	0	0	0

	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Taco Cabana Trips	0	0	50	0	0	0	0	0	50	0	0	0
Subtotal (NO BUILD - P.M.)	0	1,798	50	0	1,489	0	0	0	50	0	0	0
Percent Residential Trips Generated(Entering)	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Residential Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	19.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Entering)	0.00%	4.34%	10.00%	0.00%	28.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	4.34%	0.00%	0.00%	0.00%	18.58%	0.00%	0.00%	0.00%
Percent Medical Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Medical Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	20	24	0	88	0	0	0	49	0	0	0
Subtotal PM Pk Hr. BUILD Volumes	0	1,818	74	0	1,577	0	0	0	99	0	0	0
Pass-by Trip Adjustments	0	-38	19	0	0	0	0	0	17	0	0	0
Total PM Peak Hour BUILD Volumes	0	1,780	93	0	1,577	0	0	0	116	0	0	0

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated	13	39	A.M.	100% Residential Development
	43	25	P.M.	
Number of Commercial Trips Generated	371	325	A.M.	100% Commercial Development
	243	206	P.M.	
Number of Medical Trips Generated	43	12	A.M.	100% Medical Development
	15	36	P.M.	

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering
Volume Entering
Percent Exiting
Volume Exiting
Net AM Passby Trips

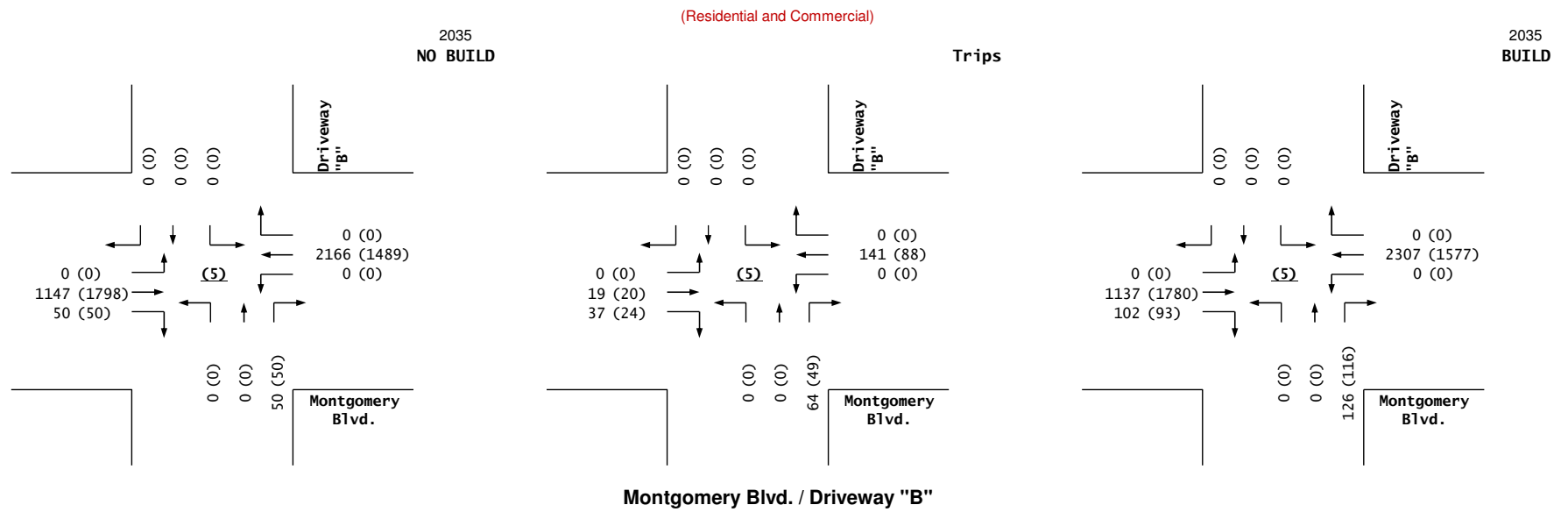
	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	-17.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-29	15	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	12	0	0	0
Net AM Passby Trips	0	-29	15	0	0	0	0	0	12	0	0	0

PM Pass-by Trips

Percent Entering
Volume Entering
Percent Exiting
Volume Exiting
Net PM Passby Trips

	Eastbound (Montgomery Blvd.)			Westbound (Montgomery Blvd.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Percent Entering	0.00%	-26.00%	13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Entering	0	-38	19	0	0	0	0	0	0	0	0	0
Percent Exiting	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%	0.00%	0.00%
Volume Exiting	0	0	0	0	0	0	0	0	17	0	0	0
Net PM Passby Trips	0	-38	19	0	0	0	0	0	17	0	0	0

Pass-by Trips
170 150 AM
148 132 PM



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Driveway "C" / Wyoming Blvd.

(Residential and Commercial)

INTERSECTION :

E-W Street: Driveway "C"

(6)

N-S Street: Wyoming Blvd.

Year of Existing Counts

2021

(Adjusted for COVID and School)

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,472	0	0	1,973	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	8.58%	0.00%	0.00%	13.00%	15.41%
20.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	8.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	10.00%	0.00%	0.00%	0.00%	24.07%
14.07%	0.00%	23.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
67	0	36	0	0	0	70	84	0	0	83	67
67	0	36	0	0	0	70	1,556	0	0	2,056	67
33	0	23	0	0	0	37	-20	0	0	-26	26
100	0	59	0	0	0	107	1,536	0	0	2,030	93

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,750	0	0	1,751	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	8.58%	0.00%	0.00%	13.00%	15.41%
20.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	8.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	10.00%	0.00%	0.00%	0.00%	24.07%
14.07%	0.00%	23.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
46	0	29	0	0	0	43	53	0	0	73	41
46	0	29	0	0	0	43	1,803	0	0	1,824	41
34	0	17	0	0	0	38	-21	0	0	-19	19
80	0	46	0	0	0	81	1,782	0	0	1,805	60

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

13

39

A.M.

100% Residential Development

Number of Commercial Trips Generated

43

25

P.M.

100% Commercial Development

Number of Medical Trips Generated

243

206

P.M.

100% Medical Development

43

12

A.M.

15

36

P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.00%	-22.00%	0.00%	0.00%	-15.00%	15.00%
0	0	0	0	0	0	37	-37	0	0	-26	26
22.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	11.00%	0.00%	0.00%	0.00%	0.00%
33	0	23	0	0	0	0	17	0	0	0	0
33	0	23	0	0	0	37	-20	0	0	-26	26

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net PM Passby Trips

Eastbound (Driveway "C")			Westbound (Driveway "C")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	26.00%	-26.00%	0.00%	0.00%	-13.00%	13.00%
0	0	0	0	0	0	38	-38	0	0	-19	19
26.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%
34	0	17	0	0	0	0	17	0	0	0	0
34	0	17	0	0	0	38	-21	0	0	-19	19

Entering

Exiting

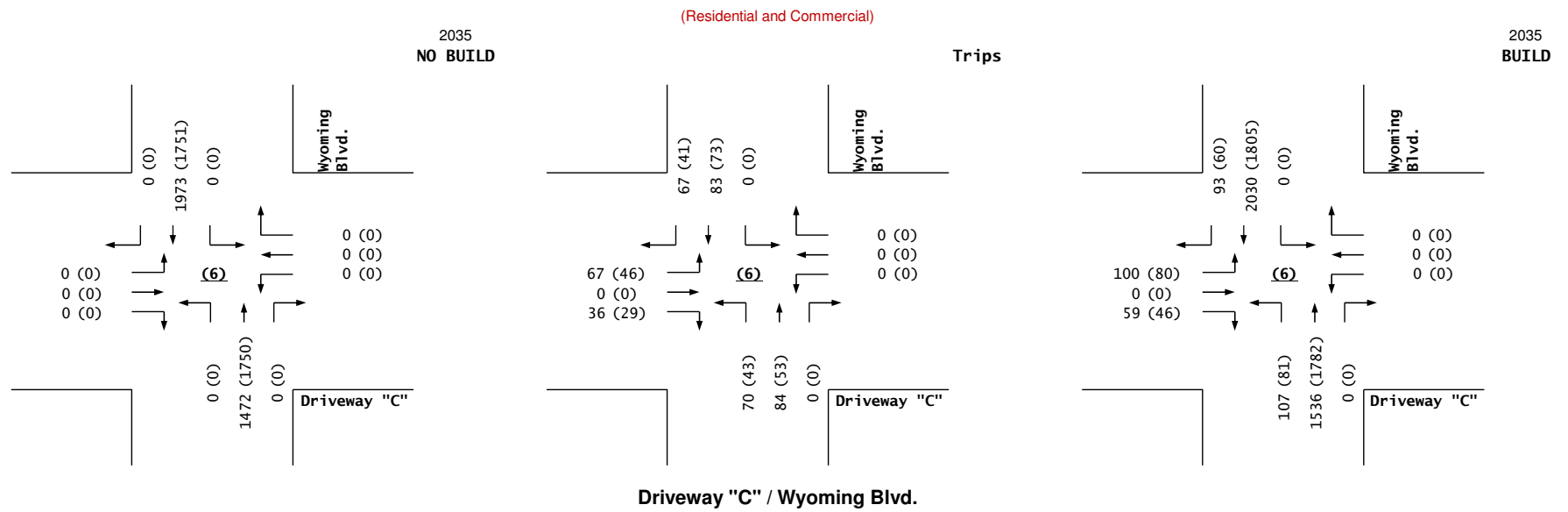
Pass-by Trips

170

150 AM

148

132 PM



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

Driveway "D" / Wyoming Blvd.

(Residential and Commercial)

INTERSECTION : E-W Street: **Driveway "D"**
 N-S Street: **Wyoming Blvd.**
 Year of Existing Counts: 2021
 Horizon Year: 2035
 Growth Rates: 0.50% 0.50% 0.50% 0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal AM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,472	0	0	1,973	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	0.00%	0.00%	0.00%	13.00%
0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	18.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%
0	0	33	0	0	0	0	154	0	0	71	48
0	0	33	0	0	0	0	1,626	0	0	2,044	48
0	0	21	0	0	0	0	0	0	0	-26	24
0	0	54	0	0	0	0	1,626	0	0	2,018	72

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Subtotal PM Pk Hr. BUILD Volumes

Pass-by Trip Adjustments

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	1,750	0	0	1,751	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.20%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.58%	0.00%	0.00%	0.00%	13.00%
0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	8.41%	0.00%	0.00%	18.58%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	34.58%	0.00%
0	0	21	0	0	0	0	95	0	0	73	32
0	0	21	0	0	0	0	1,845	0	0	1,824	32
0	0	17	0	0	0	0	0	0	0	-21	19
0	0	38	0	0	0	0	1,845	0	0	1,803	51

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Number of Residential Trips Generated

Entering 13 39 A.M. 100% Residential Development
 Exiting 43 25 P.M.

Number of Commercial Trips Generated

Entering 371 325 A.M. 100% Commercial Development
 Exiting 243 206 P.M.

Number of Medical Trips Generated

Entering 43 12 A.M. 100% Medical Development
 Exiting 15 36 P.M.

Pass-by Trip Calculations:

AM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

Volume Exiting

Net AM Passby Trips

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-29.00%	14.00%
0	0	0	0	0	0	0	0	0	0	-49	24
0.00%	0.00%	14.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.00%	0.00%
0	0	21	0	0	0	0	0	0	0	23	0
0	0	21	0	0	0	0	0	0	0	-26	24

PM Pass-by Trips

Percent Entering

Volume Entering

Percent Exiting

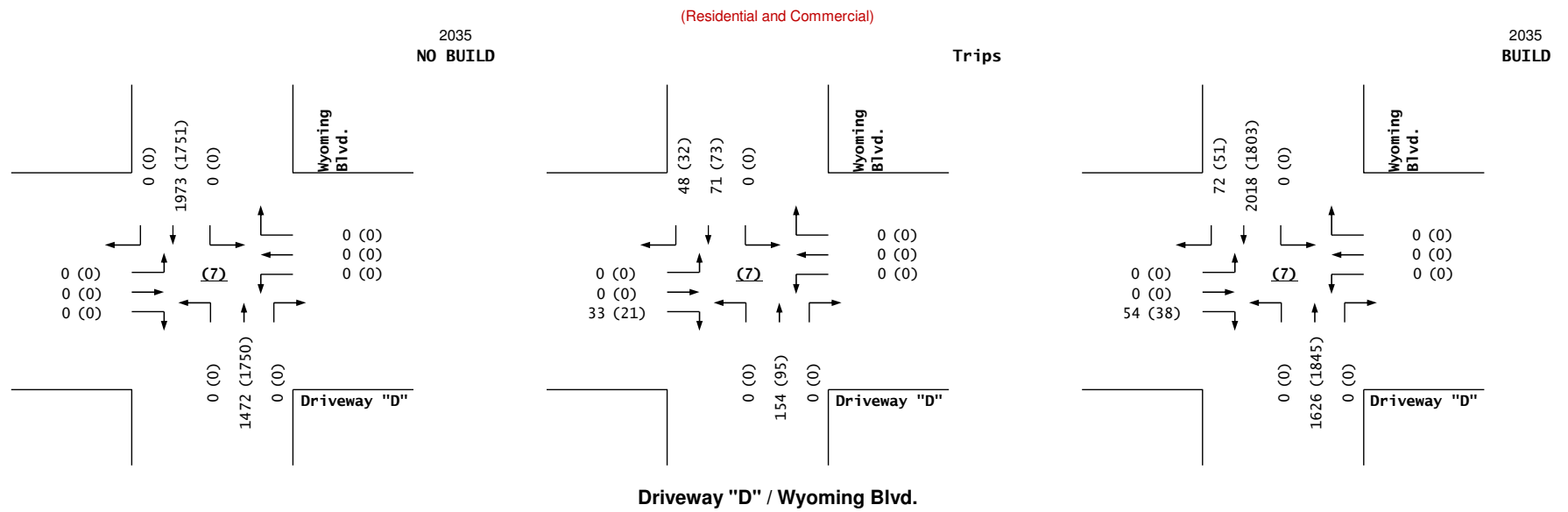
Volume Exiting

Net PM Passby Trips

Eastbound (Driveway "D")			Westbound (Driveway "D")			Northbound (Wyoming Blvd.)			Southbound (Wyoming Blvd.)		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-26.00%	13.00%
0	0	0	0	0	0	0	0	0	0	-38	19
0.00%	0.00%	13.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.00%	0.00%
0	0	17	0	0	0	0	0	0	0	17	0
0	0	17	0	0	0	0	0	0	0	-21	19

Entering 170 150 AM
 Exiting 148 132 PM

Pass-by Trips



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Driveway "R"

(Residential and Commercial)

(8)

INTERSECTION :

E-W Street: **La Mirada Pl.**

N-S Street: **Driveway "R"**

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2035

Growth Rates

0.50%

0.50%

0.50%

0.50% *

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	52	0	0	78	0	0	0	0	0	0	0
1.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	1.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	4	0	0	3	13	0	0	0	39	0	0
0	56	0	0	81	13	0	0	0	39	0	0

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "R")			Southbound (Driveway "R")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
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	65	0	0	35	0	0	0	0	0	0	0
1.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	1.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	2	0	0	2	43	0	0	0	25	0	0
0	67	0	0	37	43	0	0	0	25	0	0

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated

13 39 A.M. 100% Residential Development

43 25 P.M.

Number of Commercial Trips Generated

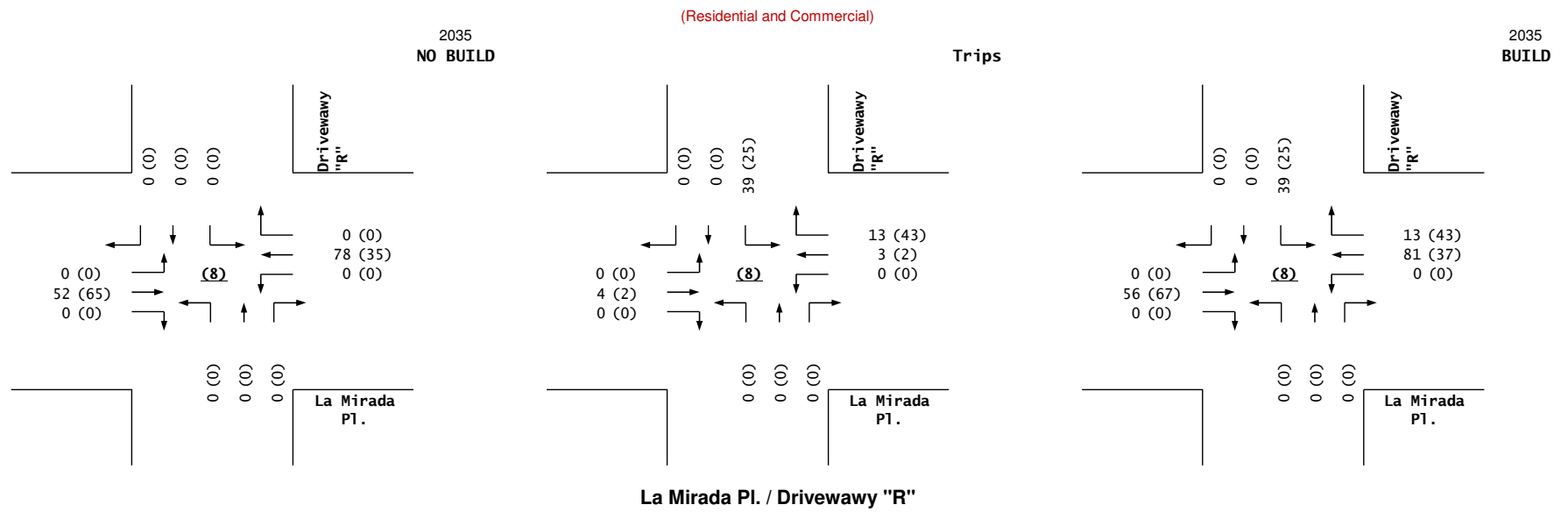
371 325 A.M. 100% Commercial Development

243 206 P.M.

Number of Medical Trips Generated

43 12 A.M. 100% Medical Development

15 36 P.M.



La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Projected Turning Movements Worksheet

La Mirada Pl. / Driveway "E"(Residential and Commercial)**INTERSECTION :**E-W Street: **La Mirada Pl.**

(9)

N-S Street: **Driveway "E"**

Year of Existing Counts

2021 (Adjusted for COVID and School)

Horizon Year

2035

Growth Rates

Subtotal (NO BUILD - A.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

0.50%			0.50%			0.50%			0.50% *		
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	52	0	0	78	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	1.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	39	0	0	13	37	0	0	0	33	0	3
4	91	0	0	91	37	0	0	0	33	0	3

Subtotal (NO BUILD - P.M.)

Percent Residential Trips Generated(Entering)

Percent Residential Trips Generated(Exiting)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Percent Medical Trips Generated(Entering)

Percent Medical Trips Generated(Exiting)

Total Trips Generated

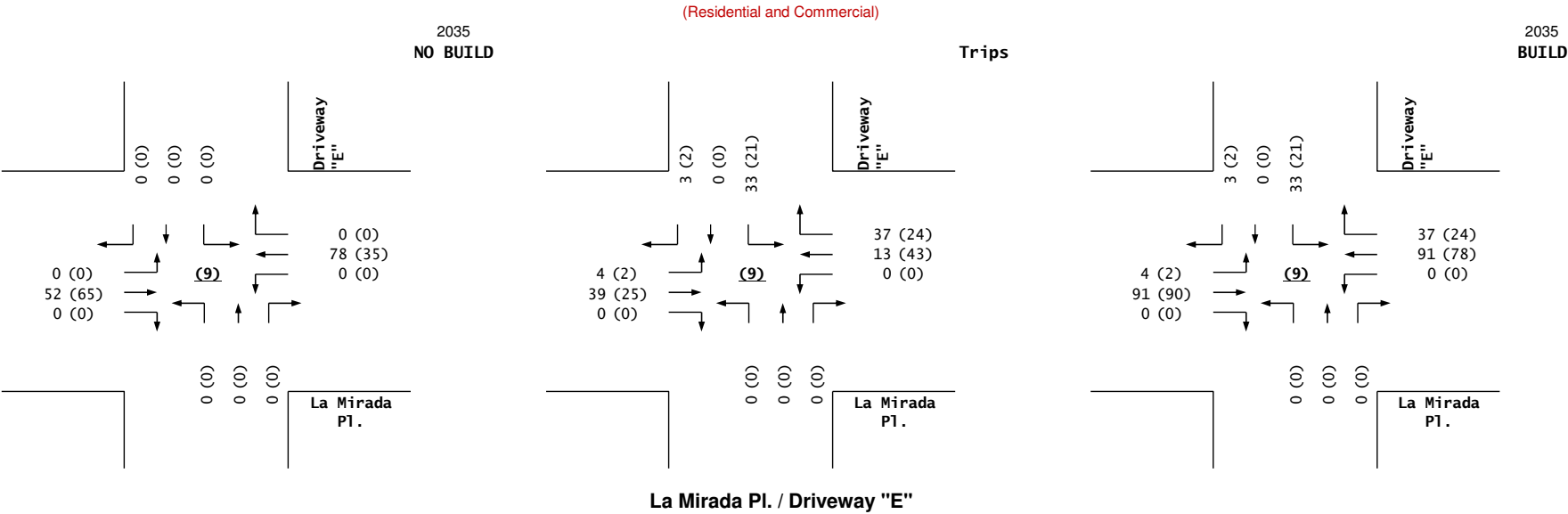
Total PM Peak Hour BUILD Volumes

0.50%			0.50%			0.50%			0.50%		
Eastbound (La Mirada Pl.)			Westbound (La Mirada Pl.)			Northbound (Driveway "E")			Southbound (Driveway "E")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	65	0	0	35	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	1.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2	25	0	0	43	24	0	0	0	21	0	2
2	90	0	0	78	24	0	0	0	21	0	2

* - Note: 0.50% annual growth rate is not supported by the data. Data shows a flat to slightly negative growth rate.

Entering Exiting

Number of Residential Trips Generated	13	39	A.M.	100% Residential Development
	43	25	P.M.	
Number of Commercial Trips Generated	371	325	A.M.	100% Commercial Development
	243	206	P.M.	
Number of Medical Trips Generated	43	12	A.M.	100% Medical Development
	15	36	P.M.	



Timings
1: Wyoming Blvd. & Montgomery Blvd.

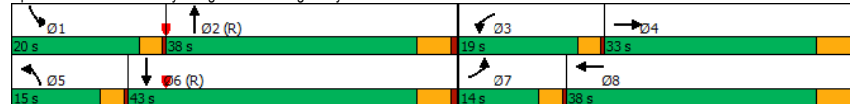
Terry O. Brown, P.E.
08/16/2021

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	 	  	 	  	 	  	 	  
Traffic Volume (vph)	196	771	220	1440	237	996	273	1534
Future Volume (vph)	196	771	220	1440	237	996	273	1534
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	20.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%	39.1%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/16/2021

	↖	→	↗	↖	↖	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	196	771	126	220	1440	318	237	996	171	273	1534	388
Future Volume (veh/h)	196	771	126	220	1440	318	237	996	171	273	1534	388
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	196	771	126	220	1440	318	237	996	171	273	1534	388
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	256	1264	205	282	1227	270	298	1604	275	335	1532	384
Arrive On Green	0.07	0.29	0.29	0.08	0.30	0.30	0.06	0.25	0.25	0.10	0.38	0.38
Sat Flow, veh/h	3428	4392	712	3428	4154	914	3428	4353	746	3428	4038	1013
Grp Volume(v), veh/h	196	591	306	220	1170	588	237	772	395	273	1281	641
Grp Sat Flow(s),veh/h/ln	1714	1689	1727	1714	1689	1691	1714	1689	1721	1714	1689	1673
Q Serve(g_s), s	6.2	16.6	16.8	6.9	32.5	32.5	7.5	22.4	22.4	8.6	41.7	41.7
Cycle Q Clear(g_c), s	6.2	16.6	16.8	6.9	32.5	32.5	7.5	22.4	22.4	8.6	41.7	41.7
Prop In Lane			0.41	1.00		0.54	1.00		0.43	1.00		0.61
Lane Grp Cap(c), veh/h	256	972	497	282	998	500	298	1244	634	335	1281	635
V/C Ratio(X)	0.77	0.61	0.61	0.78	1.17	1.18	0.79	0.62	0.62	0.81	1.00	1.01
Avail Cap(c_a), veh/h	327	972	497	483	998	500	358	1244	634	514	1281	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	33.8	33.9	49.5	38.7	38.8	50.8	34.6	34.6	48.6	34.1	34.1
Incr Delay (d2), s/veh	5.7	2.8	5.6	1.8	88.4	98.9	8.1	2.3	4.6	3.1	25.1	38.2
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	5.0	11.3	12.1	5.4	36.6	38.7	6.4	15.0	15.8	6.7	28.1	30.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	36.7	39.5	51.3	127.2	137.7	58.9	36.9	39.2	51.7	59.3	72.3
LnGrp LOS	E	D	D	D	F	F	E	D	D	D	E	F
Approach Vol, veh/h	1093			1978			1404			2195		
Approach Delay, s/veh	40.9			121.9			41.3			62.1		
Approach LOS	D			F			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	46.0	12.6	37.2	13.1	47.2	11.7	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	10.6	24.4	8.9	18.8	9.5	43.7	8.2	34.5				
Green Ext Time (p_c), s	0.2	5.3	0.1	4.5	0.1	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				72.0								
HCM 6th LOS				E								

Intersection Summary

HCM 6th Ctrl Delay 72.0
HCM 6th LOS E

Timings
1: Wyoming Blvd. & Montgomery Blvd.

