

APPENDIX A

US 27 Traffic Forecast Modeling Technical Memorandum

TECHNICAL MEMORANDUM

TRAFFIC FORECAST MODELING

US 27 FROM SR 60 TO LAKE COUNTY

POLK COUNTY, FLORIDA

March 2019



Traffic Forecast Modeling Technical Memorandum

US 27 from SR 60 to Lake County

Polk County, Florida

Introduction

This Technical Memorandum presents the details of the development of a Traffic Forecast model in support of a traffic study for US 27 from SR-60 to the Lake County Line in Polk County, Florida. A map showing this study area is shown below.

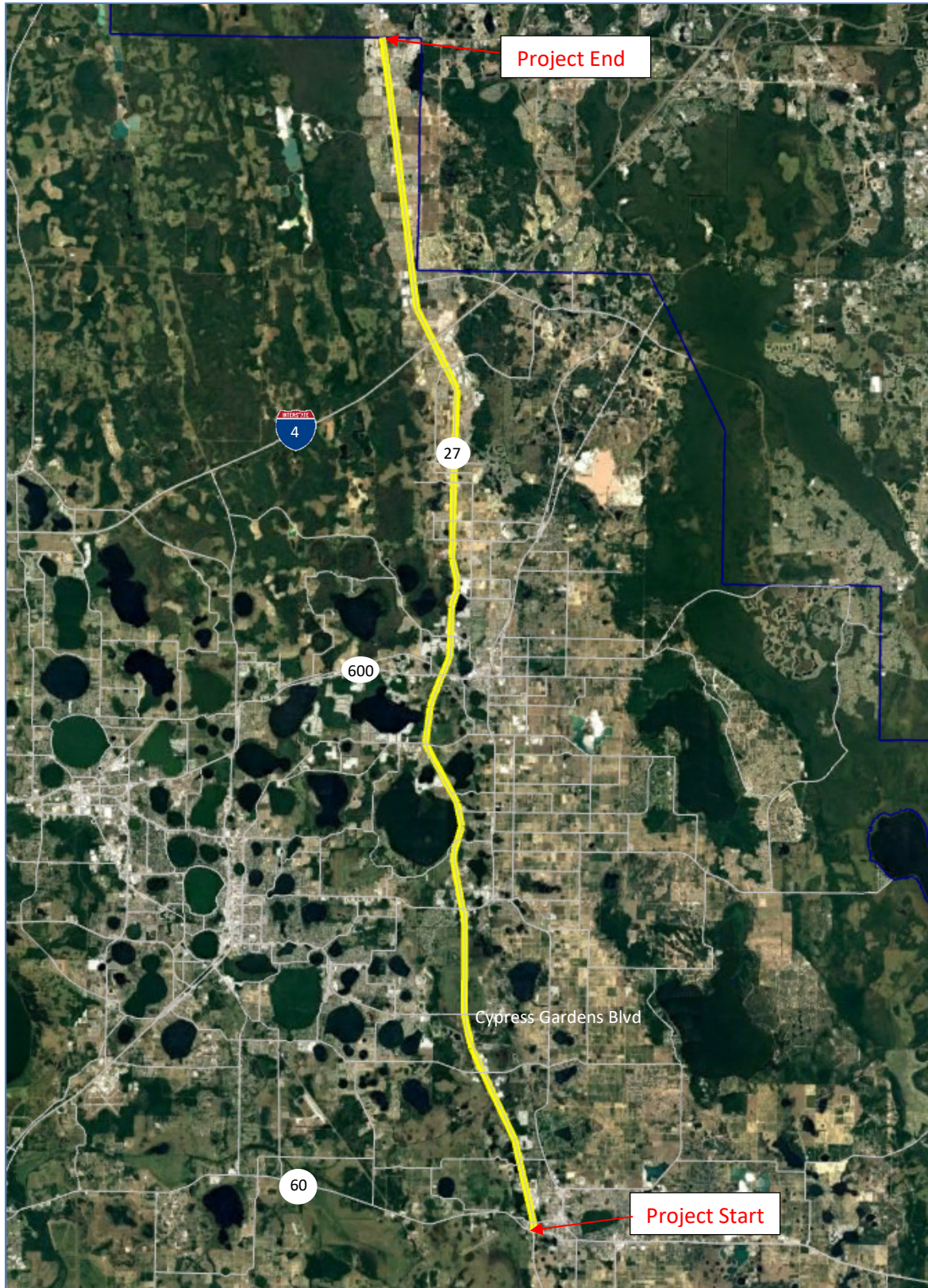
This effort involved conducting a sub-area base year (2010) validation refinement for the study area, as well as development of a refined forecast (2040) Cost Feasible No-Build model.

The traffic model applied for this study was based on the current adopted District 1 Cost Feasible 2040 Regional Planning Model (D1RPM v1.0.3), with refinements made in conjunction with a May 2018 US 17/92 Haines City traffic study (documentation attached). The D1RPM is a travel demand forecasting tool developed by FDOT District 1, in conjunction with the six District MPO/TPOs in support of their current 2040 Long Range Transportation Plans (LRTP). This model was adopted by the Polk County MPO for use in developing traffic forecasts within the County.

Model Sub-Area Validation

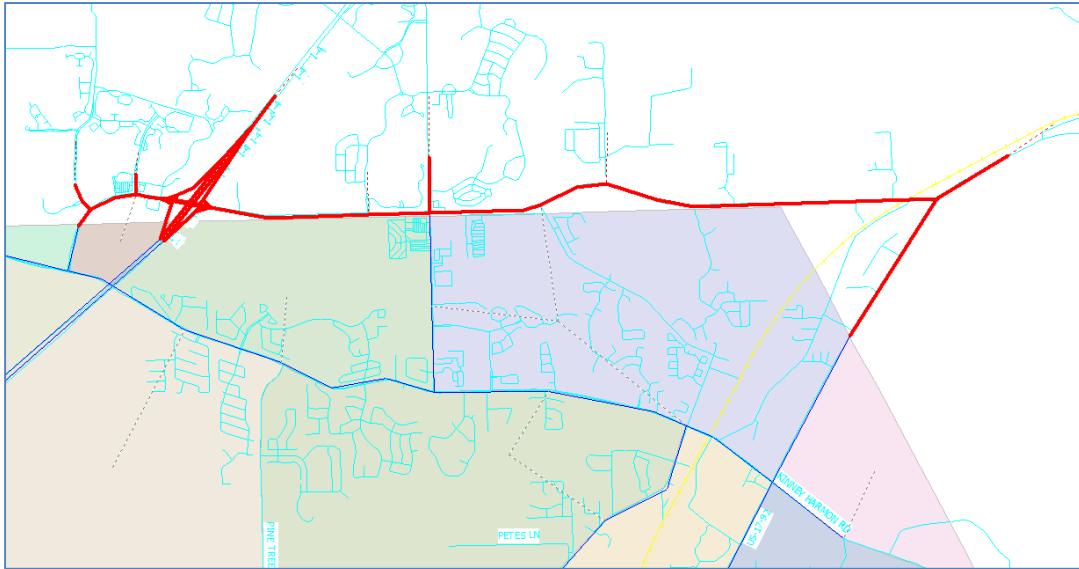
The 2010 base year model validation was refined for the project study area to ensure that the base year model is replicating base year traffic conditions and counts. The model refinement was performed by using the guidelines identified in “FDOT Project Traffic Forecasting Handbook”. Validation criteria including volume over count (v/c) ratios were used to assess the accuracy of the base year model.

