

HCM 6th AWSC
1: ATRISCO VISTA & CENTRAL

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	20	9	30	39	226	20	259	116	150	170	76
Future Vol, veh/h	74	20	9	30	39	226	20	259	116	150	170	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	25	25	25	21	21	21	3	3	3	13	13	13
Mvmt Flow	78	21	9	32	41	238	21	273	122	158	179	80
Number of Lanes	1	2	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	13	14.9	13.8	13.2
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	43%	0%	100%	43%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	57%	0%	0%	57%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	173	202	74	13	16	30	39	226	150	113
LT Vol	20	0	0	74	0	0	30	0	0	150	0
Through Vol	0	173	86	0	13	7	0	39	0	0	113
RT Vol	0	0	116	0	0	9	0	0	226	0	0
Lane Flow Rate	21	182	213	78	14	16	32	41	238	158	119
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.045	0.362	0.401	0.191	0.033	0.036	0.073	0.089	0.468	0.342	0.242
Departure Headway (Hd)	7.672	7.172	6.771	8.844	8.344	7.942	8.278	7.778	7.078	7.805	7.305
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	467	502	532	406	429	451	434	461	509	461	492
Service Time	5.408	4.908	4.507	6.59	6.09	5.687	6.013	5.513	4.813	5.543	5.043
HCM Lane V/C Ratio	0.045	0.363	0.4	0.192	0.033	0.035	0.074	0.089	0.468	0.343	0.242
HCM Control Delay	10.8	13.9	14	13.7	11.4	11	11.7	11.3	15.9	14.6	12.4
HCM Lane LOS	B	B	B	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.1	1.6	1.9	0.7	0.1	0.1	0.2	0.3	2.5	1.5	0.9

Intersection	
Intersection Delay, s/veh	22.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	31	17	94	22	307	8	162	89	314	199	44
Future Vol, veh/h	64	31	17	94	22	307	8	162	89	314	199	44
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	16	16	16	16	16	16	3	3	3	15	15	15
Mvmt Flow	71	34	19	104	24	341	9	180	99	349	221	49
Number of Lanes	1	2	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	13.6	23.1	14.6	26.8
HCM LOS	B	C	B	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	38%	0%	100%	38%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	62%	0%	0%	62%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	108	143	64	21	27	94	22	307	314	133
LT Vol	8	0	0	64	0	0	94	0	0	314	0
Through Vol	0	108	54	0	21	10	0	22	0	0	133
RT Vol	0	0	89	0	0	17	0	0	307	0	0
Lane Flow Rate	9	120	159	71	23	30	104	24	341	349	147
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.279	0.35	0.19	0.058	0.073	0.252	0.056	0.709	0.802	0.318
Departure Headway (Hd)	8.865	8.365	7.929	9.597	9.097	8.661	8.686	8.186	7.486	8.273	7.773
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	403	428	453	373	393	412	414	437	481	436	461
Service Time	6.636	6.136	5.701	7.376	6.876	6.441	6.445	5.945	5.245	6.034	5.534
HCM Lane V/C Ratio	0.022	0.28	0.351	0.19	0.059	0.073	0.251	0.055	0.709	0.8	0.319
HCM Control Delay	11.8	14.4	14.9	14.6	12.4	12.1	14.4	11.4	26.6	37.1	14.1
HCM Lane LOS	B	B	B	B	B	B	B	B	D	E	B
HCM 95th-tile Q	0.1	1.1	1.5	0.7	0.2	0.2	1	0.2	5.5	7.2	1.4

HCM 6th TWSC

2: ATRISCO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

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	16	1	56	0	0	0	0	246	319	14	333	0
Future Vol, veh/h	16	1	56	0	0	0	0	246	319	14	333	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	300	-	-	-	-	-	0	300	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	28	28	28	2	2	2	15	15	15	10	10	10
Mvmt Flow	17	1	59	0	0	0	0	259	336	15	351	0
Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	511	976	176				-	0	0	595	0	0
Stage 1	381	381	-				-	-	-	-	-	-
Stage 2	130	595	-				-	-	-	-	-	-
Critical Hdwy	7.36	7.06	7.46				-	-	-	4.3	-	-
Critical Hdwy Stg 1	6.36	6.06	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.36	6.06	-				-	-	-	-	-	-
Follow-up Hdwy	3.78	4.28	3.58				-	-	-	2.3	-	-
Pot Cap-1 Maneuver	433	210	761				0	-	-	924	-	0
Stage 1	589	551	-				0	-	-	-	-	0
Stage 2	810	431	-				0	-	-	-	-	0
Platoon blocked, %								-	-	-		
Mov Cap-1 Maneuver	426	0	761				-	-	-	924	-	-
Mov Cap-2 Maneuver	426	0	-				-	-	-	-	-	-
Stage 1	589	0	-				-	-	-	-	-	-
Stage 2	797	0	-				-	-	-	-	-	-
Approach	EB						NB			SB		
HCM Control Delay, s	11						0			0.4		
HCM LOS	B											
Minor Lane/Major Mvmt		NBT	NBR	EBLn1	EBLn2	SBL	SBT					
Capacity (veh/h)		-	-	426	761	924	-					
HCM Lane V/C Ratio		-	-	0.042	0.077	0.016	-					
HCM Control Delay (s)		-	-	13.8	10.1	9	-					
HCM Lane LOS		-	-	B	B	A	-					
HCM 95th %tile Q(veh)		-	-	0.1	0.3	0	-					

HCM 6th TWSC

2: ATRISCO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱					↰	↱	↰	↱	
Traffic Vol, veh/h	70	0	138	0	0	0	0	330	185	166	406	0
Future Vol, veh/h	70	0	138	0	0	0	0	330	185	166	406	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	300	-	-	-	-	-	0	300	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	19	19	19	2	2	2	14	14	14	9	9	9
Mvmt Flow	75	0	148	0	0	0	0	355	199	178	437	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	971	1347	219	-	0	0	554	0	0
Stage 1	793	793	-	-	-	-	-	-	-
Stage 2	178	554	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.88	7.28	-	-	-	4.28	-	-
Critical Hdwy Stg 1	6.18	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.69	4.19	3.49	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	222	130	735	0	-	-	965	-	0
Stage 1	365	360	-	0	-	-	-	-	0
Stage 2	786	472	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	181	0	735	-	-	-	965	-	-
Mov Cap-2 Maneuver	181	0	-	-	-	-	-	-	-
Stage 1	365	0	-	-	-	-	-	-	-
Stage 2	641	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.3	0	2.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	181	735	965	-
HCM Lane V/C Ratio	-	-	0.416	0.202	0.185	-
HCM Control Delay (s)	-	-	38.4	11.1	9.6	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.9	0.8	0.7	-

HCM 6th TWSC 3: ATRISCO VISTA & WB RAMPS

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↔↗	↗↗	↗↖	↗↗		↗↗	
Traffic Vol, veh/h	0	0	0	213	1	120	89	177	0	0	164	40
Future Vol, veh/h	0	0	0	213	1	120	89	177	0	0	164	40
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	-	-	-	-	-	300	300	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	24	24	24	14	14	14	11	11	11
Mvmt Flow	0	0	0	220	1	124	92	182	0	0	169	41
Major/Minor				Minor1		Major1		Major2				
Conflicting Flow All				451	576	91	210	0	-	-	-	0
Stage 1				366	366	-	-	-	-	-	-	-
Stage 2				85	210	-	-	-	-	-	-	-
Critical Hdwy				7.28	6.98	7.38	4.38	-	-	-	-	-
Critical Hdwy Stg 1				6.28	5.98	-	-	-	-	-	-	-
Critical Hdwy Stg 2				6.28	5.98	-	-	-	-	-	-	-
Follow-up Hdwy				3.74	4.24	3.54	2.34	-	-	-	-	-
Pot Cap-1 Maneuver				484	383	882	1275	-	0	0	-	-
Stage 1				611	569	-	-	-	0	0	-	-
Stage 2				867	676	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver				449	0	882	1275	-	-	-	-	-
Mov Cap-2 Maneuver				449	0	-	-	-	-	-	-	-
Stage 1				567	0	-	-	-	-	-	-	-
Stage 2				867	0	-	-	-	-	-	-	-
Approach				WB		NB		SB				
HCM Control Delay, s				16.6		2.7		0				
HCM LOS				C								
Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR						
Capacity (veh/h)	1275	-	449	882	-	-						
HCM Lane V/C Ratio	0.072	-	0.491	0.14	-	-						
HCM Control Delay (s)	8	-	20.5	9.7	-	-						
HCM Lane LOS	A	-	C	A	-	-						
HCM 95th %tile Q(veh)	0.2	-	2.7	0.5	-	-						

HCM 6th TWSC

3: ATRISCO VISTA & WB RAMPS

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	20.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Vol, veh/h	0	0	0	211	1	53	157	255	0	0	367	26
Future Vol, veh/h	0	0	0	211	1	53	157	255	0	0	367	26
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	-	-	-	-	-	300	300	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	10	10	10	7	7	7	7	7	7
Mvmt Flow	0	0	0	234	1	59	174	283	0	0	408	29

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	835	1068	142	437	0	-
Stage 1	631	631	-	-	-	-
Stage 2	204	437	-	-	-	-
Critical Hdwy	7	6.7	7.1	4.24	-	-
Critical Hdwy Stg 1	6	5.7	-	-	-	-
Critical Hdwy Stg 2	6	5.7	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	2.27	-	-
Pot Cap-1 Maneuver	291	208	855	1084	-	0
Stage 1	471	453	-	-	0	0
Stage 2	787	558	-	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	244	0	855	1084	-	-
Mov Cap-2 Maneuver	244	0	-	-	-	-
Stage 1	395	0	-	-	-	-
Stage 2	787	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	75.8	3.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1084	- 244 855	-	-
HCM Lane V/C Ratio	0.161	- 0.965 0.069	-	-
HCM Control Delay (s)	9	- 92.4 9.5	-	-
HCM Lane LOS	A	- F A	-	-
HCM 95th %tile Q(veh)	0.6	- 8.9 0.2	-	-

PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Satisfies Warrant 3A

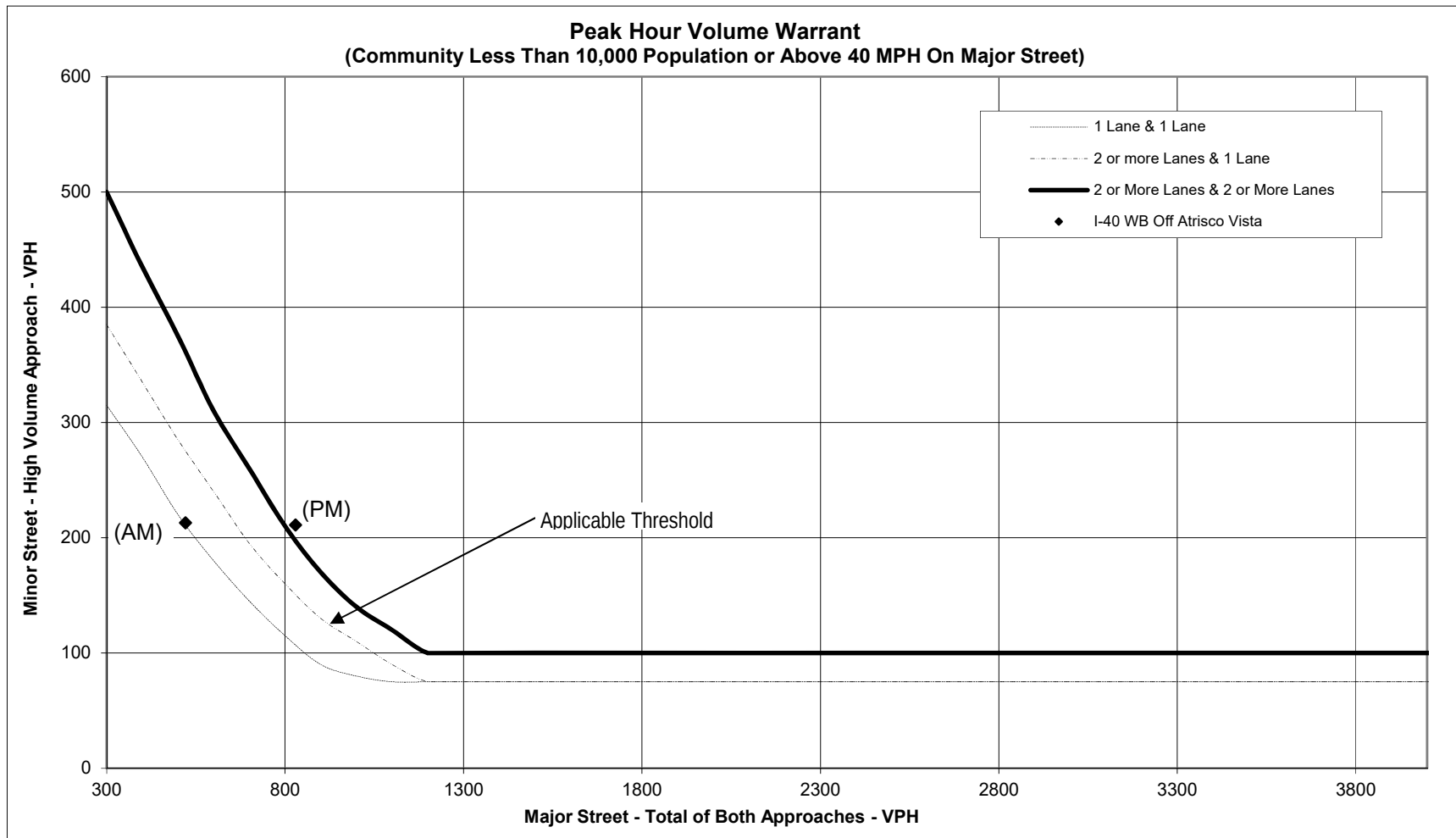
YES

Scenario: 2022 Build
Intersection: I-40 WB Off Atrisco Vista
Type: 1 Lane/2 Lane
Major Street (Orientation): Atrisco Vista (N/S)
Minor Street (Orientation): WB Off (E/W)