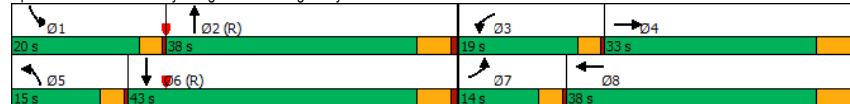
Terry O. Brown, P.E.
08/17/2021

	↖	→	↗	↖	↖	↖	↖
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖	↖↖↖
Traffic Volume (vph)	196	771	222	1440	245	1003	273
Future Volume (vph)	196	771	222	1440	245	1003	273
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot
Protected Phases	7	4	3	8	5	2	1
Permitted Phases	7	4	3	8	5	2	1
Detector Phase	7	4	3	8	5	2	1
Switch Phase							
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?							
Recall Mode	None	Max	None	Max	None	C-Max	None

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/17/2021

	↖	→	↗	↖	↖	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	196	771	129	222	1440	318	245	1003	177	273	1536	388
Future Volume (veh/h)	196	771	129	222	1440	318	245	1003	177	273	1536	388
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	196	771	129	222	1440	318	245	1003	177	273	1536	388
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	256	1257	209	284	1227	270	304	1596	281	335	1525	382
Arrive On Green	0.07	0.29	0.29	0.08	0.30	0.30	0.09	0.37	0.37	0.10	0.38	0.38
Sat Flow, veh/h	3428	4376	726	3428	4154	914	3428	4332	763	3428	4039	1012
Grp Volume(v), veh/h	196	594	306	222	1170	588	245	781	399	273	1282	642
Grp Sat Flow(s),veh/h/ln	1714	1689	1725	1714	1689	1691	1714	1689	1718	1714	1689	1673
Q Serve(g_s), s	6.2	16.7	16.9	7.0	32.5	32.5	7.7	20.9	21.0	8.6	41.5	41.5
Cycle Q Clear(g_c), s	6.2	16.7	16.9	7.0	32.5	32.5	7.7	20.9	21.0	8.6	41.5	41.5
Prop In Lane	1.00		0.42	1.00		0.54	1.00		0.44	1.00		0.60
Lane Grp Cap(c), veh/h	256	970	495	284	998	500	304	1244	633	335	1275	632
V/C Ratio(X)	0.77	0.61	0.62	0.78	1.17	1.18	0.80	0.63	0.63	0.81	1.01	1.02
Avail Cap(c_a), veh/h	327	970	495	483	998	500	358	1244	633	514	1275	632
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	33.9	34.0	49.5	38.7	38.8	49.2	28.5	28.6	48.6	34.2	34.2
Incr Delay (d2), s/veh	5.7	2.9	5.7	1.8	88.4	98.9	9.2	2.4	4.7	3.1	26.6	39.9
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	5.0	11.4	12.2	5.4	36.6	38.7	6.5	13.3	14.1	6.7	28.4	31.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	36.8	39.7	51.2	127.2	137.7	58.4	30.9	33.3	51.7	60.9	74.1
LnGrp LOS	E	D	D	D	F	F	E	C	C	D	F	F
Approach Vol, veh/h	1096			1980				1425			2197	
Approach Delay, s/veh	41.0			121.8				36.3			63.6	
Approach LOS	D			F				D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	46.0	12.6	37.1	13.3	47.0	11.7	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	10.6	23.0	9.0	18.9	9.7	43.5	8.2	34.5				
Green Ext Time (p_c), s	0.2	6.1	0.1	4.5	0.1	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	71.3											
HCM 6th LOS	E											

Intersection Summary

HCM 6th Ctrl Delay 71.3
HCM 6th LOS E

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/16/2021

								
Lane Group	EBL	EFT	WBL	WBT	NBL	NRT	SBL	SBT
Lane Configurations	LT	LT	LT	LT	LT	LT	LT	LT
Traffic Volume (vph)	257	1240	226	938	228	1244	326	1224
Future Volume (vph)	257	1240	226	938	228	1244	326	1224
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	22.0	44.0	13.0	35.0	17.0	47.0	16.0	46.0
Total Split (%)	18.3%	36.7%	10.8%	29.2%	14.2%	39.2%	13.3%	38.3%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↖	↖	↖	↖	↖	↖	↖	↖
16 s	47 s	13 s	44 s	17 s	46 s	22 s	35 s
↖	↖	↖	↖	↖	↖	↖	↖
↖	↖	↖	↖	↖	↖	↖	↖

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/16/2021

	↖	→	↗	↖	↗	↖	↗	↖	↗	↖	↗	↖	↗
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		
Traffic Volume (veh/h)	257	1240	216	226	938	306	228	1244	196	326	1224	253	
Future Volume (veh/h)	257	1240	216	226	938	306	228	1244	196	326	1224	253	
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	
Adj Flow Rate, veh/h	257	1240	216	226	938	306	228	1244	196	326	1224	253	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3	
Cap, veh/h	315	1393	243	271	1165	379	285	1526	240	357	1543	319	
Arrive On Green	0.09	0.32	0.32	0.08	0.31	0.31	0.06	0.23	0.23	0.10	0.37	0.37	
Sat Flow, veh/h	3428	4340	756	3428	3781	1230	3428	4412	695	3428	4207	869	
Grp Volume(v), veh/h	257	965	491	226	838	406	228	952	488	326	983	494	
Grp Sat Flow(s),veh/h/ln	1714	1689	1719	1714	1689	1634	1714	1689	1730	1714	1689	1699	
Q Serve(g_s), s	8.8	32.6	32.6	7.8	27.4	27.5	7.9	32.0	32.0	11.3	31.2	31.2	
Cycle Q Clear(g_c), s	8.8	32.6	32.6	7.8	27.4	27.5	7.9	32.0	32.0	11.3	31.2	31.2	
Prop In Lane	1.00		0.44	1.00		0.75	1.00		0.40	1.00		0.51	
Lane Grp Cap(c), veh/h	315	1083	552	271	1041	504	285	1168	598	357	1239	623	
V/C Ratio(X)	0.82	0.89	0.89	0.83	0.80	0.81	0.80	0.82	0.82	0.91	0.79	0.79	
Avail Cap(c_a), veh/h	529	1083	552	271	1041	504	386	1168	598	357	1239	623	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	53.5	38.7	38.7	54.5	38.2	38.2	55.7	42.5	42.5	53.2	33.9	33.9	
Incr Delay (d2), s/veh	2.0	11.0	19.1	18.4	6.6	13.0	5.9	6.3	11.6	26.5	5.3	10.0	
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	6.9	21.0	22.8	7.2	17.6	18.3	6.6	21.0	22.5	10.1	19.2	20.3	
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	55.5	49.8	57.9	72.8	44.8	51.2	61.5	48.8	54.1	79.7	39.2	43.9	
LnGrp LOS	E	D	E	E	D	D	E	D	D	E	D	D	
Approach Vol, veh/h	1713			1470			1668			1803			
Approach Delay, s/veh	52.9			50.9			52.1			47.8			
Approach LOS	D			D			D			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	16.0	47.0	13.0	44.0	13.5	49.5	14.5	42.5					
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5					
Max Green Setting (Gmax), s	12.5	41.5	9.5	38.5	13.5	40.5	18.5	29.5					
Max Q Clear Time (g_c+I1), s	13.3	34.0	9.8	34.6	9.9	33.2	10.8	29.5					
Green Ext Time (p_c), s	0.0	5.7	0.0	3.2	0.1	5.7	0.2	0.0					

Intersection Summary

HCM 6th Ctrl Delay 50.9
HCM 6th LOS D

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/17/2021

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	 	  	 	  	 	  	 	  
Traffic Volume (vph)	285	1268	266	962	265	1274	326	1261
Future Volume (vph)	285	1268	266	962	265	1274	326	1261
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	22.0	44.0	13.0	35.0	17.0	47.0	16.0	46.0
Total Split (%)	18.3%	36.7%	10.8%	29.2%	14.2%	39.2%	13.3%	38.3%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↖	↖	↖	↖	↖	↖	↖	↖
16 s	47 s	13 s	44 s	17 s	46 s	22 s	35 s
↖	↖	↖	↖	↖	↖	↖	↖
↖	↖	↖	↖	↖	↖	↖	↖

La Mirada Development - Full Development - 2025 PM Peak Hour BUILD Conditions - Full Development

Synchro 11 Report
2025_PBX_All.syn

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/17/2021

	↖	→	↗	←	↖	↗	↓	↖	↗	↓	↖	↗	↓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBT	SBT
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	↖↖	↖↖↖
Traffic Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279	279
Future Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279	279
Initial Q (Qb), veh	0	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	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	1.00
Work Zone On Approach	No			No			No			No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	1268	254	266	962	306	265	1274	230	326	1261	279	279
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	343	1358	272	271	1142	363	321	1492	269	357	1478	327	327
Arrive On Green	0.10	0.32	0.32	0.08	0.30	0.30	0.06	0.23	0.23	0.10	0.36	0.36	0.36
Sat Flow, veh/h	3428	4232	848	3428	3806	1209	3428	4314	779	3428	4150	918	918
Grp Volume(v), veh/h	285	1012	510	266	853	415	265	997	507	326	1026	514	514
Grp Sat Flow(s),veh/h/ln	1714	1689	1703	1714	1689	1638	1714	1689	1715	1714	1689	1690	1690
Q Serve(g_s), s	9.8	34.9	34.9	9.3	28.4	28.5	9.2	33.9	33.9	11.3	33.7	33.7	33.7
Cycle Q Clear(g_c), s	9.8	34.9	34.9	9.3	28.4	28.5	9.2	33.9	33.9	11.3	33.7	33.7	33.7
Prop In Lane	1.00		0.50	1.00		0.74	1.00		0.45	1.00		0.54	0.54
Lane Grp Cap(c), veh/h	343	1083	546	271	1013	491	321	1168	593	357	1203	602	602
V/C Ratio(X)	0.83	0.93	0.93	0.98	0.84	0.84	0.82	0.85	0.85	0.91	0.85	0.85	0.85
Avail Cap(c_a), veh/h	529	1083	546	271	1013	491	386	1168	593	357	1203	602	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	39.5	39.5	55.2	39.3	39.4	55.3	43.2	43.2	53.2	35.7	35.7	35.7
Incr Delay (d2), s/veh	3.8	15.4	25.2	48.8	8.5	16.1	9.9	8.0	14.5	26.5	7.8	14.3	14.3
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	0.0
%ile BackOfQ(95%),veh/ln	7.7	22.9	24.8	9.7	18.4	19.3	7.9	22.3	23.9	10.1	20.9	22.3	22.3
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	56.8	54.9	64.7	103.9	47.8	55.5	65.2	51.2	57.7	79.7	43.5	50.0	50.0
LnGrp LOS	E	D	E	F	D	E	E	D	E	E	D	D	D
Approach Vol, veh/h	1807			1534			1769			1866			
Approach Delay, s/veh	58.0			59.6			55.2			51.6			
Approach LOS	E			E			E			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	16.0	47.0	13.0	44.0	14.8	48.2	15.5	41.5					
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5					
Max Green Setting (Gmax), s	12.5	41.5	9.5	38.5	13.5	40.5	18.5	29.5					
Max Q Clear Time (g_c+I1), s	13.3	35.9	11.3	36.9	11.2	35.7	11.8	30.5					
Green Ext Time (p_c), s	0.0	4.5	0.0	1.4	0.1	4.0	0.2	0.0					

Intersection Summary

HCM 6th Ctrl Delay 55.9
HCM 6th LOS E

La Mirada Development - Full Development - 2025 PM Peak Hour BUILD Conditions - Full Development

Synchro 11 Report
2025_PBX_All.syn

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/16/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↩	↩↩	↩	↩↩	↩	↩↩↩	↩	↩↩↩
Traffic Volume (vph)	78	159	147	432	118	1179	73	1240
Future Volume (vph)	78	159	147	432	118	1179	73	1240
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	14.0	38.0	19.0	43.0	13.0	40.0	13.0	40.0
Total Split (%)	12.7%	34.5%	17.3%	39.1%	11.8%	36.4%	11.8%	36.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 62.7 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
13 s	40 s	19 s	38 s
Ø5	Ø6 (R)	Ø7	Ø8
13 s	40 s	14 s	43 s

La Mirada Development - 2025 AM Peak Hour NO BUILD Conditions

Synchro 11 Report
2025_ANX.syn

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/16/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩↩		↩	↩↩		↩	↩↩↩		↩	↩↩↩	
Traffic Volume (veh/h)	78	159	41	147	432	106	118	1179	102	73	1240	102
Future Volume (veh/h)	78	159	41	147	432	106	118	1179	102	73	1240	102
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	78	159	41	147	432	106	118	1179	102	73	1240	102
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	332	871	219	509	958	233	282	1986	172	229	1912	157
Arrive On Green	0.04	0.31	0.31	0.07	0.34	0.34	0.06	0.42	0.42	0.08	0.80	0.80
Sat Flow, veh/h	1767	2792	700	1767	2811	684	1767	4748	411	1767	4770	392
Grp Volume(v), veh/h	78	99	101	147	270	268	118	838	443	73	878	464
Grp Sat Flow(s), veh/h/ln	1767	1763	1729	1767	1763	1732	1767	1689	1782	1767	1689	1785
Q Serve(g_s), s	3.3	4.5	4.7	6.0	13.1	13.3	4.2	21.1	21.1	2.7	11.8	11.8
Cycle Q Clear(g_c), s	3.3	4.5	4.7	6.0	13.1	13.3	4.2	21.1	21.1	2.7	11.8	11.8
Prop In Lane	1.00		0.40	1.00		0.39	1.00		0.23	1.00		0.22
Lane Grp Cap(c), veh/h	332	550	540	509	601	591	282	1413	745	229	1354	716
V/C Ratio(X)	0.24	0.18	0.19	0.29	0.45	0.45	0.42	0.59	0.59	0.32	0.65	0.65
Avail Cap(c_a), veh/h	423	550	540	630	601	591	337	1413	745	315	1354	716
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	27.6	27.6	21.8	28.2	28.3	18.1	24.8	24.8	19.3	7.7	7.7
Incr Delay (d2), s/veh	0.1	0.7	0.8	0.1	2.4	2.5	0.4	1.8	3.5	0.3	2.4	4.5
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	2.4	3.6	3.7	4.4	9.8	9.8	3.0	13.1	14.2	1.8	5.1	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	28.3	28.4	21.9	30.6	30.8	18.5	26.6	28.2	19.6	10.1	12.2
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h	278			685			1399				1415	
Approach Delay, s/veh	27.3			28.8			26.4				11.3	
Approach LOS	C			C			C				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	51.0	11.5	39.8	9.6	49.1	8.3	43.0				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	9.5	35.0	15.5	32.5	9.5	35.0	10.5	37.5				
Max Q Clear Time (g_c+I1), s	4.7	23.1	8.0	6.7	6.2	13.8	5.3	15.3				
Green Ext Time (p_c), s	0.0	7.0	0.1	1.3	0.0	10.6	0.0	3.8				

Intersection Summary

HCM 6th Ctrl Delay 21.3
HCM 6th LOS C

La Mirada Development - 2025 AM Peak Hour NO BUILD Conditions

Synchro 11 Report
2025_ANX.syn

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/17/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↩	↩↩	↩	↩↩	↩	↩↩	↩	↩↩
Traffic Volume (vph)	80	159	147	432	118	1182	76	1248
Future Volume (vph)	80	159	147	432	118	1182	76	1248
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	14.0	38.0	19.0	43.0	13.0	40.0	13.0	40.0
Total Split (%)	12.7%	34.5%	17.3%	39.1%	11.8%	36.4%	11.8%	36.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 62.7 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
13 s	40 s	19 s	38 s
Ø5	Ø6 (R)	Ø7	Ø8
13 s	40 s	14 s	43 s

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩↩		↩	↩↩		↩	↩↩		↩	↩↩	↩
Traffic Volume (veh/h)	80	159	41	147	432	107	118	1182	102	76	1248	109
Future Volume (veh/h)	80	159	41	147	432	107	118	1182	102	76	1248	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	80	159	41	147	432	107	118	1182	102	76	1248	109
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	333	874	219	511	956	235	238	1976	170	230	1897	166
Arrive On Green	0.04	0.31	0.31	0.07	0.34	0.34	0.06	0.42	0.42	0.04	0.40	0.40
Sat Flow, veh/h	1767	2792	700	1767	2805	689	1767	4749	410	1767	4744	414
Grp Volume(v), veh/h	80	99	101	147	270	269	118	840	444	76	888	469
Grp Sat Flow(s), veh/h/ln	1767	1763	1729	1767	1763	1732	1767	1689	1782	1767	1689	1781
Q Serve(g_s), s	3.4	4.5	4.7	6.0	13.1	13.3	4.3	21.3	21.3	2.8	23.6	23.6
Cycle Q Clear(g_c), s	3.4	4.5	4.7	6.0	13.1	13.3	4.3	21.3	21.3	2.8	23.6	23.6
Prop In Lane	1.00		0.40	1.00		0.40	1.00		0.23	1.00		0.23
Lane Grp Cap(c), veh/h	333	552	541	511	601	590	238	1405	741	230	1350	712
V/C Ratio(X)	0.24	0.18	0.19	0.29	0.45	0.46	0.50	0.60	0.60	0.33	0.66	0.66
Avail Cap(c_a), veh/h	423	552	541	632	601	590	292	1405	741	313	1350	712
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	27.5	27.6	21.8	28.2	28.3	21.0	25.0	25.0	20.2	26.9	26.9
Incr Delay (d2), s/veh	0.1	0.7	0.8	0.1	2.4	2.5	0.6	1.9	3.5	0.3	2.5	4.7
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	2.5	3.6	3.7	4.4	9.8	9.8	3.1	13.3	14.3	2.0	14.6	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	28.2	28.3	21.9	30.6	30.8	21.6	26.8	28.5	20.5	29.4	31.6
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h	280			686			1402				1433	
Approach Delay, s/veh	27.2			28.8			26.9				29.7	
Approach LOS	C			C			C				C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	50.8	11.5	39.9	9.6	49.0	8.4	43.0				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	9.5	35.0	15.5	32.5	9.5	35.0	10.5	37.5				
Max Q Clear Time (g_c+I1), s	4.8	23.3	8.0	6.7	6.3	25.6	5.4	15.3				
Green Ext Time (p_c), s	0.0	6.9	0.1	1.3	0.0	6.2	0.0	3.8				

Intersection Summary

HCM 6th Ctrl Delay 28.3
HCM 6th LOS C

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/16/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	90	486	131	363	57	1497	147	1416
Future Volume (vph)	90	486	131	363	57	1497	147	1416
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4	8	2	6	1	6	1	6
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	16.0	40.0	12.0	36.0	15.0	52.0	16.0	53.0
Total Split (%)	13.3%	33.3%	10.0%	30.0%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.4 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
16 s	52 s	12 s	40 s
Ø5	Ø6 (R)	Ø7	Ø8
15 s	53 s	16 s	36 s

La Mirada Development La Mirada Development - 2025 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2025_PNX.syn

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/16/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	90	486	78	131	363	188	57	1497	102	147	1416	57
Future Volume (veh/h)	90	486	78	131	363	188	57	1497	102	147	1416	57
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	90	486	78	131	363	188	57	1497	102	147	1416	57
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	292	875	140	306	689	351	219	2124	145	227	2349	95
Arrive On Green	0.05	0.29	0.29	0.07	0.30	0.30	0.03	0.44	0.44	0.08	0.63	0.63
Sat Flow, veh/h	1767	3045	486	1767	2260	1151	1767	4843	330	1767	4995	201
Grp Volume(v), veh/h	90	280	284	131	282	269	57	1044	555	147	957	516
Grp Sat Flow(s),veh/h/ln	1767	1763	1768	1767	1763	1648	1767	1689	1796	1767	1689	1819
Q Serve(g_s), s	4.3	16.2	16.3	6.2	15.9	16.3	2.1	30.1	30.1	5.3	20.5	20.5
Cycle Q Clear(g_c), s	4.3	16.2	16.3	6.2	15.9	16.3	2.1	30.1	30.1	5.3	20.5	20.5
Prop In Lane	1.00		0.28	1.00		0.70	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	292	507	508	306	537	502	219	1481	788	227	1588	855
V/C Ratio(X)	0.31	0.55	0.56	0.43	0.52	0.54	0.26	0.70	0.70	0.65	0.60	0.60
Avail Cap(c_a), veh/h	388	507	508	312	537	502	336	1481	788	303	1588	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	36.2	36.3	28.0	34.5	34.7	18.9	27.4	27.4	22.6	15.7	15.7
Incr Delay (d2), s/veh	0.2	4.3	4.4	0.4	3.6	4.1	0.2	2.8	5.2	1.2	1.7	3.1
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	3.3	12.0	12.1	4.7	11.7	11.4	1.5	17.9	19.5	3.7	10.8	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	40.5	40.7	28.4	38.2	38.7	19.2	30.2	32.6	23.8	17.4	18.9
LnGrp LOS	C	D	D	C	D	D	B	C	C	C	B	B
Approach Vol, veh/h	654			682			1656				1620	
Approach Delay, s/veh	39.0			36.5			30.6				18.5	
Approach LOS	D			D			C				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	57.6	11.6	40.0	7.0	61.4	9.5	42.1				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	12.5	47.0	8.5	34.5	11.5	48.0	12.5	30.5				
Max Q Clear Time (g_c+I1), s	7.3	32.1	8.2	18.3	4.1	22.5	6.3	18.3				
Green Ext Time (p_c), s	0.0	10.0	0.0	3.6	0.0	13.0	0.0	3.1				

Intersection Summary

HCM 6th Ctrl Delay 28.4
HCM 6th LOS C

La Mirada Development La Mirada Development - 2025 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2025_PNX.syn

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/17/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↩	↩↪	↩	↩↪	↩	↩↪	↩	↩↪
Traffic Volume (vph)	114	486	131	363	57	1559	165	1470
Future Volume (vph)	114	486	131	363	57	1559	165	1470
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4	8	2	6	1	6	1	6
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	16.0	40.0	12.0	36.0	15.0	52.0	16.0	53.0
Total Split (%)	13.3%	33.3%	10.0%	30.0%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.4 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
16 s	52 s	12 s	40 s
Ø5	Ø6 (R)	Ø7	Ø8
15 s	53 s	16 s	36 s

La Mirada Development - Full Development - 2025 PM Peak Hour BUILD Conditions - Full Development

Synchro 11 Report
2025_PBX_All.syn

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩↪		↩	↩↪		↩	↩↪		↩	↩↪	↩↪
Traffic Volume (veh/h)	114	486	78	131	363	209	57	1559	102	165	1470	77
Future Volume (veh/h)	114	486	78	131	363	209	57	1559	102	165	1470	77
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	114	486	78	131	363	209	57	1559	102	165	1470	77
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	292	875	140	306	639	362	253	2093	137	229	2314	121
Arrive On Green	0.06	0.29	0.29	0.07	0.29	0.29	0.03	0.43	0.43	0.14	0.94	0.94
Sat Flow, veh/h	1767	3045	486	1767	2169	1228	1767	4858	318	1767	4928	258
Grp Volume(v), veh/h	114	280	284	131	294	278	57	1084	577	165	1007	540
Grp Sat Flow(s), veh/h/ln	1767	1763	1768	1767	1763	1634	1767	1689	1798	1767	1689	1809
Q Serve(g_s), s	5.4	16.2	16.3	6.2	16.9	17.4	2.2	32.3	32.3	6.2	5.4	5.4
Cycle Q Clear(g_c), s	5.4	16.2	16.3	6.2	16.9	17.4	2.2	32.3	32.3	6.2	5.4	5.4
Prop In Lane	1.00		0.28	1.00		0.75	1.00		0.18	1.00		0.14
Lane Grp Cap(c), veh/h	292	507	508	306	519	481	253	1455	775	229	1586	850
V/C Ratio(X)	0.39	0.55	0.56	0.43	0.57	0.58	0.23	0.74	0.75	0.72	0.64	0.64
Avail Cap(c_a), veh/h	369	507	508	312	519	481	370	1455	775	292	1586	850
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	36.2	36.3	28.3	35.8	36.0	18.1	28.6	28.6	22.7	2.1	2.1
Incr Delay (d2), s/veh	0.3	4.3	4.4	0.4	4.4	5.0	0.2	3.5	6.4	3.9	2.0	3.6
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	4.1	12.0	12.1	4.7	12.4	12.0	1.6	19.1	21.0	4.3	2.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	40.5	40.7	28.6	40.3	41.0	18.2	32.1	35.1	26.7	4.0	5.7
LnGrp LOS	C	D	D	C	D	D	B	C	D	C	A	A
Approach Vol, veh/h	678			703			1718			1712		
Approach Delay, s/veh	38.6			38.4			32.6			6.8		
Approach LOS	D			D			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	56.7	11.6	40.0	7.0	61.4	10.8	40.8				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	12.5	47.0	8.5	34.5	11.5	48.0	12.5	30.5				
Max Q Clear Time (g_c+I1), s	8.2	34.3	8.2	18.3	4.2	7.4	7.4	19.4				
Green Ext Time (p_c), s	0.1	9.1	0.0	3.6	0.0	17.3	0.0	3.1				

Intersection Summary

HCM 6th Ctrl Delay 25.1
HCM 6th LOS C

La Mirada Development - Full Development - 2025 PM Peak Hour BUILD Conditions - Full Development