Study Area Map



The following revisions were incorporated into the 2010 Base Year model as part of the sub-area validation effort:

- Add Osceola County CR 532 interchange area network (see graphic below)



- Add screenlines (27 & 83) for study area roadways with counts
- CR 532 from I-4 to CR 54 – FT 23 to FT 25
- CR 532 from Lake Wilson Rd to I-4– FT 22 to FT 23
- US 27 from Ridgewood Lakes Blvd to I-4 – FT 21 to FT 23
- US 27 from Johnson Ave to Blue Heron Blvd – FT 22 to FT 23
- US 27 from SR 60 to Washington Ave – FT 21 to FT 22
- US 27 from Lakeside Dr to SR 60 – FT 21 to FT 22
- SR 60 from Logistics Pkwy to E of Lake Wales Rd - FT 21 to 29
- SR 60 from Capps Rd to Stokes Rd - FT 21 to 29
- SR 544 from Lake Hamilton Dr to US 27 – FT 31 to FT 41
- SR 544 from to US 27 to SR 17 – FT 42 to FT 36
- TAZ 476, 534, 651, 652, 696, 570 - revise centroid loading
- TAZ 522, 525, 572, 602, 286, 511 - revise centroid loading
- TAZ 699, 700, 701 – Add Osceola County zones
- Refine External Station data (EETRIPS, INTEXT, SPECGEN_A)
 - Stations - 5641, 5647, 5648, 5649, 5650, 5661, 5662, 5663

- Turn Penalty - Champions Gate N of Ronald Reagan Pkwy (.5 min)
- Turn Penalty – I-4/US 27, WB to SB and NB to EB (.5 min)
- Turn Penalty – I-4/US 27, WB to SB and NB to EB (1 min)
- Turn Penalty – US 27/Central Ave, EB to NB and SB to WB (1 min)
- Turn Prohibitors – US 27/SR 60 and US 27/US 17-92
- Socioeconomic Data (ZONEDATA) – Add 2010 SE data for Osceola zones: 699, 700, 701
- TAZ 344, 452, 473, 486, 488, 510 - revise centroid loading

The following tables and plots show the resulting level of validation performance for the US 27 study area.

Root Mean Square Error (RMSE)

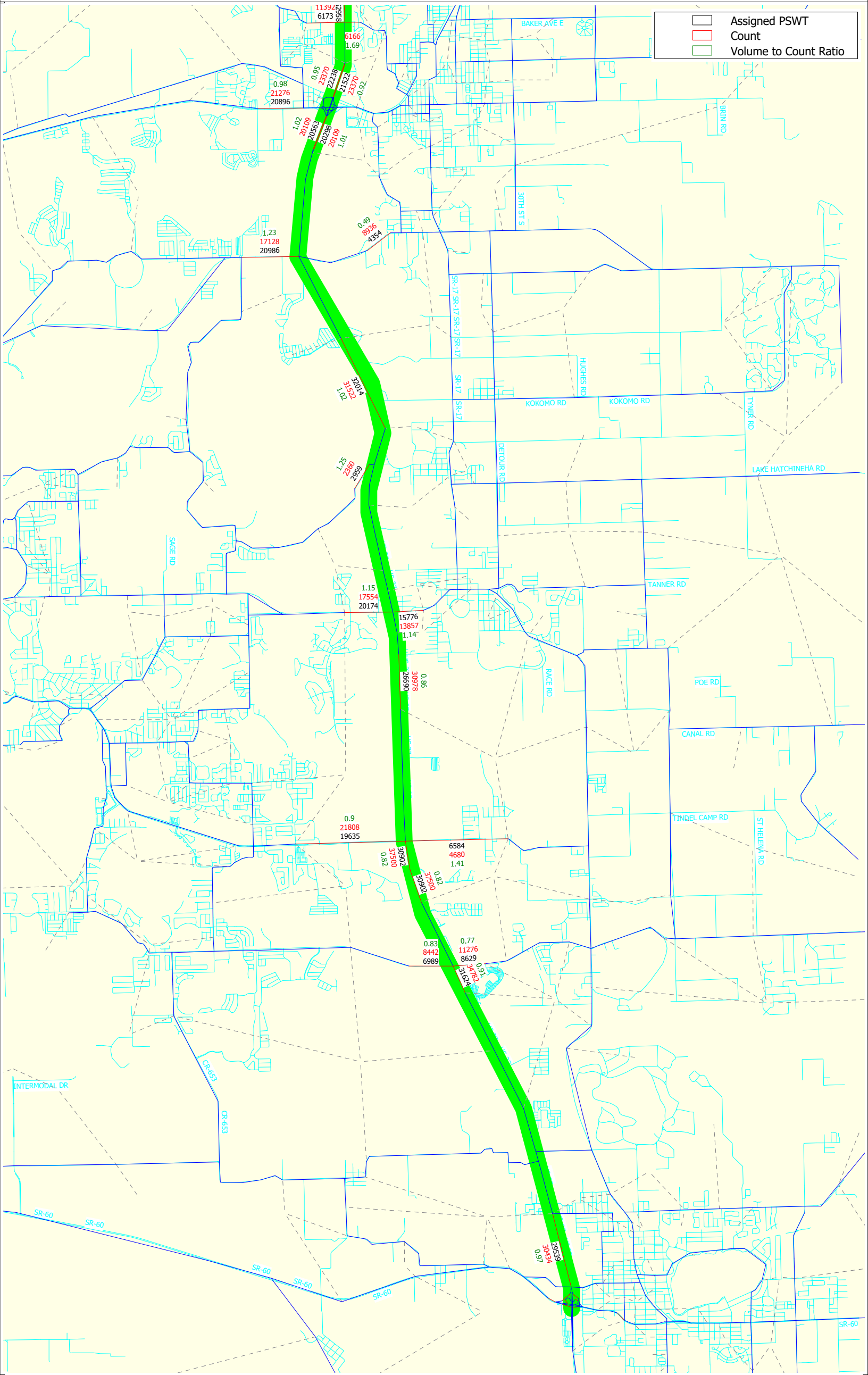
Statistic	Acceptable	Preferable	Actual
RMSE: LT 5000 VPD	100%	45%	36%
RMSE: 5000-9999 VPD	45%	35%	16%
RMSE: 10000-14900 VPD	35%	27%	14%
RMSE: 15000-19999 VPD	30%	25%	31%
RMSE: 20000-29999 VPD	27%	15%	4%
RMSE: 30000-49999 VPD	25%	15%	11%
RMSE: 50000-59999 VPD	20%	10%	15%
RMSE: 60000+ VPD	19%	10%	4%
RMSE: Study Area	45%	35%	12%
RMSE: US 27			8%