Peak Hour Delay
1.30 Hours in AM Criteria - 5 Hours
5.86 Hours in PM

Meet Criteria? Intersection Volume > 800, Minor Approach > 100
NO YES YES
YES YES YES

	Minor Street Approach Volume			Major Street Approach Volume			Satisfies
Time	EB	WB	High Vol Approach	NB	SB	NB + SB	Warrant 3B?
AM Peak	0	213	213	266	255	521	NO
PM Peak	0	211	211	412	417	829	YES



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane

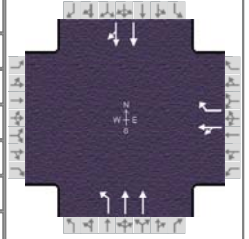
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Atrisco Vista @ WB I-40
Project Description	AM 2022 Build

Intersection Information

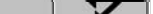
Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Atrisco Vista_WB I40_2022B_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				213	1	120	89	177			164	40

Signal Information

Cycle, s	110.0	Reference Phase	2											
Offset, s	0	Reference Point	End		Green	5.7	60.8	30.0	0.0	0.0	0.0			
Uncoordinated	No	Simult. Gap E/W	On		Yellow	4.0	4.5	4.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On		Red	0.0	1.0	0.0	0.0	0.0	0.0			

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6		2
Case Number				11.0	1.0	4.0		8.3
Phase Duration, s				34.0	9.7	76.0		66.3
Change Period, (Y+R _c), s				4.0	4.0	5.5		5.5
Max Allow Headway (MAH), s				3.1	3.0	0.0		0.0
Queue Clearance Time (g _s), s				13.8	4.3			
Green Extension Time (g _e), s				0.6	0.1	0.0		0.0
Phase Call Probability				1.00	0.95			
Max Out Probability				0.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7	4	14	1	6		2	12	
Adjusted Flow Rate (v), veh/h				233	130	97	192			112	109	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1309	1810	1611			1737	1621	
Queue Service Time (g _s), s				11.8	8.9	2.3	2.5			4.0	3.6	
Cycle Queue Clearance Time (g _c), s				11.8	8.9	2.3	2.5			4.0	3.6	
Green Ratio (g/C)				0.27	0.27	0.62	0.64			0.55	0.55	
Capacity (c), veh/h				494	357	768	2065			960	896	
Volume-to-Capacity Ratio (X)				0.471	0.365	0.126	0.093			0.117	0.122	
Back of Queue (Q), ft/ln (95 th percentile)				217.5	146.2	36.8	39			62.7	56.4	
Back of Queue (Q), veh/ln (95 th percentile)				8.7	4.9	1.5	1.4			2.3	2.3	
Queue Storage Ratio (RQ) (95 th percentile)				0.66	0.44	0.15	0.10			0.12	0.12	
Uniform Delay (d ₁), s/veh				33.4	32.3	8.4	7.5			11.8	11.8	
Incremental Delay (d ₂), s/veh				0.3	0.2	0.0	0.1			0.2	0.3	
Initial Queue Delay (d ₃), s/veh				0.0	0.0	0.0	0.0			0.0	0.0	
Control Delay (d), s/veh				33.6	32.5	8.5	7.6			12.0	12.1	
Level of Service (LOS)					C	C	A	A			B	B
Approach Delay, s/veh / LOS	0.0			33.2		C	7.9		A	12.0		B
Intersection Delay, s/veh / LOS	19.5						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.32		B	2.15		B	1.65		B	1.38		A
Bicycle LOS Score / LOS				1.09		A	0.73		A	0.67		A

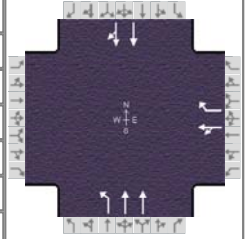
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Atrisco Vista @ WB I-40
Project Description	PM 2022 Build

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 16:00
File Name	Atrisco Vista_WB I40_2022B_PM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				211	1	53	157	255			367	26

Signal Information

Cycle, s	110.0	Reference Phase	2						
Offset, s	0	Reference Point	End						
Uncoordinated	No	Simult. Gap E/W	On						
Force Mode	Fixed	Simult. Gap N/S	On						
Green	6.4	60.1	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6		2
Case Number				11.0	1.0	4.0		8.3
Phase Duration, s				34.0	10.4	76.0		65.6
Change Period, (Y+R _c), s				4.0	4.0	5.5		5.5
Max Allow Headway (MAH), s				3.1	3.0	0.0		0.0
Queue Clearance Time (g _s), s				13.7	6.3			
Green Extension Time (g _e), s				0.5	0.1	0.0		0.0
Phase Call Probability				1.00	0.99			
Max Out Probability				0.00	0.02			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7	4	14	1	6		2	12	
Adjusted Flow Rate (v), veh/h				230	58	171	277			215	212	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1485	1810	1710			1796	1754	
Queue Service Time (g _s), s				11.7	3.2	4.3	3.5			7.7	6.9	
Cycle Queue Clearance Time (g _c), s				11.7	3.2	4.3	3.5			7.7	6.9	
Green Ratio (g/C)				0.27	0.27	0.62	0.64			0.55	0.55	
Capacity (c), veh/h				494	405	636	2192			981	958	
Volume-to-Capacity Ratio (X)				0.467	0.142	0.269	0.126			0.220	0.221	
Back of Queue (Q), ft/ln (95 th percentile)				215.7	54.8	67.9	54.6			126.6	118.4	
Back of Queue (Q), veh/ln (95 th percentile)				8.6	2.0	2.7	2.1			4.8	4.7	
Queue Storage Ratio (RQ) (95 th percentile)				0.65	0.17	0.28	0.14			0.24	0.24	
Uniform Delay (d ₁), s/veh				33.3	30.3	9.2	7.7			12.9	12.9	
Incremental Delay (d ₂), s/veh				0.3	0.1	0.1	0.1			0.5	0.5	
Initial Queue Delay (d ₃), s/veh				0.0	0.0	0.0	0.0			0.0	0.0	
Control Delay (d), s/veh				33.6	30.3	9.2	7.8			13.4	13.4	
Level of Service (LOS)					C	C	A	A			B	B
Approach Delay, s/veh / LOS	0.0			32.9	C		8.4	A		13.4	B	
Intersection Delay, s/veh / LOS	16.3						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.32		B	2.15		B	1.65		B	1.38		A
Bicycle LOS Score / LOS				0.96		A	0.86		A	0.84		A

HCM 6th TWSC
4: ATRISCO VISTA & FRONTAGE

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

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	4	0	44	0	0	0	105	198	0	0	158	30
Future Vol, veh/h	4	0	44	0	0	0	105	198	0	0	158	30
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	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	250	-	250	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	2	2	2	9	9	9	9	9	9
Mvmt Flow	4	0	49	0	0	0	117	220	0	0	176	33

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	537	647	105	-	-	110	209	0	-	220	0	0
Stage 1	193	193	-	-	-	-	-	-	-	-	-	-
Stage 2	344	454	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	-	-	6.94	4.28	-	-	4.28	-	-
Critical Hdwy Stg 1	6.6	5.6	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	-	-	3.32	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	420	382	920	0	0	922	1309	-	0	1297	-	-
Stage 1	782	732	-	0	0	-	-	-	0	-	-	-
Stage 2	636	560	-	0	0	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	391	348	920	-	-	922	1309	-	-	1297	-	-
Mov Cap-2 Maneuver	391	348	-	-	-	-	-	-	-	-	-	-
Stage 1	712	732	-	-	-	-	-	-	-	-	-	-
Stage 2	579	510	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	0	2.8	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	827	-	1297	-
HCM Lane V/C Ratio	0.089	-	0.064	-	-	-
HCM Control Delay (s)	8	-	9.7	0	0	-
HCM Lane LOS	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	0	-

HCM 6th TWSC
4: ATRISCO VISTA & FRONTAGE

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔				↔	↔	↔	↔	↔	↔	
Traffic Vol, veh/h	19	0	146	0	0	0	96	216	0	0	243	7
Future Vol, veh/h	19	0	146	0	0	0	96	216	0	0	243	7
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	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	250	-	250	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	13	13	13	2	2	2	5	5	5	2	2	2
Mvmt Flow	22	0	170	0	0	0	112	251	0	0	283	8
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	637	762	146	-	-	126	291	0	-	251	0	0
Stage 1	287	287	-	-	-	-	-	-	-	-	-	-
Stage 2	350	475	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.76	6.76	7.16	-	-	6.94	4.2	-	-	4.14	-	-
Critical Hdwy Stg 1	6.76	5.76	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.76	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.63	4.13	3.43	-	-	3.32	2.25	-	-	2.22	-	-
Pot Cap-1 Maneuver	340	313	841	0	0	901	1246	-	0	1311	-	-
Stage 1	666	646	-	0	0	-	-	-	0	-	-	-
Stage 2	610	529	-	0	0	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	317	285	841	-	-	901	1246	-	-	1311	-	-
Mov Cap-2 Maneuver	317	285	-	-	-	-	-	-	-	-	-	-
Stage 1	606	646	-	-	-	-	-	-	-	-	-	-
Stage 2	555	481	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12			0			2.5			0		
HCM LOS	B			A								
Minor Lane/Major Mvmt	NBL			NBT EBLn1WBLn1			SBL SBT SBR					
Capacity (veh/h)	1246			- 707 -			1311 - -					
HCM Lane V/C Ratio	0.09			- 0.271 -			- - -					
HCM Control Delay (s)	8.2			- 12 0			0 - -					
HCM Lane LOS	A			- B A			A - -					
HCM 95th %tile Q(veh)	0.3			- 1.1 -			0 - -					

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	29	105	94	177	27
Future Vol, veh/h	3	29	105	94	177	27
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	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	50	50	11	11	3	3
Mvmt Flow	3	33	121	108	203	31
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	569	219	234	0	-	0
Stage 1	219	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	6.9	6.7	4.21	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	2.299	-	-	-
Pot Cap-1 Maneuver	412	714	1282	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	714	1282	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.7	4.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1282	-	373	714	-	-
HCM Lane V/C Ratio	0.094	-	0.009	0.047	-	-
HCM Control Delay (s)	8.1	-	14.7	10.3	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0	0.1	-	-

HCM 6th TWSC
5: ATRISCO VISTA & TEMPURPEDIC

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	171	60	179	89	15
Future Vol, veh/h	39	171	60	179	89	15
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	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	6	6
Mvmt Flow	49	214	75	224	111	19
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	495	121	130	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	534	930	1455	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	506	930	1455	-	-	-
Mov Cap-2 Maneuver	506	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.5	1.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1455	-	506	930	-	-
HCM Lane V/C Ratio	0.052	-	0.096	0.23	-	-
HCM Control Delay (s)	7.6	-	12.9	10	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	0.9	-	-

HCM 6th TWSC
6: ARROYO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

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	38	0	33	0	0	0	2	661	1543	0	849	609
Future Vol, veh/h	38	0	33	0	0	0	2	661	1543	0	849	609
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	-	-	Free	-	-	None	-	-	Free	-	-	Free
Storage Length	0	-	300	-	-	-	-	-	300	-	-	0
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	19	19	19	2	2	2	4	4	4	3	3	3
Mvmt Flow	41	0	35	0	0	0	2	711	1659	0	913	655
Major/Minor	Minor2						Major1		Major2			
Conflicting Flow All	1273	-	-				913	0	-	-	-	0
Stage 1	913	-	-				-	-	-	-	-	-
Stage 2	360	-	-				-	-	-	-	-	-
Critical Hdwy	7.18	-	-				4.18	-	-	-	-	-
Critical Hdwy Stg 1	6.18	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-				-	-	-	-	-	-
Follow-up Hdwy	3.69	-	-				2.24	-	-	-	-	-
Pot Cap-1 Maneuver	138	0	0				730	-	0	0	-	0
Stage 1	313	0	0				-	-	0	0	-	0
Stage 2	629	0	0				-	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	137	0	-				730	-	-	-	-	-
Mov Cap-2 Maneuver	137	0	-				-	-	-	-	-	-
Stage 1	311	0	-				-	-	-	-	-	-
Stage 2	629	0	-				-	-	-	-	-	-
Approach	EB						NB		SB			
HCM Control Delay, s	42.1						0		0			
HCM LOS	E											
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT							
Capacity (veh/h)	730	-	137	-	-							
HCM Lane V/C Ratio	0.003	-	0.298	-	-							
HCM Control Delay (s)	9.9	-	42.1	0	-							
HCM Lane LOS	A	-	E	A	-							
HCM 95th %tile Q(veh)	0	-	1.2	-	-							