Synchro 11 Report
2025_PBX_All.syn

HCM 6th TWSC
3: Wyoming Blvd. & La Mirada Pl./Driveway

Terry O. Brown, P.E.
08/16/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	29	1	20	1	1	1	53	1142	16	41	1363	20
Future Vol, veh/h	29	1	20	1	1	1	53	1142	16	41	1363	20
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	29	1	20	1	1	1	53	1142	16	41	1363	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2018	2719	692	1884	2721	579	1383	0	0	1158	0	0
Stage 1	1455	1455	-	1256	1256	-	-	-	-	-	-	-
Stage 2	563	1264	-	628	1465	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*350	*332	*604	*350	*332	*651	*759	-	-	*818	-	-
Stage 1	*620	*589	-	*668	*635	-	-	-	-	-	-	-
Stage 2	*668	*635	-	*620	*589	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*317	*294	*604	*307	*294	*651	*759	-	-	*818	-	-
Mov Cap-2 Maneuver	*408	*387	-	*395	*381	-	-	-	-	-	-	-
Stage 1	*577	*560	-	*622	*590	-	-	-	-	-	-	-
Stage 2	*620	*590	-	*569	*560	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.6		13		0.4		0.3	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	*759	-	-	468 395 481	*818	-	-
HCM Lane V/C Ratio	0.07	-	-	0.107 0.003 0.004	0.05	-	-
HCM Control Delay (s)	10.1	-	-	13.6 14.1 12.5	9.6	-	-
HCM Lane LOS	B	-	-	B B B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4 0 0	0.2	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	50	1	38	1	1	1	59	1142	16	41	1363	27
Future Vol, veh/h	50	1	38	1	1	1	59	1142	16	41	1363	27
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	50	1	38	1	1	1	59	1142	16	41	1363	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2034	2735	695	1896	2740	579	1390	0	0	1158	0	0
Stage 1	1459	1459	-	1268	1268	-	-	-	-	-	-	-
Stage 2	575	1276	-	628	1472	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*350	*332	*604	*350	*332	*651	*759	-	-	*818	-	-
Stage 1	*620	*589	-	*668	*635	-	-	-	-	-	-	-
Stage 2	*668	*635	-	*620	*589	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*315	*291	*604	*296	*291	*651	*759	-	-	*818	-	-
Mov Cap-2 Maneuver	*405	*385	-	*381	*377	-	-	-	-	-	-	-
Stage 1	*572	*560	-	*616	*585	-	-	-	-	-	-	-
Stage 2	*614	*585	-	*551	*560	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.4		13.2		0.5		0.3	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	*759	-	-	471 381 477	*818	-	-
HCM Lane V/C Ratio	0.078	-	-	0.189 0.003 0.004	0.05	-	-
HCM Control Delay (s)	10.1	-	-	14.4 14.5 12.6	9.6	-	-
HCM Lane LOS	B	-	-	B B B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7 0 0	0.2	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	4	1	57	20	1	8	16	1848	24	29	1714	16
Future Vol, veh/h	4	1	57	20	1	8	16	1848	24	29	1714	16
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	1	57	20	1	8	16	1848	24	29	1714	16

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2552	3684	865	2636	3680	936	1730	0	0	1872	0	0
Stage 1	1780	1780	-	1892	1892	-	-	-	-	-	-	-
Stage 2	772	1904	-	744	1788	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*234	*44	*523	*234	*45	*479	*656	-	-	*602	-	-
Stage 1	*536	*509	-	*492	*467	-	-	-	-	-	-	-
Stage 2	*492	*467	-	*536	*509	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*217	*41	*523	*196	*42	*479	*656	-	-	*602	-	-
Mov Cap-2 Maneuver	*316	*226	-	*298	*230	-	-	-	-	-	-	-
Stage 1	*523	*485	-	*480	*456	-	-	-	-	-	-	-
Stage 2	*471	*456	-	*454	*485	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.4		16.6		0.1		0.2	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 656	-	-	492 298 428	* 602	-	-
HCM Lane V/C Ratio	0.024	-	-	0.126 0.067 0.021	0.048	-	-
HCM Control Delay (s)	10.6	-	-	13.4 17.9 13.6	11.3	-	-
HCM Lane LOS	B	-	-	B C B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4 0.2 0.1	0.2	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	36	1	81	20	1	8	60	1910	24	29	1785	41
Future Vol, veh/h	36	1	81	20	1	8	60	1910	24	29	1785	41
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	1	81	20	1	8	60	1910	24	29	1785	41

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2749	3918	913	2815	3926	967	1826	0	0	1934	0	0
Stage 1	1864	1864	-	2042	2042	-	-	-	-	-	-	-
Stage 2	885	2054	-	773	1884	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*180	*24	*501	*180	*23	*479	*629	-	-	*602	-	-
Stage 1	*514	*488	-	*492	*467	-	-	-	-	-	-	-
Stage 2	*492	*467	-	*514	*488	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*158	*21	*501	*134	*20	*479	*629	-	-	*602	-	-
Mov Cap-2 Maneuver	*270	*204	-	*238	*198	-	-	-	-	-	-	-
Stage 1	*465	*465	-	*445	*423	-	-	-	-	-	-	-
Stage 2	*437	*423	-	*409	*465	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18	19.1	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 629	-	-	393 238 414	* 602	-	-
HCM Lane V/C Ratio	0.095	-	-	0.3 0.084 0.022	0.048	-	-
HCM Control Delay (s)	11.3	-	-	18 21.5 13.9	11.3	-	-
HCM Lane LOS	B	-	-	C C B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.2 0.3 0.1	0.2	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	31											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1132	57	173	2033	5	110	3	53	10	1	10
Future Vol, veh/h	10	1132	57	173	2033	5	110	3	53	10	1	10
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1132	57	173	2033	5	110	3	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2038	0	0	1189	0	0	2341	3565	595	2856	3591	1019
Stage 1	-	-	-	-	-	-	1181	1181	-	2382	2382	-
Stage 2	-	-	-	-	-	-	1160	2384	-	474	1209	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	118	-	-	314	-	-	~ 38	5	381	18	5	200
Stage 1	-	-	-	-	-	-	148	260	-	20	65	-
Stage 2	-	-	-	-	-	-	185	64	-	491	252	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	118	-	-	314	-	-	~ 18	~ 2	381	~ 7	2	200
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 47	16	-	16	18	-
Stage 1	-	-	-	-	-	-	135	238	-	18	29	-
Stage 2	-	-	-	-	-	-	~ 76	29	-	382	231	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			2.3			\$ 603.4			277.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	45 381		118	-	-	314	-	-	29			
HCM Lane V/C Ratio	2.511 0.139		0.085	-	-	0.551	-	-	0.724			
HCM Control Delay (s)	\$ 878.9 16		38.3	-	-	29.7	-	-	277.6			
HCM Lane LOS	F C		E	-	-	D	-	-	F			
HCM 95th %tile Q(veh)	12 0.5		0.3	-	-	3.1	-	-	2.4			
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
08/19/2021

Intersection												
Int Delay, s/veh	18.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱ ↱↱↱			↱ ↱↱↱				↱ ↱			↱↱	
Traffic Vol, veh/h	5	1733	46	107	1400	10	74	2	42	5	1	5
Future Vol, veh/h	5	1733	46	107	1400	10	74	2	42	5	1	5
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1733	46	107	1400	10	74	2	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1410	0	0	1779	0	0	2541	3390	890	2323	3408	705
Stage 1	-	-	-	-	-	-	1766	1766	-	1619	1619	-
Stage 2	-	-	-	-	-	-	775	1624	-	704	1789	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	245	-	-	160	-	-	~ 29	7	244	39	7	323
Stage 1	-	-	-	-	-	-	~ 56	134	-	72	159	-
Stage 2	-	-	-	-	-	-	322	158	-	356	131	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	245	-	-	160	-	-	~ 12	2	244	14	2	323
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 37	32	-	51	14	-
Stage 1	-	-	-	-	-	-	~ 55	131	-	71	53	-
Stage 2	-	-	-	-	-	-	103	52	-	284	128	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			4.5			\$ 473			79.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	37 244		245	-	-	160	-	-	59			
HCM Lane V/C Ratio	2.054 0.172		0.02	-	-	0.669	-	-	0.186			
HCM Control Delay (s)	\$ 721.8 22.8		20	-	-	64	-	-	79.5			
HCM Lane LOS	F C		C	-	-	F	-	-	F			
HCM 95th %tile Q(veh)	8.3 0.6		0.1	-	-	3.8	-	-	0.6			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↑↑↑			↱			↱		
Traffic Vol, veh/h	60	1083	102	0	2206	60	0	0	126	0	0	60
Future Vol, veh/h	60	1083	102	0	2206	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1083	102	0	2206	60	0	0	126	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2266	0	0	-	-	0	-	-	593	-	-	1133
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	90	-	-	0	-	-	0	0	383	0	0	168
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	90	-	-	-	-	-	-	-	383	-	-	168
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	5			0			18.9			37.9		
HCM LOS							C			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	383	90	-	-	-	-	168					
HCM Lane V/C Ratio	0.329	0.667	-	-	-	-	0.357					
HCM Control Delay (s)	18.9	102.8	-	-	-	-	37.9					
HCM Lane LOS	C	F	-	-	-	-	E					
HCM 95th %tile Q(veh)	1.4	3.2	-	-	-	-	1.5					

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑				↑↑↑				↰			↰
Traffic Vol, veh/h	60	1695	93	0	1507	60	0	0	116	0	0	60
Future Vol, veh/h	60	1695	93	0	1507	60	0	0	116	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1695	93	0	1507	60	0	0	116	0	0	60
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	1567	0	0	-	-	0	-	-	894	-	-	784
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	204	-	-	0	-	-	0	0	242	0	0	287
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	204	-	-	-	-	-	-	-	242	-	-	287
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	1		0			32.9			20.8			
HCM LOS						D			C			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	242	204	-	-	-	-	287					
HCM Lane V/C Ratio	0.479	0.294	-	-	-	-	0.209					
HCM Control Delay (s)	32.9	29.8	-	-	-	-	20.8					
HCM Lane LOS	D	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	2.4	1.2	-	-	-	-	0.8					

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
08/19/2021

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	100	1	59	60	1	60	107	1468	60	60	1937	93
Future Vol, veh/h	100	1	59	60	1	60	107	1468	60	60	1937	93
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	100	1	59	60	1	60	107	1468	60	60	1937	93
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2906	3846	1015	2607	3862	764	2030	0	0	1528	0	0
Stage 1	2104	2104	-	1712	1712	-	-	-	-	-	-	-
Stage 2	802	1742	-	895	2150	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 92	*5	*463	*211	*5	*581	*582	-	-	*729	-	-
Stage 1	*475	*452	-	*507	*510	-	-	-	-	-	-	-
Stage 2	*596	*486	-	*475	*452	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 66	*4	*463	*148	*4	*581	*582	-	-	*729	-	-
Mov Cap-2 Maneuver	*204	*172	-	*213	*163	-	-	-	-	-	-	-
Stage 1	*388	*415	-	*413	*416	-	-	-	-	-	-	-
Stage 2	*435	*397	-	*380	*415	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	29.6		24			0.8			0.3			
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 582	-	-	204	463	309	* 729	-	-			
HCM Lane V/C Ratio	0.184	-	-	0.495	0.127	0.392	0.082	-	-			
HCM Control Delay (s)	12.6	-	-	38.8	13.9	24	10.4	-	-			
HCM Lane LOS	B	-	-	E	B	C	B	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	2.5	0.4	1.8	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
08/19/2021

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱	↰	↱		↰	↱	
Traffic Vol, veh/h	80	1	46	60	1	60	81	1700	60	60	1722	60
Future Vol, veh/h	80	1	46	60	1	60	81	1700	60	60	1722	60
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	80	1	46	60	1	60	81	1700	60	60	1722	60

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2715	3794	891	2701	3794	880	1782	0	0	1760	0	0
Stage 1	1872	1872	-	1892	1892	-	-	-	-	-	-	-
Stage 2	843	1922	-	809	1902	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*128	*6	*523	*133	*6	*523	*656	-	-	*656	-	-
Stage 1	*536	*509	-	*536	*509	-	-	-	-	-	-	-
Stage 2	*536	*509	-	*536	*509	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*95	*4	*523	*102	*4	*523	*656	-	-	*656	-	-
Mov Cap-2 Maneuver	*227	*194	-	*232	*190	-	-	-	-	-	-	-
Stage 1	*470	*463	-	*470	*447	-	-	-	-	-	-	-
Stage 2	*415	*447	-	*443	*463	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.3		22.9		0.5		0.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 656	-	-	227	523	320	* 656	-	-
HCM Lane V/C Ratio	0.123	-	-	0.357	0.088	0.378	0.091	-	-
HCM Control Delay (s)	11.3	-	-	29.4	12.5	22.9	11	-	-
HCM Lane LOS	B	-	-	D	B	C	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.5	0.3	1.7	0.3	-	-

Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	54	0	1588	1935	72
Future Vol, veh/h	0	54	0	1588	1935	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
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, %	3	3	3	3	3	3
Mvmt Flow	0	54	0	1588	1935	72
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	1004	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	205	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	205	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	28.7	0	0			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	205	-	-		
HCM Lane V/C Ratio	-	0.263	-	-		
HCM Control Delay (s)	-	28.7	-	-		
HCM Lane LOS	-	D	-	-		
HCM 95th %tile Q(veh)	-	1	-	-		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	38	0	1763	1720	51
Future Vol, veh/h	0	38	0	1763	1720	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
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, %	3	3	3	3	3	3
Mvmt Flow	0	38	0	1763	1720	51
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	886	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	245	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	245	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	22.4	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 245		-	-		
HCM Lane V/C Ratio	- 0.155		-	-		
HCM Control Delay (s)	- 22.4		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.5		-	-		

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	54	77	13	39	1
Future Vol, veh/h	1	54	77	13	39	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	54	77	13	39	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	90	0	-	0	140	84
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1499	-	-	-	851	972
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1499	-	-	-	850	972
Mov Cap-2 Maneuver	-	-	-	-	850	-
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	964	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1499	-	-	-	853	
HCM Lane V/C Ratio	0.001	-	-	-	0.047	
HCM Control Delay (s)	7.4	0	-	-	9.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	64	35	43	25	1
Future Vol, veh/h	1	64	35	43	25	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	64	35	43	25	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	78	0	-	0	123	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	66	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1514	-	-	-	870	1006
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	869	1006
Mov Cap-2 Maneuver	-	-	-	-	869	-
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	954	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		9.2		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1514	-	-	-	874	
HCM Lane V/C Ratio	0.001	-	-	-	0.03	
HCM Control Delay (s)	7.4	0	-	-	9.2	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	89	87	37	33	3
Future Vol, veh/h	4	89	87	37	33	3
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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	89	87	37	33	3
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	124	0	-	0	203	106
Stage 1	-	-	-	-	106	-
Stage 2	-	-	-	-	97	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1457	-	-	-	783	946
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1457	-	-	-	781	946
Mov Cap-2 Maneuver	-	-	-	-	781	-
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	924	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		9.8		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1457	-	-	-	793	
HCM Lane V/C Ratio	0.003	-	-	-	0.045	
HCM Control Delay (s)	7.5	0	-	-	9.8	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	87	76	24	21	2
Future Vol, veh/h	2	87	76	24	21	2
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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	2	87	76	24	21	2
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	100	0	-	0	179	88
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1486	-	-	-	808	968
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	807	968
Mov Cap-2 Maneuver	-	-	-	-	807	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	930	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1486	-	-	-	819	
HCM Lane V/C Ratio	0.001	-	-	-	0.028	
HCM Control Delay (s)	7.4	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings
1: Wyoming Blvd. & Montgomery Blvd.

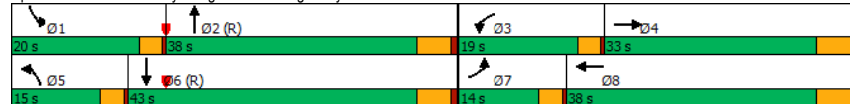
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08/18/2021

								
Lane Group	EBL	EFT	WBL	WBT	NBL	NRT	SBL	SBT
Lane Configurations	 	  	 	  	 	  	 	  
Traffic Volume (vph)	205	809	231	1511	248	1044	287	1609
Future Volume (vph)	205	809	231	1511	248	1044	287	1609
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	20.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%	39.1%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

	↖	→	↗	↖	↖	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	205	809	133	231	1511	334	248	1044	180	287	1609	407
Future Volume (veh/h)	205	809	133	231	1511	334	248	1044	180	287	1609	407
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	809	133	231	1511	334	248	1044	180	287	1609	407
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	265	1260	206	293	1227	270	309	1574	271	349	1510	377
Arrive On Green	0.08	0.29	0.29	0.09	0.30	0.30	0.06	0.24	0.24	0.10	0.37	0.37
Sat Flow, veh/h	3428	4387	716	3428	4154	914	3428	4349	749	3428	4041	1010
Grp Volume(v), veh/h	205	621	321	231	1227	618	248	810	414	287	1342	674
Grp Sat Flow(s),veh/h/ln	1714	1689	1727	1714	1689	1691	1714	1689	1721	1714	1689	1674
Q Serve(g_s), s	6.5	17.7	17.9	7.3	32.5	32.5	7.9	23.8	23.9	9.0	41.1	41.1
Cycle Q Clear(g_c), s	6.5	17.7	17.9	7.3	32.5	32.5	7.9	23.8	23.9	9.0	41.1	41.1
Prop In Lane	1.00		0.41	1.00		0.54	1.00		0.44	1.00		0.60
Lane Grp Cap(c), veh/h	265	970	496	293	998	500	309	1222	623	349	1262	625
V/C Ratio(X)	0.77	0.64	0.65	0.79	1.23	1.24	0.80	0.66	0.66	0.82	1.06	1.08
Avail Cap(c_a), veh/h	327	970	496	483	998	500	358	1222	623	514	1262	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	34.3	34.3	49.3	38.7	38.8	50.7	35.6	35.6	48.4	34.5	34.5
Incr Delay (d2), s/veh	6.8	3.2	6.4	1.8	112.2	123.1	9.3	2.8	5.5	4.2	44.0	59.0
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	11.9	12.8	5.6	41.9	44.1	6.8	15.9	16.8	7.2	33.0	36.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	37.5	40.7	51.1	151.0	161.8	60.0	38.5	41.2	52.6	78.4	93.5
LnGrp LOS	E	D	D	D	F	F	E	D	D	D	F	F
Approach Vol, veh/h	1147			2076			1472			2303		
Approach Delay, s/veh	41.8			143.1			42.9			79.6		
Approach LOS	D			F			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	45.3	12.9	37.1	13.4	46.6	12.0	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	11.0	25.9	9.3	19.9	9.9	43.1	8.5	34.5				
Green Ext Time (p_c), s	0.2	4.6	0.1	4.3	0.1	0.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				84.5								
HCM 6th LOS				F								

Timings
1: Wyoming Blvd. & Montgomery Blvd.

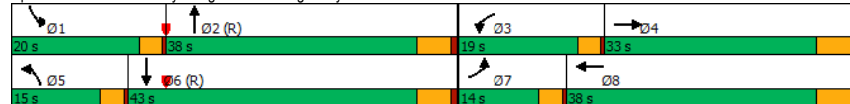
Terry O. Brown, P.E.
08/18/2021

	↖	→	↗	↖	↖	↖	↖
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖	↖↖↖
Traffic Volume (vph)	246	848	282	1548	306	1088	287
Future Volume (vph)	246	848	282	1548	306	1088	287
Turn Type	Prot	NA	Prot	NA	Prot	NA	NA
Protected Phases	7	4	3	8	5	2	1
Permitted Phases	7	4	3	8	5	2	1
Detector Phase	7	4	3	8	5	2	1
Switch Phase							
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							
Recall Mode	None	Max	None	Max	None	C-Max	None

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

	↖	→	↗	↖	↖	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	246	848	180	282	1548	334	306	1088	230	287	1657	448
Future Volume (veh/h)	246	848	180	282	1548	334	306	1088	230	287	1657	448
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	246	848	180	282	1548	334	306	1088	230	287	1657	448
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	305	1190	251	344	1234	265	358	1467	310	349	1384	368
Arrive On Green	0.09	0.28	0.28	0.10	0.30	0.30	0.10	0.35	0.35	0.10	0.35	0.35
Sat Flow, veh/h	3428	4190	884	3428	4176	896	3428	4188	885	3428	3983	1059
Grp Volume(v), veh/h	246	683	345	282	1250	632	306	877	441	287	1400	705
Grp Sat Flow(s),veh/h/ln	1714	1689	1696	1714	1689	1694	1714	1689	1696	1714	1689	1665
Q Serve(g_s), s	7.7	20.0	20.1	8.9	32.5	32.5	9.7	25.1	25.1	9.0	38.2	38.2
Cycle Q Clear(g_c), s	7.7	20.0	20.1	8.9	32.5	32.5	9.7	25.1	25.1	9.0	38.2	38.2
Prop In Lane	1.00		0.52	1.00		0.53	1.00		0.52	1.00		0.64
Lane Grp Cap(c), veh/h	305	959	482	344	998	501	358	1183	594	349	1174	579
V/C Ratio(X)	0.81	0.71	0.72	0.82	1.25	1.26	0.85	0.74	0.74	0.82	1.19	1.22
Avail Cap(c_a), veh/h	327	959	482	483	998	501	358	1183	594	514	1174	579
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	35.3	35.4	48.5	38.7	38.8	48.4	31.4	31.4	48.4	35.9	35.9
Incr Delay (d2), s/veh	11.9	4.5	8.9	5.3	122.2	133.3	17.0	4.2	8.2	4.2	95.5	113.0
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	6.8	13.3	14.2	7.1	44.1	46.4	8.5	15.8	16.6	7.2	44.2	47.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	39.8	44.3	53.8	160.9	172.0	65.4	35.6	39.5	52.6	131.4	148.9
LnGrp LOS	E	D	D	D	F	F	E	D	D	D	F	F
Approach Vol, veh/h	1274			2164				1624			2392	
Approach Delay, s/veh	45.1			150.2				42.3			127.1	
Approach LOS	D			F				D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	44.0	14.5	36.7	15.0	43.7	13.3	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	11.0	27.1	10.9	22.1	11.7	40.2	9.7	34.5				
Green Ext Time (p_c), s	0.2	4.1	0.2	3.4	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	101.3											
HCM 6th LOS	F											

Intersection Summary

HCM 6th Ctrl Delay 101.3
HCM 6th LOS F

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

								
Lane Group	EBL	EFT	WBL	WBT	NBL	NRT	SBL	SBT
Lane Configurations	↰↰	↰↰↰	↰↰	↰↰↰	↰↰	↰↰↰	↰↰	↰↰↰
Traffic Volume (vph)	270	1301	240	984	240	1305	342	1284
Future Volume (vph)	270	1301	240	984	240	1305	342	1284
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	22.0	44.0	13.0	35.0	17.0	47.0	16.0	46.0
Total Split (%)	18.3%	36.7%	10.8%	29.2%	14.2%	39.2%	13.3%	38.3%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↖	↖	↖	↖	↖	↖	↖	↖
16 s	47 s	13 s	44 s	17 s	46 s	22 s	35 s
↖	↖	↖	↖	↖	↖	↖	↖
↖	↖	↖	↖	↖	↖	↖	↖

La Mirada Development - 2035 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2035_PNX.syn

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

	↖	→	↗	↖	↖	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	270	1301	227	240	984	321	240	1305	205	342	1284	265
Future Volume (veh/h)	270	1301	227	240	984	321	240	1305	205	342	1284	265
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	270	1301	227	240	984	321	240	1305	205	342	1284	265
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	328	1392	243	271	1150	375	297	1527	240	357	1529	316
Arrive On Green	0.10	0.32	0.32	0.08	0.30	0.30	0.06	0.23	0.23	0.10	0.36	0.36
Sat Flow, veh/h	3428	4339	757	3428	3779	1231	3428	4414	693	3428	4208	868
Grp Volume(v), veh/h	270	1012	516	240	879	426	240	998	512	342	1030	519
Grp Sat Flow(s),veh/h/ln	1714	1689	1719	1714	1689	1634	1714	1689	1731	1714	1689	1699
Q Serve(g_s), s	9.3	34.9	34.9	8.3	29.4	29.4	8.3	34.0	34.0	11.9	33.5	33.6
Cycle Q Clear(g_c), s	9.3	34.9	34.9	8.3	29.4	29.4	8.3	34.0	34.0	11.9	33.5	33.6
Prop In Lane	1.00		0.44	1.00		0.75	1.00		0.40	1.00		0.51
Lane Grp Cap(c), veh/h	328	1083	552	271	1028	497	297	1168	599	357	1227	617
V/C Ratio(X)	0.82	0.93	0.93	0.88	0.86	0.86	0.81	0.85	0.85	0.96	0.84	0.84
Avail Cap(c_a), veh/h	529	1083	552	271	1028	497	386	1168	599	357	1227	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	39.5	39.5	54.7	39.3	39.3	55.5	43.2	43.2	53.5	35.0	35.0
Incr Delay (d2), s/veh	2.5	15.5	25.1	26.5	9.1	17.1	7.2	8.1	14.5	36.2	7.0	13.0
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	7.3	22.9	25.0	8.0	19.0	19.9	7.0	22.4	24.1	11.1	20.7	22.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	55.0	64.7	81.2	48.3	56.3	62.7	51.3	57.7	89.7	42.0	48.0
LnGrp LOS	E	E	E	F	D	E	E	D	E	F	D	D
Approach Vol, veh/h	1798			1545			1750			1891		
Approach Delay, s/veh	57.9			55.6			54.7			52.3		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	47.0	13.0	44.0	13.9	49.1	15.0	42.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	12.5	41.5	9.5	38.5	13.5	40.5	18.5	29.5				
Max Q Clear Time (g_c+I1), s	13.9	36.0	10.3	36.9	10.3	35.6	11.3	31.4				
Green Ext Time (p_c), s	0.0	4.5	0.0	1.4	0.1	4.1	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				55.1								
HCM 6th LOS				E								

Intersection Summary

HCM 6th Ctrl Delay 55.1
HCM 6th LOS E

La Mirada Development - 2035 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2035_PNX.syn

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

								
Lane Group	FBL	FRT	WBL	WRT	NBL	NRT	SBL	SBT
Lane Configurations	 	  	 	  	 	  	 	  
Traffic Volume (vph)	298	1329	278	1008	277	1335	342	1321
Future Volume (vph)	298	1329	278	1008	277	1335	342	1321
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	22.0	44.0	13.0	35.0	17.0	47.0	16.0	46.0
Total Split (%)	18.3%	36.7%	10.8%	29.2%	14.2%	39.2%	13.3%	38.3%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↖	↖	↖	↖	↖	↖	↖	↖
16 s	47 s	13 s	44 s	17 s	46 s	22 s	35 s
↖	↖	↖	↖	↖	↖	↖	↖
↖	↖	↖	↖	↖	↖	↖	↖