ROADWAY	AT	FT	ANODE	BNODE	VOLUME	COUNT	VOL/CNT
BATES RD	31	45	7471	9467	5,739	4,436	1.29
BATES RD	31	45	9467	7471	4,899	4,436	1.1
CF 54	33	22	6045	8501	4,453	5,043	0.88
CF 54	33	22	8501	6045	4,329	5,043	0.86
CHALET SUZANNE RD	31	43	6007	7627	4323	5,638	0.77
CHALET SUZANNE RD	31	43	7627	6007	4,307	5,638	0.76
Champions Gate	33	25	36003	36004	9,055	7,680	1.18
Champions Gate	33	25	36004	36003	8,696	7,680	1.13
CR 17	31	46	6207	6210	5,456	3,083	1.77
CR 17	31	43	6207	9443	2,713	5,696	0.48
CR 17	31	46	6210	6207	4,959	3,083	1.61
CR 17	31	43	9443	6207	3,460	5,696	0.61
CR 532	33	25	6031	9414	8249	6,615	1.25
CR 532	33	25	9414	6031	8,607	6,615	1.3
CR 54	31	22	6040	9428	10,154	7,043	1.44
CR 54	33	22	6909	8558	6,057	4,840	1.25
CR 54	33	22	8558	6909	5,845	4,840	1.21
CR 54	31	22	9428	6040	9,738	7,043	1.38
CR 547	31	43	6104	9472	2,843	4,272	0.67
CR 547	31	43	9472	6104	3,305	4,272	0.77
CRUMP RD	31	46	9400	9401	1,456	1,180	1.23
CRUMP RD	31	46	9401	9400	1,504	1,180	1.27
DUNDEE RD	31	32	7299	8555	7,879	6,929	1.14
DUNDEE RD	31	32	8555	7299	7,898	6,928	1.14
I-4	31	12	6059	6069	42,112	39,473	1.07
I-4	31	12	7197	6050	52,689	52,105	1.01
I-4	31	12	8167	8168	42,189	39,473	1.07
I-4	31	12	8174	7200	52,816	52,105	1.01
I-4	31	12	36031	40167	56,485	56,958	0.99
I-4	31	12	40167	36031	56,486	56,958	0.99
I-4 ramp	31	76	7888	7916	19,138	16,667	1.15
I-4 ramp	33	71	7899	7996	8,560	8,602	1
I-4 ramp	33	76	7904	7912	8,687	5,914	1.47
I-4 ramp	33	71	7922	7918	19,315	17,849	1.08
I-4/CR 532 NB OFF RAMP	33	75	7200	36034	7,393	5,051	1.46
I-4/CR 532 NB ON RAMP	33	71	36028	36029	11,061	8,556	1.29
I-4/CR 532 SB OFF RAMP	33	75	8176	36032	11,027	9,484	1.16
I-4/CR 532 SB ON RAMP	33	71	36030	7197	7,230	5,258	1.38
Lake Wilson Rd	33	46	9504	28026	4,004	5,996	0.67
Lake Wilson Rd	33	46	9504	36027	4,106	4,243	0.97
Lake Wilson Rd	33	46	28026	9504	3,764	5,996	0.63
Lake Wilson Rd	33	46	36027	9504	4,106	4,243	0.97
Legends Blvd	33	44	36004	36005	1,201	797	1.51
Legends Blvd	33	44	36005	36004	1,202	797	1.51
Masters Blvd	33	23	36001	36002	1,846	1,959	0.94
Masters Blvd	33	23	36002	36001	1,846	1,959	0.94
Osceola Polk Line Rd	33	31	9504	36018	6,817	8,140	0.84

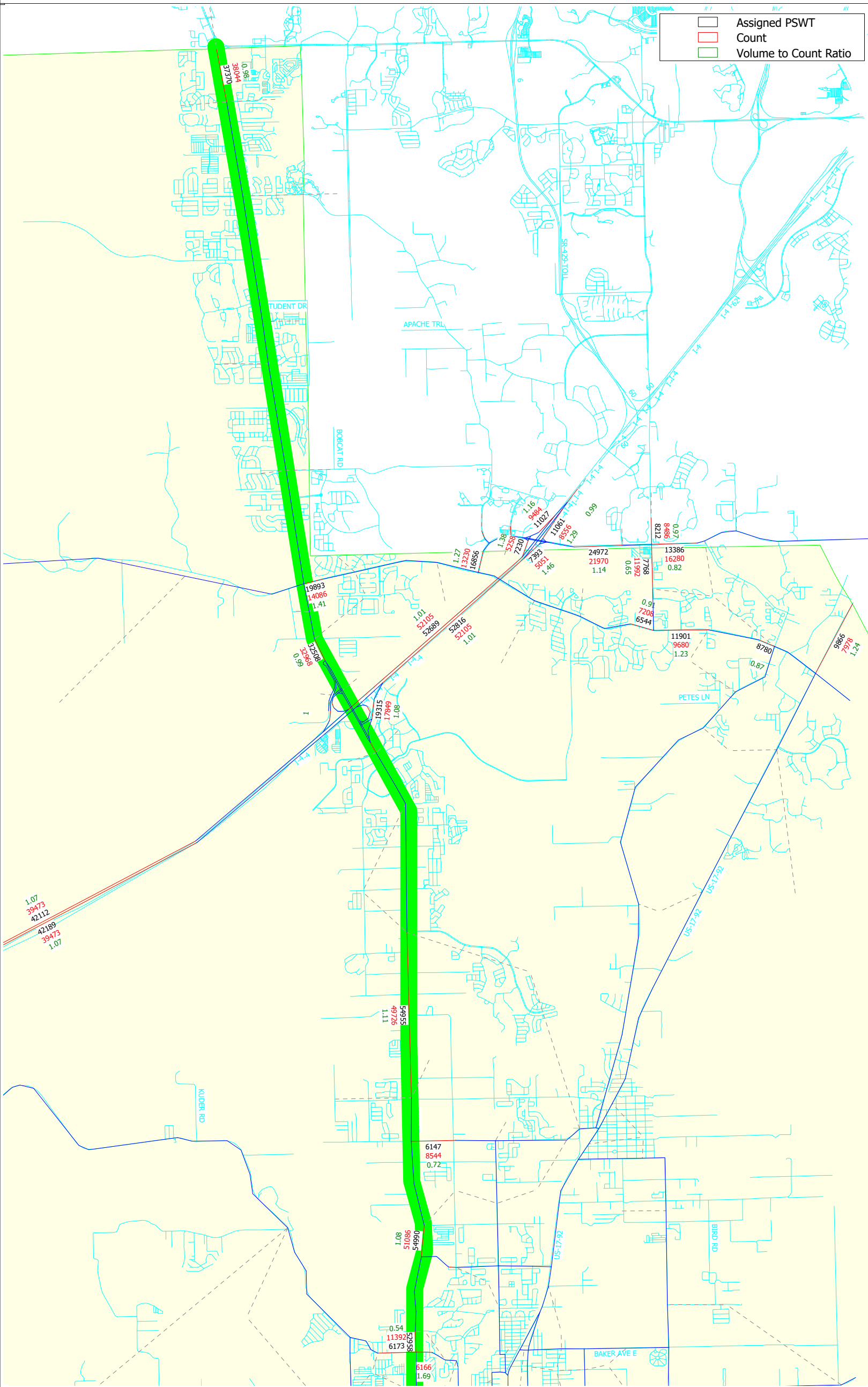
ROADWAY	AT	FT	ANODE	BNODE	VOLUME	COUNT	VOL/CNT
Osceola Polk Line Rd	33	23	36016	36017	12,729	10,985	1.16
Osceola Polk Line Rd	33	23	36017	36016	12,242	10,985	1.11
Osceola Polk Line Rd	33	31	36018	9504	6,571	8,140	0.81
RONALD REAGAN PKWY	33	22	6909	8560	3,243	3,604	0.9
RONALD REAGAN PKWY	33	22	8560	6909	3,300	3,604	0.92
SR 25-US 27	31	21	6008	7627	15,804	17,391	0.91
SR 25-US 27	31	21	6062	9485	27,320	24,863	1.1
SR 25-US 27	31	21	6126	6164	27,542	25,543	1.08
SR 25-US 27	31	21	6164	6126	27,447	25,543	1.07
SR 25-US 27	31	23	6204	6207	26,943	23,936	1.13
SR 25-US 27	31	23	6207	6204	26,015	23,936	1.09
SR 25-US 27	31	21	6557	6739	16,007	15,761	1.02
SR 25-US 27	31	22	6607	6720	20,298	20,109	1.01
SR 25-US 27	31	22	6615	6627	22,238	23,370	0.95
SR 25-US 27	31	22	6684	6625	20,563	20,109	1.02
SR 25-US 27	31	22	6737	6614	21,522	23,370	0.92
SR 25-US 27	31	21	6739	6557	16,007	15,761	1.02
SR 25-US 27	31	21	7046	88416	15,481	18,750	0.83
SR 25-US 27	31	21	7440	8958	13,351	15,489	0.86
SR 25-US 27	31	21	7523	88416	15,423	18,750	0.82
SR 25-US 27	31	21	7627	6008	15,819	17,391	0.91
SR 25-US 27	31	22	7722	7782	14,774	15,217	0.97
SR 25-US 27	31	22	7782	7722	14,764	15,217	0.97
SR 25-US 27	31	21	7897	9523	12,309	11,797	1.04
SR 25-US 27	31	21	8958	7440	13,339	15,489	0.86
SR 25-US 27	31	21	9485	6062	27,633	24,863	1.11
SR 25-US 27	31	21	9523	7897	13,103	11,797	1.11
SR 25-US 27	31	21	88416	7046	15,423	18,750	0.82
SR 25-US 27	31	21	88416	7523	15,481	18,750	0.83
SR 25-US 27	31	21	6061	7930	16,048	16,484	0.97
SR 25-US 27	31	21	7930	6061	16,461	16,484	1
SR 25-US 27	31	23	9421	9422	30,738	30,707	1
SR 25-US 27	31	23	9422	9421	30,274	30,707	0.99
SR 25-US 27	31	21	9439	28027	18,685	19,022	0.98
SR 25-US 27	31	21	28027	9439	18,685	19,022	0.98
SR 540	31	23	7523	7525	9,842	10,904	0.9
SR 540	31	32	7523	7530	3,292	2,340	1.41
SR 540	31	23	7525	7523	9,793	10,904	0.9
SR 540	31	32	7530	7523	3,291	2,340	1.41
SR 542	31	33	7299	7303	10,123	8,777	1.15
SR 542	31	33	7303	7299	10,052	8,777	1.15
SR 544	31	36	6398	6412	2,297	4,468	0.51
SR 544	31	36	6412	6398	2,058	4,468	0.46
SR 544	31	41	6413	9355	10,334	8,564	1.21
SR 544	31	41	9355	6413	10,651	8,564	1.24
SR 60	42	21	7801	28127	9,851	10,000	0.99
SR 60	42	21	7828	7835	9,331	10,532	0.89