HCM 6th TWSC
6: ARROYO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection													
Int Delay, s/veh	18.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations								 			 		
Traffic Vol, veh/h	40	0	79	0	0	0	0	501	697	0	1920	218	
Future Vol, veh/h	40	0	79	0	0	0	0	501	697	0	1920	218	
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	-	-	Free	-	-	None	-	-	Free	-	-	Free	
Storage Length	0	-	300	-	-	-	-	-	300	-	-	0	
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	
Heavy Vehicles, %	31	31	31	2	2	2	6	6	6	2	2	2	
Mvmt Flow	44	0	88	0	0	0	0	557	774	0	2133	242	
Major/Minor	Minor2			Major1				Major2					
Conflicting Flow All	2412	-	-					-	0	-	-	-	0
Stage 1	2133	-	-					-	-	-	-	-	-
Stage 2	279	-	-					-	-	-	-	-	-
Critical Hdwy	7.42	-	-					-	-	-	-	-	-
Critical Hdwy Stg 1	6.42	-	-					-	-	-	-	-	-
Critical Hdwy Stg 2	6.42	-	-					-	-	-	-	-	-
Follow-up Hdwy	3.81	-	-					-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 18	0	0					0	-	0	0	-	0
Stage 1	53	0	0					0	-	0	0	-	0
Stage 2	663	0	0					0	-	0	0	-	0
Platoon blocked, %								-			-		
Mov Cap-1 Maneuver	~ 18	0	-					-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 18	0	-					-	-	-	-	-	-
Stage 1	53	0	-					-	-	-	-	-	-
Stage 2	663	0	-					-	-	-	-	-	-
Approach	EB			NB				SB					
HCM Control Delay, \$	1111.3			0				0					
HCM LOS	F												
Minor Lane/Major Mvmt	NBT EBLn1		EBLn2	SBT									
Capacity (veh/h)	-		18	-									
HCM Lane V/C Ratio	-		2.469	-									
HCM Control Delay (s)	\$		1111.3	0									
HCM Lane LOS	-		F	A									
HCM 95th %tile Q(veh)	-		6.1	-									
Notes													
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon							

HCM 6th TWSC
6: ARROYO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista (Two Stage)

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	38	0	33	0	0	0	2	661	1543	0	849	609
Future Vol, veh/h	38	0	33	0	0	0	2	661	1543	0	849	609
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	-	-	Free	-	-	None	-	-	Free	-	-	Free
Storage Length	0	-	300	-	-	-	-	-	300	-	-	0
Veh in Median Storage, #	-	1	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	19	19	19	2	2	2	4	4	4	3	3	3
Mvmt Flow	41	0	35	0	0	0	2	711	1659	0	913	655
Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1273	-	-				913	0	-	-	-	0
Stage 1	913	-	-				-	-	-	-	-	-
Stage 2	360	-	-				-	-	-	-	-	-
Critical Hdwy	7.18	-	-				4.18	-	-	-	-	-
Critical Hdwy Stg 1	6.18	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-				-	-	-	-	-	-
Follow-up Hdwy	3.69	-	-				2.24	-	-	-	-	-
Pot Cap-1 Maneuver	138	0	0				730	-	0	0	-	0
Stage 1	313	0	0				-	-	0	0	-	0
Stage 2	629	0	0				-	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	137	0	-				730	-	-	-	-	-
Mov Cap-2 Maneuver	242	0	-				-	-	-	-	-	-
Stage 1	311	0	-				-	-	-	-	-	-
Stage 2	629	0	-				-	-	-	-	-	-
Approach	EB						NB			SB		
HCM Control Delay, s	22.9						0			0		
HCM LOS	C											
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT							
Capacity (veh/h)	730	-	242	-	-							
HCM Lane V/C Ratio	0.003	-	0.169	-	-							
HCM Control Delay (s)	9.9	-	22.9	0	-							
HCM Lane LOS	A	-	C	A	-							
HCM 95th %tile Q(veh)	0	-	0.6	-	-							

HCM 6th TWSC
6: ARROYO VISTA & EB RAMPS

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista (Two Stage)

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	0	79	0	0	0	0	501	697	0	1920	218
Future Vol, veh/h	40	0	79	0	0	0	0	501	697	0	1920	218
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	-	-	Free	-	-	None	-	-	Free	-	-	Free
Storage Length	0	-	300	-	-	-	-	-	300	-	-	0
Veh in Median Storage, #	-	1	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	31	31	31	2	2	2	6	6	6	2	2	2
Mvmt Flow	44	0	88	0	0	0	0	557	774	0	2133	242

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2412	-	-	-	0	-	-	-	0
Stage 1	2133	-	-	-	-	-	-	-	-
Stage 2	279	-	-	-	-	-	-	-	-
Critical Hdwy	7.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	6.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 18	0	0	0	-	0	0	-	0
Stage 1	53	0	0	0	-	0	0	-	0
Stage 2	663	0	0	0	-	0	0	-	0
Platoon blocked, %					-				-
Mov Cap-1 Maneuver	~ 18	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	47	0	-	-	-	-	-	-	-
Stage 1	53	0	-	-	-	-	-	-	-
Stage 2	663	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	250.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	47	-	-
HCM Lane V/C Ratio	-	0.946	-	-
HCM Control Delay (s)	-	250.3	0	-
HCM Lane LOS	-	F	A	-
HCM 95th %tile Q(veh)	-	3.9	-	-

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

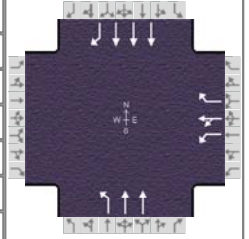
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	98th & I -40 WB
Project Description	AM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
File Name	98th_I-40WB_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				498	2	139	84	740			896	41

Signal Information

Cycle, s	130.0	Reference Phase	2				
Offset, s	0	Reference Point	End				
Uncoordinated	No	Simult. Gap E/W	On				
Force Mode	Fixed	Simult. Gap N/S	On				
Green	3.9	86.3	21.8	0.0	0.0	0.0	
Yellow	4.5	4.5	4.5	0.0	0.0	0.0	
Red	2.0	1.0	1.5	0.0	0.0	0.0	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6		2
Case Number				9.0	1.0	4.0		7.3
Phase Duration, s				27.8	10.4	102.2		91.8
Change Period, (Y+R c), s				6.0	6.5	5.5		5.5
Max Allow Headway (MAH), s				4.1	4.1	0.0		0.0
Queue Clearance Time (g s), s				19.4	3.8			
Green Extension Time (g e), s				2.4	0.2	0.0		0.0
Phase Call Probability				1.00	0.95			
Max Out Probability				0.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7	4	14	1	6		2	12	
Adjusted Flow Rate (v), veh/h				249	251	139	84	740		896	41	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1810		1810	1809		1725		
Queue Service Time (g s), s				17.3	17.4		1.8	8.6		9.1		
Cycle Queue Clearance Time (g c), s				17.3	17.4		1.8	8.6		9.1		
Green Ratio (g/C)				0.17	0.17		0.71	0.74		0.66		
Capacity (c), veh/h				304	304		484	2691		3436		
Volume-to-Capacity Ratio (X)				0.820	0.827		0.174	0.275		0.261		
Back of Queue (Q), ft/ln (95 th percentile)				324.3	327.4		30.1	133.3		149.4		
Back of Queue (Q), veh/ln (95 th percentile)				13.0	13.1		1.2	5.3		6.0		
Queue Storage Ratio (RQ) (95 th percentile)				0.00	0.00		0.30	0.00		0.00		
Uniform Delay (d 1), s/veh				52.2	52.3		6.3	5.4		8.9		
Incremental Delay (d 2), s/veh				5.8	6.0		0.2	0.3		0.2		
Initial Queue Delay (d 3), s/veh				0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh				58.0	58.3	0.0	6.5	5.6		9.1	0.0	
Level of Service (LOS)				E	E	A	A	A		A	A	
Approach Delay, s/veh / LOS	0.0			45.5		D	5.7		A	8.7		A
Intersection Delay, s/veh / LOS				17.4						B		

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.48		B	2.48		B	1.86		B	1.36		A
Bicycle LOS Score / LOS				1.54		B	1.17		A	1.00		A

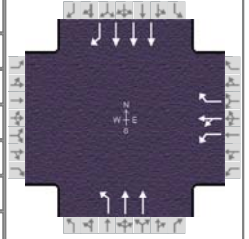
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	98th & I -40 WB
Project Description	PM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 16:00
File Name	98th_I-40WB_PM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				1652	1	469	80	475			622	61

Signal Information

Cycle, s	110.0	Reference Phase	2																
Offset, s	0	Reference Point	End		Green	5.1	29.3	57.6	0.0	0.0	0.0								
Uncoordinated	No	Simult. Gap E/W	On		Yellow	4.5	4.5	4.5	0.0	0.0	0.0								
Force Mode	Fixed	Simult. Gap N/S	On		Red	2.0	1.0	1.5	0.0	0.0	0.0								

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4	1	6		2
Case Number				9.0	1.0	4.0		7.3
Phase Duration, s				63.6	11.6	46.4		34.8
Change Period, (Y+R c), s				6.0	6.5	5.5		5.5
Max Allow Headway (MAH), s				4.1	4.1	0.0		0.0
Queue Clearance Time (g s), s				46.1	5.4			
Green Extension Time (g e), s				11.5	0.2	0.0		0.0
Phase Call Probability				1.00	0.91			
Max Out Probability				0.40	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7	4	14	1	6		2	12	
Adjusted Flow Rate (v), veh/h				826	827	469	80	475		622	61	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1810		1810	1809		1725		
Queue Service Time (g s), s				44.0	44.1		3.4	10.4		11.0		
Cycle Queue Clearance Time (g c), s				44.0	44.1		3.4	10.4		11.0		
Green Ratio (g/C)				0.52	0.52		0.33	0.37		0.27		
Capacity (c), veh/h				947	947		285	1346		1380		
Volume-to-Capacity Ratio (X)				0.872	0.873		0.281	0.353		0.451		
Back of Queue (Q), ft/ln (95 th percentile)				661.5	663.4		67	200.5		205.7		
Back of Queue (Q), veh/ln (95 th percentile)				26.5	26.5		2.7	8.0		8.2		
Queue Storage Ratio (RQ) (95 th percentile)				0.00	0.00		0.67	0.00		0.00		
Uniform Delay (d 1), s/veh				23.0	23.0		26.6	25.0		33.6		
Incremental Delay (d 2), s/veh				7.0	7.1		0.5	0.7		1.1		
Initial Queue Delay (d 3), s/veh				0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh				30.0	30.1	0.0	27.1	25.7		34.7	0.0	
Level of Service (LOS)				C	C	A	C	C		C	A	
Approach Delay, s/veh / LOS	0.0			23.4		C	25.9		C	31.6		C
Intersection Delay, s/veh / LOS				25.5						C		

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.47		B	2.48		B	1.92		B	1.42		A
Bicycle LOS Score / LOS				3.99		D	0.95		A	0.86		A

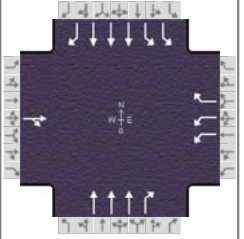
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Arroyo Vista & Ladera
Project Description	AM 2022 Build

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Arroyo Vista_Ladera_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h		0	0	413		28		334	373	47	588	0

Signal Information

Cycle, s	50.8	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6		4	3	8
Case Number		8.3	1.0	3.0		7.3	2.0	3.0
Phase Duration, s		0.0	16.6	16.6		24.0	10.1	34.1
Change Period, ($Y+R_c$), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Allow Headway (MAH), s		0.0	5.1	5.4		5.1	5.1	5.1
Queue Clearance Time (g_s), s			7.9	2.8		13.0	2.7	5.2
Green Extension Time (g_e), s		0.0	2.8	0.2		4.5	0.2	9.5
Phase Call Probability			1.00	1.00		1.00	0.51	1.00
Max Out Probability			0.01	0.00		0.58	0.00	0.32

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		2	12			16		4	14		3	8
Adjusted Flow Rate (v), veh/h		0		449		30		363	405		51	639
Adjusted Saturation Flow Rate (s), veh/h/ln		0		1757				1725			1757	1725
Queue Service Time (g_s), s		0.0		5.9				2.5			0.7	3.2
Cycle Queue Clearance Time (g_c), s		0.0		5.9				2.5			0.7	3.2
Green Ratio (g/C)				0.21				0.35			0.08	0.55
Capacity (c), veh/h				1021				1835			286	2867
Volume-to-Capacity Ratio (X)		0.000		0.440				0.198			0.179	0.223
Back of Queue (Q), ft/ln (95 th percentile)		0		95.3				35.7			12.2	35.5
Back of Queue (Q), veh/ln (95 th percentile)		0.0		3.8				1.4			0.5	1.4
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00				0.00			0.04	0.00
Uniform Delay (d_1), s/veh				18.1				11.4			21.8	5.8
Incremental Delay (d_2), s/veh		0.0		0.4				0.1			0.4	0.1
Initial Queue Delay (d_3), s/veh		0.0		0.0				0.0			0.0	0.0
Control Delay (d), s/veh				18.5		0.0		11.5	0.0		22.2	5.8
Level of Service (LOS)				B		A		B	A		C	A
Approach Delay, s/veh / LOS	0.0			17.3		B	5.4		A	7.0		A
Intersection Delay, s/veh / LOS				8.9						A		

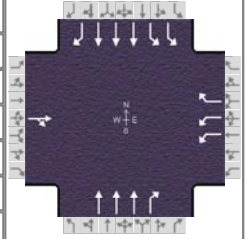
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.59		C	2.82		C	2.25		B	1.64		B
Bicycle LOS Score / LOS	0.49		A			F	0.91		A	0.87		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston		
Analyst	CDV	Analysis Date	11/27/2019
Jurisdiction		Time Period	PM Peak
Urban Street		Analysis Year	2022
Intersection	Arroyo Vista & Ladera	File Name	Arroyo Vista_Lade
Project Description	PM 2022 Build		



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h		0	0	342		123		733	395	103	451	0