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
08/18/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	298	1329	265	278	1008	321	277	1335	239	342	1321	291
Future Volume (veh/h)	298	1329	265	278	1008	321	277	1335	239	342	1321	291
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	298	1329	265	278	1008	321	277	1335	239	342	1321	291
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	356	1359	271	271	1127	359	332	1494	267	357	1467	323
Arrive On Green	0.10	0.32	0.32	0.08	0.30	0.30	0.10	0.35	0.35	0.10	0.35	0.35
Sat Flow, veh/h	3428	4236	844	3428	3804	1210	3428	4320	773	3428	4154	914
Grp Volume(v), veh/h	298	1059	535	278	895	434	277	1043	531	342	1074	538
Grp Sat Flow(s),veh/h/ln	1714	1689	1704	1714	1689	1638	1714	1689	1716	1714	1689	1691
Q Serve(g_s), s	10.2	37.2	37.3	9.5	30.4	30.5	9.5	35.1	35.1	11.9	36.2	36.2
Cycle Q Clear(g_c), s	10.2	37.2	37.3	9.5	30.4	30.5	9.5	35.1	35.1	11.9	36.2	36.2
Prop In Lane	1.00		0.50	1.00		0.74	1.00		0.45	1.00		0.54
Lane Grp Cap(c), veh/h	356	1083	547	271	1000	485	332	1168	594	357	1193	597
V/C Ratio(X)	0.84	0.98	0.98	1.02	0.89	0.90	0.84	0.89	0.89	0.96	0.90	0.90
Avail Cap(c_a), veh/h	529	1083	547	271	1000	485	386	1168	594	357	1193	597
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	40.3	40.3	55.3	40.4	40.4	53.3	37.2	37.2	53.5	36.8	36.8
Incr Delay (d2), s/veh	4.8	22.5	33.5	61.0	12.1	21.7	11.5	10.6	18.4	36.2	10.9	19.2
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	25.3	27.5	10.5	20.0	21.1	8.1	22.1	24.0	11.1	22.8	24.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	62.8	73.9	116.3	52.6	62.1	64.7	47.7	55.6	89.7	47.7	56.0
LnGrp LOS	E	E	E	F	D	E	E	D	E	F	D	E
Approach Vol, veh/h	1892			1607			1851			1954		
Approach Delay, s/veh	65.1			66.2			52.5			57.3		
Approach LOS	E			E			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	47.0	13.0	44.0	15.1	47.9	15.9	41.1				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	12.5	41.5	9.5	38.5	13.5	40.5	18.5	29.5				
Max Q Clear Time (g_c+I1), s	13.9	37.1	11.5	39.3	11.5	38.2	12.2	32.5				
Green Ext Time (p_c), s	0.0	3.7	0.0	0.0	0.1	2.0	0.2	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	60.1											
HCM 6th LOS	E											

Intersection Summary

HCM 6th Ctrl Delay 60.1
HCM 6th LOS E

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	81	167	154	454	124	1237	77	1301
Future Volume (vph)	81	167	154	454	124	1237	77	1301
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	14.0	38.0	19.0	43.0	13.0	40.0	13.0	40.0
Total Split (%)	12.7%	34.5%	17.3%	39.1%	11.8%	36.4%	11.8%	36.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 62.7 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
13 s	40 s	19 s	38 s
Ø5	Ø6 (R)	Ø7	Ø8
13 s	40 s	14 s	43 s

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	↱
Traffic Volume (veh/h)	81	167	43	154	454	111	124	1237	107	77	1301	107
Future Volume (veh/h)	81	167	43	154	454	111	124	1237	107	77	1301	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	81	167	43	154	454	111	124	1237	107	77	1301	107
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	324	868	218	507	959	233	271	1970	170	220	1893	156
Arrive On Green	0.05	0.31	0.31	0.08	0.34	0.34	0.06	0.41	0.41	0.08	0.79	0.79
Sat Flow, veh/h	1767	2792	700	1767	2813	683	1767	4748	411	1767	4770	392
Grp Volume(v), veh/h	81	104	106	154	283	282	124	880	464	77	921	487
Grp Sat Flow(s), veh/h/ln	1767	1763	1730	1767	1763	1733	1767	1689	1782	1767	1689	1785
Q Serve(g_s), s	3.4	4.7	5.0	6.3	13.9	14.1	4.5	22.7	22.7	2.8	13.6	13.6
Cycle Q Clear(g_c), s	3.4	4.7	5.0	6.3	13.9	14.1	4.5	22.7	22.7	2.8	13.6	13.6
Prop In Lane	1.00		0.40	1.00		0.39	1.00		0.23	1.00		0.22
Lane Grp Cap(c), veh/h	324	548	538	507	601	591	271	1401	739	220	1341	709
V/C Ratio(X)	0.25	0.19	0.20	0.30	0.47	0.48	0.46	0.63	0.63	0.35	0.69	0.69
Avail Cap(c_a), veh/h	413	548	538	623	601	591	322	1401	739	302	1341	709
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	27.8	27.8	21.8	28.5	28.5	18.6	25.5	25.5	19.8	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.1	2.6	2.7	0.4	2.1	4.0	0.4	2.9	5.4
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	2.6	3.8	3.9	4.6	10.3	10.3	3.2	14.0	15.1	2.0	5.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	28.5	28.6	21.9	31.1	31.3	19.1	27.6	29.5	20.1	11.1	13.6
LnGrp LOS	C	C	C	C	C	C	B	C	C	C	B	B
Approach Vol, veh/h	291			719			1468				1485	
Approach Delay, s/veh	27.5			29.2			27.5				12.4	
Approach LOS	C			C			C				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	50.6	11.8	39.7	9.9	48.7	8.5	43.0				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	9.5	35.0	15.5	32.5	9.5	35.0	10.5	37.5				
Max Q Clear Time (g_c+I1), s	4.8	24.7	8.3	7.0	6.5	15.6	5.4	16.1				
Green Ext Time (p_c), s	0.0	6.6	0.1	1.4	0.0	10.6	0.0	4.0				

Intersection Summary

HCM 6th Ctrl Delay 22.1
HCM 6th LOS C

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	109	167	154	454	124	1326	103	1378
Future Volume (vph)	109	167	154	454	124	1326	103	1378
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4	8	2	6	1	6	1	6
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	14.0	38.0	19.0	43.0	13.0	40.0	13.0	40.0
Total Split (%)	12.7%	34.5%	17.3%	39.1%	11.8%	36.4%	11.8%	36.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 62.7 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
13 s	40 s	19 s	38 s
Ø5	Ø6 (R)	Ø7	Ø8
13 s	40 s	14 s	43 s

La Mirada Development - Full Development - 2025 AM Peak Hour BUILD Conditions _Full Development

Synchro 11 Report
2035_ABX_All.syn

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	109	167	43	154	454	140	124	1326	107	103	1378	135
Future Volume (veh/h)	109	167	43	154	454	140	124	1326	107	103	1378	135
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	109	167	43	154	454	140	124	1326	107	103	1378	135
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	333	901	226	522	906	277	245	1871	151	215	1800	176
Arrive On Green	0.06	0.32	0.32	0.08	0.34	0.34	0.06	0.39	0.39	0.10	0.77	0.77
Sat Flow, veh/h	1767	2792	700	1767	2659	813	1767	4778	386	1767	4690	459
Grp Volume(v), veh/h	109	104	106	154	300	294	124	937	496	103	992	521
Grp Sat Flow(s),veh/h/ln	1767	1763	1730	1767	1763	1709	1767	1689	1786	1767	1689	1773
Q Serve(g_s), s	4.5	4.7	4.9	6.3	14.9	15.1	4.6	25.7	25.7	3.9	18.2	18.2
Cycle Q Clear(g_c), s	4.5	4.7	4.9	6.3	14.9	15.1	4.6	25.7	25.7	3.9	18.2	18.2
Prop In Lane	1.00		0.40	1.00		0.48	1.00		0.22	1.00		0.26
Lane Grp Cap(c), veh/h	333	569	558	522	601	583	245	1323	699	215	1296	681
V/C Ratio(X)	0.33	0.18	0.19	0.30	0.50	0.50	0.51	0.71	0.71	0.48	0.77	0.77
Avail Cap(c_a), veh/h	401	569	558	638	601	583	293	1323	699	277	1296	681
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	26.8	26.9	21.7	28.8	28.9	20.7	28.2	28.2	21.2	10.0	10.0
Incr Delay (d2), s/veh	0.2	0.7	0.8	0.1	2.9	3.1	0.6	3.2	6.0	0.6	4.3	8.0
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	3.3	3.7	3.8	4.6	10.9	10.7	3.4	15.8	17.2	2.6	7.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	27.5	27.6	21.8	31.7	32.0	21.3	31.4	34.2	21.9	14.3	18.0
LnGrp LOS	C	C	C	C	C	C	C	C	C	C	B	B
Approach Vol, veh/h	319			748			1557				1616	
Approach Delay, s/veh	26.2			29.8			31.5				16.0	
Approach LOS	C			C			C				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	48.1	11.8	41.0	10.0	47.2	9.8	43.0				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	9.5	35.0	15.5	32.5	9.5	35.0	10.5	37.5				
Max Q Clear Time (g_c+I1), s	5.9	27.7	8.3	6.9	6.6	20.2	6.5	17.1				
Green Ext Time (p_c), s	0.0	5.2	0.1	1.4	0.0	9.5	0.0	4.2				

Intersection Summary

HCM 6th Ctrl Delay 24.9
HCM 6th LOS C

La Mirada Development - Full Development - 2025 AM Peak Hour BUILD Conditions _Full Development

Synchro 11 Report
2035_ABX_All.syn

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	94	509	137	381	60	1571	154	1485
Future Volume (vph)	94	509	137	381	60	1571	154	1485
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4	8	2	6	1	6	1	6
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	16.0	40.0	12.0	36.0	15.0	52.0	16.0	53.0
Total Split (%)	13.3%	33.3%	10.0%	30.0%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.4 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
16 s	52 s	12 s	40 s
Ø5	Ø6 (R)	Ø7	Ø8
15 s	53 s	16 s	36 s

La Mirada Development - 2035 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2035_PNX.syn

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	94	509	81	137	381	197	60	1571	107	154	1485	60
Future Volume (veh/h)	94	509	81	137	381	197	60	1571	107	154	1485	60
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	94	509	81	137	381	197	60	1571	107	154	1485	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	876	139	301	690	352	207	2100	143	220	2329	94
Arrive On Green	0.05	0.29	0.29	0.07	0.31	0.31	0.03	0.43	0.43	0.08	0.62	0.62
Sat Flow, veh/h	1767	3048	483	1767	2260	1152	1767	4844	330	1767	4995	202
Grp Volume(v), veh/h	94	293	297	137	296	282	60	1095	583	154	1004	541
Grp Sat Flow(s), veh/h/ln	1767	1763	1769	1767	1763	1648	1767	1689	1796	1767	1689	1819
Q Serve(g_s), s	4.5	17.1	17.2	6.4	16.8	17.2	2.3	32.6	32.7	5.6	22.4	22.4
Cycle Q Clear(g_c), s	4.5	17.1	17.2	6.4	16.8	17.2	2.3	32.6	32.7	5.6	22.4	22.4
Prop In Lane	1.00		0.27	1.00		0.70	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	286	507	508	301	538	503	207	1464	779	220	1575	848
V/C Ratio(X)	0.33	0.58	0.58	0.46	0.55	0.56	0.29	0.75	0.75	0.70	0.64	0.64
Avail Cap(c_a), veh/h	378	507	508	303	538	503	322	1464	779	291	1575	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	36.5	36.6	28.0	34.8	34.9	19.6	28.5	28.5	24.1	16.4	16.4
Incr Delay (d2), s/veh	0.2	4.8	4.8	0.4	4.0	4.5	0.3	3.5	6.5	2.5	2.0	3.7
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	3.4	12.6	12.7	4.9	12.3	11.9	1.6	19.3	21.1	4.1	11.7	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	41.3	41.4	28.4	38.8	39.4	19.8	32.0	35.0	26.6	18.4	20.1
LnGrp LOS	C	D	D	C	D	D	B	C	D	C	B	C
Approach Vol, veh/h	684			715			1738			1699		
Approach Delay, s/veh	39.7			37.0			32.6			19.7		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	57.0	11.8	40.0	7.2	61.0	9.7	42.1				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	12.5	47.0	8.5	34.5	11.5	48.0	12.5	30.5				
Max Q Clear Time (g_c+I1), s	7.6	34.7	8.4	19.2	4.3	24.4	6.5	19.2				
Green Ext Time (p_c), s	0.1	9.0	0.0	3.7	0.0	13.2	0.0	3.1				

Intersection Summary

HCM 6th Ctrl Delay 29.7
HCM 6th LOS C

La Mirada Development - 2035 PM Peak Hour NO BUILD Conditions

Synchro 11 Report
2035_PNX.syn

Timings
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↩	↩↩	↩	↩↩	↩	↩↩	↩	↩↩
Traffic Volume (vph)	118	509	137	381	60	1633	172	1539
Future Volume (vph)	118	509	137	381	60	1633	172	1539
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4	8	2	6	1	6	1	6
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	15.5	3.0	15.5	3.0	16.0	3.0	16.0
Minimum Split (s)	6.5	21.0	6.5	21.0	6.5	21.0	6.5	21.0
Total Split (s)	16.0	40.0	12.0	36.0	15.0	52.0	16.0	53.0
Total Split (%)	13.3%	33.3%	10.0%	30.0%	12.5%	43.3%	13.3%	44.2%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.5	1.5	0.5	1.5	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.0	3.5	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.4 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Wyoming Blvd. & Comanche Rd.

Ø1	Ø2 (R)	Ø3	Ø4
16 s	52 s	12 s	40 s
Ø5	Ø6 (R)	Ø7	Ø8
15 s	53 s	16 s	36 s

HCM 6th Signalized Intersection Summary
2: Wyoming Blvd. & Comanche Rd.

Terry O. Brown, P.E.
08/18/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩↩		↩	↩↩		↩	↩↩		↩	↩↩	
Traffic Volume (veh/h)	118	509	81	137	381	218	60	1633	107	172	1539	80
Future Volume (veh/h)	118	509	81	137	381	218	60	1633	107	172	1539	80
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	118	509	81	137	381	218	60	1633	107	172	1539	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	286	876	139	302	641	362	241	2067	135	223	2296	119
Arrive On Green	0.06	0.29	0.29	0.07	0.30	0.30	0.03	0.43	0.43	0.14	0.93	0.93
Sat Flow, veh/h	1767	3048	483	1767	2172	1225	1767	4857	318	1767	4930	256
Grp Volume(v), veh/h	118	293	297	137	308	291	60	1135	605	172	1054	565
Grp Sat Flow(s), veh/h/ln	1767	1763	1769	1767	1763	1635	1767	1689	1798	1767	1689	1809
Q Serve(g_s), s	5.6	17.1	17.2	6.5	17.9	18.3	2.3	34.9	35.0	6.5	6.8	6.8
Cycle Q Clear(g_c), s	5.6	17.1	17.2	6.5	17.9	18.3	2.3	34.9	35.0	6.5	6.8	6.8
Prop In Lane	1.00		0.27	1.00		0.75	1.00		0.18	1.00		0.14
Lane Grp Cap(c), veh/h	286	507	508	302	520	483	241	1437	765	223	1573	843
V/C Ratio(X)	0.41	0.58	0.58	0.45	0.59	0.60	0.25	0.79	0.79	0.77	0.67	0.67
Avail Cap(c_a), veh/h	360	507	508	303	520	483	356	1437	765	281	1573	843
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	36.5	36.6	28.3	36.1	36.3	18.4	29.8	29.8	23.7	2.4	2.4
Incr Delay (d2), s/veh	0.4	4.8	4.8	0.4	4.9	5.5	0.2	4.5	8.2	7.3	2.3	4.2
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	4.3	12.6	12.7	4.9	13.0	12.6	1.7	20.6	22.8	4.8	2.7	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	41.3	41.4	28.7	41.0	41.7	18.6	34.3	38.0	31.0	4.7	6.7
LnGrp LOS	C	D	D	C	D	D	B	C	D	C	A	A
Approach Vol, veh/h	708			736			1800			1791		
Approach Delay, s/veh	39.3			39.0			35.0			7.9		
Approach LOS	D			D			D			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	56.1	11.9	40.0	7.2	60.9	11.0	40.9				
Change Period (Y+Rc), s	3.5	5.0	3.5	5.5	3.5	5.0	3.5	5.5				
Max Green Setting (Gmax), s	12.5	47.0	8.5	34.5	11.5	48.0	12.5	30.5				
Max Q Clear Time (g_c+I1), s	8.5	37.0	8.5	19.2	4.3	8.8	7.6	20.3				
Green Ext Time (p_c), s	0.1	7.8	0.0	3.7	0.0	18.2	0.0	3.0				

Intersection Summary

HCM 6th Ctrl Delay 26.5
HCM 6th LOS C

HCM 6th TWSC
3: Wyoming Blvd. & La Mirada Pl./Driveway

Terry O. Brown, P.E.
08/18/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕ ↕ ↕ ↕			↕ ↕ ↕ ↕		
Traffic Vol, veh/h	30	1	21	1	1	1	56	1198	17	43	1430	21
Future Vol, veh/h	30	1	21	1	1	1	56	1198	17	43	1430	21
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	30	1	21	1	1	1	56	1198	17	43	1430	21
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2119	2854	726	1978	2856	608	1451	0	0	1215	0	0
Stage 1	1527	1527	-	1319	1319	-	-	-	-	-	-	-
Stage 2	592	1327	-	659	1537	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*350	*301	*604	*350	299	*651	*759	-	-	*818	-	-
Stage 1	*620	*589	-	*639	616	-	-	-	-	-	-	-
Stage 2	*668	*610	-	*620	582	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*316	*264	*604	*305	262	*651	*759	-	-	*818	-	-
Mov Cap-2 Maneuver	*406	*366	-	*387	360	-	-	-	-	-	-	-
Stage 1	*574	*558	-	*591	571	-	-	-	-	-	-	-
Stage 2	*617	*565	-	*566	551	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	13.7		13.3			0.4			0.3			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR			
Capacity (veh/h)	* 759	-	-	467	387	464	* 818	-	-			
HCM Lane V/C Ratio	0.074	-	-	0.111	0.003	0.004	0.053	-	-			
HCM Control Delay (s)	10.1	-	-	13.7	14.3	12.8	9.6	-	-			
HCM Lane LOS	B	-	-	B	B	B	A	-	-			
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0	0	0.2	-	-			
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕ ↕ ↕ ↕			↕ ↕ ↕ ↕		
Traffic Vol, veh/h	82	1	59	1	1	1	99	1299	17	43	1527	31
Future Vol, veh/h	82	1	59	1	1	1	99	1299	17	43	1527	31
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	82	1	59	1	1	1	99	1299	17	43	1527	31
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2347	3143	779	2203	3150	658	1558	0	0	1316	0	0
Stage 1	1629	1629	-	1506	1506	-	-	-	-	-	-	-
Stage 2	718	1514	-	697	1644	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*301	*203	*581	*301	197	*628	*729	-	-	*788	-	-
Stage 1	*596	*566	-	*524	535	-	-	-	-	-	-	-
Stage 2	*644	*529	-	*596	567	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*258	*165	*581	*232	161	*628	*729	-	-	*788	-	-
Mov Cap-2 Maneuver	*352	*286	-	*301	278	-	-	-	-	-	-	-
Stage 1	*515	*535	-	*453	462	-	-	-	-	-	-	-
Stage 2	*555	*457	-	*505	536	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	17.9		15.3			0.7			0.3			
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL		NBT		NBR		EBLn1WBLn1WBLn2		SBL	SBT	SBR	
Capacity (veh/h)	* 729		-		-		420 301 385		* 788	-	-	
HCM Lane V/C Ratio	0.136		-		-		0.338 0.003 0.005		0.055	-	-	
HCM Control Delay (s)	10.7		-		-		17.9 17 14.4		9.8	-	-	
HCM Lane LOS	B		-		-		C C B		A	-	-	
HCM 95th %tile Q(veh)	0.5		-		-		1.5 0 0		0.2	-	-	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕ ↕ ↕ ↕			↕ ↕ ↕ ↕		
Traffic Vol, veh/h	4	1	60	21	1	9	17	1939	26	30	1798	17
Future Vol, veh/h	4	1	60	21	1	9	17	1939	26	30	1798	17
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	1	60	21	1	9	17	1939	26	30	1798	17
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2677	3866	908	2766	3861	983	1815	0	0	1965	0	0
Stage 1	1867	1867	-	1986	1986	-	-	-	-	-	-	-
Stage 2	810	1999	-	780	1875	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*211	*21	*501	*211	*21	*458	*629	-	-	*575	-	-
Stage 1	*514	*488	-	*470	*446	-	-	-	-	-	-	-
Stage 2	*470	*446	-	*514	*488	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*194	*19	*501	*174	*20	*458	*629	-	-	*575	-	-
Mov Cap-2 Maneuver	*295	*206	-	*277	*210	-	-	-	-	-	-	-
Stage 1	*500	*463	-	*457	*434	-	-	-	-	-	-	-
Stage 2	*447	*434	-	*428	*463	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	13.9		17.5			0.1			0.2			
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	* 629	-	-	470 277 410	* 575	-	-					
HCM Lane V/C Ratio	0.027	-	-	0.138 0.076 0.024	0.052	-	-					
HCM Control Delay (s)	10.9	-	-	13.9 19.1 14	11.6	-	-					
HCM Lane LOS	B	-	-	B C B	B	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	0.5 0.2 0.1	0.2	-	-					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕ ↕ ↕ ↕			↕ ↕ ↕ ↕		
Traffic Vol, veh/h	36	1	84	21	1	9	61	2001	26	30	1869	42
Future Vol, veh/h	36	1	84	21	1	9	61	2001	26	30	1869	42
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	-	-	-	50	-	-	80	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	1	84	21	1	9	61	2001	26	30	1869	42
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2873	4099	956	2944	4107	1014	1911	0	0	2027	0	0
Stage 1	1950	1950	-	2136	2136	-	-	-	-	-	-	-
Stage 2	923	2149	-	808	1971	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*158	*8	*479	*158	*8	*458	*602	-	-	*575	-	-
Stage 1	*492	*467	-	*470	*446	-	-	-	-	-	-	-
Stage 2	*470	*446	-	*492	*467	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*137	*7	*479	*115	*7	*458	*602	-	-	*575	-	-
Mov Cap-2 Maneuver	*249	*187	-	*218	*182	-	-	-	-	-	-	-
Stage 1	*442	*443	-	*422	*401	-	-	-	-	-	-	-
Stage 2	*413	*401	-	*384	*443	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	19.3		20.4			0.3			0.2			
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL		NBT		NBR		EBLn1WBLn1WBLn2		SBL	SBT	SBR	
Capacity (veh/h)	* 602		-		-		372	218	398	* 575	-	
HCM Lane V/C Ratio	0.101		-		-		0.325	0.096	0.025	0.052	-	
HCM Control Delay (s)	11.7		-		-		19.3	23.3	14.3	11.6	-	
HCM Lane LOS	B		-		-		C	C	B	B	-	
HCM 95th %tile Q(veh)	0.3		-		-		1.4	0.3	0.1	0.2	-	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	36.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
Future Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1186	57	173	2134	5	110	3	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2139	0	0	1243	0	0	2435	3720	622	2979	3746	1070
Stage 1	-	-	-	-	-	-	1235	1235	-	2483	2483	-
Stage 2	-	-	-	-	-	-	1200	2485	-	496	1263	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	105	-	-	296	-	-	~ 33	4	366	15	4	185
Stage 1	-	-	-	-	-	-	135	245	-	17	57	-
Stage 2	-	-	-	-	-	-	175	57	-	477	237	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	105	-	-	296	-	-	~ 15	~ 2	366	~ 5	2	185
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 41	12	-	13	15	-
Stage 1	-	-	-	-	-	-	122	222	-	15	24	-
Stage 2	-	-	-	-	-	-	~ 66	24	-	364	214	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			2.5			\$ 736.6			\$ 371.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	39		366	105	-	-	296	-	-	24		
HCM Lane V/C Ratio	2.897		0.145	0.095	-	-	0.584	-	-	0.875		
HCM Control Delay (s)	\$ 1074.3		16.5	42.9	-	-	32.9	-	-	\$ 371.5		
HCM Lane LOS	F		C	E	-	-	D	-	-	F		
HCM 95th %tile Q(veh)	12.6		0.5	0.3	-	-	3.4	-	-	2.6		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
08/19/2021

Intersection												
Int Delay, s/veh	23.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵ ↱↱↱			↵ ↱↱↱				↱ ↵			↱↱	
Traffic Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
Future Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1818	46	107	1470	10	74	2	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1480	0	0	1864	0	0	2654	3545	932	2427	3563	740
Stage 1	-	-	-	-	-	-	1851	1851	-	1689	1689	-
Stage 2	-	-	-	-	-	-	803	1694	-	738	1874	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	226	-	-	145	-	-	~ 24	6	229	34	5	306
Stage 1	-	-	-	-	-	-	~ 49	121	-	64	146	-
Stage 2	-	-	-	-	-	-	309	146	-	339	118	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	226	-	-	145	-	-	~ 8	2	229	10	1	306
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 30	24	-	45	6	-
Stage 1	-	-	-	-	-	-	~ 48	118	-	63	38	-
Stage 2	-	-	-	-	-	-	78	38	-	266	115	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			5.3			\$ 637.1			139.2		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	30		229	226	-	-	145	-	-	37		
HCM Lane V/C Ratio	2.533		0.183	0.022	-	-	0.738	-	-	0.297		
HCM Control Delay (s)	\$ 975.8		24.2	21.3	-	-	79.1	-	-	139.2		
HCM Lane LOS	F		C	C	-	-	F	-	-	F		
HCM 95th %tile Q(veh)	8.9		0.7	0.1	-	-	4.4	-	-	1		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↑↑↑			↱			↱		
Traffic Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
Future Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1137	102	0	2307	60	0	0	126	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2367	0	0	-	-	0	-	-	620	-	-	1184
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	80	-	-	0	-	-	0	0	367	0	0	155
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	80	-	-	-	-	-	-	-	367	-	-	155
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	6			0			19.9			42.2		
HCM LOS							C			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	367	80	-	-	-	-	155					
HCM Lane V/C Ratio	0.343	0.75	-	-	-	-	0.387					
HCM Control Delay (s)	19.9	129.2	-	-	-	-	42.2					
HCM Lane LOS	C	F	-	-	-	-	E					
HCM 95th %tile Q(veh)	1.5	3.7	-	-	-	-	1.7					