ROADWAY	AT	FT	ANODE	BNODE	VOLUME	COUNT	VOL/CNT
SR 60	42	21	7835	7828	8,434	10,532	0.8
SR 60	42	21	28127	7801	9,883	10,000	0.99
SR 600-US 17/92	31	22	6299	6300	10,593	10,638	1
SR 600-US 17/92	31	22	6300	6299	10,300	10,638	0.97
THOMPSON NUSERY RD	31	43	7627	8551	3,489	4,221	0.83
THOMPSON NUSERY RD	31	43	8551	7627	3,501	4,221	0.83
US 17-92	33	35	6048	36024	4,810	3,989	1.21
US 17-92	33	31	10396	36025	8,609	8,969	0.96
US 17-92	33	35	36024	6048	5,057	3,989	1.27
US 17-92	33	31	36025	10396	8,610	8,969	0.96
US 27/SR 60 EB OFF RAMP	42	73	6888	6884	5,421	3,684	1.47
US 27/SR 60 EB ON RAMP	42	77	6828	6830	5,369	5,684	0.94
US 27/SR 60 EB TO SB RAMP	42	73	6811	6959	294	1,158	0.25
US 27/SR 60 NB TO WB RAMP	42	77	6966	6976	3,881	3,579	1.08
US 27/SR 60 SB TO WB RAMP	42	77	6939	6954	1,490	2,000	0.75
US 27/SR 60 WB TO NB RAMP	42	73	6925	6933	4,148	5,368	0.77
Study Area					1,368,390	1,353,465	1.01
US 27					585,497	594,378	0.99
I-4					302,777	297,072	1.02

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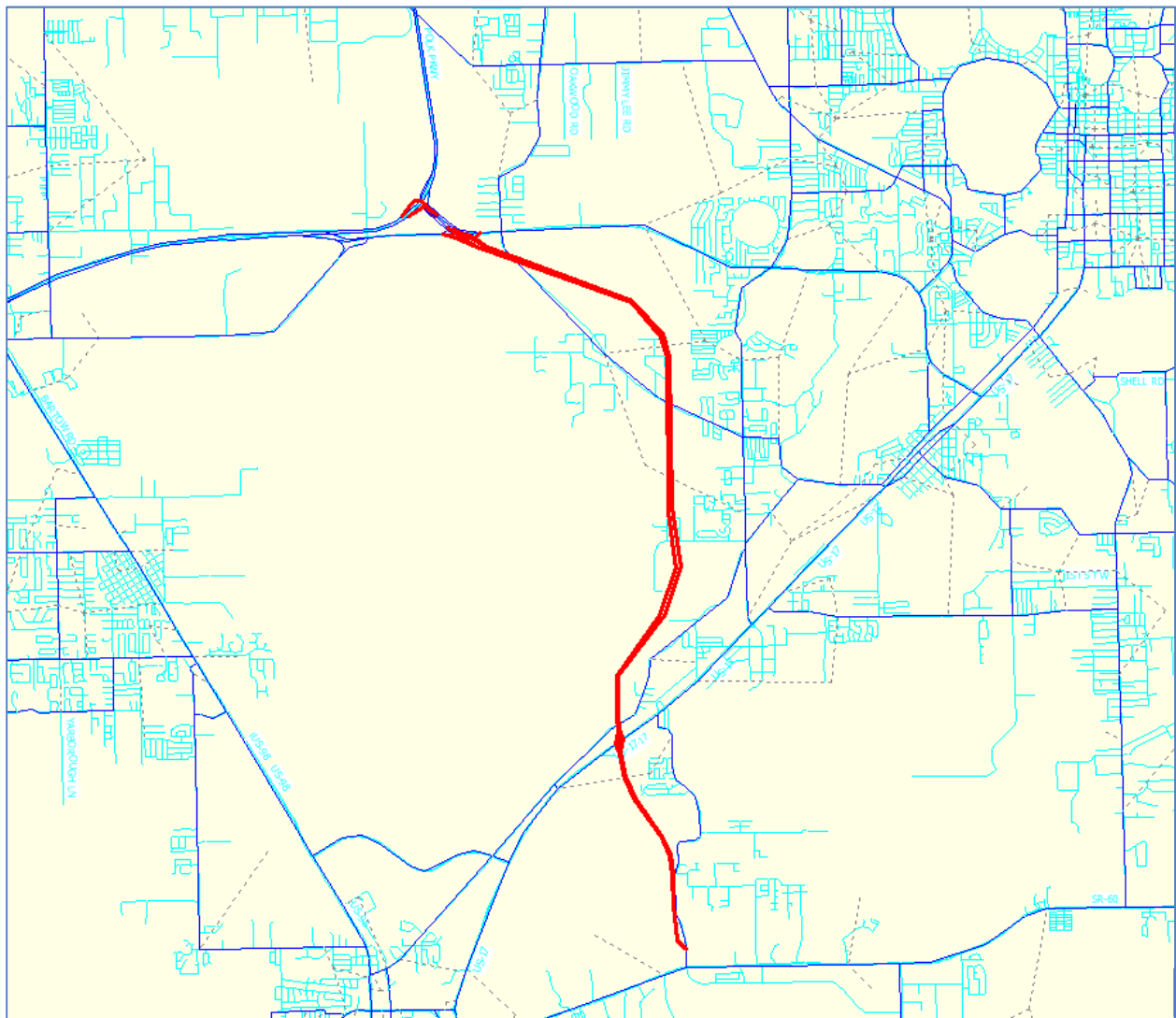
cube (Licensed to TRAF-O-DATA CORP)