Signal Information

Cycle, s	53.9	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	9.5	6.5	19.9	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	2.0	2.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6		4	3	8
Case Number		8.3	1.0	3.0		7.3	2.0	3.0
Phase Duration, s		0.0	15.5	15.5		25.9	12.5	38.4
Change Period, (Y+R _c), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Allow Headway (MAH), s		0.0	5.1	5.4		5.1	5.1	5.1
Queue Clearance Time (g _s), s			7.2	6.0		14.4	3.6	4.2
Green Extension Time (g _e), s		0.0	2.3	0.9		5.5	0.5	11.9
Phase Call Probability			1.00	1.00		1.00	0.81	1.00
Max Out Probability			0.00	0.00		0.74	0.00	0.44

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		2	12			16		4	14		3	8
Adjusted Flow Rate (v), veh/h		0		372		134		797	429		112	490
Adjusted Saturation Flow Rate (s), veh/h/ln		0		1757				1725			1757	1725
Queue Service Time (g _s), s		0.0		5.2				6.2			1.6	2.2
Cycle Queue Clearance Time (g _c), s		0.0		5.2				6.2			1.6	2.2
Green Ratio (g/C)				0.18				0.37			0.12	0.60
Capacity (c), veh/h				886				1910			425	3112
Volume-to-Capacity Ratio (X)		0.000		0.419				0.417			0.263	0.158
Back of Queue (Q), ft/ln (95 th percentile)		0		88.5				91.3			27.3	23.7
Back of Queue (Q), veh/ln (95 th percentile)		0.0		3.5				3.7			1.1	0.9
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00				0.00			0.08	0.00
Uniform Delay (d ₁), s/veh				20.4				12.7			21.5	4.7
Incremental Delay (d ₂), s/veh		0.0		0.5				0.2			0.5	0.0
Initial Queue Delay (d ₃), s/veh		0.0		0.0				0.0			0.0	0.0
Control Delay (d), s/veh				20.8		0.0		12.9	0.0		22.0	4.8
Level of Service (LOS)				C		A		B	A		C	A
Approach Delay, s/veh / LOS	0.0			15.3		B	8.4		A	8.0		A
Intersection Delay, s/veh / LOS	9.8						A					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.82	C	2.25	B	1.63	B
Bicycle LOS Score / LOS	0.49	A		F	1.16	A	0.82	A

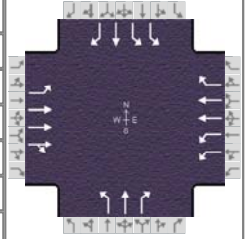
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Arroyo Vista & Tierra Pi...
Project Description	AM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
File Name	Arroyo Vista_Tierra Pintada_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	28	405	0	2	165	214	0	2	0	253	3	20

Signal Information

Cycle, s	52.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	5.0	16.1	4.1	15.2	0.0	22.0	9.8	31.8
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	6.0	4.0	6.0
Max Allow Headway (MAH), s	5.1	4.1	2.6	4.1	0.0	5.3	2.6	5.3
Queue Clearance Time (g_s), s	2.6	5.2	2.0	8.5		2.0	5.6	2.3
Green Extension Time (g_e), s	0.1	2.0	0.0	1.2	0.0	0.0	0.4	0.1
Phase Call Probability	0.33	1.00	0.03	1.00		1.00	0.97	1.00
Max Out Probability	0.00	0.47	0.00	1.00		0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	28	405	0	2	165	214	0	2	0	253	3	20
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	0	1757	1809	1610	1810	1900	1610	1757	1900	1610
Queue Service Time (g_s), s	0.6	3.2	0.0	0.0	2.0	6.5	0.0	0.0	0.0	3.6	0.0	0.3
Cycle Queue Clearance Time (g_c), s	0.6	3.2	0.0	0.0	2.0	6.5	0.0	0.0	0.0	3.6	0.0	0.3
Green Ratio (g/C)	0.21	0.20		0.00	0.19	0.19		0.31	0.31	0.11	0.50	0.50
Capacity (c), veh/h	357	1166		7	676	301	3	583	494	393	942	798
Volume-to-Capacity Ratio (X)	0.078	0.347	0.000	0.296	0.244	0.711	0.000	0.003	0.000	0.644	0.003	0.025
Back of Queue (Q), ft/ln (50 th percentile)	6.2	30.9	0	0.5	19.1	63.2	0	0.4	0	34	0.3	2.2
Back of Queue (Q), veh/ln (50 th percentile)	0.2	1.2	0.0	0.0	0.8	2.5	0.0	0.0	0.0	1.4	0.0	0.1
Queue Storage Ratio (RQ) (50 th percentile)	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Uniform Delay (d_1), s/veh	16.7	17.7		25.9	18.0	19.8	0.0	12.5	0.0	22.1	6.6	6.7
Incremental Delay (d_2), s/veh	0.1	0.2	0.0	8.9	0.2	4.9	0.0	0.0	0.0	0.7	0.0	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.8	17.9		34.8	18.2	24.7	0.0	12.5	0.0	22.8	6.6	6.7
Level of Service (LOS)	B	B		C	B	C		B		C	A	A
Approach Delay, s/veh / LOS	17.8		B	21.9		C	12.5		B	21.4		C
Intersection Delay, s/veh / LOS	20.1						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.27		B	2.27		B	2.68		C	2.39		B
Bicycle LOS Score / LOS	0.73		A	0.80		A	0.49		A	0.94		A

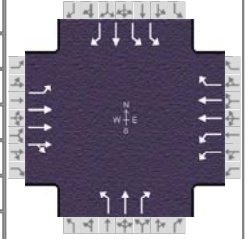
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Arroyo Vista & Tierra Pi...
Project Description	PM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 16:00
File Name	Arroyo Vista_Tierra Pintada_PM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	33	268	50	60	544	216	1	18	14	293	78	98

Signal Information

Cycle, s	53.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	5.2	15.6	5.8	16.2	4.0	21.2	10.6	27.7
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	6.0	4.0	6.0
Max Allow Headway (MAH), s	5.1	4.1	2.6	4.1	2.6	5.2	2.6	5.2
Queue Clearance Time (g_s), s	2.8	4.7	2.9	9.5	2.0	2.4	6.2	4.0
Green Extension Time (g_e), s	0.1	2.8	0.1	1.2	0.0	0.1	0.4	0.9
Phase Call Probability	0.39	1.00	0.59	1.00	0.01	1.00	0.99	1.00
Max Out Probability	0.00	0.54	0.00	1.00	0.00	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	33	214	104	60	544	216	1	18	14	293	78	98
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1748	1757	1809	1610	1810	1900	1610	1757	1900	1610
Queue Service Time (g_s), s	0.8	2.6	2.7	0.9	7.5	6.6	0.0	0.4	0.3	4.2	1.3	2.0
Cycle Queue Clearance Time (g_c), s	0.8	2.6	2.7	0.9	7.5	6.6	0.0	0.4	0.3	4.2	1.3	2.0
Green Ratio (g/C)	0.21	0.19	0.19	0.03	0.20	0.20	0.00	0.29	0.29	0.12	0.41	0.41
Capacity (c), veh/h	195	724	333	117	731	325	3	542	460	436	776	658
Volume-to-Capacity Ratio (X)	0.169	0.296	0.311	0.514	0.744	0.664	0.294	0.033	0.030	0.672	0.100	0.149
Back of Queue (Q), ft/ln (50 th percentile)	7.9	25.7	25.6	9.1	78.1	62.9	0.7	3.5	2.7	40.3	11.9	15.3
Back of Queue (Q), veh/ln (50 th percentile)	0.3	1.0	1.0	0.4	3.1	2.5	0.0	0.1	0.1	1.6	0.5	0.6
Queue Storage Ratio (RQ) (50 th percentile)	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.00	0.00
Uniform Delay (d_1), s/veh	17.6	18.5	18.5	25.3	19.9	19.6	26.5	13.7	13.7	22.3	9.7	9.9
Incremental Delay (d_2), s/veh	0.6	0.2	0.5	1.3	3.4	4.0	17.4	0.0	0.0	0.7	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.1	18.7	19.0	26.6	23.3	23.5	43.9	13.7	13.7	22.9	9.8	10.1
Level of Service (LOS)	B	B	B	C	C	C	D	B	B	C	A	B
Approach Delay, s/veh / LOS	18.7	B		23.6	C		14.7	B		18.1	B	
Intersection Delay, s/veh / LOS	20.9						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.27	B		2.27	B		2.69	C		2.40	B	
Bicycle LOS Score / LOS	0.68	A		1.16	A		0.54	A		1.26	A	

HCM 6th TWSC
10: ARROYO VISTA & INSPIRATION WEST

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	229	104	20	57	0
Future Vol, veh/h	0	229	104	20	57	0
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	269	122	24	67	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	146	0	-	0	403	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	269	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1436	-	-	-	603	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	776	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1436	-	-	-	603	915
Mov Cap-2 Maneuver	-	-	-	-	603	-
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	776	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		11.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1436	-	-	-	603	
HCM Lane V/C Ratio	-	-	-	-	0.111	
HCM Control Delay (s)	0	-	-	-	11.7	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.4	

HCM 6th TWSC
10: ARROYO VISTA & INSPIRATION WEST

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	151	253	65	37	0
Future Vol, veh/h	0	151	253	65	37	0
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	178	298	76	44	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	374	0	-	0	514	336
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	178	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1184	-	-	-	521	706
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1184	-	-	-	521	706
Mov Cap-2 Maneuver	-	-	-	-	521	-
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	853	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		12.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1184	-	-	-	521	
HCM Lane V/C Ratio	-	-	-	-	0.084	
HCM Control Delay (s)	0	-	-	-	12.5	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

HCM 6th TWSC
11: ARROYO VISTA & INSPIRATION EAST

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	286	124	47	134	0
Future Vol, veh/h	0	286	124	47	134	0
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	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	336	146	55	158	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	201	0	-	0	510	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	336	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1371	-	-	-	523	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	724	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1371	-	-	-	523	869
Mov Cap-2 Maneuver	-	-	-	-	523	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	724	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		14.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1371	-	-	-	523	
HCM Lane V/C Ratio	-	-	-	-	0.301	
HCM Control Delay (s)	0	-	-	-	14.8	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	1.3	

HCM 6th TWSC
11: ARROYO VISTA & INSPIRATION EAST

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	188	319	153	85	0
Future Vol, veh/h	0	188	319	153	85	0
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	85	85	80	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	221	399	180	100	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	579	0	-	0	710	489
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	995	-	-	-	400	579
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	995	-	-	-	400	579
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	816	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		17		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	995	-	-	-	400	
HCM Lane V/C Ratio	-	-	-	-	0.25	
HCM Control Delay (s)	0	-	-	-	17	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	1	

HCM 6th TWSC
10: ARROYO VISTA & INSPIRATION WEST

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	229	104	20	57	0
Future Vol, veh/h	0	229	104	20	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	269	122	24	67	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	146	0	-	0	269	73
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1434	-	-	-	698	974
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	877	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1434	-	-	-	698	974
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	877	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1434	-	-	-	698	
HCM Lane V/C Ratio	-	-	-	-	0.096	
HCM Control Delay (s)	0	-	-	-	10.7	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

HCM 6th TWSC
10: ARROYO VISTA & INSPIRATION WEST

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	151	253	65	37	0
Future Vol, veh/h	0	151	253	65	37	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	178	298	76	44	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	374	0	0	425	187
Stage 1	-	-	-	336	-
Stage 2	-	-	-	89	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	1181	-	-	557	823
Stage 1	-	-	-	696	-
Stage 2	-	-	-	924	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1181	-	-	557	823
Mov Cap-2 Maneuver	-	-	-	557	-
Stage 1	-	-	-	696	-
Stage 2	-	-	-	924	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1181	-	-	-	557
HCM Lane V/C Ratio	-	-	-	-	0.078
HCM Control Delay (s)	0	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

HCM 6th TWSC
11: ARROYO VISTA & INSPIRATION EAST

Upper Petroglyphs TIA
2022 Build Existing AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	286	124	47	134	0
Future Vol, veh/h	0	286	124	47	134	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	71	71
Mvmt Flow	0	336	146	55	158	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	201	0	-	0	342	101
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	4.14	-	-	-	8.22	8.32
Critical Hdwy Stg 1	-	-	-	-	7.22	-
Critical Hdwy Stg 2	-	-	-	-	7.22	-
Follow-up Hdwy	2.22	-	-	-	4.21	4.01
Pot Cap-1 Maneuver	1368	-	-	-	475	752
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1368	-	-	-	475	752
Mov Cap-2 Maneuver	-	-	-	-	475	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	672	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		16.3		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1368	-	-	-	475	
HCM Lane V/C Ratio	-	-	-	-	0.332	
HCM Control Delay (s)	0	-	-	-	16.3	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	1.4	

HCM 6th TWSC
11: ARROYO VISTA & INSPIRATION EAST

Upper Petroglyphs TIA
2022 Build Existing PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	188	319	153	85	0
Future Vol, veh/h	0	188	319	153	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	221	375	180	100	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	555	0	-	0	576	278
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1011	-	-	-	448	719
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1011	-	-	-	448	719
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	901	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		15.3		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1011	-	-	-	448	
HCM Lane V/C Ratio	-	-	-	-	0.223	
HCM Control Delay (s)	0	-	-	-	15.3	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0.8	

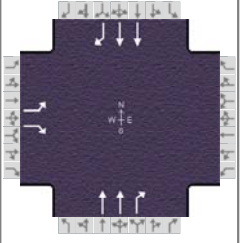
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Unser @ EB I-40
Project Description	AM 2022 Build

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Unser_EB I40_2022B_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122		89					831	877		1269	973

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	69.0	30.0	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.5	0.0	0.0	0.0	0.0		
				Red	1.0	1.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		9.0				7.0		7.0
Phase Duration, s		35.5				74.5		74.5
Change Period, (Y+R _c), s		5.5				5.5		5.5
Max Allow Headway (MAH), s		3.1				0.0		0.0
Queue Clearance Time (g _s), s		8.7						
Green Extension Time (g _e), s		0.4				0.0		0.0
Phase Call Probability		1.00						
Max Out Probability		0.00						