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑				↑↑↑				↰			↰
Traffic Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
Future Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1780	93	0	1577	60	0	0	116	0	0	60
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	1637	0	0	-	-	0	-	-	937	-	-	819
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	188	-	-	0	-	-	0	0	227	0	0	272
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	188	-	-	-	-	-	-	-	227	-	-	272
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	1		0			36.3			21.9			
HCM LOS						E			C			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	227	188	-	-	-	-	272					
HCM Lane V/C Ratio	0.511	0.319	-	-	-	-	0.221					
HCM Control Delay (s)	36.3	32.9	-	-	-	-	21.9					
HCM Lane LOS	E	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	2.6	1.3	-	-	-	-	0.8					

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
08/21/2021

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	100	1	59	60	1	60	107	1536	60	60	2030	93
Future Vol, veh/h	100	1	59	60	1	60	107	1536	60	60	2030	93
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	100	1	59	60	1	60	107	1536	60	60	2030	93
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	3026	4007	1062	2713	4023	798	2123	0	0	1596	0	0
Stage 1	2197	2197	-	1780	1780	-	-	-	-	-	-	-
Stage 2	829	1810	-	933	2243	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 79	*3	*440	*197	*3	*557	*552	-	-	*700	-	-
Stage 1	*451	*429	-	*543	*526	-	-	-	-	-	-	-
Stage 2	*572	*501	-	*451	*429	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 56	*2	*440	*135	*2	*557	*552	-	-	*700	-	-
Mov Cap-2 Maneuver	*188	*168	-	*199	*156	-	-	-	-	-	-	-
Stage 1	*364	*392	-	*438	*424	-	-	-	-	-	-	-
Stage 2	*410	*404	-	*356	*392	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	33.3		25.9			0.8			0.3			
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 552	-	-	188	440	291	* 700	-	-			
HCM Lane V/C Ratio	0.194	-	-	0.537	0.134	0.416	0.086	-	-			
HCM Control Delay (s)	13.1	-	-	44.4	14.4	25.9	10.6	-	-			
HCM Lane LOS	B	-	-	E	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	2.8	0.5	2	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
08/19/2021

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
Future Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	80	1	46	60	1	60	81	1782	60	60	1805	60
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2830	3959	933	2817	3959	921	1865	0	0	1842	0	0
Stage 1	1955	1955	-	1974	1974	-	-	-	-	-	-	-
Stage 2	875	2004	-	843	1985	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*111	*3	*501	*115	*3	*501	*629	-	-	*629	-	-
Stage 1	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Stage 2	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*82	*3	*501	*87	*3	*501	*629	-	-	*629	-	-
Mov Cap-2 Maneuver	*211	*184	-	*215	*180	-	-	-	-	-	-	-
Stage 1	*448	*442	-	*448	*425	-	-	-	-	-	-	-
Stage 2	*393	*425	-	*421	*442	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	25.3		25			0.5			0.4			
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 629	-	-	211	501	299	* 629	-	-			
HCM Lane V/C Ratio	0.129	-	-	0.384	0.092	0.405	0.095	-	-			
HCM Control Delay (s)	11.6	-	-	32.3	12.9	25	11.3	-	-			
HCM Lane LOS	B	-	-	D	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.7	0.3	1.9	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	54	0	1626	2018	72
Future Vol, veh/h	0	54	0	1626	2018	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
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, %	3	3	3	3	3	3
Mvmt Flow	0	54	0	1626	2018	72
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	1045	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	192	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	192	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	30.9	0	0			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	192	-	-		
HCM Lane V/C Ratio	-	0.281	-	-		
HCM Control Delay (s)	-	30.9	-	-		
HCM Lane LOS	-	D	-	-		
HCM 95th %tile Q(veh)	-	1.1	-	-		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	38	0	1845	1803	51
Future Vol, veh/h	0	38	0	1845	1803	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
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, %	3	3	3	3	3	3
Mvmt Flow	0	38	0	1845	1803	51
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	927	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	230	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	230	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	23.7	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	230	-	-		
HCM Lane V/C Ratio	-	0.165	-	-		
HCM Control Delay (s)	-	23.7	-	-		
HCM Lane LOS	-	C	-	-		
HCM 95th %tile Q(veh)	-	0.6	-	-		

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	56	81	13	39	1
Future Vol, veh/h	1	56	81	13	39	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	56	81	13	39	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	94	0	-	0	146	88
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1494	-	-	-	844	968
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	962	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1494	-	-	-	843	968
Mov Cap-2 Maneuver	-	-	-	-	843	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	962	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1494	-	-	-	846	
HCM Lane V/C Ratio	0.001	-	-	-	0.047	
HCM Control Delay (s)	7.4	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	67	37	43	25	1
Future Vol, veh/h	1	67	37	43	25	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	67	37	43	25	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	80	0	-	0	128	59
Stage 1	-	-	-	-	59	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1512	-	-	-	864	1004
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1512	-	-	-	863	1004
Mov Cap-2 Maneuver	-	-	-	-	863	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	951	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		9.3		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1512	-	-	-	-	868
HCM Lane V/C Ratio	0.001	-	-	-	-	0.03
HCM Control Delay (s)	7.4	0	-	-	-	9.3
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0.1

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	91	91	37	33	3
Future Vol, veh/h	4	91	91	37	33	3
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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	91	91	37	33	3
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	128	0	-	0	209	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1452	-	-	-	777	941
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	922	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1452	-	-	-	775	941
Mov Cap-2 Maneuver	-	-	-	-	775	-
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	922	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		9.8		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1452	-	-	-	787	
HCM Lane V/C Ratio	0.003	-	-	-	0.046	
HCM Control Delay (s)	7.5	0	-	-	9.8	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	90	78	24	21	2
Future Vol, veh/h	2	90	78	24	21	2
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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	2	90	78	24	21	2
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	102	0	-	0	184	90
Stage 1	-	-	-	-	90	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1484	-	-	-	803	965
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	927	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1484	-	-	-	802	965
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	927	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		9.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1484	-	-	-	814	
HCM Lane V/C Ratio	0.001	-	-	-	0.028	
HCM Control Delay (s)	7.4	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Traffic Count Data Sheet

Year Counts Taken:

2021

E-W Street:

Montgomery Blvd.

N-S Street:

Wyoming Blvd.

Speed Limit (Montgomery Blvd.)=

35 MPH

Speed Limit (Wyoming Blvd.)=

35 MPH

Signalized

7/22/21

Begin Time	End Time		Eastbound (Montgomery Blvd.)				Westbound (Montgomery Blvd.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	0	18	76	17	0	15	154	14	1	15	129	14	0	22	161	33	1
7:15 AM	7:30 AM	0	21	91	25	1	26	155	32	0	23	146	25	1	22	182	31	1
7:30 AM	7:45 AM	0	20	107	20	0	31	192	49	0	51	216	23	0	52	244	39	0
7:45 AM	8:00 AM	1	47	143	24	0	36	229	56	0	42	232	26	1	54	267	55	0
8:00 AM	8:15 AM	0	36	96	25	0	24	184	33	0	28	180	32	1	40	238	42	1
8:15 AM	8:30 AM	0	30	135	27	0	35	184	49	1	22	187	19	1	50	233	52	0
8:30 AM	8:45 AM	0	32	118	36	0	34	180	32	0	34	180	32	0	45	232	37	0
8:45 AM	9:00 AM	0	33	160	30	0	39	203	47	1	43	175	39	1	70	246	72	0
AM Peak 15-min Period			47	143	24	0	36	229	56	0	42	232	26	1	54	267	55	0
AM Peak Hour			188	572	96	0	144	916	224	1	168	928	104	3	216	1,068	220	1
Streetlightdata 2019:2021 Summer Ratio			1.0	1.3	1.3		1.5	1.5	1.4		1.4	1.0	1.6		1.2	1.4	1.7	
AM Peak 15-min Period Adjusted			48	189	31	0	54	353	78	0	58	244	42	0	67	376	95	0
AM Peak Hour Adjusted			192	756	124	0	216	1,412	312	0	232	976	168	0	268	1,504	380	0

Begin Time	End Time		Eastbound (Montgomery Blvd.)				Westbound (Montgomery Blvd.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	1	63	304	53	1	56	230	75	0	56	305	48	2	80	300	62	0
4:15 PM	4:30 PM	0	69	224	46	1	37	207	69	1	67	345	60	1	80	330	69	0
4:30 PM	4:45 PM	0	62	254	37	0	49	268	65	0	68	291	65	0	74	295	48	0
4:45 PM	5:00 PM	0	47	226	42	0	46	183	64	0	57	294	60	1	75	330	50	0
5:00 PM	5:15 PM	0	72	316	53	1	52	220	75	0	59	295	59	1	64	295	59	0
5:15 PM	5:30 PM	0	61	235	57	1	41	191	78	0	50	320	59	0	69	301	60	0
5:30 PM	5:45 PM	0	59	268	40	0	33	218	75	0	52	244	47	0	71	254	49	2
5:45 PM	6:00 PM	0	55	217	39	1	38	178	69	0	42	252	55	1	67	272	41	0
PM Peak 15-min Period			63	304	53	1	56	230	75	0	56	305	48	2	80	300	62	0
PM Peak Hour			252	1,216	212	1	224	920	300	0	224	1,220	192	1	320	1,200	248	2
Streetlightdata 2019:2021 Summer Ratio			1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0	
PM Peak 15-min Period			63	304	53	0	56	230	75	0	56	305	48	0	80	300	62	0
PM Peak Hour			252	1,216	212	0	224	920	300	0	224	1,220	192	0	320	1,200	248	0

Traffic Count Data Sheet

Year Counts Taken:

2021

E-W Street:

Comanche Rd.

Speed Limit (Comanche Rd.)=

35 MPH

N-S Street:

Wyoming Blvd.

Speed Limit (Wyoming Blvd.)=

40 MPH

Signalized

7/22/21

Begin Time	End Time		Eastbound (Comanche Rd.)				Westbound (Comanche Rd.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	0	7	9	2	0	16	52	22	1	5	122	6	0	8	175	2	2
7:15 AM	7:30 AM	0	7	18	3	0	24	52	28	0	7	166	8	0	11	205	4	1
7:30 AM	7:45 AM	0	9	23	11	0	26	60	20	0	4	161	10	1	23	222	10	0
7:45 AM	8:00 AM	1	15	35	8	0	28	93	26	0	15	289	15	0	16	300	12	0
8:00 AM	8:15 AM	0	13	21	8	0	28	55	22	0	8	246	9	0	18	277	14	0
8:15 AM	8:30 AM	0	11	30	3	1	22	54	34	0	8	218	9	0	22	253	15	0
8:30 AM	8:45 AM	0	10	41	6	1	17	47	29	1	7	198	11	0	17	236	12	1
8:45 AM	9:00 AM	0	26	44	8	0	20	45	43	0	8	205	13	0	21	255	8	0
AM Peak 15-min Period			15	35	8	0	28	93	26	0	15	289	15	0	16	300	12	0
AM Peak Hour			60	140	32	2	112	372	104	1	60	1,156	60	0	64	1,200	48	1
Streetlightdata 2019:2021 Summer Ratio			1.3	1.1	1.3		1.3	1.1	1.0		2.0	1.0	1.7		1.1	1.0	2.1	
AM Peak 15-min Period Adjusted			19	39	10	0	36	106	26	0	29	289	25	0	18	304	25	0
AM Peak Hour Adjusted			76	156	40	0	144	424	104	0	116	1,156	100	0	72	1,216	100	0

Begin Time	End Time		Eastbound (Comanche Rd.)				Westbound (Comanche Rd.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	0	22	65	13	1	20	51	34	0	17	318	33	1	23	300	15	0
4:15 PM	4:30 PM	0	33	89	16	0	30	73	25	1	18	307	23	0	34	298	28	3
4:30 PM	4:45 PM	0	13	62	7	1	18	52	21	0	24	359	29	2	35	338	18	0
4:45 PM	5:00 PM	0	28	66	22	0	24	74	30	1	21	351	35	1	28	296	16	0
5:00 PM	5:15 PM	0	26	80	16	1	26	57	34	0	20	370	34	0	33	334	30	4
5:15 PM	5:30 PM	1	22	118	19	0	32	89	46	1	14	367	25	2	36	347	14	0
5:30 PM	5:45 PM	0	27	91	9	1	27	58	33	1	21	371	29	0	36	371	23	0
5:45 PM	6:00 PM	0	21	95	15	1	24	82	33	0	14	370	33	0	23	327	16	1
PM Peak 15-min Period			22	118	19	0	32	89	46	1	14	367	25	2	36	347	14	0
PM Peak Hour			88	472	76	2	128	356	184	1	56	1,468	100	0	144	1,388	56	1
Streetlightdata 2019:2021 Summer Ratio			1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0	
PM Peak 15-min Period			22	119	19	0	32	89	46	0	14	367	25	0	36	347	14	0
PM Peak Hour			88	476	76	0	128	356	184	0	56	1,468	100	0	144	1,388	56	0

Traffic Count Data Sheet

Year Counts Taken:

2021

E-W Street:

La Mirada Pl.

Speed Limit (La Mirada Pl.)=

30

MPH

N-S Street:

Wyoming Blvd.

Speed Limit (Wyoming Blvd.)=

40

MPH

Signalized

7/22/21

Begin Time	End Time		Eastbound (La Mirada Pl.)				Westbound (La Mirada Pl.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
7:00 AM	7:15 AM	0	1	0	3	1	0	0	0	0	2	161	1	0	3	193	1	0
7:15 AM	7:30 AM	0	2	0	5	0	1	0	1	0	3	208	1	0	0	232	2	0
7:30 AM	7:45 AM	0	1	0	3	0	0	0	0	0	3	291	1	0	1	298	3	0
7:45 AM	8:00 AM	1	5	0	5	0	0	0	0	2	5	280	4	0	4	307	3	0
8:00 AM	8:15 AM	0	2	0	6	0	1	0	2	1	4	234	7	0	1	290	3	0
8:15 AM	8:30 AM	0	1	0	5	0	0	0	1	1	2	235	2	0	4	293	3	0
8:30 AM	8:45 AM	0	1	0	9	0	0	0	1	1	5	227	2	0	3	274	1	0
8:45 AM	9:00 AM	0	1	0	10	0	2	0	0	1	5	263	3	0	10	306	2	0
AM Peak 15-min Period			5	0	5	0	0	0	0	2	5	280	4	0	4	307	3	0
AM Peak Hour			20	0	20	0	0	0	0	5	20	1,120	16	0	16	1,228	12	0
Streetlightdata 2019:2021 Summer Ratio			1.3	1.0	1.0		1.0	1.0	1.0		2.6	1.0	1.0		2.4	1.1	1.5	
AM Peak 15-min Period Adjusted			7	0	5	0	0	0	0	0	13	280	4	0	10	334	5	0
AM Peak Hour Adjusted			28	0	20	0	0	0	0	0	52	1,120	16	0	40	1,336	20	0

Begin Time	End Time		Eastbound (La Mirada Pl.)				Westbound (La Mirada Pl.)				Northbound (Wyoming Blvd.)				Southbound (Wyoming Blvd.)			
			L	T	R	Peds	L	T	R	Peds	L	T	R	Peds	L	T	R	Peds
4:00 PM	4:15 PM	1	1	0	14	0	5	0	2	0	4	453	5	0	7	420	2	0
4:15 PM	4:30 PM	0	0	0	8	0	1	0	1	1	11	445	3	0	9	404	2	0
4:30 PM	4:45 PM	0	2	0	17	1	1	0	2	1	9	405	4	0	7	405	2	0
4:45 PM	5:00 PM	0	2	0	18	0	2	0	4	0	5	399	2	0	5	399	4	0
5:00 PM	5:15 PM	0	3	0	8	0	1	0	1	0	7	446	6	0	4	419	3	0
5:15 PM	5:30 PM	0	3	0	9	0	6	0	7	0	8	407	7	0	7	392	2	1
5:30 PM	5:45 PM	0	1	0	5	0	0	0	1	0	2	351	1	0	4	336	2	0
5:45 PM	6:00 PM	0	1	0	8	0	4	0	1	0	4	315	5	0	5	347	3	0
PM Peak 15-min Period			1	0	14	0	5	0	2	0	4	453	5	0	7	420	2	0
PM Peak Hour			4	0	56	0	20	0	8	0	16	1,812	20	0	28	1,680	8	0
Streetlightdata 2019:2021 Summer Ratio			1.1	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.2		1.0	1.0	2.1	
PM Peak 15-min Period			1	0	14	0	5	0	2	0	4	453	6	0	7	420	4	0
PM Peak Hour			4	0	56	0	20	0	8	0	16	1,812	24	0	28	1,680	16	0

APPENDIX "B"

Analysis of Driveways "A", "B", and "C"
considering platooning effect of traffic signal
at Pennsylvania

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	237	810	271	1477	295	1040	273	1582
Future Volume (vph)	237	810	271	1477	295	1040	273	1582
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	10.6	35.6	16.2	41.2	12.0	42.8	15.4	46.2
Total Split (%)	9.6%	32.4%	14.7%	37.5%	10.9%	38.9%	14.0%	42.0%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
15.4 s	42.8 s	16.2 s	35.6 s
Ø5	Ø6 (R)	Ø7	Ø8
12 s	46.2 s	10.6 s	41.2 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
Future Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	810	173	271	1477	318	295	1040	221	273	1582	429
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	1225	260	331	1355	291	265	1467	311	332	1471	394
Arrive On Green	0.02	0.10	0.10	0.10	0.32	0.32	0.08	0.35	0.35	0.10	0.37	0.37
Sat Flow, veh/h	3428	4186	887	3428	4176	896	3428	4185	888	3428	3976	1065
Grp Volume(v), veh/h	237	652	331	271	1193	602	295	839	422	273	1341	670
Grp Sat Flow(s),veh/h/ln	1714	1689	1696	1714	1689	1694	1714	1689	1696	1714	1689	1664
Q Serve(g_s), s	7.1	20.5	20.7	8.5	35.7	35.7	8.5	23.6	23.7	8.6	40.7	40.7
Cycle Q Clear(g_c), s	7.1	20.5	20.7	8.5	35.7	35.7	8.5	23.6	23.7	8.6	40.7	40.7
Prop In Lane	1.00		0.52	1.00		0.53	1.00		0.52	1.00		0.64
Lane Grp Cap(c), veh/h	221	988	496	331	1096	550	265	1184	594	332	1250	616
V/C Ratio(X)	1.07	0.66	0.67	0.82	1.09	1.09	1.11	0.71	0.71	0.82	1.07	1.09
Avail Cap(c_a), veh/h	221	988	496	396	1096	550	265	1184	594	371	1250	616
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	44.4	44.5	48.8	37.2	37.2	50.7	30.9	30.9	48.7	34.6	34.6
Incr Delay (d2), s/veh	80.6	3.5	6.9	9.3	54.7	66.5	89.2	3.6	7.0	11.3	47.5	62.8
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	9.7	14.8	15.6	7.2	31.8	34.2	11.5	14.9	15.7	7.4	33.6	36.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	134.4	47.9	51.4	58.1	91.9	103.7	140.0	34.5	37.9	60.1	82.1	97.5
LnGrp LOS	F	D	D	E	F	F	F	C	D	E	F	F
Approach Vol, veh/h	1220			2066			1556				2284	
Approach Delay, s/veh	65.7			90.9			55.4				84.0	
Approach LOS	E			F			E				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	44.1	14.1	37.7	12.0	46.2	10.6	41.2				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	11.9	37.3	12.7	30.1	8.5	40.7	7.1	35.7				
Max Q Clear Time (g_c+I1), s	10.6	25.7	10.5	22.7	10.5	42.7	9.1	37.7				
Green Ext Time (p_c), s	0.1	7.5	0.1	4.3	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 76.6
HCM 6th LOS E

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	285	1268	266	962	265	1274	326	1261
Future Volume (vph)	285	1268	266	962	265	1274	326	1261
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	48.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
Future Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	1268	254	266	962	306	265	1274	230	326	1261	279
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	342	1323	265	311	1155	367	311	1451	262	378	1477	327
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.23	0.23	0.11	0.36	0.36
Sat Flow, veh/h	3428	4232	848	3428	3806	1209	3428	4314	779	3428	4150	918
Grp Volume(v), veh/h	285	1012	510	266	853	415	265	997	507	326	1026	514
Grp Sat Flow(s),veh/h/ln	1714	1689	1703	1714	1689	1638	1714	1689	1715	1714	1689	1690
Q Serve(g_s), s	9.9	35.8	35.8	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Cycle Q Clear(g_c), s	9.9	35.8	35.8	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Prop In Lane	1.00		0.50	1.00		0.74	1.00		0.45	1.00		0.54
Lane Grp Cap(c), veh/h	342	1055	532	311	1025	497	311	1136	577	378	1202	601
V/C Ratio(X)	0.83	0.96	0.96	0.85	0.83	0.83	0.85	0.88	0.88	0.86	0.85	0.85
Avail Cap(c_a), veh/h	386	1055	532	311	1025	497	311	1136	577	386	1202	601
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	53.0	53.0	53.8	39.0	39.0	55.5	44.1	44.1	52.5	35.8	35.8
Incr Delay (d2), s/veh	11.7	19.4	30.0	19.2	7.9	15.2	18.7	9.7	17.1	16.8	7.8	14.4
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	8.7	26.1	28.2	8.3	18.3	19.1	8.4	22.8	24.5	9.5	20.9	22.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	72.4	83.1	72.9	46.9	54.1	74.3	53.8	61.2	69.2	43.6	50.2
LnGrp LOS	E	E	F	E	D	D	E	D	E	E	D	D
Approach Vol, veh/h	1807			1534			1769				1866	
Approach Delay, s/veh	74.9			53.4			59.0				49.9	
Approach LOS	E			D			E				D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	45.9	14.4	43.0	14.4	48.2	15.5	41.9				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.2	36.2	11.2	37.8	11.2	35.8	11.9	30.3				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	5.6	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay 59.4
HCM 6th LOS E

Timings
1: Wyoming Blvd. & Montgomery Blvd.