Forecast Model Development

A forecast 2040 No-build model network was developed by applying appropriate base year validation refinements to the 2040 LRTP Cost Feasible model network. This included adding the I-4/CR 532 interchange area (Osceola County) network and socioeconomic data, and forecast external station volumes. This data was developed in coordination with FDOT District 5, to achieve consistency with the District 5 model (CFRPM) and Osceola County external station forecasts.

This 2040 network was also revised to include the proposed Central Polk Parkway (CPP) project, from Polk Parkway to 91 Mine Road, consistent with the associated Florida Turnpike (FTE) project model coding (see graphic below).



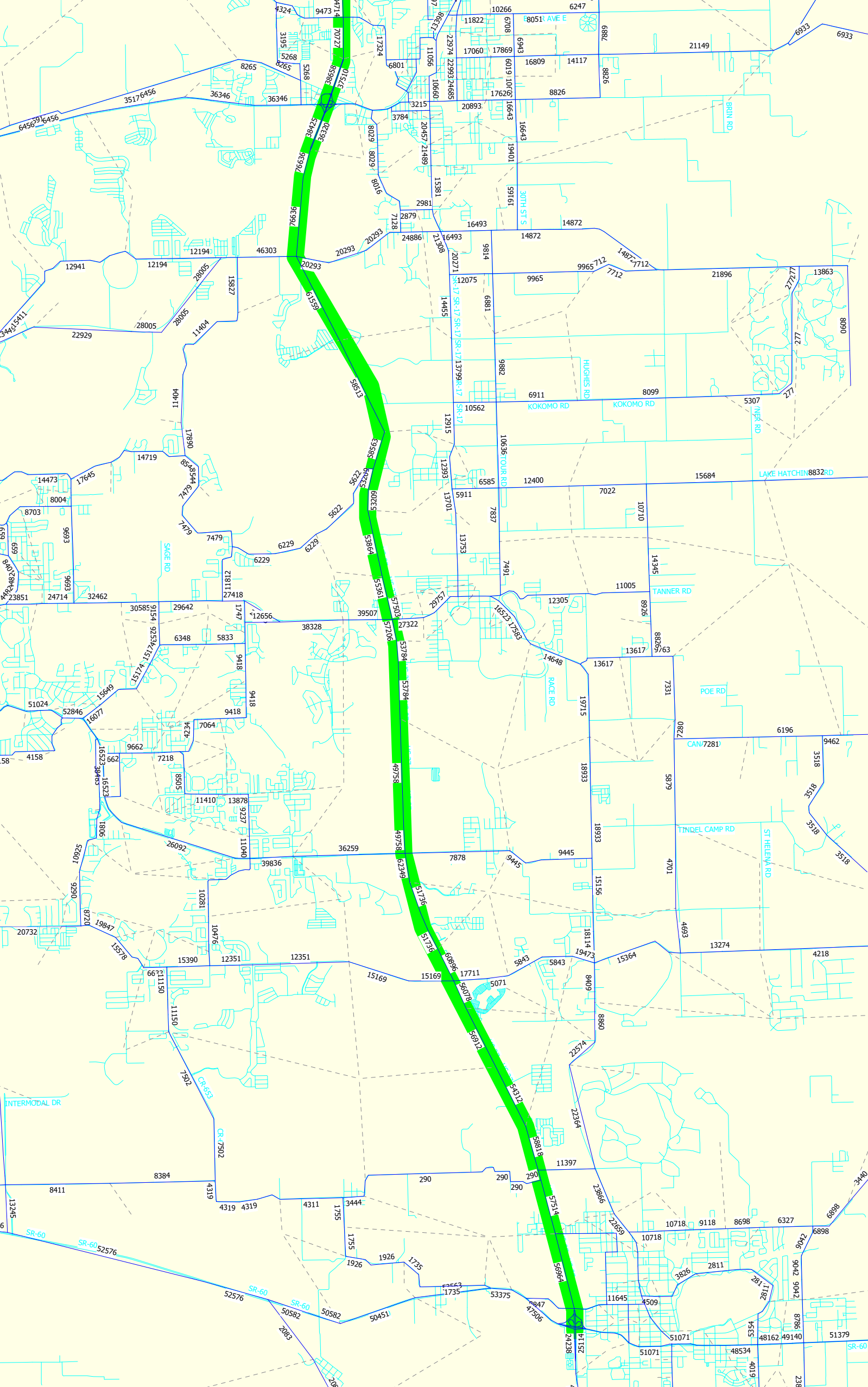
Based on coordination with the Polk County TPO and Haines City, the 2040 model socioeconomic (SE) data was refined to reflect planned development within the study area which was not included in the original 2040 SE data. Information provided by the Polk TPO was used to adjust industrial employment for TAZs (457, 674 and 650) near the interchange of I-4/US 27, as shown in the table below.