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3		18				6	16		2	12	
Adjusted Flow Rate (v), veh/h	133		97				903	953		1379	1058	
Adjusted Saturation Flow Rate (s), veh/h/ln	1711						1766			1781		
Queue Service Time (g _s), s	6.7						14.1			25.9		
Cycle Queue Clearance Time (g _c), s	6.7						14.1			25.9		
Green Ratio (g/C)	0.27						0.63			0.63		
Capacity (c), veh/h	466						2217			2235		
Volume-to-Capacity Ratio (X)	0.284						0.407			0.617		
Back of Queue (Q), ft/ln (95 th percentile)	128.2						218.9			360.4		
Back of Queue (Q), veh/ln (95 th percentile)	4.9						8.5			14.2		
Queue Storage Ratio (RQ) (95 th percentile)	1.14						0.11			0.23		
Uniform Delay (d ₁), s/veh	31.6						10.3			12.5		
Incremental Delay (d ₂), s/veh	0.1						0.6			1.3		
Initial Queue Delay (d ₃), s/veh	0.0						0.0			0.0		
Control Delay (d), s/veh	31.7		0.0				10.8	0.0		13.7	0.0	
Level of Service (LOS)	C		A				B	A		B	A	
Approach Delay, s/veh / LOS	18.3		B	0.0			5.3	A		7.8	A	
Intersection Delay, s/veh / LOS	7.3						A					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.32		B	2.32		B	1.36		A	1.88		B
Bicycle LOS Score / LOS			F				2.02		B	2.50		B

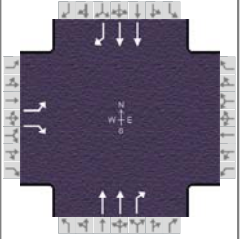
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	Unser @ EB I-40
Project Description	PM 2022 Build

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 16:00
File Name	Unser_EB I40_2022B_PM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	94		49				994	637		1364	404	

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	69.3	29.7	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.5	0.0	0.0	0.0	0.0		
				Red	1.0	1.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8				6		2
Case Number		9.0				7.0		7.0
Phase Duration, s		35.2				74.8		74.8
Change Period, (Y+R _c), s		5.5				5.5		5.5
Max Allow Headway (MAH), s		3.1				0.0		0.0
Queue Clearance Time (g _s), s		7.0						
Green Extension Time (g _e), s		0.3				0.0		0.0
Phase Call Probability		0.99						
Max Out Probability		0.00						

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3		18				6	16		2	12	
Adjusted Flow Rate (v), veh/h	102		53				1080	692		1483	439	
Adjusted Saturation Flow Rate (s), veh/h/ln	1753						1781			1766		
Queue Service Time (g _s), s	5.0						17.7			29.5		
Cycle Queue Clearance Time (g _c), s	5.0						17.7			29.5		
Green Ratio (g/C)	0.27						0.63			0.63		
Capacity (c), veh/h	474						2242			2224		
Volume-to-Capacity Ratio (X)	0.216						0.482			0.667		
Back of Queue (Q), ft/ln (95 th percentile)	94.9						262.4			402.3		
Back of Queue (Q), veh/ln (95 th percentile)	3.7						10.3			15.7		
Queue Storage Ratio (RQ) (95 th percentile)	0.85						0.13			0.26		
Uniform Delay (d ₁), s/veh	31.1						10.8			13.0		
Incremental Delay (d ₂), s/veh	0.1						0.7			1.6		
Initial Queue Delay (d ₃), s/veh	0.0						0.0			0.0		
Control Delay (d), s/veh	31.2		0.0				11.6	0.0		14.6	0.0	
Level of Service (LOS)	C		A				B	A		B	A	
Approach Delay, s/veh / LOS	20.5		C	0.0			7.1	A		11.3		B
Intersection Delay, s/veh / LOS	9.7						A					

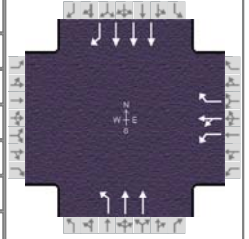
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.32		B	2.32		B	1.36		A	1.88		B
Bicycle LOS Score / LOS			F				1.95		B	2.07		B

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston			Duration, h	1.000
Analyst	CDV	Analysis Date	11/21/2019	Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	1.00
Urban Street		Analysis Year	2022	Analysis Period	1> 7:00
Intersection	UNSER @ WB I-40	File Name	Unser Intersections_AM (Existing Signal Timing)....		
Project Description	AM 2022 Build (Existing Signal Timing)				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				348	1	239	27	891			2311	176

Signal Information

Cycle, s	130.0	Reference Phase	2									
Offset, s	13	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.9	91.2	21.9	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	4.5	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	1.5	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	1.0	4.0		7.3
Phase Duration, s				27.9	5.4	102.1		96.7
Change Period, (Y+R c), s				6.0	3.5	5.5		5.5
Max Allow Headway (MAH), s				3.1	4.0	0.0		0.0
Queue Clearance Time (g s), s				20.8	2.5			
Green Extension Time (g e), s				1.1	0.1	0.0		0.0
Phase Call Probability				1.00	0.62			
Max Out Probability				0.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6		16
Adjusted Flow Rate (v), veh/h				174	175	239	27	891		2152		164
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1810		1810	1809		1725		
Queue Service Time (g s), s				11.5	11.6		0.5	10.9		15.0		
Cycle Queue Clearance Time (g c), s				11.5	11.6		0.5	10.9		15.0		
Green Ratio (g/C)				0.17	0.17		0.73	0.74		0.70		
Capacity (c), veh/h				305	305		192	2688		3632		
Volume-to-Capacity Ratio (X)				0.571	0.574		0.141	0.331		0.593		
Back of Queue (Q), ft/ln (95 th percentile)				221.7	223.1		8.3	157.6		132.5		
Back of Queue (Q), veh/ln (95 th percentile)				8.9	8.9		0.3	6.3		5.3		
Queue Storage Ratio (RQ) (95 th percentile)				0.00	0.00		0.02	0.00		0.00		
Uniform Delay (d 1), s/veh				49.7	49.8		6.1	5.7		3.6		
Incremental Delay (d 2), s/veh				0.6	0.6		0.3	0.3		0.4		
Initial Queue Delay (d 3), s/veh				0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh				50.4	50.4	0.0	6.4	6.0		4.1	0.0	
Level of Service (LOS)				D	D	A	A	A		A	A	
Approach Delay, s/veh / LOS	0.0			29.9		C	6.0		A	3.8		A
Intersection Delay, s/veh / LOS				8.4						A		

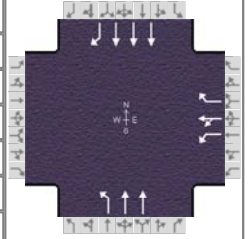
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.48		B	2.48		B	1.86		B	1.35		A
Bicycle LOS Score / LOS				1.46		A	1.24		A	1.86		B

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston			Duration, h	1.000
Analyst	CDV	Analysis Date	11/21/2019	Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	1.00
Urban Street		Analysis Year	2022	Analysis Period	1> 16:00
Intersection	UNSER @ WB I-40	File Name	Unser Intersections_PM (Existing Signal Timing)....		
Project Description	PM 2022 Build (Existing Signal Timing)				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				741	5	1503	50	1010			1144	215

Signal Information

Cycle, s	130.0	Reference Phase	2									
Offset, s	3	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.5	47.3	64.2	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	4.5	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	1.5	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	1.0	4.0		7.3
Phase Duration, s				70.2	7.0	59.8		52.8
Change Period, (Y+R _c), s				6.0	3.5	5.5		5.5
Max Allow Headway (MAH), s				3.2	4.0	0.0		0.0
Queue Clearance Time (g _s), s				66.2	4.2			
Green Extension Time (g _e), s				0.0	0.0	0.0		0.0
Phase Call Probability				1.00	0.84			
Max Out Probability				1.00	0.04			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6		16
Adjusted Flow Rate (v), veh/h				371	376	1503	50	1010		1036		195
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1811		1810	1809		1725		
Queue Service Time (g _s), s				16.9	17.2		2.2	29.3		21.4		
Cycle Queue Clearance Time (g _c), s				16.9	17.2		2.2	29.3		21.4		
Green Ratio (g/C)				0.49	0.49		0.41	0.42		0.36		
Capacity (c), veh/h				894	894		215	1511		1882		
Volume-to-Capacity Ratio (X)				0.415	0.420		0.232	0.668		0.551		
Back of Queue (Q), ft/ln (95 th percentile)				279.6	283		42.8	465.5		338.2		
Back of Queue (Q), veh/ln (95 th percentile)				11.2	11.3		1.7	18.6		13.5		
Queue Storage Ratio (RQ) (95 th percentile)				0.00	0.00		0.12	0.00		0.00		
Uniform Delay (d ₁), s/veh				20.9	21.0		25.9	30.6		35.3		
Incremental Delay (d ₂), s/veh				0.1	0.1		0.5	2.4		0.9		
Initial Queue Delay (d ₃), s/veh				0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh				21.1	21.1	0.0	26.4	33.0		36.2		0.0
Level of Service (LOS)				C	C	A	C	C		D		A
Approach Delay, s/veh / LOS	0.0			7.0		A	32.7		C	30.5		C
Intersection Delay, s/veh / LOS	19.3						B					

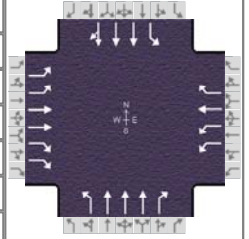
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.48		B	2.48		B	1.92		B	1.41		A
Bicycle LOS Score / LOS				4.20		D	1.36		A	1.24		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston			Duration, h	1.000
Analyst	CDV	Analysis Date	11/21/2019	Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	1.00
Urban Street		Analysis Year	2022	Analysis Period	1> 7:00
Intersection	UNSER @ LADERA	File Name	Unser Intersections_AM (Existing Signal Timing)....		
Project Description	AM 2022 Build (Existing Signal Timing)				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	295	309	260	488	123	174	91	754	260	139	1510	68

Signal Information

Cycle, s	130.0	Reference Phase	2									
Offset, s	99	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	8.4	3.9	52.1	13.0	2.6	18.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	3.5	4.0	4.0		
				Red	3.5	0.0	4.5	1.0	1.5	2.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	17.5	24.0	25.6	32.0	15.4	61.1	19.3	65.0
Change Period, (Y+R _c), s	4.5	6.0	5.5	6.0	7.0	9.0	6.9	9.0
Max Allow Headway (MAH), s	3.1	4.7	3.1	4.7	2.6	0.0	2.6	0.0
Queue Clearance Time (g _s), s	12.7	13.2	19.7	14.6	8.6		12.4	
Green Extension Time (g _e), s	0.3	4.7	0.3	4.9	0.1	0.0	0.1	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	0.97		0.99	
Max Out Probability	0.65	0.02	1.00	0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	295	309	260	488	123	174	93	771	266	144	1101	538
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1809	1425	1757	1900	1610	1810	1725		1810	1900	1856
Queue Service Time (g _s), s	10.7	10.5	11.2	17.7	7.2	12.6	6.6	11.4		10.4	21.6	20.6
Cycle Queue Clearance Time (g _c), s	10.7	10.5	11.2	17.7	7.2	12.6	6.6	11.4		10.4	21.6	20.6
Green Ratio (g/C)	0.10	0.14	0.14	0.15	0.20	0.20	0.06	0.40		0.10	0.43	0.43
Capacity (c), veh/h	351	500	394	542	381	323	117	2076		173	1638	800
Volume-to-Capacity Ratio (X)	0.841	0.618	0.660	0.900	0.323	0.539	0.794	0.371		0.834	0.672	0.672
Back of Queue (Q), ft/ln (95 th percentile)	224.7	211.8	186.9	353.5	154.2	220.7	147.1	191.4		212.1	252.6	240.8
Back of Queue (Q), veh/ln (95 th percentile)	9.0	8.5	7.5	14.1	6.2	8.8	5.9	7.7		8.5	10.1	9.6
Queue Storage Ratio (RQ) (95 th percentile)	0.80	0.00	0.93	1.22	0.00	0.00	0.33	0.00		0.44	0.00	0.00
Uniform Delay (d ₁), s/veh	57.5	52.8	53.1	54.0	44.4	46.6	62.2	21.1		63.9	14.6	13.4
Incremental Delay (d ₂), s/veh	10.3	1.8	2.7	18.6	0.4	1.0	4.4	0.5		2.9	1.6	3.3
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	67.7	54.6	55.8	72.6	44.8	47.6	66.6	21.6	0.0	66.8	16.2	16.7
Level of Service (LOS)	E	D	E	E	D	D	E	C	A	E	B	B
Approach Delay, s/veh / LOS	59.4		E	62.7		E	20.2		C	20.4		C
Intersection Delay, s/veh / LOS	35.0						D					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.60		C	2.44		B	2.57		C
Bicycle LOS Score / LOS	1.20		A	1.78		B	1.10		A	1.43		A

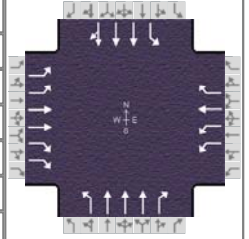
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston		
Analyst	CDV	Analysis Date	11/21/2019
Jurisdiction		Time Period	PM Peak
Urban Street		Analysis Year	2022
Intersection	UNSER @ LADERA	File Name	Unser Intersection
Project Description	PM 2022 Build (Existing Signal Timing)		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 16:00