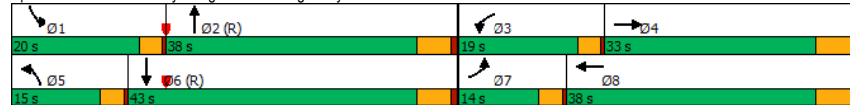
Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔
Traffic Volume (vph)	246	848	282	1548	306	1088	287	1657
Future Volume (vph)	246	848	282	1548	306	1088	287	1657
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	20.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%	39.1%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔	↔↔↔	↔↔↔	↔
Traffic Volume (veh/h)	246	848	180	282	1548	334	306	1088	230	287	1657	448
Future Volume (veh/h)	246	848	180	282	1548	334	306	1088	230	287	1657	448
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	246	848	180	282	1548	334	306	1088	230	287	1657	448
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	307	1193	252	344	1234	265	358	1463	309	349	1381	367
Arrive On Green	0.03	0.09	0.09	0.10	0.30	0.30	0.10	0.35	0.35	0.10	0.35	0.35
Sat Flow, veh/h	3428	4190	884	3428	4176	896	3428	4188	885	3428	3983	1059
Grp Volume(v), veh/h	246	683	345	282	1250	632	306	877	441	287	1400	705
Grp Sat Flow(s),veh/h/ln	1714	1689	1696	1714	1689	1694	1714	1689	1696	1714	1689	1665
Q Serve(g_s), s	7.8	21.6	21.8	8.9	32.5	32.5	9.7	25.1	25.1	9.0	38.1	38.1
Cycle Q Clear(g_c), s	7.8	21.6	21.8	8.9	32.5	32.5	9.7	25.1	25.1	9.0	38.1	38.1
Prop In Lane	1.00		0.52	1.00		0.53	1.00		0.52	1.00		0.64
Lane Grp Cap(c), veh/h	307	962	483	344	998	501	358	1180	593	349	1171	577
V/C Ratio(X)	0.80	0.71	0.71	0.82	1.25	1.26	0.85	0.74	0.74	0.82	1.20	1.22
Avail Cap(c_a), veh/h	327	962	483	483	998	501	358	1180	593	514	1171	577
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	45.4	45.5	48.5	38.7	38.8	48.4	31.5	31.5	48.4	35.9	35.9
Incr Delay (d2), s/veh	11.3	4.4	8.7	5.3	122.2	133.3	17.0	4.3	8.2	4.2	96.8	114.3
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	7.1	15.6	16.5	7.1	44.1	46.4	8.5	15.8	16.7	7.2	44.4	48.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	49.8	54.2	53.8	160.9	172.0	65.4	35.7	39.7	52.6	132.7	150.2
LnGrp LOS	E	D	D	D	F	F	E	D	D	D	F	F
Approach Vol, veh/h	1274			2164			1624			2392		
Approach Delay, s/veh	53.7			150.2			42.4			128.3		
Approach LOS	D			F			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	43.9	14.5	36.8	15.0	43.6	13.4	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	11.0	27.1	10.9	23.8	11.7	40.1	9.8	34.5				
Green Ext Time (p_c), s	0.2	4.1	0.2	2.5	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				103.2								
HCM 6th LOS				F								

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔
Traffic Volume (vph)	298	1329	278	1008	277	1335	342	1321
Future Volume (vph)	298	1329	278	1008	277	1335	342	1321
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	48.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔	
Traffic Volume (veh/h)	298	1329	265	278	1008	321	277	1335	239	342	1321	291
Future Volume (veh/h)	298	1329	265	278	1008	321	277	1335	239	342	1321	291
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	298	1329	265	278	1008	321	277	1335	239	342	1321	291
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	355	1324	264	311	1140	363	311	1444	258	386	1478	325
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.22	0.22	0.11	0.36	0.36
Sat Flow, veh/h	3428	4236	844	3428	3804	1210	3428	4320	773	3428	4154	914
Grp Volume(v), veh/h	298	1059	535	278	895	434	277	1043	531	342	1074	538
Grp Sat Flow(s),veh/h/ln	1714	1689	1704	1714	1689	1638	1714	1689	1716	1714	1689	1691
Q Serve(g_s), s	10.4	37.5	37.5	9.6	30.3	30.3	9.6	36.3	36.3	11.8	36.0	36.1
Cycle Q Clear(g_c), s	10.4	37.5	37.5	9.6	30.3	30.3	9.6	36.3	36.3	11.8	36.0	36.1
Prop In Lane	1.00		0.50	1.00		0.74	1.00		0.45	1.00		0.54
Lane Grp Cap(c), veh/h	355	1055	532	311	1012	491	311	1129	574	386	1202	602
V/C Ratio(X)	0.84	1.00	1.00	0.89	0.88	0.88	0.89	0.92	0.93	0.89	0.89	0.89
Avail Cap(c_a), veh/h	386	1055	532	311	1012	491	311	1129	574	386	1202	602
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	53.8	53.8	54.0	40.0	40.0	55.8	45.1	45.1	52.5	36.5	36.5
Incr Delay (d2), s/veh	13.1	28.6	40.1	25.3	11.1	20.2	24.8	13.9	23.0	20.6	10.3	18.3
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	9.1	28.7	31.0	8.9	19.8	20.8	9.0	24.6	26.7	10.1	22.5	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	82.4	93.9	79.3	51.2	60.3	80.5	59.0	68.1	73.1	46.8	54.8
LnGrp LOS	E	F	F	E	D	E	F	E	E	E	D	D
Approach Vol, veh/h	1892			1607			1851				1954	
Approach Delay, s/veh	83.7			58.5			64.8				53.6	
Approach LOS	F			E			E				D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	45.6	14.4	43.0	14.4	48.2	15.9	41.5				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.8	38.3	11.6	39.5	11.6	38.1	12.4	32.3				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	3.9	0.1	2.1				

Intersection Summary

HCM 6th Ctrl Delay 65.3
HCM 6th LOS E

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱			↰ ↱ ↱ ↱				↰ ↱			↰ ↱	
Traffic Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
Future Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1818	46	107	1470	10	74	2	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1480	0	0	1864	0	0	2654	3545	932	2427	3563	740
Stage 1	-	-	-	-	-	-	1851	1851	-	1689	1689	-
Stage 2	-	-	-	-	-	-	803	1694	-	738	1874	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	226	-	-	*629	-	-	*117	*10	*501	*204	*10	306
Stage 1	-	-	-	-	-	-	*514	*488	-	*64	*146	-
Stage 2	-	-	-	-	-	-	*309	*146	-	*514	*488	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	226	-	-	*629	-	-	*97	*8	*501	*157	*8	306
Mov Cap-2 Maneuver	-	-	-	-	-	-	*188	*87	-	*~ -22	*86	-
Stage 1	-	-	-	-	-	-	*503	*478	-	*63	*121	-
Stage 2	-	-	-	-	-	-	*250	*121	-	*459	*478	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			29.2					
HCM LOS							D			-		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	182	501	226	-	-	* 629	-	-	+			
HCM Lane V/C Ratio	0.418	0.084	0.022	-	-	0.17	-	-	-			
HCM Control Delay (s)	38.3	12.8	21.3	-	-	11.9	-	-	-			
HCM Lane LOS	E	B	C	-	-	B	-	-	-			
HCM 95th %tile Q(veh)	1.9	0.3	0.1	-	-	0.6	-	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗		↖ ↗		↖ ↗				↖ ↗		↖ ↗	
Traffic Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
Future Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1780	93	0	1577	60	0	0	116	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1637	0	0	-	-	0	-	-	937	-	-	819
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	188	-	-	0	-	-	0	0	*501	0	0	272
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	188	-	-	-	-	-	-	-	*501	-	-	272
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			14.3			21.9		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	501	188	-	-	-	-	272					
HCM Lane V/C Ratio	0.232	0.319	-	-	-	-	0.221					
HCM Control Delay (s)	14.3	32.9	-	-	-	-	21.9					
HCM Lane LOS	B	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	0.9	1.3	-	-	-	-	0.8					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
Future Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	80	1	46	60	1	60	81	1782	60	60	1805	60
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2830	3959	933	2817	3959	921	1865	0	0	1842	0	0
Stage 1	1955	1955	-	1974	1974	-	-	-	-	-	-	-
Stage 2	875	2004	-	843	1985	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*112	*3	*501	*116	*3	*501	*629	-	-	*629	-	-
Stage 1	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Stage 2	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*82	*3	*501	*87	*3	*501	*629	-	-	*629	-	-
Mov Cap-2 Maneuver	*211	*184	-	*215	*180	-	-	-	-	-	-	-
Stage 1	*448	*442	-	*448	*425	-	-	-	-	-	-	-
Stage 2	*393	*425	-	*421	*442	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	25.3		25		0.5		0.4					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 629	-	-	211	501	299	* 629	-	-			
HCM Lane V/C Ratio	0.129	-	-	0.384	0.092	0.405	0.095	-	-			
HCM Control Delay (s)	11.6	-	-	32.3	12.9	25	11.3	-	-			
HCM Lane LOS	B	-	-	D	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.7	0.3	1.9	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
Future Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1186	57	173	2134	5	110	3	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2139	0	0	1243	0	0	2435	3720	622	2979	3746	1070
Stage 1	-	-	-	-	-	-	1235	1235	-	2483	2483	-
Stage 2	-	-	-	-	-	-	1200	2485	-	496	1263	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	105	-	-	*818	-	-	*~ 79	*5	*651	*26	*5	185
Stage 1	-	-	-	-	-	-	*668	*635	-	*17	*57	-
Stage 2	-	-	-	-	-	-	*175	*57	-	*668	*635	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	105	-	-	*818	-	-	*~ 57	*4	*651	*17	*4	185
Mov Cap-2 Maneuver	-	-	-	-	-	-	*~ 102	*30	-	*14	*38	-
Stage 1	-	-	-	-	-	-	*605	*575	-	*15	*45	-
Stage 2	-	-	-	-	-	-	*128	*45	-	*553	*575	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.8			159.3			\$ 328.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	96		651	105	-	-	* 818	-	-	26		
HCM Lane V/C Ratio	1.177		0.081	0.095	-	-	0.211	-	-	0.808		
HCM Control Delay (s)	228.8		11	42.9	-	-	10.6	-	-	\$ 328.7		
HCM Lane LOS	F		B	E	-	-	B	-	-	F		
HCM 95th %tile Q(veh)	7.7		0.3	0.3	-	-	0.8	-	-	2.5		
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	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
Future Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1137	102	0	2307	60	0	0	126	0	0	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2367	0	0	-	-	0	-	-	620	-	-	1184
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	80	-	-	0	-	-	0	0	*675	0	0	155
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	-
Mov Cap-1 Maneuver	80	-	-	-	-	-	-	-	*675	-	-	155
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6	0	11.6	42.2
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	675	80	-	-	-	-	155
HCM Lane V/C Ratio	0.187	0.75	-	-	-	-	0.387
HCM Control Delay (s)	11.6	129.2	-	-	-	-	42.2
HCM Lane LOS	B	F	-	-	-	-	E
HCM 95th %tile Q(veh)	0.7	3.7	-	-	-	-	1.7

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

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	100	1	59	60	1	60	107	1536	60	60	2030	93
Future Vol, veh/h	100	1	59	60	1	60	107	1536	60	60	2030	93
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	100	1	59	60	1	60	107	1536	60	60	2030	93
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	3026	4007	1062	2713	4023	798	2123	0	0	1596	0	0
Stage 1	2197	2197	-	1780	1780	-	-	-	-	-	-	-
Stage 2	829	1810	-	933	2243	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 79	*3	*440	*197	*3	*557	*552	-	-	*700	-	-
Stage 1	*451	*429	-	*543	*526	-	-	-	-	-	-	-
Stage 2	*572	*501	-	*451	*429	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 56	*2	*440	*135	*2	*557	*552	-	-	*700	-	-
Mov Cap-2 Maneuver	*188	*168	-	*199	*156	-	-	-	-	-	-	-
Stage 1	*364	*392	-	*438	*424	-	-	-	-	-	-	-
Stage 2	*410	*404	-	*356	*392	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	33.3		25.9			0.8			0.3			
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 552	-	-	188	440	291	* 700	-	-			
HCM Lane V/C Ratio	0.194	-	-	0.537	0.134	0.416	0.086	-	-			
HCM Control Delay (s)	13.1	-	-	44.4	14.4	25.9	10.6	-	-			
HCM Lane LOS	B	-	-	E	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	2.8	0.5	2	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

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	10	1132	57	173	2033	5	110	3	53	10	1	10
Future Vol, veh/h	10	1132	57	173	2033	5	110	3	53	10	1	10
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1132	57	173	2033	5	110	3	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2038	0	0	1189	0	0	2341	3565	595	2856	3591	1019
Stage 1	-	-	-	-	-	-	1181	1181	-	2382	2382	-
Stage 2	-	-	-	-	-	-	1160	2384	-	474	1209	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	118	-	-	839	-	-	*~ 85	*7	*675	*31	7	200
Stage 1	-	-	-	-	-	-	*693	*658	-	*20	65	-
Stage 2	-	-	-	-	-	-	*185	*64	-	*693	635	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	118	-	-	839	-	-	*~ 63	*5	*675	*21	5	200
Mov Cap-2 Maneuver	-	-	-	-	-	-	*110	*36	-	*16	43	-
Stage 1	-	-	-	-	-	-	*634	*602	-	*18	52	-
Stage 2	-	-	-	-	-	-	*137	*51	-	*581	581	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.8			133.2			263.3		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	104	675	118	-	-	839	-	-	30			
HCM Lane V/C Ratio	1.087	0.079	0.085	-	-	0.206	-	-	0.7			
HCM Control Delay (s)	190.6	10.8	38.3	-	-	10.4	-	-	263.3			
HCM Lane LOS	F	B	E	-	-	B	-	-	F			
HCM 95th %tile Q(veh)	7.1	0.3	0.3	-	-	0.8	-	-	2.3			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
5: Driveway "B" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘ ↑↑↑			↑↑↑			↗			↗		
Traffic Vol, veh/h	60	1083	102	0	2206	60	0	0	126	0	0	60
Future Vol, veh/h	60	1083	102	0	2206	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1083	102	0	2206	60	0	0	126	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2266	0	0	-	-	0	-	-	593	-	-	1133
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	90	-	-	0	-	-	0	0	*675	0	0	168
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	90	-	-	-	-	-	-	-	*675	-	-	168
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	5			0			11.6			37.9		
HCM LOS							B			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	675	90	-	-	-	-	168					
HCM Lane V/C Ratio	0.187	0.667	-	-	-	-	0.357					
HCM Control Delay (s)	11.6	102.8	-	-	-	-	37.9					
HCM Lane LOS	B	F	-	-	-	-	E					
HCM 95th %tile Q(veh)	0.7	3.2	-	-	-	-	1.5					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	100	1	59	60	1	60	107	1468	60	60	1937	93
Future Vol, veh/h	100	1	59	60	1	60	107	1468	60	60	1937	93
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	100	1	59	60	1	60	107	1468	60	60	1937	93
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2906	3846	1015	2607	3862	764	2030	0	0	1528	0	0
Stage 1	2104	2104	-	1712	1712	-	-	-	-	-	-	-
Stage 2	802	1742	-	895	2150	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 92	*5	*463	*211	*5	*581	*582	-	-	*729	-	-
Stage 1	*475	*452	-	*507	*510	-	-	-	-	-	-	-
Stage 2	*596	*486	-	*475	*452	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 66	*4	*463	*148	*4	*581	*582	-	-	*729	-	-
Mov Cap-2 Maneuver	*204	*172	-	*213	*163	-	-	-	-	-	-	-
Stage 1	*388	*415	-	*413	*416	-	-	-	-	-	-	-
Stage 2	*435	*397	-	*380	*415	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	29.6		24			0.8			0.3			
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 582	-	-	204	463	309	* 729	-	-			
HCM Lane V/C Ratio	0.184	-	-	0.495	0.127	0.392	0.082	-	-			
HCM Control Delay (s)	12.6	-	-	38.8	13.9	24	10.4	-	-			
HCM Lane LOS	B	-	-	E	B	C	B	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	2.5	0.4	1.8	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱ ↱			↰ ↱ ↱ ↱ ↱				↰ ↱			↰ ↱	
Traffic Vol, veh/h	5	1733	46	107	1400	10	74	2	42	5	1	5
Future Vol, veh/h	5	1733	46	107	1400	10	74	2	42	5	1	5
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1733	46	107	1400	10	74	2	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1410	0	0	1779	0	0	2541	3390	890	2323	3408	705
Stage 1	-	-	-	-	-	-	1766	1766	-	1619	1619	-
Stage 2	-	-	-	-	-	-	775	1624	-	704	1789	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	245	-	-	*656	-	-	*132	*15	*523	*220	*14	323
Stage 1	-	-	-	-	-	-	*536	*509	-	*72	*159	-
Stage 2	-	-	-	-	-	-	*322	*158	-	*536	*509	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	245	-	-	*656	-	-	*111	*12	*523	*172	*12	323
Mov Cap-2 Maneuver	-	-	-	-	-	-	*200	*96	-	*~ -27	*95	-
Stage 1	-	-	-	-	-	-	*525	*499	-	*71	*133	-
Stage 2	-	-	-	-	-	-	*263	*132	-	*481	*499	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			27					
HCM LOS							D			-		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	194	523	245	-	-	* 656	-	-	+			
HCM Lane V/C Ratio	0.392	0.08	0.02	-	-	0.163	-	-	-			
HCM Control Delay (s)	35	12.5	20	-	-	11.6	-	-	-			
HCM Lane LOS	E	B	C	-	-	B	-	-	-			
HCM 95th %tile Q(veh)	1.7	0.3	0.1	-	-	0.6	-	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
5: Driveway "B" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱				↰ ↱ ↱				↰ ↱			↰ ↱
Traffic Vol, veh/h	60	1695	93	0	1507	60	0	0	116	0	0	60
Future Vol, veh/h	60	1695	93	0	1507	60	0	0	116	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1695	93	0	1507	60	0	0	116	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1567	0	0	-	-	0	-	-	894	-	-	784
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	204	-	-	0	-	-	0	0	*523	0	0	287
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	204	-	-	-	-	-	-	-	*523	-	-	287
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			13.8			20.8		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	523	204	-	-	-	-	287					
HCM Lane V/C Ratio	0.222	0.294	-	-	-	-	0.209					
HCM Control Delay (s)	13.8	29.8	-	-	-	-	20.8					
HCM Lane LOS	B	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	0.8	1.2	-	-	-	-	0.8					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	80	1	46	60	1	60	81	1700	60	60	1722	60
Future Vol, veh/h	80	1	46	60	1	60	81	1700	60	60	1722	60
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	80	1	46	60	1	60	81	1700	60	60	1722	60
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2715	3794	891	2701	3794	880	1782	0	0	1760	0	0
Stage 1	1872	1872	-	1892	1892	-	-	-	-	-	-	-
Stage 2	843	1922	-	809	1902	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*128	*6	*523	*133	*6	*523	*656	-	-	*656	-	-
Stage 1	*536	*509	-	*536	*509	-	-	-	-	-	-	-
Stage 2	*536	*509	-	*536	*509	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*95	*4	*523	*102	*4	*523	*656	-	-	*656	-	-
Mov Cap-2 Maneuver	*227	*194	-	*232	*190	-	-	-	-	-	-	-
Stage 1	*470	*463	-	*470	*447	-	-	-	-	-	-	-
Stage 2	*415	*447	-	*443	*463	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	23.3			22.9			0.5			0.4		
HCM LOS	C			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 656	-	-	227	523	320	* 656	-	-			
HCM Lane V/C Ratio	0.123	-	-	0.357	0.088	0.378	0.091	-	-			
HCM Control Delay (s)	11.3	-	-	29.4	12.5	22.9	11	-	-			
HCM Lane LOS	B	-	-	D	B	C	B	-	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.5	0.3	1.7	0.3	-	-			
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
Future Vol, veh/h	10	1186	57	173	2134	5	110	3	53	10	1	10
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1186	57	173	2134	5	110	3	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2139	0	0	1243	0	0	2435	3720	622	2979	3746	1070
Stage 1	-	-	-	-	-	-	1235	1235	-	2483	2483	-
Stage 2	-	-	-	-	-	-	1200	2485	-	496	1263	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	105	-	-	*818	-	-	*~ 79	*5	*651	*26	*5	185
Stage 1	-	-	-	-	-	-	*668	*635	-	*17	*57	-
Stage 2	-	-	-	-	-	-	*175	*57	-	*668	*635	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	105	-	-	*818	-	-	*~ 57	*4	*651	*17	*4	185
Mov Cap-2 Maneuver	-	-	-	-	-	-	*~ 102	*30	-	*14	*38	-
Stage 1	-	-	-	-	-	-	*605	*575	-	*15	*45	-
Stage 2	-	-	-	-	-	-	*128	*45	-	*553	*575	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.8			159.3			\$ 328.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	96		651	105	-	-	* 818	-	-	26		
HCM Lane V/C Ratio	1.177		0.081	0.095	-	-	0.211	-	-	0.808		
HCM Control Delay (s)	228.8		11	42.9	-	-	10.6	-	-	\$ 328.7		
HCM Lane LOS	F		B	E	-	-	B	-	-	F		
HCM 95th %tile Q(veh)	7.7		0.3	0.3	-	-	0.8	-	-	2.5		
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	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
Future Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1137	102	0	2307	60	0	0	126	0	0	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2367	0	0	-	-	0	-	-	620	-	-	1184
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	80	-	-	0	-	-	0	0	*675	0	0	155
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	-
Mov Cap-1 Maneuver	80	-	-	-	-	-	-	-	*675	-	-	155
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6	0	11.6	42.2
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	675	80	-	-	-	-	155
HCM Lane V/C Ratio	0.187	0.75	-	-	-	-	0.387
HCM Control Delay (s)	11.6	129.2	-	-	-	-	42.2
HCM Lane LOS	B	F	-	-	-	-	E
HCM 95th %tile Q(veh)	0.7	3.7	-	-	-	-	1.7

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

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	100	1	59	60	1	60	107	1536	60	60	2030	93
Future Vol, veh/h	100	1	59	60	1	60	107	1536	60	60	2030	93
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	100	1	59	60	1	60	107	1536	60	60	2030	93
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	3026	4007	1062	2713	4023	798	2123	0	0	1596	0	0
Stage 1	2197	2197	-	1780	1780	-	-	-	-	-	-	-
Stage 2	829	1810	-	933	2243	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 79	*3	*440	*197	*3	*557	*552	-	-	*700	-	-
Stage 1	*451	*429	-	*543	*526	-	-	-	-	-	-	-
Stage 2	*572	*501	-	*451	*429	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 56	*2	*440	*135	*2	*557	*552	-	-	*700	-	-
Mov Cap-2 Maneuver	*188	*168	-	*199	*156	-	-	-	-	-	-	-
Stage 1	*364	*392	-	*438	*424	-	-	-	-	-	-	-
Stage 2	*410	*404	-	*356	*392	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	33.3		25.9			0.8			0.3			
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 552	-	-	188	440	291	* 700	-	-			
HCM Lane V/C Ratio	0.194	-	-	0.537	0.134	0.416	0.086	-	-			
HCM Control Delay (s)	13.1	-	-	44.4	14.4	25.9	10.6	-	-			
HCM Lane LOS	B	-	-	E	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	2.8	0.5	2	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳				↰ ↱			↰ ↱	
Traffic Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
Future Vol, veh/h	5	1818	46	107	1470	10	74	2	42	5	1	5
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	100	-	-	50	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1818	46	107	1470	10	74	2	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1480	0	0	1864	0	0	2654	3545	932	2427	3563	740
Stage 1	-	-	-	-	-	-	1851	1851	-	1689	1689	-
Stage 2	-	-	-	-	-	-	803	1694	-	738	1874	-
Critical Hdwy	5.36	-	-	5.36	-	-	6.46	6.56	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	7.36	5.56	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.76	5.56	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	3.13	-	-	3.83	4.03	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	226	-	-	*629	-	-	*117	*10	*501	*204	*10	306
Stage 1	-	-	-	-	-	-	*514	*488	-	*64	*146	-
Stage 2	-	-	-	-	-	-	*309	*146	-	*514	*488	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	226	-	-	*629	-	-	*97	*8	*501	*157	*8	306
Mov Cap-2 Maneuver	-	-	-	-	-	-	*188	*87	-	*~ -22	*86	-
Stage 1	-	-	-	-	-	-	*503	*478	-	*63	*121	-
Stage 2	-	-	-	-	-	-	*250	*121	-	*459	*478	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			29.2					
HCM LOS							D			-		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	182	501	226	-	-	* 629	-	-	+			
HCM Lane V/C Ratio	0.418	0.084	0.022	-	-	0.17	-	-	-			
HCM Control Delay (s)	38.3	12.8	21.3	-	-	11.9	-	-	-			
HCM Lane LOS	E	B	C	-	-	B	-	-	-			
HCM 95th %tile Q(veh)	1.9	0.3	0.1	-	-	0.6	-	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↑↑↑				↑↑↑				↗			↗
Traffic Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
Future Vol, veh/h	60	1780	93	0	1577	60	0	0	116	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1780	93	0	1577	60	0	0	116	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1637	0	0	-	-	0	-	-	937	-	-	819
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	188	-	-	0	-	-	0	0	*501	0	0	272
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	188	-	-	-	-	-	-	-	*501	-	-	272
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			14.3			21.9		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	501	188	-	-	-	-	272					
HCM Lane V/C Ratio	0.232	0.319	-	-	-	-	0.221					
HCM Control Delay (s)	14.3	32.9	-	-	-	-	21.9					
HCM Lane LOS	B	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	0.9	1.3	-	-	-	-	0.8					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
Future Vol, veh/h	80	1	46	60	1	60	81	1782	60	60	1805	60
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	80	1	46	60	1	60	81	1782	60	60	1805	60
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2830	3959	933	2817	3959	921	1865	0	0	1842	0	0
Stage 1	1955	1955	-	1974	1974	-	-	-	-	-	-	-
Stage 2	875	2004	-	843	1985	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*112	*3	*501	*116	*3	*501	*629	-	-	*629	-	-
Stage 1	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Stage 2	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*82	*3	*501	*87	*3	*501	*629	-	-	*629	-	-
Mov Cap-2 Maneuver	*211	*184	-	*215	*180	-	-	-	-	-	-	-
Stage 1	*448	*442	-	*448	*425	-	-	-	-	-	-	-
Stage 2	*393	*425	-	*421	*442	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	25.3		25		0.5		0.4					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 629	-	-	211	501	299	* 629	-	-			
HCM Lane V/C Ratio	0.129	-	-	0.384	0.092	0.405	0.095	-	-			
HCM Control Delay (s)	11.6	-	-	32.3	12.9	25	11.3	-	-			
HCM Lane LOS	B	-	-	D	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.7	0.3	1.9	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

APPENDIX "B"

Comparative Analysis of Driveways "A", "B", and "C" (Full Access Driveway "A" vs. Right-in, Right-out Driveway "A")

Wednesday, October 7, 2021

Matthew Grush, P.E.
Transportation Development Section
Planning Department
City of Albuquerque
600 2nd St. NW
Albuquerque, NM 87102

Re: La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Dear Matt:

Please consider this letter of analysis a supplement to the Traffic Impact Study for the La Mirada Development at the northwest corner of La Mirada Pl. / Wyoming Blvd. This analysis will address your comments as follows:

- 1) Revise analysis of Montgomery Blvd. / Driveway "A" to include the impact resulting from the platooning effect of the existing signalized intersection of Montgomery Blvd. / Pennsylvania located approximately 2,000 feet west of Driveway "A".
- 2) Revise analysis of Montgomery Blvd. / Driveway "B" to include the impact resulting from the platooning effect of the existing signalized intersection of Montgomery Blvd. / Pennsylvania located approximately 2,000 feet west of Driveway "B".
- 3) Revise the analysis of Driveway "A" as a right-in, right-out only driveway. Reroute the left turns into Driveway "A" and the left turns out of Driveway "A" over to Driveway "C" and determine the impact of doing so.
- 4) Use the Mid-Region Council of Governments Regional Model (2040 Data Set) to estimate the annual growth rate for this area of Albuquerque.

As you will see, the results of this analysis demonstrate that 1) the existing signal operation at Montgomery / Pennsylvania dramatically improve the calculated delays associated with the left turn movements at Driveway "A"; 2) the calculated queue lengths at Driveway "B" are also reduced significantly as a result of the impact of the operation of the signal at Pennsylvania; 3) restricting Driveway "A" to a right-in, right-out driveway will have a significant adverse impact on the operation of the signalized intersection of Montgomery Blvd. / Wyoming Blvd. and Driveway "C" / Wyoming Blvd.; and 4) the Mid-Region Council of Governments' Regional Transportation Model would support an annual growth rate of 0.5%. Restricting Driveway "A" access to right-in, right-out will divert left turn traffic at the driveway to Driveway "C" and then through Montgomery / Wyoming, thus having a significant adverse impact on both Driveway "A" and Montgomery / Wyoming. It is not

Re: La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

possible to mitigate the impact on those two intersections due to right-of-way constraints and geometric constraints. Mitigation of failure of the eastbound left turn movement at Driveway "C" onto Wyoming Blvd. could be considered by constructing dual eastbound left turn lanes, but that is not feasible or safe at an unsignalized intersection (driveway). Failure of the northbound left turn movement on Wyoming Blvd. at Montgomery Blvd. could possibly be mitigated by constructing triple northbound left turn lanes, but there is insufficient existing pavement width to reconfigure the laneage to add a third northbound left turn lane on Wyoming and the three receiving lanes on Montgomery are too narrow to receive triple left turns.