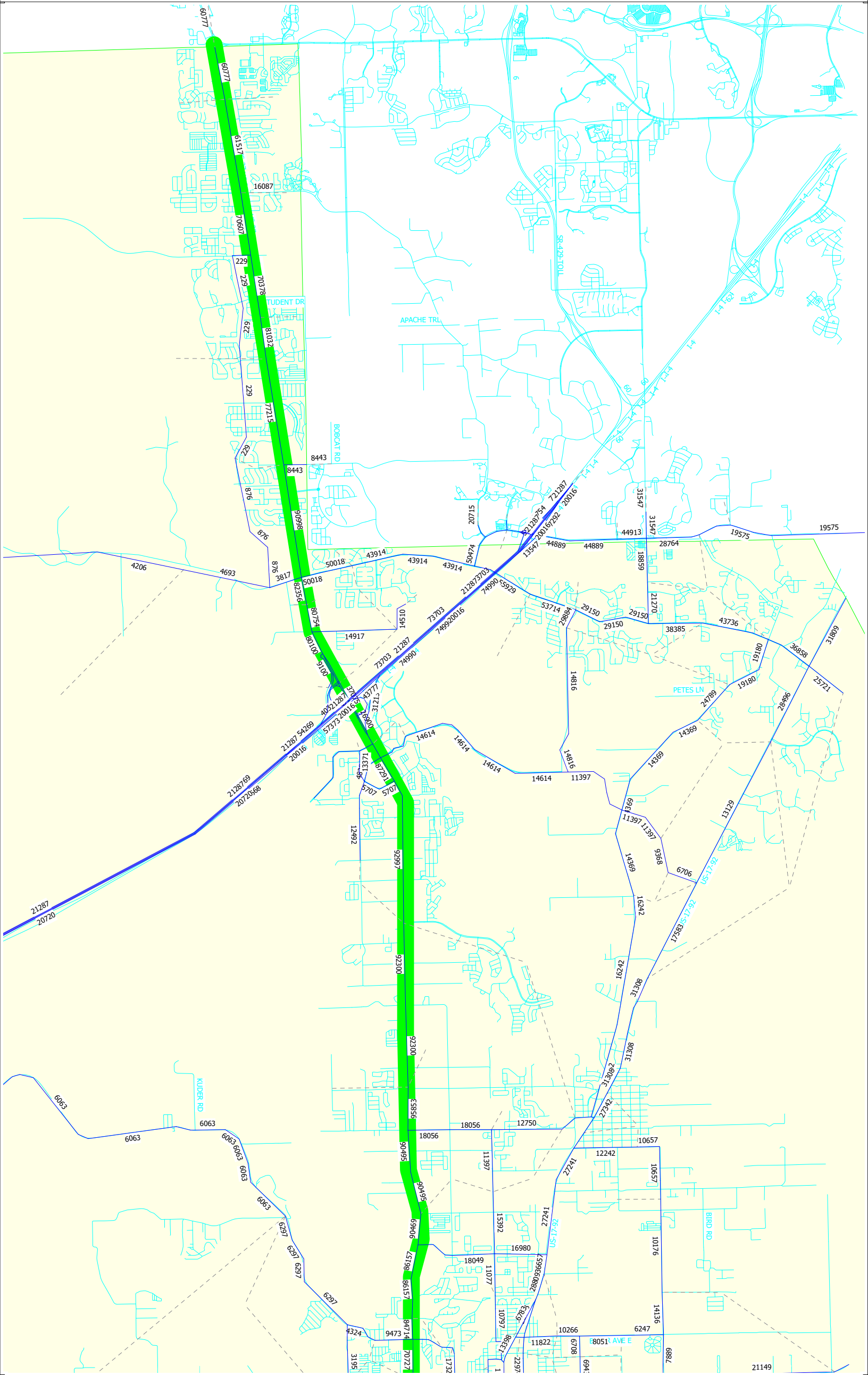
TAZ	INDUSTRIAL		ORIGINAL EMPLOYMENT				REVISED EMPLOYMENT			
	KSF	EMP	IND	COMM	SERV	TOT	IND	COMM	SERV	TOT
457	1294	1294	271	274	364	909	656	274	364	1294
674	1855	1854	449	121	33	603	1700	121	33	1854
650	2796	2796	308	194	44	546	2558	194	44	2796

The 2040 socioeconomic data also reflects development information received from Haines City. These developments and the associated land use changes are documented in the attached US 17/92 Haines City modeling technical memorandum.

The following plots show the resulting Peak Season Weekday Traffic (PSWT) volumes for the study area.

D1RPM v1.0.5 US - 27 No-Build Model - 2040 PSWT Volumes





ATTACHMENTS

TECHNICAL MEMORANDUM

TRAFFIC FORECAST MODELING

US 17/92 (HINSON AVE)

HAINES CITY

POLK COUNTY, FLORIDA

May 2018



Traffic Forecast Modeling Technical Memorandum

US 17/ US 19 Study

Polk County, Florida

Introduction

This Technical Memorandum presents the details of the Model Traffic Forecasts developed in support of the model validation study US 17-19 (Hinson Ave. between 10th St. S and 17th St. N) in Polk County, Florida.

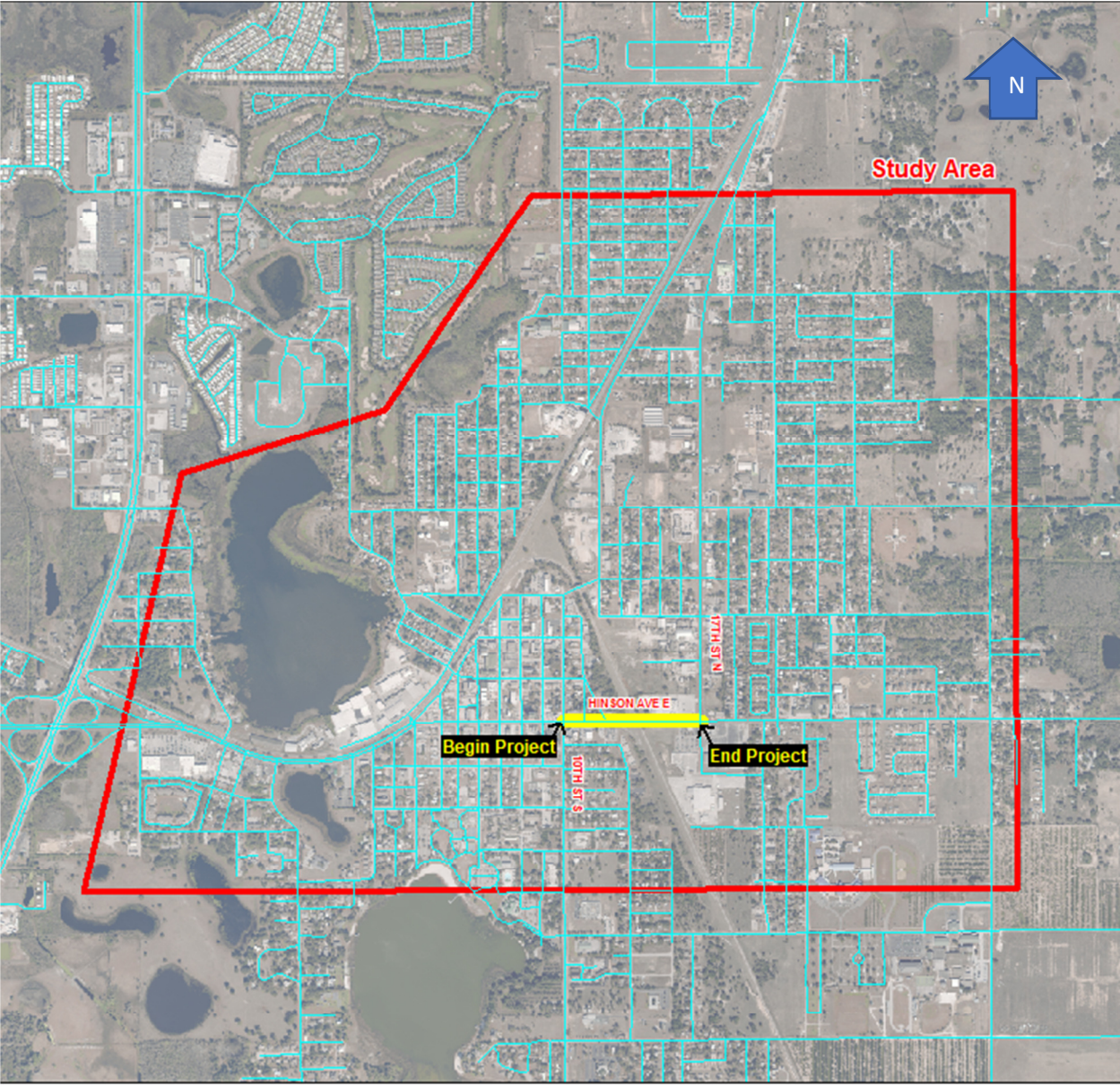
This effort involved conducting a sub-area base year (2010) validation refinement for the study area, as well as development of a refined No-Build 2040 forecast model.