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	166	240	144	333	352	234	299	1350	279	215	813	176

Signal Information

Cycle, s	130.0	Reference Phase	2									
Offset, s	56	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	16.3	5.8	44.4	8.1	1.4	22.1		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.4	0.0	4.5	3.5	4.0	4.0		
				Red	3.5	0.0	4.5	1.0	1.5	2.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	12.6	28.1	19.5	35.0	29.0	59.2	23.2	53.4
Change Period, ($Y+R_c$), s	4.5	6.0	5.5	6.0	7.0	9.0	6.9	9.0
Max Allow Headway (MAH), s	3.1	4.2	3.1	4.2	2.6	0.0	2.6	0.0
Queue Clearance Time (g_s), s	8.0	9.7	14.1	25.0	21.7		16.1	
Green Extension Time (g_e), s	0.1	4.3	0.0	4.1	0.3	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.01	1.00	0.04	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	166	240	144	333	352	234	280	1264	261	199	628	289
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1809	1425	1757	1900	1610	1810	1725		1810	1900	1725
Queue Service Time (g_s), s	6.0	7.7	5.7	12.1	23.0	17.2	19.7	27.7		14.1	17.1	18.8
Cycle Queue Clearance Time (g_c), s	6.0	7.7	5.7	12.1	23.0	17.2	19.7	27.7		14.1	17.1	18.8
Green Ratio (g/C)	0.06	0.17	0.17	0.11	0.22	0.22	0.17	0.39		0.13	0.34	0.34
Capacity (c), veh/h	220	616	485	378	424	359	306	1999		226	1297	589
Volume-to-Capacity Ratio (X)	0.756	0.390	0.297	0.880	0.830	0.651	0.915	0.632		0.880	0.484	0.490
Back of Queue (Q), ft/ln (95 th percentile)	126.6	157.5	93	271.4	420.3	282.6	252.9	347.2		277.5	312.5	330.8
Back of Queue (Q), veh/ln (95 th percentile)	5.1	6.3	3.7	10.9	16.8	11.3	10.1	13.9		11.1	12.5	13.2
Queue Storage Ratio (RQ) (95 th percentile)	0.45	0.00	0.46	0.94	0.00	0.00	0.56	0.00		0.57	0.00	0.00
Uniform Delay (d_1), s/veh	60.0	47.9	47.1	57.2	48.1	45.9	50.8	38.6		57.0	34.4	39.7
Incremental Delay (d_2), s/veh	4.5	0.6	0.5	24.4	4.5	1.5	0.8	0.1		8.4	1.1	2.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	64.4	48.5	47.6	81.6	52.6	47.4	51.6	38.8	0.0	65.4	35.6	42.3
Level of Service (LOS)	E	D	D	F	D	D	D	D	A	E	D	D
Approach Delay, s/veh / LOS	53.1		D	61.8		E	35.1		D	42.6		D
Intersection Delay, s/veh / LOS	44.9						D					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.60	C	2.44	B	2.59	C
Bicycle LOS Score / LOS	0.94	A	2.00	B	1.55	B	1.15	A

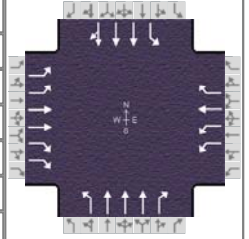
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	UNSER @ LADERA
Project Description	AM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
File Name	Unser Intersections_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	295	309	260	488	123	174	91	754	260	139	1510	68

Signal Information

Cycle, s	130.0	Reference Phase	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	17.8	24.0	26.0	32.1	15.4	60.7	19.3	64.7
Change Period, ($Y+R_c$), s	4.5	6.0	5.5	6.0	7.0	9.0	6.9	9.0
Max Allow Headway (MAH), s	3.1	4.7	3.1	4.7	2.6	0.0	2.6	0.0
Queue Clearance Time (g_s), s	12.7	13.2	19.7	14.6	8.6		12.4	
Green Extension Time (g_e), s	0.6	4.7	0.8	4.9	0.1	0.0	0.1	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	0.97		0.99	
Max Out Probability	0.00	0.02	0.06	0.01	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	295	309	260	488	123	174	93	771	266	144	1101	538
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1809	1425	1757	1900	1610	1810	1725		1810	1900	1856
Queue Service Time (g_s), s	10.7	10.5	11.2	17.7	7.2	12.6	6.6	11.4		10.4	21.9	21.0
Cycle Queue Clearance Time (g_c), s	10.7	10.5	11.2	17.7	7.2	12.6	6.6	11.4		10.4	21.9	21.0
Green Ratio (g/C)	0.10	0.14	0.14	0.16	0.20	0.20	0.06	0.40		0.10	0.43	0.43
Capacity (c), veh/h	360	500	394	553	381	323	117	2060		173	1627	795
Volume-to-Capacity Ratio (X)	0.819	0.618	0.660	0.882	0.323	0.538	0.794	0.374		0.834	0.677	0.677
Back of Queue (Q), ft/ln (95 th percentile)	210	211.8	187	330.7	154.2	220.6	147.1	191.5		212.1	259.1	244.6
Back of Queue (Q), veh/ln (95 th percentile)	8.4	8.5	7.5	13.2	6.2	8.8	5.9	7.7		8.5	10.4	9.8
Queue Storage Ratio (RQ) (95 th percentile)	0.75	0.00	0.93	1.14	0.00	0.00	0.33	0.00		0.44	0.00	0.00
Uniform Delay (d_1), s/veh	57.2	52.8	53.1	53.6	44.4	46.6	62.2	21.2		63.9	14.9	13.7
Incremental Delay (d_2), s/veh	1.8	1.8	2.7	9.3	0.4	1.0	4.4	0.5		2.9	1.6	3.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	58.9	54.6	55.9	62.9	44.8	47.6	66.6	21.7	0.0	66.8	16.6	17.1
Level of Service (LOS)	E	D	E	E	D	D	E	C	A	E	B	B
Approach Delay, s/veh / LOS	56.5		E	56.7		E	20.3		C	20.8		C
Intersection Delay, s/veh / LOS	33.6						C					

Multimodal Results

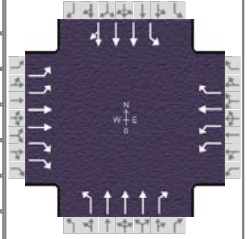
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.60		C	2.44		B	2.57		C
Bicycle LOS Score / LOS	1.20		A	1.78		B	1.10		A	1.43		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston		
Analyst	CDV	Analysis Date	11/21/2019
Jurisdiction		Time Period	PM Peak
Urban Street		Analysis Year	2022
Intersection	UNSER @ LADERA	File Name	Unser Intersection
Project Description	PM 2022 Build		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	166	240	144	333	352	234	299	1350	279	215	813	176

Signal Information

Cycle, s	130.0	Reference Phase	2
Offset, s	56	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	12.8	27.7	19.7	34.6	28.9	59.5	23.2	53.7
Change Period, (Y+R _c), s	4.5	6.0	5.5	6.0	7.0	9.0	6.9	9.0
Max Allow Headway (MAH), s	3.1	4.2	3.1	4.2	2.6	0.0	2.6	0.0
Queue Clearance Time (g _s), s	8.0	9.7	14.1	25.1	21.6		16.1	
Green Extension Time (g _e), s	0.3	4.1	0.1	3.6	0.3	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	0.03	1.00	0.15	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	166	240	144	333	352	234	280	1264	261	199	628	289
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1809	1425	1757	1900	1610	1810	1725		1810	1900	1725
Queue Service Time (g _s), s	6.0	7.7	5.8	12.1	23.1	17.2	19.6	27.7		14.1	17.0	18.7
Cycle Queue Clearance Time (g _c), s	6.0	7.7	5.8	12.1	23.1	17.2	19.6	27.7		14.1	17.0	18.7
Green Ratio (g/C)	0.06	0.17	0.17	0.11	0.22	0.22	0.17	0.39		0.13	0.34	0.34
Capacity (c), veh/h	224	603	475	384	418	354	305	2009		226	1306	593
Volume-to-Capacity Ratio (X)	0.742	0.398	0.303	0.867	0.842	0.660	0.917	0.629		0.881	0.481	0.487
Back of Queue (Q), ft/ln (95 th percentile)	122.9	158.4	93.5	262.2	435.1	283.9	247	346.8		275	310.1	328.5
Back of Queue (Q), veh/ln (95 th percentile)	4.9	6.3	3.7	10.5	17.4	11.4	9.9	13.9		11.0	12.4	13.1
Queue Storage Ratio (RQ) (95 th percentile)	0.44	0.00	0.47	0.90	0.00	0.00	0.55	0.00		0.57	0.00	0.00
Uniform Delay (d ₁), s/veh	59.8	48.3	47.5	57.0	48.5	46.3	49.3	38.5		56.6	34.0	39.3
Incremental Delay (d ₂), s/veh	1.9	0.6	0.5	19.0	8.2	1.6	0.8	0.1		8.0	1.1	2.5
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	61.7	48.9	48.0	76.0	56.7	47.8	50.1	38.6	0.0	64.5	35.1	41.8
Level of Service (LOS)	E	D	D	E	E	D	D	D	A	E	D	D
Approach Delay, s/veh / LOS	52.5		D	61.4		E	34.8		C	42.1		D
Intersection Delay, s/veh / LOS	44.5						D					

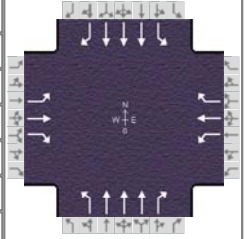
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.60	C	2.44	B	2.58	C
Bicycle LOS Score / LOS	0.94	A	2.00	B	1.55	B	1.15	A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston			Duration, h	1.000
Analyst	CDV	Analysis Date	11/21/2019	Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	1.00
Urban Street		Analysis Year	2022	Analysis Period	1> 7:00
Intersection	UNSER @ TIERRA PIN...	File Name	Unser Intersections_AM (Existing Signal Timing)....		
Project Description	AM 2022 Build (Existing Signal Timing)				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	234	12	359	52	12	19	118	976	29	68	1372	116

Signal Information

Cycle, s	130.0	Reference Phase	2									
Offset, s	90	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	6.4	0.8	60.9	4.9	1.7	25.4		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	3.5	4.5	3.5	3.5	3.0		
				Red	1.0	1.0	1.0	1.0	1.0	3.5		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	15.6	38.1	9.4	31.9	16.1	71.6	10.9	66.4
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	5.5	4.5	5.5
Max Allow Headway (MAH), s	2.6	3.3	2.6	3.3	2.6	0.0	2.6	0.0
Queue Clearance Time (g_s), s	13.1	30.8	5.8	3.3	11.6		6.9	
Green Extension Time (g_e), s	0.0	0.8	0.0	0.9	0.1	0.0	0.0	0.0
Phase Call Probability	1.00	1.00	0.85	1.00	0.99		0.91	
Max Out Probability	1.00	0.00	0.00	0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	234	12	359	52	12	19	130	1078	32	68	1372	116
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870		1781	1870		1739	1658		1781	1698	
Queue Service Time (g_s), s	11.1	0.6		3.8	0.7		9.6	18.8		4.9	25.5	
Cycle Queue Clearance Time (g_c), s	11.1	0.6		3.8	0.7		9.6	18.8		4.9	25.5	
Green Ratio (g/C)	0.09	0.24		0.04	0.20		0.09	0.51		0.05	0.47	
Capacity (c), veh/h	152	455		67	365		155	2531		87	2386	
Volume-to-Capacity Ratio (X)	1.539	0.026		0.776	0.033		0.838	0.426		0.781	0.575	
Back of Queue (Q), ft/ln (95 th percentile)	1725.8	13.4		83.7	14.4		199.9	303.5		107.4	395.3	
Back of Queue (Q), veh/ln (95 th percentile)	67.9	0.5		3.3	0.6		7.7	11.7		4.2	15.6	
Queue Storage Ratio (RQ) (95 th percentile)	9.59	0.00		0.33	0.06		0.42	0.00		0.25	0.00	
Uniform Delay (d_1), s/veh	59.5	37.5		62.0	42.4		59.8	22.2		61.1	25.1	
Incremental Delay (d_2), s/veh	1002.0	0.0		7.3	0.0		4.0	0.4		5.8	1.0	
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	1061.5	37.5	0.0	69.3	42.4	0.0	63.8	22.7	0.0	66.9	26.2	0.0
Level of Service (LOS)	F	D	A	E	D	A	E	C	A	E	C	A
Approach Delay, s/veh / LOS	411.3		F	49.5		D	26.4		C	26.0		C
Intersection Delay, s/veh / LOS	93.6						F					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.73	C	2.73	C	2.10	B	2.11	B
Bicycle LOS Score / LOS	1.49	A	0.62	A	1.11	A	1.34	A

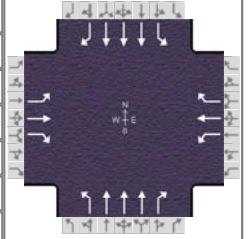
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	UNSER @ TIERRA PIN...
Project Description	PM 2022 Build (Existing Signal Timing)

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 16:00
File Name	Unser Intersections_PM (Existing Signal Timing)...