The intersection of Montgomery Blvd. / Pennsylvania St. was counted in September 2017 in association with another project in the area. The 2017 traffic count data was correlated with Mid-Region Council of Governments' Transportation Analysis and Querying Application (TAQA) and the information correlated pretty closely. The 2017 turning movements volumes count was utilized as a basis for the analysis in this study and grown at an annual rate of 0.5% consistent with the rest of the Traffic Impact Study to the year 2025 (Implementation Year) and again to the year 2035 (Horizon Year). Trips generated by full development of the La Mirada Development were distributed through the intersection of Montgomery Blvd. / Pennsylvania St. and added to derive the 2025 and 2035 BUILD volumes for the new analysis. The focus of the analysis was the impact on Driveway "A" and Driveway "B" in consideration of the platooning effect of eastbound traffic flows on Montgomery Blvd. created as an effect of the signal operation at Pennsylvania St. The platooning effect on eastbound Montgomery Blvd. traffic flows will create gaps in the traffic that will make it easier to execute both the northbound left turn movement at Driveway "A" and the westbound left turn movement into Driveway "A". It will also make the right turn movements out of Driveway "A" and Driveway "B" somewhat easier.

A summary of the revised analysis of Driveway "A" and Driveway "B" to consider the effects of platooning created in the eastbound flow of traffic on Montgomery Blvd. by the existing traffic signal at Montgomery Blvd. / Pennsylvania St. is in the following tables:

Driveway "A" (2025)	TIS (AM / PM)	Supplement (AM / PM)
Northbound Left Turn	F – 879 / F – 722	F – 191 / E – 35
Westbound Left Turn	D – 29.7 / F – 64.0	B – 10.4 / B – 11.6
Northbound Right Turn	C – 16.0 / C – 22.8	B – 10.8 / B – 12.5

Driveway "A" (2035)	TIS (AM / PM)	Supplement (AM / PM)
Northbound Left Turn	F – 999+ / F – 976	F – 228.8 / F – 38.3
Westbound Left Turn	D – 32.9 / F – 79.1	B – 10.6 / B – 11.9
Northbound Right Turn	C – 16.5 / C – 24.2	B – 11.0 / B – 12.8

Re: La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

Driveway "B" (2025)	TIS (AM / PM) - Queue	Supplement (AM / PM)
Northbound Right Turn	1.4 / 2.4	0.7 / 0.9

Driveway "B" (2035)	TIS (AM / PM) - Queue	Supplement (AM / PM)
Northbound Right Turn	1.5 / 2.6	1.2 / 0.5

The platooning effect created by the existing traffic signal at Pennsylvania causes a dramatic reduction in calculated delays at Driveway "A", but does not eliminate all of the levels-of-service F, especially for the northbound left turn movement. However, it should be considered that many retail commercial driveways along Principal Arterial Roadways in Albuquerque operate at LOS F during either the AM Peak Hour and / or the PM Peak Hour periods.

Also, platooning effect created by the existing traffic signal at Pennsylvania causes a significant reduction in the 95th percentile queue length for the northbound right turn movement at Driveway "B". The maximum queue length is reduced from 2.6 vehicles (round up to 3) down to 1.2 vehicles (round to 2). Therefore, the design queuing for the northbound right turn movement should be 50 feet.

The next part is this analysis is to analyze Driveway "A" as a right-in, right-out only driveway and divert the left turns at Driveway "A" over to Driveway "C" on Wyoming Blvd. just south of Montgomery Blvd. Driveway "C" is already congested (at LOS E) in the original Traffic Impact Study as is the signalized intersection of Montgomery Blvd. /

Wyoming Blvd. Prohibiting left turn movements into and out of Driveway "A" will cause additional failures at Driveway "C" and the signalized intersection of Montgomery Blvd. / Wyoming Blvd. The following table summarizes the comparative results for Driveway "A", Driveway "C", and the signalized intersection of Montgomery Blvd. / Wyoming Blvd. considering Driveway "A" as a full access driveway versus restricting Driveway "A" to right-in, right-out only.

Summary of Results - La Mirada Development

Comparative Analysis Incorporating Pennsylvania St.
 Driveway "A" - Full Access vs. Right-in, Right-out

Conditions	Montgomery / Wyoming				
	Driveway "A"	Driveway "B"	Driveway "C"	Overall LOS / Delay	NB LT LOS / Delay
2025 AM (Driveway "A" - Full Access)	F - 191	B - 11.6 (0.7)	E - 38.8	E - 65.7	F - 85.7
2025 AM (Driveway "A" - RI / RO Access)	B - 10.8**	*****	F - 317.6	E - 69.1	F - 227
2035 AM (Driveway "A" - Full Access)	F - 228.8*	B - 11.6 (0.7)	E - 44.4	F - 88.6	F - 165.6
2035 AM (Driveway "A" - RI / RO Access)	B = 12.5**	*****	F - 608.8	F - 95.5	F - 324.9
2025 PM (Driveway "A" - Full Access)	E - 35.0*	B - 13.8 (0.8)	D - 29.4	E - 59.4	E - 74.3
2025 PM (Driveway "A" - RI / RO Access)	B - 12.5	*****	F - 74.4	E - 63.9	F - 133.1
2035 PM (Driveway "A" - Full Access)	E - 38.3*	B - 14.3 (0.9)	D - 32.3	E - 65.3	F - 80.5
2035 PM (Driveway "A" - RI / RO Access)	B - 12.8	*****	F - 91.5	E - 70.1	F - 146.2

* - LOS - Delay associated with NB LT movement

** LOS - Delay associated with NB RT movement

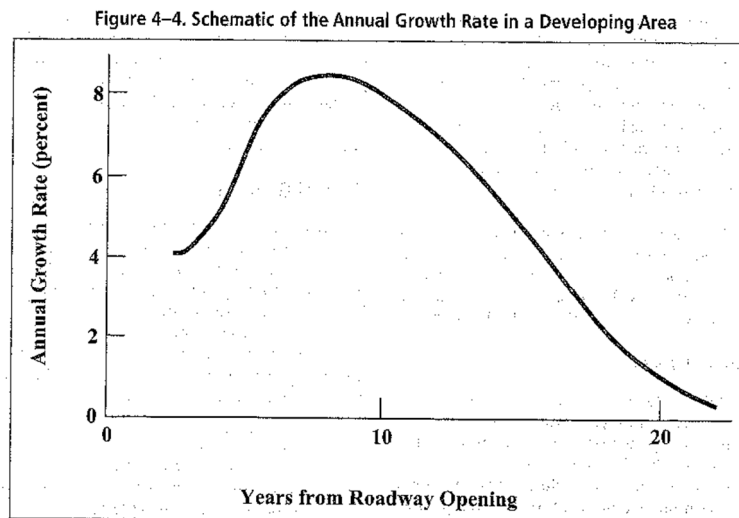
Driveway "B" - LOS - delay (95th Percentile Queue - vehicles)

Re: La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

In summary, there is a substantial adverse impact realized at Driveway "C" and at the signalized intersection of Montgomery Blvd. / Wyoming Blvd. by restricting Driveway "A" to right-in, right-out only. This supplemental analysis recommends that Driveway "A" be maintained as a full access unsignalized driveway as it has been for many years to avoid the adverse impacts to the intersection of Montgomery Blvd. / Wyoming Blvd. and to Driveway "C" on Wyoming Blvd.

Finally, the Mid-Region Council of Governments' Regional Transportation Model was accessed to determine the annual growth rate for the intersection of Montgomery Blvd. / Wyoming Blvd. that would be supported by that method. The Regional Transportation Model is a valid method to determine background traffic growth rates on roadways, but it is my opinion that it is not as accurate as the historic method that was utilized in the La Mirada Traffic Impact Study which resulted in no growth.

Additionally, it should be remembered that the annual growth rate on a roadway in a major community typically grows significantly for a period of time but stabilizes at near zero growth rate once the area around the roadway fully develops. The following graph copied from ITE's Transportation Impact Analyses for Site Development (An ITE Recommended Practice) demonstrates the concept:



Note: Axis values are provided for example only and do not reflect "true" data.

SOURCE: Stover and Koepke, 2002.

The graph is a result of research by Stover and Koepke (2002). Even though the preceding graph does not reflect "true" data, it does demonstrate a typical trend of growth on a roadway in the developing area. Since this segment of Montgomery Blvd. and Wyoming Blvd. is located in a virtually fully developed area of town that has been

Page 5 of 5

Matthew Grush, P.E.

Wednesday, October 7, 2021

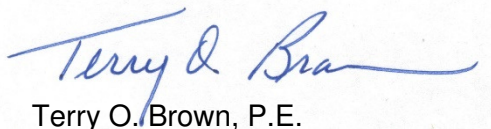
Re: La Mirada Development (La Mirada Pl. / Wyoming Blvd.)

developing for the last 30 or 40 years, it seems reasonable to conclude that the appropriate growth rate for Montgomery and Wyoming are zero or near zero.

In summary, the recommendations of this supplement to the La Mirada Development Traffic Impact Study supports the full access at Driveway "A" and finds that there are substantial adverse impacts to Driveway "C" and the signalized intersection of Montgomery Blvd. / Wyoming Blvd. if Driveway "A" access is restricted to right-in, right-out only. This supplemental analysis also supports the low (near zero) annual growth rate for the study area of the La Mirada Development project.

Please call me if you have questions.

Best Regards,

A handwritten signature in blue ink that reads "Terry O. Brown". The signature is fluid and cursive, with the first and last names being more prominent.

Terry O. Brown, P.E.

attachments as noted

cc: Ronald R. Bohannon, Tierra West, LLC

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	↖	→	↗	↖	↖	↑	↗	↓
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖
Traffic Volume (vph)	196	771	309	1353	355	1003	273	1622
Future Volume (vph)	196	771	309	1353	355	1003	273	1622
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	10.6	35.6	16.2	41.2	12.0	42.8	15.4	46.2
Total Split (%)	9.6%	32.4%	14.7%	37.5%	10.9%	38.9%	14.0%	42.0%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max
Act Effct Green (s)	7.1	30.7	12.1	35.7	8.5	38.0	11.2	40.7
Actuated g/C Ratio	0.06	0.28	0.11	0.32	0.08	0.35	0.10	0.37
v/c Ratio	0.89	0.65	0.82	1.03	1.35	0.69	0.79	1.04
Control Delay	75.7	35.6	66.5	66.4	222.0	32.5	65.1	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.7	35.6	66.5	66.4	222.0	32.5	65.1	67.2
LOS	E	D	E	E	F	C	E	E
Approach Delay		42.8		66.4		76.4		67.0
Approach LOS		D		E		E		E
Intersection Summary								
Cycle Length: 110								
Actuated Cycle Length: 110								
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green								
Natural Cycle: 130								
Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 1.35								
Intersection Signal Delay: 65.0								
Intersection Capacity Utilization 102.9%								
ICU Level of Service G								
Analysis Period (min) 15								

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↖ Ø1	↖ Ø2 (R)	↖ Ø3	→ Ø4
15.4 s	42.8 s	16.2 s	35.6 s
↖ Ø5	↖ Ø6 (R)	↖ Ø7	↖ Ø8
12 s	46.2 s	10.6 s	41.2 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	  		  	  	
Traffic Volume (veh/h)	196	771	129	309	1353	318	355	1003	177	273	1622	302
Future Volume (veh/h)	196	771	129	309	1353	318	355	1003	177	273	1622	302
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	196	771	129	309	1353	318	355	1003	177	273	1622	302
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	1234	205	367	1330	312	265	1518	267	332	1589	294
Arrive On Green	0.02	0.09	0.09	0.11	0.32	0.32	0.08	0.35	0.35	0.10	0.37	0.37
Sat Flow, veh/h	3428	4376	726	3428	4098	962	3428	4332	763	3428	4295	795
Grp Volume(v), veh/h	196	594	306	309	1115	556	355	781	399	273	1273	651
Grp Sat Flow(s),veh/h/ln	1714	1689	1725	1714	1689	1682	1714	1689	1718	1714	1689	1712
Q Serve(g_s), s	6.3	18.6	18.8	9.7	35.7	35.7	8.5	21.5	21.6	8.6	40.7	40.7
Cycle Q Clear(g_c), s	6.3	18.6	18.8	9.7	35.7	35.7	8.5	21.5	21.6	8.6	40.7	40.7
Prop In Lane	1.00		0.42	1.00		0.57	1.00		0.44	1.00		0.46
Lane Grp Cap(c), veh/h	221	952	486	367	1096	546	265	1184	602	332	1250	634
V/C Ratio(X)	0.89	0.62	0.63	0.84	1.02	1.02	1.34	0.66	0.66	0.82	1.02	1.03
Avail Cap(c_a), veh/h	221	952	486	396	1096	546	265	1184	602	371	1250	634
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	44.3	44.4	48.2	37.2	37.2	50.7	30.2	30.2	48.7	34.6	34.7
Incr Delay (d2), s/veh	31.1	3.1	6.1	13.1	31.5	43.4	176.3	2.9	5.6	11.3	30.3	42.8
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	6.7	13.7	14.5	8.3	26.2	28.3	16.7	13.8	14.6	7.4	28.9	32.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.5	47.3	50.4	61.3	68.6	80.5	227.0	33.1	35.9	60.1	65.0	77.5
LnGrp LOS	F	D	D	E	F	F	F	C	D	E	F	F
Approach Vol, veh/h		1096			1980			1535			2197	
Approach Delay, s/veh		54.8			70.8			78.7			68.1	
Approach LOS		D			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	44.1	15.3	36.5	12.0	46.2	10.6	41.2				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	11.9	37.3	12.7	30.1	8.5	40.7	7.1	35.7				
Max Q Clear Time (g_c+I1), s	10.6	23.6	11.7	20.8	10.5	42.7	8.3	37.7				
Green Ext Time (p_c), s	0.1	8.0	0.1	4.8	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay												
HCM 6th LOS												

Timings

1: Wyoming Blvd. & Montgomery Blvd.

10/07/2021

	↖	→	↗	↖	↖	↑	↗	↓
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖	↖↖	↖↖↖
Traffic Volume (vph)	285	1268	320	905	339	1274	326	1314
Future Volume (vph)	285	1268	320	905	339	1274	326	1314
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max
Act Effct Green (s)	12.6	37.5	10.9	35.8	10.9	40.5	13.1	42.7
Actuated g/C Ratio	0.10	0.31	0.09	0.30	0.09	0.34	0.11	0.36
v/c Ratio	0.80	0.98	1.04	0.81	1.10	0.90	0.88	0.87
Control Delay	46.9	61.6	114.6	41.8	135.9	31.7	76.9	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	61.6	114.6	41.8	135.9	31.7	76.9	41.7
LOS	D	E	F	D	F	C	E	D
Approach Delay		59.3		57.0		50.9		47.9
Approach LOS		E		E		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 53.6

Intersection LOS: D

Intersection Capacity Utilization 95.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	46.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd. & Montgomery Blvd.

10/07/2021

	↖	→	↗	↖	↖	↑	↗	↓	↖			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖		↖↖	↖↖↖	
Traffic Volume (veh/h)	285	1268	254	320	905	306	339	1274	230	326	1314	226
Future Volume (veh/h)	285	1268	254	320	905	306	339	1274	230	326	1314	226
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	1268	254	320	905	306	339	1274	230	326	1314	226
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	342	1323	265	311	1136	383	311	1451	262	378	1548	266
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.23	0.23	0.11	0.36	0.36
Sat Flow, veh/h	3428	4232	848	3428	3744	1262	3428	4314	779	3428	4350	748
Grp Volume(v), veh/h	285	1012	510	320	816	395	339	997	507	326	1020	520
Grp Sat Flow(s),veh/h/ln	1714	1689	1703	1714	1689	1628	1714	1689	1715	1714	1689	1721
Q Serve(g_s), s	9.9	35.8	35.8	10.9	26.6	26.8	10.9	34.2	34.2	11.2	33.5	33.5
Cycle Q Clear(g_c), s	9.9	35.8	35.8	10.9	26.6	26.8	10.9	34.2	34.2	11.2	33.5	33.5
Prop In Lane	1.00		0.50	1.00		0.77	1.00		0.45	1.00		0.43
Lane Grp Cap(c), veh/h	342	1055	532	311	1025	494	311	1136	577	378	1202	612
V/C Ratio(X)	0.83	0.96	0.96	1.03	0.80	0.80	1.09	0.88	0.88	0.86	0.85	0.85
Avail Cap(c_a), veh/h	386	1055	532	311	1025	494	311	1136	577	386	1202	612
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	53.0	53.0	54.5	38.4	38.4	56.3	44.1	44.1	52.5	35.7	35.7
Incr Delay (d2), s/veh	11.7	19.4	30.0	58.3	6.4	12.7	76.8	9.7	17.1	16.8	7.6	13.8
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	8.7	26.1	28.2	11.6	17.2	17.8	13.2	22.8	24.5	9.5	20.8	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	72.4	83.1	112.8	44.8	51.1	133.1	53.8	61.2	69.2	43.2	49.4
LnGrp LOS	E	E	F	F	D	D	F	D	E	E	D	D
Approach Vol, veh/h		1807			1531			1843			1866	
Approach Delay, s/veh		74.9			60.7			70.4			49.5	
Approach LOS		E			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	45.9	14.4	43.0	14.4	48.2	15.5	41.9				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.2	36.2	12.9	37.8	12.9	35.5	11.9	28.8				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	5.8	0.1	4.3				

Intersection Summary

HCM 6th Ctrl Delay

HCM 6th LOS

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰↰	↰↰↰	↰↰	↰↰↰	↰↰	↰↰↰	↰↰	↰↰↰
Traffic Volume (vph)	246	848	336	1494	416	1088	287	1710
Future Volume (vph)	246	848	336	1494	416	1088	287	1710
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	10.6	35.6	16.2	41.2	12.0	42.8	15.4	46.2
Total Split (%)	9.6%	32.4%	14.7%	37.5%	10.9%	38.9%	14.0%	42.0%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

↰ Ø1	↰ Ø2 (R)	↰ Ø3	→ Ø4
15.4 s	42.8 s	16.2 s	35.6 s
↰ Ø5	↰ Ø6 (R)	↰ Ø7	→ Ø8
12 s	46.2 s	10.6 s	41.2 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↰	↰↰↰		↰↰	↰↰↰		↰↰	↰↰↰		↰↰	↰↰↰	
Traffic Volume (veh/h)	246	848	180	336	1494	334	416	1088	230	287	1710	395
Future Volume (veh/h)	246	848	180	336	1494	334	416	1088	230	287	1710	395
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	246	848	180	336	1494	334	416	1088	230	287	1710	395
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	1151	243	392	1345	299	265	1452	307	345	1526	347
Arrive On Green	0.02	0.09	0.09	0.11	0.32	0.32	0.08	0.35	0.35	0.10	0.37	0.37
Sat Flow, veh/h	3428	4190	884	3428	4144	922	3428	4188	885	3428	4125	939
Grp Volume(v), veh/h	246	683	345	336	1216	612	416	877	441	287	1395	710
Grp Sat Flow(s),veh/h/ln	1714	1689	1696	1714	1689	1690	1714	1689	1696	1714	1689	1687
Q Serve(g_s), s	7.1	21.7	21.8	10.6	35.7	35.7	8.5	25.2	25.2	9.0	40.7	40.7
Cycle Q Clear(g_c), s	7.1	21.7	21.8	10.6	35.7	35.7	8.5	25.2	25.2	9.0	40.7	40.7
Prop In Lane	1.00		0.52	1.00		0.55	1.00		0.52	1.00		0.56
Lane Grp Cap(c), veh/h	221	927	466	392	1096	548	265	1170	588	345	1250	624
V/C Ratio(X)	1.11	0.74	0.74	0.86	1.11	1.12	1.57	0.75	0.75	0.83	1.12	1.14
Avail Cap(c_a), veh/h	221	927	466	396	1096	548	265	1170	588	371	1250	624
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	46.1	46.2	47.8	37.2	37.2	50.7	31.7	31.7	48.5	34.6	34.6
Incr Delay (d2), s/veh	93.7	5.2	10.2	15.8	62.4	74.3	274.2	4.4	8.5	12.8	63.9	80.1
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	10.4	15.7	16.7	9.0	33.7	36.1	22.4	15.9	16.8	7.8	38.1	42.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	147.5	51.3	56.4	63.7	99.6	111.5	324.9	36.1	40.3	61.4	98.5	114.7
LnGrp LOS	F	D	E	E	F	F	F	D	D	E	F	F
Approach Vol, veh/h	1274			2164			1734				2392	
Approach Delay, s/veh	71.3			97.4			106.5				98.9	
Approach LOS	E			F			F				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	43.6	16.1	35.7	12.0	46.2	10.6	41.2				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	11.9	37.3	12.7	30.1	8.5	40.7	7.1	35.7				
Max Q Clear Time (g_c+I1), s	11.0	27.2	12.6	23.8	10.5	42.7	9.1	37.7				
Green Ext Time (p_c), s	0.0	6.9	0.0	3.9	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 95.5
HCM 6th LOS F

Timings

1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.

10/07/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔
Traffic Volume (vph)	298	1329	332	954	351	1335	342	1374
Future Volume (vph)	298	1329	332	954	351	1335	342	1374
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	48.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary

1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.

10/07/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔	
Traffic Volume (veh/h)	298	1329	265	332	954	321	351	1335	239	342	1374	238
Future Volume (veh/h)	298	1329	265	332	954	321	351	1335	239	342	1374	238
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	298	1329	265	332	954	321	351	1335	239	342	1374	238
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	355	1324	264	311	1123	377	311	1444	258	386	1546	268
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.22	0.22	0.11	0.36	0.36
Sat Flow, veh/h	3428	4236	844	3428	3747	1259	3428	4320	773	3428	4345	752
Grp Volume(v), veh/h	298	1059	535	332	860	415	351	1043	531	342	1068	544
Grp Sat Flow(s),veh/h/ln	1714	1689	1704	1714	1689	1629	1714	1689	1716	1714	1689	1720
Q Serve(g_s), s	10.4	37.5	37.5	10.9	28.7	28.8	10.9	36.3	36.3	11.8	35.7	35.8
Cycle Q Clear(g_c), s	10.4	37.5	37.5	10.9	28.7	28.8	10.9	36.3	36.3	11.8	35.7	35.8
Prop In Lane	1.00		0.50	1.00		0.77	1.00		0.45	1.00		0.44
Lane Grp Cap(c), veh/h	355	1055	532	311	1012	488	311	1129	574	386	1202	612
V/C Ratio(X)	0.84	1.00	1.00	1.07	0.85	0.85	1.13	0.92	0.93	0.89	0.89	0.89
Avail Cap(c_a), veh/h	386	1055	532	311	1012	488	311	1129	574	386	1202	612
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	53.8	53.8	54.5	39.5	39.5	56.3	45.1	45.1	52.5	36.4	36.4
Incr Delay (d2), s/veh	13.1	28.6	40.1	69.6	8.8	16.8	89.8	13.9	23.0	20.6	10.0	17.5
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	9.1	28.7	31.0	12.4	18.6	19.4	14.1	24.6	26.7	10.1	22.3	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	82.4	93.9	124.2	48.3	56.3	146.2	59.0	68.1	73.1	46.4	54.9
LnGrp LOS	E	F	F	F	D	E	F	E	E	E	D	D
Approach Vol, veh/h	1892				1607				1925			
Approach Delay, s/veh	83.7				66.0				77.4			
Approach LOS	F				E				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	45.6	14.4	43.0	14.4	48.2	15.9	41.5				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.8	38.3	12.9	39.5	12.9	37.8	12.4	30.8				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	4.2	0.1	3.2				

Intersection Summary

HCM 6th Ctrl Delay

70.1

HCM 6th LOS

E

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	10	1132	57	0	2059	5	0	0	53	10	1	10
Future Vol, veh/h	10	1132	57	0	2059	5	0	0	53	10	1	10
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	100	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1132	57	0	2059	5	0	0	53	10	1	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2064	0	0	-	-	0	-	-	595	2535	3271	1032
Stage 1	-	-	-	-	-	-	-	-	-	2062	2062	-
Stage 2	-	-	-	-	-	-	-	-	-	473	1209	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	115	-	-	0	-	-	0	0	*675	*58	13	196
Stage 1	-	-	-	0	-	-	0	0	-	*34	95	-
Stage 2	-	-	-	0	-	-	0	0	-	*693	635	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	1	1	-
Mov Cap-1 Maneuver	115	-	-	-	-	-	-	-	*675	*50	11	196
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	*28	77	-
Stage 1	-	-	-	-	-	-	-	-	-	*31	95	-
Stage 2	-	-	-	-	-	-	-	-	-	*583	580	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	10.8	121.5
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	675	115	-	-	-	-	50
HCM Lane V/C Ratio	0.079	0.087	-	-	-	-	0.42
HCM Control Delay (s)	10.8	39.3	-	-	-	-	121.5
HCM Lane LOS	B	E	-	-	-	-	F
HCM 95th %tile Q(veh)	0.3	0.3	-	-	-	-	1.5

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↰ ↑↑↑					↰			↰
Traffic Vol, veh/h	60	1083	52	0	2206	60	0	0	76	0	0	60
Future Vol, veh/h	60	1083	52	0	2206	60	0	0	76	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1083	52	0	2206	60	0	0	76	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2266	0	0	-	-	0	-	-	568	-	-	1133
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	90	-	-	0	-	-	0	0	*675	0	0	168
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	90	-	-	-	-	-	-	-	*675	-	-	168
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	5.2			0			11			37.9		
HCM LOS							B			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	675	90	-	-	-	-	168					
HCM Lane V/C Ratio	0.113	0.667	-	-	-	-	0.357					
HCM Control Delay (s)	11	102.8	-	-	-	-	37.9					
HCM Lane LOS	B	F	-	-	-	-	E					
HCM 95th %tile Q(veh)	0.4	3.2	-	-	-	-	1.5					
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	14.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	179	1	68	60	1	60	78	1483	60	60	1937	266
Future Vol, veh/h	179	1	68	60	1	60	78	1483	60	60	1937	266
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	179	1	68	60	1	60	78	1483	60	60	1937	266
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2940	3889	1102	2564	3992	772	2203	0	0	1543	0	0
Stage 1	2190	2190	-	1669	1669	-	-	-	-	-	-	-
Stage 2	750	1699	-	895	2323	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 72	*4	*463	*198	3	292	*582	-	-	210	-	-
Stage 1	*475	*452	-	*66	150	-	-	-	-	-	-	-
Stage 2	*334	*145	-	*475	371	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	-	-	-	-	-	-
Mov Cap-1 Maneuver	*~ 40	*3	*463	*117	2	292	*582	-	-	210	-	-
Mov Cap-2 Maneuver	*~ 123	*51	-	*~ -45	71	-	-	-	-	-	-	-
Stage 1	*412	*322	-	*~ 57	130	-	-	-	-	-	-	-
Stage 2	*228	*126	-	*289	265	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	234.4					0.6			0.8			
HCM LOS	F											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 582	-	-	122	463	+	210	-	-			
HCM Lane V/C Ratio	0.134	-	-	1.475	0.147	-	0.286	-	-			
HCM Control Delay (s)	12.1	-	-	\$ 317.6	14.1	-	28.9	-	-			
HCM Lane LOS	B	-	-	F	B	-	D	-	-			
HCM 95th %tile Q(veh)	0.5	-	-	12.6	0.5	-	1.1	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

10/07/2021

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	5	1733	46	0	1416	10	0	0	42	5	1	5
Future Vol, veh/h	5	1733	46	0	1416	10	0	0	42	5	1	5
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	100	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1733	46	0	1416	10	0	0	42	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1426	0	0	-	-	0	-	-	890	2124	3210	713
Stage 1	-	-	-	-	-	-	-	-	-	1421	1421	-
Stage 2	-	-	-	-	-	-	-	-	-	703	1789	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	240	-	-	0	-	-	0	0	*523	*348	*23	319
Stage 1	-	-	-	0	-	-	0	0	-	*100	*199	-
Stage 2	-	-	-	0	-	-	0	0	-	*536	*509	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	1	1	-
Mov Cap-1 Maneuver	240	-	-	-	-	-	-	-	*523	*315	*23	319
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	*967	*138	-
Stage 1	-	-	-	-	-	-	-	-	-	*98	*199	-
Stage 2	-	-	-	-	-	-	-	-	-	*483	*499	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	12.5	14.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	523	240	-	-	-	-	392
HCM Lane V/C Ratio	0.08	0.021	-	-	-	-	0.028
HCM Control Delay (s)	12.5	20.3	-	-	-	-	14.4
HCM Lane LOS	B	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	-	-	0.1

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
5: Driveway "B" & Montgomery Blvd.