The traffic model applied for this study was based on the current adopted District 1 Cost Feasible 2040 One Regional Planning Model (D1RPM v1.0.3). The D1RPM is a travel demand forecasting tool developed by FDOT District 1, in conjunction with the six District MPO/TPOs in support of their current 2040 Long Range Transportation Plans (LRTP). This model was adopted by the Polk County MPO for use in developing traffic forecasts within the County.

Model Sub-Area Validation

The original 2010 base year model validation was refined for the project study area to ensure that the base year model is replicating 2010 traffic conditions and counts. The model refinement was performed by using the guidelines identified in “FDOT Project Traffic Forecasting Handbook”. Validation criteria including volume over count (v/c) ratios were used to assess the accuracy of the base year model.

Study Area Map



The following network revisions were incorporated as part of the sub-area validation effort:

- Add Screenline 74 for study area
- W Main St from Cedar St to 2nd St N - FT 43 to FT 46
- Add 10th/12th St from Hinson to N Lee Jackson Hwy (AT 31-FT 46-LN 01)
- Add MLK Jr Way/10th St N from Citrus Ave to Bates Rd (AT 31-FT 46-LN 01)
- TAZ 500, 495, 499, 490, 484, 542, 684 and 502 - Revise Centroid Loading
- Refine/Supplement Traffic Counts
- Add Claude Holmes Sr Ave from Main St to 7th St N (AT 31-FT 46-LN 01)
- Add Oak Ave from 1st St S to 10th ST S (AT 31-FT 48-LN 01)
- Hinson Ave from Lee Jackson Hwy to 3rd St S - FT 24 to FT 25
- 5th St/Palmetto/Polk City Rd from Hinson to Jim Johnson Rd - FT 46 to FT 47
- Refine Assignment Volume Composition to/from Osceola County
 - External Station 5661 (Marigold) – revise external station volume composition (IE, SPC_GEN, EE)
 - External Station 5651 (CR 580) – revise external station volume composition (IE, SPC_GEN, EE)
 - TAZ 563 – revise centroid volume composition (ZONEDATA, EE to 5651)
 - TAZ 554, revise centroid volume composition (ZONEDATA, EE to 5651)
 - Add Country Club Rd from Walnut St to CR 580 (AT 52-FT 46-LN 01)
 - TAZ 563, 504, 679, 509 - Revise centroid loading
- 5th St/Main St from Hinson to Jim Johnson Rd - FT 46 to FT 48
- Main St from US 27 to Azalea Dr - FT 43 to FT 46
- Add Time Penalty on CR 580 (6771-6235-9581*) - 3 min
- Main St from Johnson Ave to US 27 - FT 46 to FT 47

These revisions resulted in improved validation performance for US 17-19. The following tables and plots show the original 2010 model level of validation, as well as the level of validation after model sub-area refinement.