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	152	30	116	152	62	106	292	1324	117	65	848	178

Signal Information

Cycle, s	130.0	Reference Phase	2							
Offset, s	0	Reference Point	End							
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	11.7	63.6	11.1	11.9	0.0
				Yellow	3.5	3.5	4.5	3.5	4.0	0.0
				Red	1.0	1.0	1.0	1.0	2.5	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	15.6	18.4	15.6	18.4	26.9	85.3	10.6	69.1
Change Period, (Y+R _c), s	4.5	6.5	4.5	6.5	4.5	5.5	4.5	5.5
Max Allow Headway (MAH), s	2.6	3.3	2.6	3.3	2.6	0.0	2.6	0.0
Queue Clearance Time (g _s), s	13.1	11.3	13.1	10.5	22.0		6.7	
Green Extension Time (g _e), s	0.0	0.6	0.0	0.6	0.3	0.0	0.1	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		0.90	
Max Out Probability	1.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	152	30	116	152	62	106	280	1271	112	65	848	178
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870		1781	1870		1739	1658		1781	1698	
Queue Service Time (g _s), s	11.1	1.9		11.1	4.0		20.0	22.2		4.7	13.3	
Cycle Queue Clearance Time (g _c), s	11.1	1.9		11.1	4.0		20.0	22.2		4.7	13.3	
Green Ratio (g/C)	0.09	0.09		0.09	0.09		0.17	0.61		0.05	0.49	
Capacity (c), veh/h	152	172		152	172		299	3055		84	2493	
Volume-to-Capacity Ratio (X)	0.999	0.175		0.999	0.361		0.938	0.416		0.777	0.340	
Back of Queue (Q), ft/ln (95 th percentile)	420.9	41.8		420.9	88		259.5	345.9		102.8	230	
Back of Queue (Q), veh/ln (95 th percentile)	16.6	1.6		16.6	3.5		10.0	13.3		4.0	9.1	
Queue Storage Ratio (RQ) (95 th percentile)	2.34	0.00		1.65	0.35		0.54	0.00		0.24	0.00	
Uniform Delay (d ₁), s/veh	59.4	54.5		59.4	55.4		36.5	19.6		61.3	20.3	
Incremental Delay (d ₂), s/veh	145.3	0.2		145.3	0.5		5.0	0.3		5.9	0.4	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	204.7	54.7	0.0	204.7	55.9	0.0	41.4	19.9	0.0	67.2	20.7	0.0
Level of Service (LOS)	F	D	A	F	E	A	D	B	A	E	C	A
Approach Delay, s/veh / LOS	109.9	F		108.1	F		22.2	C		20.1	C	
Intersection Delay, s/veh / LOS	37.4						D					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74	C		2.74	C		2.08	B		2.10	B	
Bicycle LOS Score / LOS	0.98	A		1.02	A		1.44	A		1.09	A	

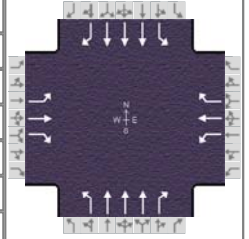
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	UNSER @ TIERRA PIN...
Project Description	AM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
File Name	Unser Intersections_AM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	234	12	359	52	12	19	118	976	29	68	1372	116

Signal Information

Cycle, s	130.0	Reference Phase	2											
Offset, s	90	Reference Point	End	Green	6.4	0.8	67.3	4.9	9.5	11.1	1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	3.5	4.5	3.5	3.5	3.0				
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	1.0	1.0	3.5	5	6	7	8

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	23.4	31.6	9.4	17.6	16.2	78.1	10.9	72.8
Change Period, (Y+R _c), s	4.5	6.5	4.5	6.5	4.5	5.5	4.5	5.5
Max Allow Headway (MAH), s	2.6	3.3	2.6	3.3	2.6	0.0	2.6	0.0
Queue Clearance Time (g _s), s	18.8	27.1	5.8	3.4	11.7		6.9	
Green Extension Time (g _e), s	0.1	0.0	0.0	0.6	0.1	0.0	0.1	0.0
Phase Call Probability	1.00	1.00	0.85	1.00	0.99		0.91	
Max Out Probability	0.29	1.00	0.00	0.07	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	234	12	359	52	12	19	130	1078	32	68	1372	116
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870		1781	1870		1739	1658		1781	1698	
Queue Service Time (g _s), s	16.8	0.7		3.8	0.8		9.7	16.5		4.9	23.1	
Cycle Queue Clearance Time (g _c), s	16.8	0.7		3.8	0.8		9.7	16.5		4.9	23.1	
Green Ratio (g/C)	0.15	0.19		0.04	0.09		0.09	0.56		0.05	0.52	
Capacity (c), veh/h	259	361		67	159		156	2779		87	2639	
Volume-to-Capacity Ratio (X)	0.903	0.033		0.773	0.075		0.834	0.388		0.779	0.520	
Back of Queue (Q), ft/ln (95 th percentile)	375.6	14.4		83.6	16.7		205.4	263.8		107.3	357.6	
Back of Queue (Q), veh/ln (95 th percentile)	14.8	0.6		3.3	0.7		7.9	10.1		4.2	14.1	
Queue Storage Ratio (RQ) (95 th percentile)	2.09	0.00		0.33	0.07		0.43	0.00		0.25	0.00	
Uniform Delay (d ₁), s/veh	54.6	42.6		62.0	54.7		61.7	17.1		61.1	20.7	
Incremental Delay (d ₂), s/veh	30.7	0.0		7.2	0.1		3.9	0.4		5.7	0.7	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	85.3	42.6	0.0	69.2	54.8	0.0	65.6	17.5	0.0	66.8	21.4	0.0
Level of Service (LOS)	F	D	A	E	D	A	E	B	A	E	C	A
Approach Delay, s/veh / LOS	33.9	C		51.2	D		22.1	C		21.8	C	
Intersection Delay, s/veh / LOS	24.7						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.73	C		2.74	C		2.09	B		2.10	B	
Bicycle LOS Score / LOS	1.49	A		0.62	A		1.11	A		1.34	A	

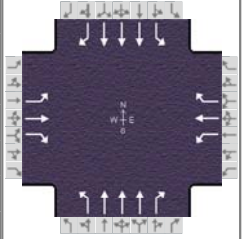
HCS7 Signalized Intersection Results Summary

General Information

Agency	Bohannon Huston
Analyst	CDV
Jurisdiction	
Urban Street	
Intersection	UNSER @ TIERRA PIN...
Project Description	PM 2022 Build

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 16:00
File Name	Unser Intersections_PM.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	152	30	116	152	62	106	292	1324	117	65	848	178

Signal Information

Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phase Duration, s	17.5	18.5	17.5	18.4	25.5	83.4	10.6	68.5
Change Period, (Y+R _c), s	4.5	6.5	4.5	6.5	4.5	5.5	4.5	5.5
Max Allow Headway (MAH), s	2.6	3.3	2.6	3.3	2.6	0.0	2.6	0.0
Queue Clearance Time (g _s), s	12.9	11.3	12.9	10.5	20.7		6.7	
Green Extension Time (g _e), s	0.2	0.6	0.1	0.6	0.3	0.0	0.1	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		0.90	
Max Out Probability	0.00	0.00	0.00	0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	152	30	116	152	62	106	261	1184	105	65	848	178
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870		1781	1870		1739	1658		1781	1698	
Queue Service Time (g _s), s	10.9	1.9		10.9	4.0		18.7	21.6		4.7	13.4	
Cycle Queue Clearance Time (g _c), s	10.9	1.9		10.9	4.0		18.7	21.6		4.7	13.4	
Green Ratio (g/C)	0.10	0.09		0.10	0.09		0.16	0.60		0.05	0.48	
Capacity (c), veh/h	179	172		178	172		282	2981		84	2469	
Volume-to-Capacity Ratio (X)	0.851	0.174		0.853	0.361		0.927	0.397		0.776	0.343	
Back of Queue (Q), ft/ln (95 th percentile)	223.8	41.8		223.9	88		269.3	345.3		102.7	232.2	
Back of Queue (Q), veh/ln (95 th percentile)	8.8	1.6		8.8	3.5		10.4	13.3		4.0	9.1	
Queue Storage Ratio (RQ) (95 th percentile)	1.24	0.00		0.88	0.35		0.56	0.00		0.24	0.00	
Uniform Delay (d ₁), s/veh	57.5	54.5		57.6	55.5		40.6	21.4		61.3	20.7	
Incremental Delay (d ₂), s/veh	4.5	0.2		4.6	0.5		4.8	0.3		5.9	0.4	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	62.1	54.6	0.0	62.2	55.9	0.0	45.4	21.7	0.0	67.1	21.1	0.0
Level of Service (LOS)	E	D	A	E	E	A	D	C	A	E	C	A
Approach Delay, s/veh / LOS	37.2		D	40.4		D	24.2		C	20.4		C
Intersection Delay, s/veh / LOS	25.7						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.74		C	2.08		B	2.10		B
Bicycle LOS Score / LOS	0.98		A	1.02		A	1.44		A	1.09		A

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	191	4	21	83	0	8	0	37	0	0	0
Future Vol, veh/h	0	191	4	21	83	0	8	0	37	0	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	201	4	22	87	0	8	0	39	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	87	0	0	205	0	0	334	334	203	354	336	87
Stage 1	-	-	-	-	-	-	203	203	-	131	131	-
Stage 2	-	-	-	-	-	-	131	131	-	223	205	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1509	-	-	1366	-	-	620	586	838	601	585	971
Stage 1	-	-	-	-	-	-	799	733	-	873	788	-
Stage 2	-	-	-	-	-	-	873	788	-	780	732	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1509	-	-	1366	-	-	612	576	838	566	575	971
Mov Cap-2 Maneuver	-	-	-	-	-	-	612	576	-	566	575	-
Stage 1	-	-	-	-	-	-	799	733	-	873	775	-
Stage 2	-	-	-	-	-	-	858	775	-	744	732	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.6			9.9			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	786	1509	-	-	1366	-	-	-				
HCM Lane V/C Ratio	0.06	-	-	-	0.016	-	-	-				
HCM Control Delay (s)	9.9	0	-	-	7.7	0	-	0				
HCM Lane LOS	A	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-				

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	125	8	42	211	0	5	0	26	0	0	0
Future Vol, veh/h	0	125	8	42	211	0	5	0	26	0	0	0
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	132	8	44	222	0	5	0	27	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	222	0	0	140	0	0	446	446	136	460	450	222
Stage 1	-	-	-	-	-	-	136	136	-	310	310	-
Stage 2	-	-	-	-	-	-	310	310	-	150	140	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1347	-	-	1443	-	-	523	507	913	512	504	818
Stage 1	-	-	-	-	-	-	867	784	-	700	659	-
Stage 2	-	-	-	-	-	-	700	659	-	853	781	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1347	-	-	1443	-	-	509	489	913	483	486	818
Mov Cap-2 Maneuver	-	-	-	-	-	-	509	489	-	483	486	-
Stage 1	-	-	-	-	-	-	867	784	-	700	636	-
Stage 2	-	-	-	-	-	-	676	636	-	827	781	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.3			9.6			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	809	1347	-	-	1443	-	-	-				
HCM Lane V/C Ratio	0.04	-	-	-	0.031	-	-	-				
HCM Control Delay (s)	9.6	0	-	-	7.6	0	-	0				
HCM Lane LOS	A	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-				

Intersection								
Int Delay, s/veh	6							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Vol, veh/h	56	10	47	43	28	140		
Future Vol, veh/h	56	10	47	43	28	140		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	0		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	61	11	51	47	30	152		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	72	0	216	67		
Stage 1	-	-	-	-	67	-		
Stage 2	-	-	-	-	149	-		
Critical Hdwy	-	-	4.12	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	-	-	2.218	-	3.518	3.318		
Pot Cap-1 Maneuver	-	-	1528	-	772	997		
Stage 1	-	-	-	-	956	-		
Stage 2	-	-	-	-	879	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	1528	-	746	997		
Mov Cap-2 Maneuver	-	-	-	-	746	-		
Stage 1	-	-	-	-	956	-		
Stage 2	-	-	-	-	849	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		3.9		9.4			
HCM LOS	A							
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	746		997		-	-	1528	-
HCM Lane V/C Ratio	0.041		0.153		-	-	0.033	-
HCM Control Delay (s)	10		9.3		-	-	7.4	0
HCM Lane LOS	B		A		-	-	A	A
HCM 95th %tile Q(veh)	0.1		0.5		-	-	0.1	-

Intersection								
Int Delay, s/veh	5.7							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Vol, veh/h	41	32	159	58	19	92		
Future Vol, veh/h	41	32	159	58	19	92		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	0		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	45	35	173	63	21	100		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	80	0	472	63		
Stage 1	-	-	-	-	63	-		
Stage 2	-	-	-	-	409	-		
Critical Hdwy	-	-	4.12	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	-	-	2.218	-	3.518	3.318		
Pot Cap-1 Maneuver	-	-	1518	-	551	1002		
Stage 1	-	-	-	-	960	-		
Stage 2	-	-	-	-	671	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	1518	-	486	1002		
Mov Cap-2 Maneuver	-	-	-	-	486	-		
Stage 1	-	-	-	-	960	-		
Stage 2	-	-	-	-	592	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		5.6		9.6			
HCM LOS					A			
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	486		1002		-	-	1518	-
HCM Lane V/C Ratio	0.042		0.1		-	-	0.114	-
HCM Control Delay (s)	12.7		9		-	-	7.7	0
HCM Lane LOS	B		A		-	-	A	A
HCM 95th %tile Q(veh)	0.1		0.3		-	-	0.4	-