10/07/2021

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↰ ↑↑↑					↰			↰
Traffic Vol, veh/h	60	1695	43	0	1507	60	0	0	66	0	0	60
Future Vol, veh/h	60	1695	43	0	1507	60	0	0	66	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1695	43	0	1507	60	0	0	66	0	0	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1567	0	0	-	-	0	-	-	869	-	-	784
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	204	-	-	0	-	-	0	0	*523	0	0	287
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	204	-	-	-	-	-	-	-	*523	-	-	287
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	12.9	20.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	523	204	-	-	-	-	287
HCM Lane V/C Ratio	0.126	0.294	-	-	-	-	0.209
HCM Control Delay (s)	12.9	29.8	-	-	-	-	20.8
HCM Lane LOS	B	D	-	-	-	-	C
HCM 95th %tile Q(veh)	0.4	1.2	-	-	-	-	0.8

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

10/07/2021

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	172	1	52	60	1	60	105	1710	60	60	1722	167
Future Vol, veh/h	172	1	52	60	1	60	105	1710	60	60	1722	167
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	172	1	52	60	1	60	105	1710	60	60	1722	167
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2821	3906	945	2759	3959	885	1889	0	0	1770	0	0
Stage 1	1926	1926	-	1950	1950	-	-	-	-	-	-	-
Stage 2	895	1980	-	809	2009	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 97	*4	*523	*114	4	*523	*656	-	-	*656	-	-
Stage 1	*536	*509	-	*509	493	-	-	-	-	-	-	-
Stage 2	*536	*468	-	*536	445	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 70	*3	*523	*84	3	*523	*656	-	-	*656	-	-
Mov Cap-2 Maneuver	*207	*178	-	*209	160	-	-	-	-	-	-	-
Stage 1	*450	*463	-	*428	414	-	-	-	-	-	-	-
Stage 2	*398	*393	-	*438	404	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	60.1		25.2		0.6		0.3					
HCM LOS	F		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 656	-	-	207	523	297	* 656	-	-			
HCM Lane V/C Ratio	0.16	-	-	0.836	0.099	0.407	0.091	-	-			
HCM Control Delay (s)	11.5	-	-	74.4	12.6	25.2	11	-	-			
HCM Lane LOS	B	-	-	F	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.6	-	-	6.2	0.3	1.9	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲			↰			↲ ↳		
Traffic Vol, veh/h	10	1186	57	0	2134	5	0	0	53	10	1	10
Future Vol, veh/h	10	1186	57	0	2134	5	0	0	53	10	1	10
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	100	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	1186	57	0	2134	5	0	0	53	10	1	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2139	0	0	-	-	0	-	-	622	2631	3400	1070
Stage 1	-	-	-	-	-	-	-	-	-	2137	2137	-
Stage 2	-	-	-	-	-	-	-	-	-	494	1263	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	105	-	-	0	-	-	0	0	*651	*53	*10	185
Stage 1	-	-	-	0	-	-	0	0	-	*30	*87	-
Stage 2	-	-	-	0	-	-	0	0	-	*668	*635	-
Platoon blocked, %		-	-		-	-			1	1	1	
Mov Cap-1 Maneuver	105	-	-	-	-	-	-	-	*651	*45	*9	185
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	*24	*71	-
Stage 1	-	-	-	-	-	-	-	-	-	*27	*87	-
Stage 2	-	-	-	-	-	-	-	-	-	*556	*575	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0			11			151.5		
HCM LOS							B			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	651	105	-	-	-	-	43					
HCM Lane V/C Ratio	0.081	0.095	-	-	-	-	0.488					
HCM Control Delay (s)	11	42.9	-	-	-	-	151.5					
HCM Lane LOS	B	E	-	-	-	-	F					
HCM 95th %tile Q(veh)	0.3	0.3	-	-	-	-	1.8					
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	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↑↑↑ ↱			↰			↱		
Traffic Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
Future Vol, veh/h	60	1137	102	0	2307	60	0	0	126	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1137	102	0	2307	60	0	0	126	0	0	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2367	0	0	-	-	0	-	-	620	-	-	1184
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	80	-	-	0	-	-	0	0	*675	0	0	155
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	-
Mov Cap-1 Maneuver	80	-	-	-	-	-	-	-	*675	-	-	155
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6	0	11.6	42.2
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	675	80	-	-	-	-	155
HCM Lane V/C Ratio	0.187	0.75	-	-	-	-	0.387
HCM Control Delay (s)	11.6	129.2	-	-	-	-	42.2
HCM Lane LOS	B	F	-	-	-	-	E
HCM 95th %tile Q(veh)	0.7	3.7	-	-	-	-	1.7

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	28.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	200	1	59	60	1	60	107	1536	60	60	2030	200
Future Vol, veh/h	200	1	59	60	1	60	107	1536	60	60	2030	200
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	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	200	1	59	60	1	60	107	1536	60	60	2030	200
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	3079	4060	1115	2713	4130	798	2230	0	0	1596	0	0
Stage 1	2250	2250	-	1780	1780	-	-	-	-	-	-	-
Stage 2	829	1810	-	933	2350	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 58	*2	*440	*163	2	281	*552	-	-	198	-	-
Stage 1	*451	*429	-	*~ 55	132	-	-	-	-	-	-	-
Stage 2	*298	*127	-	*451	418	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*~ 29	*1	*440	*91	1	281	*552	-	-	198	-	-
Mov Cap-2 Maneuver	*~ 96	*34	-	*~ -37	62	-	-	-	-	-	-	-
Stage 1	*364	*299	-	*~ 44	106	-	-	-	-	-	-	-
Stage 2	*~ 187	*102	-	*271	291	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s\$	473.9						0.8			0.8		
HCM LOS	F		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 552	-	-	95	440	+	198	-	-			
HCM Lane V/C Ratio	0.194	-	-	2.116	0.134	-	0.303	-	-			
HCM Control Delay (s)	13.1	-	-	\$ 608.8	14.4	-	30.9	-	-			
HCM Lane LOS	B	-	-	F	B	-	D	-	-			
HCM 95th %tile Q(veh)	0.7	-	-	17.5	0.5	-	1.2	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC
4: Driveway "A"/"A" & Montgomery Blvd.

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲			↰			↲ ↳		
Traffic Vol, veh/h	5	1818	46	0	1486	10	0	0	42	5	1	5
Future Vol, veh/h	5	1818	46	0	1486	10	0	0	42	5	1	5
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	100	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1818	46	0	1486	10	0	0	42	5	1	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1496	0	0	-	-	0	-	-	932	2228	3365	748
Stage 1	-	-	-	-	-	-	-	-	-	1491	1491	-
Stage 2	-	-	-	-	-	-	-	-	-	737	1874	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	6.46	6.56	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.36	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.76	5.56	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	3.83	4.03	3.93
Pot Cap-1 Maneuver	222	-	-	0	-	-	0	0	*501	*329	*17	303
Stage 1	-	-	-	0	-	-	0	0	-	*89	*184	-
Stage 2	-	-	-	0	-	-	0	0	-	*514	*488	-
Platoon blocked, %		-	-		-	-			1	1	1	
Mov Cap-1 Maneuver	222	-	-	-	-	-	-	-	*501	*296	*17	303
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	*965	*127	-
Stage 1	-	-	-	-	-	-	-	-	-	*87	*184	-
Stage 2	-	-	-	-	-	-	-	-	-	*460	*477	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			12.8			15		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	501	222	-	-	-	-	372					
HCM Lane V/C Ratio	0.084	0.023	-	-	-	-	0.03					
HCM Control Delay (s)	12.8	21.6	-	-	-	-	15					
HCM Lane LOS	B	C	-	-	-	-	C					
HCM 95th %tile Q(veh)	0.3	0.1	-	-	-	-	0.1					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↑↑↑			↰			↰		
Traffic Vol, veh/h	60	1780	43	0	1577	60	0	0	66	0	0	60
Future Vol, veh/h	60	1780	43	0	1577	60	0	0	66	0	0	60
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	0	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	1780	43	0	1577	60	0	0	66	0	0	60
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1637	0	0	-	-	0	-	-	912	-	-	819
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	-	-	-	-	-	7.16	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	-	-	-	-	-	3.93	-	-	3.93
Pot Cap-1 Maneuver	188	-	-	0	-	-	0	0	*501	0	0	272
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			
Mov Cap-1 Maneuver	188	-	-	-	-	-	-	-	*501	-	-	272
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0			13.3			21.9		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1					
Capacity (veh/h)	501	188	-	-	-	-	272					
HCM Lane V/C Ratio	0.132	0.319	-	-	-	-	0.221					
HCM Control Delay (s)	13.3	32.9	-	-	-	-	21.9					
HCM Lane LOS	B	D	-	-	-	-	C					
HCM 95th %tile Q(veh)	0.5	1.3	-	-	-	-	0.8					
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th TWSC
6: Wyoming Blvd. & Driveway "C"

Terry O. Brown, P.E.
10/07/2021

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕↕		↗	↕↕↕	
Traffic Vol, veh/h	172	1	52	60	1	60	105	1792	60	60	1805	167
Future Vol, veh/h	172	1	52	60	1	60	105	1792	60	60	1805	167
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	-	-	-	200	-	-	30	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	172	1	52	60	1	60	105	1792	60	60	1805	167
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	2936	4071	986	2875	4124	926	1972	0	0	1852	0	0
Stage 1	2009	2009	-	2032	2032	-	-	-	-	-	-	-
Stage 2	927	2062	-	843	2092	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	7.16	6.46	6.56	7.16	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.36	5.56	-	7.36	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.56	-	6.76	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.03	3.93	3.83	4.03	3.93	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	*~ 83	*2	*501	*99	*2	*501	*629	-	-	*629	-	-
Stage 1	*514	*488	-	*514	*488	-	-	-	-	-	-	-
Stage 2	*514	*467	-	*514	*442	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 59	*2	*501	*71	*1	*501	*629	-	-	*629	-	-
Mov Cap-2 Maneuver	*192	*173	-	*196	*157	-	-	-	-	-	-	-
Stage 1	*428	*442	-	*428	*407	-	-	-	-	-	-	-
Stage 2	*376	*389	-	*416	*400	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	73.4		27.3			0.6			0.3			
HCM LOS	F		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	* 629	-	-	192	501	280	* 629	-	-			
HCM Lane V/C Ratio	0.167	-	-	0.901	0.104	0.432	0.095	-	-			
HCM Control Delay (s)	11.9	-	-	91.5	13	27.3	11.3	-	-			
HCM Lane LOS	B	-	-	F	B	D	B	-	-			
HCM 95th %tile Q(veh)	0.6	-	-	7	0.3	2.1	0.3	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

APPENDIX "C"

Analysis of Montgomery / Wyoming with New Eastbound
Right Turn Lane

Timings
1: Wyoming Blvd. & Montgomery Blvd.

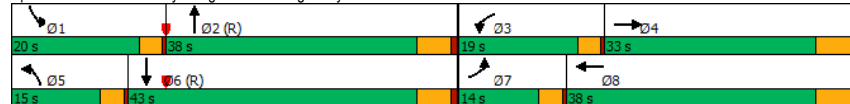
Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰ ↱	↰ ↱	↰ ↱	↰ ↱	↰ ↱	↰ ↱	↰ ↱	↰ ↱
Traffic Volume (vph)	237	810	271	1477	295	1040	273	1582
Future Volume (vph)	237	810	271	1477	295	1040	273	1582
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	14.0	33.0	19.0	38.0	15.0	38.0	20.0	43.0
Total Split (%)	12.7%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%	39.1%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱	↰ ↱		↰ ↱	↰ ↱		↰ ↱	↰ ↱		↰ ↱	↰ ↱	
Traffic Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
Future Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	810	173	271	1477	318	295	1040	221	273	1582	429
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	299	1195	253	333	1234	265	352	1489	316	335	1396	374
Arrive On Green	0.03	0.09	0.09	0.10	0.30	0.30	0.10	0.36	0.36	0.10	0.35	0.35
Sat Flow, veh/h	3428	4186	887	3428	4176	896	3428	4185	888	3428	3976	1065
Grp Volume(v), veh/h	237	652	331	271	1193	602	295	839	422	273	1341	670
Grp Sat Flow(s),veh/h/ln	1714	1689	1696	1714	1689	1694	1714	1689	1696	1714	1689	1664
Q Serve(g_s), s	7.6	20.6	20.8	8.5	32.5	32.5	9.3	23.4	23.5	8.6	38.6	38.6
Cycle Q Clear(g_c), s	7.6	20.6	20.8	8.5	32.5	32.5	9.3	23.4	23.5	8.6	38.6	38.6
Prop In Lane	1.00		0.52	1.00		0.53	1.00		0.52	1.00		0.64
Lane Grp Cap(c), veh/h	299	964	484	333	998	501	352	1202	604	335	1186	584
V/C Ratio(X)	0.79	0.68	0.68	0.81	1.20	1.20	0.84	0.70	0.70	0.81	1.13	1.15
Avail Cap(c_a), veh/h	327	964	484	483	998	501	358	1202	604	514	1186	584
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	44.9	45.0	48.7	38.7	38.8	48.4	30.4	30.4	48.6	35.7	35.7
Incr Delay (d2), s/veh	10.3	3.8	7.6	4.3	98.2	108.6	14.8	3.4	6.6	3.1	69.9	85.2
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	6.8	14.9	15.7	6.8	38.8	40.9	8.1	14.8	15.6	6.7	38.0	40.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	48.7	52.6	53.0	136.9	147.4	63.2	33.7	37.0	51.7	105.6	120.9
LnGrp LOS	E	D	D	D	F	F	E	C	D	D	F	F
Approach Vol, veh/h	1220			2066			1556			2284		
Approach Delay, s/veh	52.5			128.9			40.2			103.7		
Approach LOS	D			F			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	44.7	14.2	36.9	14.8	44.1	13.1	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	10.6	25.5	10.5	22.8	11.3	40.6	9.6	34.5				
Green Ext Time (p_c), s	0.2	5.0	0.2	3.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 88.4
HCM 6th LOS F

Timings
1: Wyoming Blvd. & Montgomery Blvd.

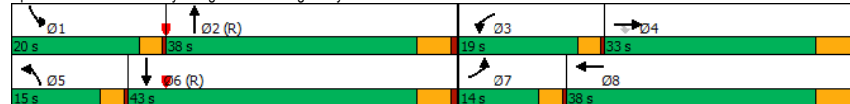
Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	237	810	173	271	1477	295	1040	273	1582
Future Volume (vph)	237	810	173	271	1477	295	1040	273	1582
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	3.0	20.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	14.0	33.0	33.0	19.0	38.0	15.0	38.0	20.0	43.0
Total Split (%)	12.7%	30.0%	30.0%	17.3%	34.5%	13.6%	34.5%	18.2%	39.1%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	None	Max	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 5.5 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.



HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
Future Volume (veh/h)	237	810	173	271	1477	318	295	1040	221	273	1582	429
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	810	173	271	1477	318	295	1040	221	273	1582	429
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	299	1446	449	333	1234	265	352	1489	316	335	1396	374
Arrive On Green	0.03	0.09	0.09	0.10	0.30	0.30	0.10	0.36	0.36	0.10	0.35	0.35
Sat Flow, veh/h	3428	5066	1572	3428	4176	896	3428	4185	888	3428	3976	1065
Grp Volume(v), veh/h	237	810	173	271	1193	602	295	839	422	273	1341	670
Grp Sat Flow(s),veh/h/ln	1714	1689	1572	1714	1689	1694	1714	1689	1696	1714	1689	1664
Q Serve(g_s), s	7.6	16.8	11.4	8.5	32.5	32.5	9.3	23.4	23.5	8.6	38.6	38.6
Cycle Q Clear(g_c), s	7.6	16.8	11.4	8.5	32.5	32.5	9.3	23.4	23.5	8.6	38.6	38.6
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.52	1.00		0.64
Lane Grp Cap(c), veh/h	299	1446	449	333	998	501	352	1202	604	335	1186	584
V/C Ratio(X)	0.79	0.56	0.39	0.81	1.20	1.20	0.84	0.70	0.70	0.81	1.13	1.15
Avail Cap(c_a), veh/h	327	1446	449	483	998	501	358	1202	604	514	1186	584
HCM Platoon Ratio	0.33	0.33	0.33	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	43.2	40.7	48.7	38.7	38.8	48.4	30.4	30.4	48.6	35.7	35.7
Incr Delay (d2), s/veh	10.3	1.6	2.5	4.3	98.2	108.6	14.8	3.4	6.6	3.1	69.9	85.2
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	6.8	12.4	8.7	6.8	38.8	40.9	8.1	14.8	15.6	6.7	38.0	40.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	44.8	43.2	53.0	136.9	147.4	63.2	33.7	37.0	51.7	105.6	120.9
LnGrp LOS	E	D	D	D	F	F	E	C	D	D	F	F
Approach Vol, veh/h	1220			2066			1556			2284		
Approach Delay, s/veh	48.0			128.9			40.2			103.7		
Approach LOS	D			F			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	44.7	14.2	36.9	14.8	44.1	13.1	38.0				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	16.5	32.5	15.5	27.5	11.5	37.5	10.5	32.5				
Max Q Clear Time (g_c+I1), s	10.6	25.5	10.5	18.8	11.3	40.6	9.6	34.5				
Green Ext Time (p_c), s	0.2	5.0	0.2	4.7	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 87.6
HCM 6th LOS F

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔	↔↔↔
Traffic Volume (vph)	285	1268	266	962	265	1274	326	1261
Future Volume (vph)	285	1268	266	962	265	1274	326	1261
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	3.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	48.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔		↔↔↔	↔↔↔	
Traffic Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
Future Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	1268	254	266	962	306	265	1274	230	326	1261	279
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	342	1323	265	311	1155	367	311	1451	262	378	1477	327
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.23	0.23	0.11	0.36	0.36
Sat Flow, veh/h	3428	4232	848	3428	3806	1209	3428	4314	779	3428	4150	918
Grp Volume(v), veh/h	285	1012	510	266	853	415	265	997	507	326	1026	514
Grp Sat Flow(s),veh/h/ln	1714	1689	1703	1714	1689	1638	1714	1689	1715	1714	1689	1690
Q Serve(g_s), s	9.9	35.8	35.8	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Cycle Q Clear(g_c), s	9.9	35.8	35.8	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Prop In Lane	1.00		0.50	1.00		0.74	1.00		0.45	1.00		0.54
Lane Grp Cap(c), veh/h	342	1055	532	311	1025	497	311	1136	577	378	1202	601
V/C Ratio(X)	0.83	0.96	0.96	0.85	0.83	0.83	0.85	0.88	0.88	0.86	0.85	0.85
Avail Cap(c_a), veh/h	386	1055	532	311	1025	497	311	1136	577	386	1202	601
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	53.0	53.0	53.8	39.0	39.0	55.5	44.1	44.1	52.5	35.8	35.8
Incr Delay (d2), s/veh	11.7	19.4	30.0	19.2	7.9	15.2	18.7	9.7	17.1	16.8	7.8	14.4
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	8.7	26.1	28.2	8.3	18.3	19.1	8.4	22.8	24.5	9.5	20.9	22.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	72.4	83.1	72.9	46.9	54.1	74.3	53.8	61.2	69.2	43.6	50.2
LnGrp LOS	E	E	F	E	D	D	E	D	E	E	D	D
Approach Vol, veh/h	1807			1534			1769				1866	
Approach Delay, s/veh	74.9			53.4			59.0				49.9	
Approach LOS	E			D			E				D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	45.9	14.4	43.0	14.4	48.2	15.5	41.9				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.2	36.2	11.2	37.8	11.2	35.8	11.9	30.3				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	5.6	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay 59.4
HCM 6th LOS E

Timings
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↰	↱	↱	↰	↱	↰	↱	↰	↱
Traffic Volume (vph)	285	1268	254	266	962	265	1274	326	1261
Future Volume (vph)	285	1268	254	266	962	265	1274	326	1261
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	3.0	20.0	20.0	3.0	20.0	3.0	20.0	3.0	20.0
Minimum Split (s)	6.5	25.5	25.5	6.5	25.5	6.5	25.5	6.5	25.5
Total Split (s)	17.0	43.0	43.0	14.4	40.4	14.4	45.6	17.0	48.2
Total Split (%)	14.2%	35.8%	35.8%	12.0%	33.7%	12.0%	38.0%	14.2%	40.2%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.0	4.5	3.0	4.5
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	0.5	1.0	0.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	None	Max	Max	None	Max	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Wyoming Blvd. & Montgomery Blvd.

Ø1	Ø2 (R)	Ø3	Ø4
17 s	45.6 s	14.4 s	43 s
Ø5	Ø6 (R)	Ø7	Ø8
14.4 s	48.2 s	17 s	40.4 s

HCM 6th Signalized Intersection Summary
1: Wyoming Blvd. & Montgomery Blvd.

Terry O. Brown, P.E.
10/17/2021

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
Future Volume (veh/h)	285	1268	254	266	962	306	265	1274	230	326	1261	279
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	1268	254	266	962	306	265	1274	230	326	1261	279
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	342	1583	491	311	1155	367	311	1451	262	378	1477	327
Arrive On Green	0.03	0.10	0.10	0.09	0.30	0.30	0.06	0.23	0.23	0.11	0.36	0.36
Sat Flow, veh/h	3428	5066	1572	3428	3806	1209	3428	4314	779	3428	4150	918
Grp Volume(v), veh/h	285	1268	254	266	853	415	265	997	507	326	1026	514
Grp Sat Flow(s),veh/h/ln	1714	1689	1572	1714	1689	1638	1714	1689	1715	1714	1689	1690
Q Serve(g_s), s	9.9	29.4	18.4	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Cycle Q Clear(g_c), s	9.9	29.4	18.4	9.2	28.3	28.3	9.2	34.2	34.2	11.2	33.7	33.8
Prop In Lane	1.00		1.00	1.00		0.74	1.00		0.45	1.00		0.54
Lane Grp Cap(c), veh/h	342	1583	491	311	1025	497	311	1136	577	378	1202	601
V/C Ratio(X)	0.83	0.80	0.52	0.85	0.83	0.83	0.85	0.88	0.88	0.86	0.85	0.85
Avail Cap(c_a), veh/h	386	1583	491	311	1025	497	311	1136	577	386	1202	601
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	50.2	45.2	53.8	39.0	39.0	55.5	44.1	44.1	52.5	35.8	35.8
Incr Delay (d2), s/veh	11.7	4.4	3.9	19.2	7.9	15.2	18.7	9.7	17.1	16.8	7.8	14.4
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	8.7	20.0	13.0	8.3	18.3	19.1	8.4	22.8	24.5	9.5	20.9	22.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	54.5	49.1	72.9	46.9	54.1	74.3	53.8	61.2	69.2	43.6	50.2
LnGrp LOS	E	D	D	E	D	D	E	D	E	E	D	D
Approach Vol, veh/h	1807			1534			1769				1866	
Approach Delay, s/veh	56.0			53.4			59.0				49.9	
Approach LOS	E			D			E				D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	45.9	14.4	43.0	14.4	48.2	15.5	41.9				
Change Period (Y+Rc), s	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5				
Max Green Setting (Gmax), s	13.5	40.1	10.9	37.5	10.9	42.7	13.5	34.9				
Max Q Clear Time (g_c+I1), s	13.2	36.2	11.2	31.4	11.2	35.8	11.9	30.3				
Green Ext Time (p_c), s	0.0	3.2	0.0	4.8	0.0	5.6	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay 54.5
HCM 6th LOS D