HCM 6th TWSC
3: ATRISCO VISTA & Arroyo Vista

Upper Petroglyphs TIA
2022 Build Future AM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	33	0	39	0	86	11	55	171	0
Future Vol, veh/h	0	0	0	33	0	39	0	86	11	55	171	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	36	0	42	0	93	12	60	186	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	426	411	186	405	405	99	186	0	0	105	0	0
Stage 1	306	306	-	99	99	-	-	-	-	-	-	-
Stage 2	120	105	-	306	306	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	539	531	856	556	535	957	1388	-	-	1486	-	-
Stage 1	704	662	-	907	813	-	-	-	-	-	-	-
Stage 2	884	808	-	704	662	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	497	507	856	537	511	957	1388	-	-	1486	-	-
Mov Cap-2 Maneuver	497	507	-	537	511	-	-	-	-	-	-	-
Stage 1	704	632	-	907	813	-	-	-	-	-	-	-
Stage 2	845	808	-	672	632	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		10.8		0		1.8					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1388	-	-	-	704	1486	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.111	0.04	-	-				
HCM Control Delay (s)	0	-	-	0	10.8	7.5	0	-				
HCM Lane LOS	A	-	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1	-	-				

HCM 6th TWSC
3: ATRISCO VISTA & Arroyo Vista

Upper Petroglyphs TIA
2022 Build Future PM Intersections w/ Arroyo Vista

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	0	0	0	19	0	57	0	182	37	36	86	0
Future Vol, veh/h	0	0	0	19	0	57	0	182	37	36	86	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	21	0	62	0	198	40	39	93	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	420	409	93	389	389	218	93	0	0	238	0	0
Stage 1	171	171	-	218	218	-	-	-	-	-	-	-
Stage 2	249	238	-	171	171	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	544	532	964	570	546	822	1501	-	-	1329	-	-
Stage 1	831	757	-	784	723	-	-	-	-	-	-	-
Stage 2	755	708	-	831	757	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	491	516	964	556	529	822	1501	-	-	1329	-	-
Mov Cap-2 Maneuver	491	516	-	556	529	-	-	-	-	-	-	-
Stage 1	831	734	-	784	723	-	-	-	-	-	-	-
Stage 2	698	708	-	805	734	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		10.5		0		2.3					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1501	-	-	-	734	1329	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.113	0.029	-	-				
HCM Control Delay (s)	0	-	-	0	10.5	7.8	0	-				
HCM Lane LOS	A	-	-	A	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1	-	-				

HCM 6th TWSC
2: Del Webb & Parcel 16/Parcel 17N

Upper Petroglyphs TIA
2022 Build Del Webb Blvd AM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	0	0	0	7	0	8	0	4	5	17
Future Vol, veh/h	30	0	0	0	0	7	0	8	0	4	5	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	28	28	28	2	2	2	15	15	15	10	10	10
Mvmt Flow	32	0	0	0	0	7	0	8	0	4	5	18
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	34	30	14	30	39	8	23	0	0	8	0	0
Stage 1	22	22	-	8	8	-	-	-	-	-	-	-
Stage 2	12	8	-	22	31	-	-	-	-	-	-	-
Critical Hdwy	7.38	6.78	6.48	7.12	6.52	6.22	4.25	-	-	4.2	-	-
Critical Hdwy Stg 1	6.38	5.78	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.38	5.78	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.752	4.252	3.552	3.518	4.018	3.318	2.335	-	-	2.29	-	-
Pot Cap-1 Maneuver	911	814	995	979	853	1074	1512	-	-	1561	-	-
Stage 1	933	828	-	1013	889	-	-	-	-	-	-	-
Stage 2	945	840	-	996	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	903	812	995	977	850	1074	1512	-	-	1561	-	-
Mov Cap-2 Maneuver	903	812	-	977	850	-	-	-	-	-	-	-
Stage 1	933	826	-	1013	889	-	-	-	-	-	-	-
Stage 2	939	840	-	993	866	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.4			0			1.1			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1512	-	-	903	1074	1561	-	-				
HCM Lane V/C Ratio	-	-	-	0.035	0.007	0.003	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.4	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

HCM 6th TWSC
2: Del Webb & Parcel 16/Parcel 17N

Upper Petroglyphs TIA
2022 Build Del Webb Blvd PM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	0	0	0	0	5	0	6	0	8	9	33
Future Vol, veh/h	20	0	0	0	0	5	0	6	0	8	9	33
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	19	19	19	2	2	2	14	14	14	9	9	9
Mvmt Flow	22	0	0	0	0	5	0	6	0	9	10	35
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	55	52	28	52	69	6	45	0	0	6	0	0
Stage 1	46	46	-	6	6	-	-	-	-	-	-	-
Stage 2	9	6	-	46	63	-	-	-	-	-	-	-
Critical Hdwy	7.29	6.69	6.39	7.12	6.52	6.22	4.24	-	-	4.19	-	-
Critical Hdwy Stg 1	6.29	5.69	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.29	5.69	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.671	4.171	3.471	3.518	4.018	3.318	2.326	-	-	2.281	-	-
Pot Cap-1 Maneuver	902	807	1000	947	822	1077	1489	-	-	1570	-	-
Stage 1	926	824	-	1016	891	-	-	-	-	-	-	-
Stage 2	970	858	-	968	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	893	802	1000	942	817	1077	1489	-	-	1570	-	-
Mov Cap-2 Maneuver	893	802	-	942	817	-	-	-	-	-	-	-
Stage 1	926	819	-	1016	891	-	-	-	-	-	-	-
Stage 2	965	858	-	962	837	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.4			0			1.2			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1489	-	-	893	1077	1570	-	-				
HCM Lane V/C Ratio	-	-	-	0.024	0.005	0.005	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.4	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile O(veh)	0	-	-	0.1	0	0	-	-				

HCM 6th TWSC
3: Del Webb & Amenity

Upper Petroglyphs TIA
2022 Build Del Webb Blvd AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	3.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	8	0	4	5
Future Vol, veh/h	0	4	8	0	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	24	24	14	14	11	11
Mvmt Flow	0	4	8	0	4	5
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	21	8	0	0	8	0
Stage 1	8	-	-	-	-	-
Stage 2	13	-	-	-	-	-
Critical Hdwy	6.64	6.44	-	-	4.21	-
Critical Hdwy Stg 1	5.64	-	-	-	-	-
Critical Hdwy Stg 2	5.64	-	-	-	-	-
Follow-up Hdwy	3.716	3.516	-	-	2.299	-
Pot Cap-1 Maneuver	942	1013	-	-	1555	-
Stage 1	961	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	939	1013	-	-	1555	-
Mov Cap-2 Maneuver	939	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.6	0		3.3		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 1013	1555	-		
HCM Lane V/C Ratio	-	- 0.004	0.003	-		
HCM Control Delay (s)	-	- 8.6	7.3	0		
HCM Lane LOS	-	- A	A	A		
HCM 95th %tile Q(veh)	-	- 0	0	-		

HCM 6th TWSC
3: Del Webb & Amenity

Upper Petroglyphs TIA
2022 Build Del Webb Blvd PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	2.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	6	0	4	9
Future Vol, veh/h	0	4	6	0	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	10	10	7	7	7	7
Mvmt Flow	0	4	7	0	4	10
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	25	7	0	0	7	0
Stage 1	7	-	-	-	-	-
Stage 2	18	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	971	1052	-	-	1581	-
Stage 1	996	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	968	1052	-	-	1581	-
Mov Cap-2 Maneuver	968	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.4	0		2.2		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 1052		1581	-	
HCM Lane V/C Ratio	-	- 0.004		0.003	-	
HCM Control Delay (s)	-	- 8.4		7.3	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0		0	-	

HCM 6th TWSC
4: Parcel 17 South & Del Webb

Upper Petroglyphs TIA
2022 Build Del Webb Blvd AM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	8	0	0	0	5	0	0
Future Vol, veh/h	0	0	0	0	0	8	0	0	0	5	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	2	2	2	9	9	9	9	9	9
Mvmt Flow	0	0	0	0	0	9	0	0	0	6	0	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	17	12	0	12	12	0	0	0	0	0	0	0
Stage 1	12	12	-	0	0	-	-	-	-	-	-	-
Stage 2	5	0	-	12	12	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.12	6.52	6.22	4.19	-	-	4.19	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.281	-	-	2.281	-	-
Pot Cap-1 Maneuver	990	877	-	1005	883	-	-	-	-	-	-	-
Stage 1	1001	880	-	-	-	-	-	-	-	-	-	-
Stage 2	1009	-	-	1009	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	877	-	-	883	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	877	-	-	883	-	-	-	-	-	-	-
Stage 1	1001	880	-	-	-	-	-	-	-	-	-	-
Stage 2	1009	-	-	1009	886	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0											
HCM LOS	A											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	-	-	-	-	-	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-				
HCM Control Delay (s)	0	-	-	0	-	-	-	-				
HCM Lane LOS	A	-	-	A	-	-	-	-				
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-	-				

HCM 6th TWSC
4: Parcel 17 South & Del Webb

Upper Petroglyphs TIA
2022 Build Del Webb Blvd PM Intersections w/ Arroyo Vista

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	6	0	0	0	9	0	0
Future Vol, veh/h	0	0	0	0	0	6	0	0	0	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	13	13	13	2	2	2	5	5	5	2	2	2
Mvmt Flow	0	0	0	0	0	7	0	0	0	10	0	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	24	20	0	20	20	0	0	0	0	0	0	0
Stage 1	20	20	-	0	0	-	-	-	-	-	-	-
Stage 2	4	0	-	20	20	-	-	-	-	-	-	-
Critical Hdwy	7.23	6.63	6.33	7.12	6.52	6.22	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	6.23	5.63	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.23	5.63	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.117	3.417	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	960	852	-	993	874	-	-	-	-	-	-	-
Stage 1	971	857	-	-	-	-	-	-	-	-	-	-
Stage 2	990	-	-	999	879	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	852	-	-	874	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	852	-	-	874	-	-	-	-	-	-	-
Stage 1	971	857	-	-	-	-	-	-	-	-	-	-
Stage 2	990	-	-	999	879	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0											
HCM LOS	A											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	-	-	-	-	-	-	-					
HCM Lane V/C Ratio	-	-	-	-	-	-	-					
HCM Control Delay (s)	0	-	-	0	-	-	-					
HCM Lane LOS	A	-	-	A	-	-	-					
HCM 95th %tile O(veh)	-	-	-	-	-	-	-					

Intersection									
Intersection Delay, s/veh 3.3									
Intersection LOS A									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	97		0		86		62		
Demand Flow Rate, veh/h	99		0		88		64		
Vehicles Circulating, veh/h	30		187		99		0		
Vehicles Exiting, veh/h	34		0		30		187		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	3.4		0.0		3.6		2.8		
Approach LOS	A		-		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	R	LT	R	
Assumed Moves	LT	R	LT	R	LT	R	LT	R	
RT Channelized									
Lane Util	1.000	0.000	0.500	0.500	1.000	0.000	0.469	0.531	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	99	0	0	0	88	0	30	34	
Cap Entry Lane, veh/h	1313	1384	1137	1211	1232	1305	1350	1420	
Entry HV Adj Factor	0.980	1.000	1.000	1.000	0.980	1.000	0.980	0.971	
Flow Entry, veh/h	97	0	0	0	86	0	29	33	
Cap Entry, veh/h	1287	1384	1137	1211	1208	1305	1323	1378	
V/C Ratio	0.075	0.000	0.000	0.000	0.071	0.000	0.022	0.024	
Control Delay, s/veh	3.4	2.6	3.2	3.0	3.6	2.8	2.9	2.8	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	0	0	0	0	0	0	0	0	

HCM 6th Roundabout
3: Estancia & Parcel 13B/Parcel 15

Upper Petroglyphs TIA
2022 Build Estancia Blvd PM Intersections w/ Arroyo Vista

Intersection									
Intersection Delay, s/veh 3.3									
Intersection LOS A									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	64		0		57		208		
Demand Flow Rate, veh/h	65		0		58		212		
Vehicles Circulating, veh/h	100		123		65		0		
Vehicles Exiting, veh/h	112		0		100		123		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	3.4		0.0		3.3		3.2		
Approach LOS	A		-		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	R	LT	R	
Assumed Moves	LT	R	LT	R	LT	R	LT	R	
RT Channelized									
Lane Util	1.000	0.000	0.500	0.500	1.000	0.000	0.472	0.528	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	65	0	0	0	58	0	100	112	
Cap Entry Lane, veh/h	1231	1304	1205	1279	1271	1344	1350	1420	
Entry HV Adj Factor	0.985	1.000	1.000	1.000	0.980	1.000	0.980	0.982	
Flow Entry, veh/h	64	0	0	0	57	0	98	110	
Cap Entry, veh/h	1212	1304	1205	1279	1247	1344	1323	1395	
V/C Ratio	0.053	0.000	0.000	0.000	0.046	0.000	0.074	0.079	
Control Delay, s/veh	3.4	2.8	3.0	2.8	3.3	2.7	3.3	3.2	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	0	0	0	0	0	0	0	0	

HCM 6th TWSC
4: Parcel 13C & Estancia

Upper Petroglyphs TIA
2022 Build Estancia Blvd AM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	6.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	79	0	0	0	0	27
Future Vol, veh/h	79	0	0	0	0	27
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	0	0	0	0	29
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	15	15	29	0	-	0
Stage 1	15	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	1001	1061	1582	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1001	1061	1582	-	-	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1582	-	1001	-	-	
HCM Lane V/C Ratio	-	-	0.086	-	-	
HCM Control Delay (s)	0	-	8.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

HCM 6th TWSC
4: Parcel 13C & Estancia

Upper Petroglyphs TIA
2022 Build Estancia Blvd PM Intersections w/ Arroyo Vista

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	0	0	0	0	90
Future Vol, veh/h	52	0	0	0	0	90
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	0	0	0	0	98
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	49	49	98	0	-	0
Stage 1	49	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	954	1009	1493	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	954	1009	1493	-	-	-
Mov Cap-2 Maneuver	954	-	-	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1493	-	954	-	-	
HCM Lane V/C Ratio	-	-	0.059	-	-	
HCM Control Delay (s)	0	-	9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	