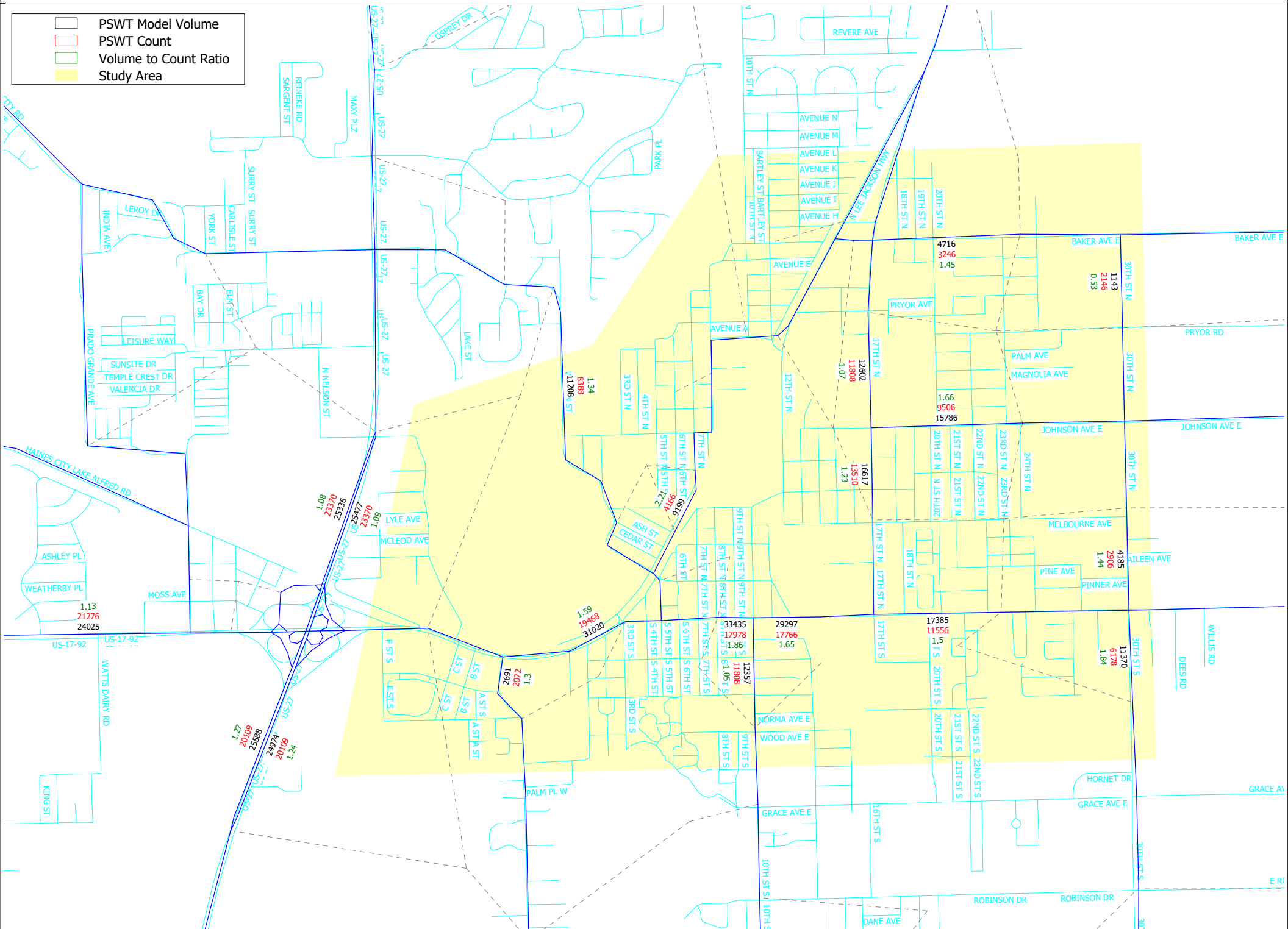
Original Study Area Validation

SL	Name	AT	FT	Anode	Bnode	Volume	Count	V/C
92	Lake Elsie Dr	31	48	6156	6296	1347	1,036	1.30
92	SR 600-US 17/92	31	24	6213	6241	6,337	5,904	1.07
92	CR 580	31	43	6240	6241	8,095	4,753	1.70
92	SR 600-US 17/92	31	24	6241	6213	6,265	5,904	1.06
92	CR 580	31	43	6241	6240	7,692	4,753	1.62
92	SR 600-US 17/92	42	24	6241	6272	8,548	6,755	1.27
92	Main St	31	46	6249	8557	5,158	4,194	1.23
92	Railroad Ave	31	46	6270	9486	4,359	2,083	2.09
92	30th St	31	43	6271	6290	2,204	1,453	1.52
92	SR 600-US 17/92	42	24	6272	6241	8,070	6,755	1.19
92	30th St	31	43	6290	6271	1,981	1,453	1.36
92	30th St	31	43	6290	9497	5,618	3,089	1.82
92	SR 600-US 17/92	14	25	6292	6294	16,789	8,989	1.87
92	Hinson A	31	43	6293	9495	8,942	5,778	1.55
92	SR 600-US 17/92	14	25	6294	6292	16,645	8,989	1.85
92	SR 17	31	36	6294	6315	6,252	5,904	1.06
92	SR 600-US 17/92	14	34	6294	6595	14,647	8,883	1.65
92	Lake Elsie Dr	31	48	6296	6156	1,343	1,036	1.30
92	SR 600-US 17/92	31	22	6299	6300	12030	10,638	1.01
92	SR 600-US 17/92	31	22	6300	6299	11994	10,638	0.95
92	SR 600-US 17/92	21	24	6303	6306	15,657	9,734	1.61
92	SR 600-US 17/92	21	24	6306	6303	15,364	9,734	1.58
92	SR 17	31	36	6315	6294	6,105	5,904	1.03
92	SR 600-US 17/92	14	34	6595	6294	14,649	8,883	1.65
92	SR 25-US 27	31	21	6607	6720	24,974	20,109	1.24
92	SR 25-US 27	31	22	6615	6627	25,336	23,370	1.08
92	SR 25-US 27	31	21	6684	6625	25,588	20,109	1.27
92	SR 25-US 27	31	22	6737	6614	25,477	23,370	1.09
92	30th St	31	43	6745	9506	669	1,073	0.62
92	Baker Ave	31	47	6751	6752	2,498	1,623	1.54
92	Baker Ave	31	47	6752	6751	2,219	1,623	1.37
92	Main St	31	46	8557	6249	6,051	4,194	1.44
92	Railroad Ave	31	46	9486	6270	4,839	2,083	2.32
92	Hinson A	31	43	9495	6293	8,444	5,778	1.46
92	30th St	31	43	9497	6290	5,752	3,089	1.86
92	30th St	31	43	9506	6745	474	1,073	0.44
92	Study Area Total					338,412	250,736	1.35

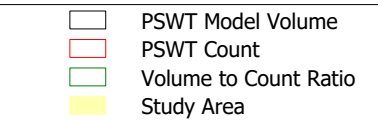
Refined Study Area Validation

SL	Name	AT	FT	Anode	Bnode	Volume	Count	V/C
92	Lake Elsie Dr	31	48	6156	6296	962	1,036	0.93
92	SR 600-US 17/92	31	24	6213	6241	5914	5,904	1.00
92	12th St	31	46	6214	40154	3045	3,224	0.94
92	CR 580	31	43	6240	6241	5942	4,753	1.25
92	SR 600-US 17/92	31	24	6241	6213	6172	5,904	1.05
92	CR 580	31	43	6241	6240	6597	4,753	1.39
92	SR 600-US 17/92	42	24	6241	6272	5786	6,755	0.86
92	7th St N	31	46	6270	9486	1218	2,083	0.58
92	30th St	31	43	6271	6290	1054	1,453	0.73
92	SR 600-US 17/92	42	24	6272	6241	6699	6,755	0.99
92	30th St	31	43	6290	6271	1073	1,453	0.74
92	30th St	31	43	6290	9497	2280	3,089	0.74
92	SR 600-US 17/92	14	25	6292	6294	11717	8,989	1.30
92	Hinson Ave	31	43	6293	9495	5769	5,778	1.00
92	SR 600-US 17/92	14	25	6294	6292	11130	8,989	1.24
92	SR 600-US 17/92	14	34	6294	6595	9231	8,883	1.04
92	10th St N	31	46	6294	40153	2876	3,195	0.90
92	Lake Elsie Dr	31	48	6296	6156	1018	1,036	0.98
92	SR 600-US 17/92	31	22	6299	6300	10706	10,638	1.01
92	SR 600-US 17/92	31	22	6300	6299	10087	10,638	0.95
92	US 17/92	21	25	6303	40155	9592	9,734	0.99
92	SR 17	31	36	6315	40163	6690	5,904	1.13
92	SR 600-US 17/92	14	34	6595	6294	8571	8,883	0.96
92	SR 25-US 27	31	21	6607	6720	23564	20,109	1.17
92	SR 25-US 27	31	22	6615	6627	24390	23,370	1.04
92	SR 25-US 27	31	21	6684	6625	23640	20,109	1.18
92	SR 25-US 27	31	22	6737	6614	24161	23,370	1.03
92	30th St	31	43	6745	9506	1070	1,073	1.00
92	Baker Ave	31	47	6751	6752	1848	1,623	1.14
92	Baker Ave	31	47	6752	6751	1843	1,623	1.14
92	Main St	31	46	8557	40160	5740	4,194	1.37
92	7th St N	31	46	9486	6270	1210	2,083	0.58
92	Hinson Ave	31	43	9495	6293	5758	5,778	1.00
92	30th St	31	43	9497	6290	2164	3,089	0.70
92	30th St	31	43	9506	6745	1068	1,073	1.00
92	10th St N	31	46	40153	6294	2888	3,195	0.90
92	12th St	31	46	40154	6214	3033	3,224	0.94
92	US 17/92	21	25	40155	6303	9685	9,734	0.99
92	Main St	31	46	40160	8557	5050	4,194	1.20
92	Johnson Ave	31	46	40160	40161	2145	2,083	1.03
92	Johnson Ave	31	46	40161	40160	2084	2,083	1.00
92	SR 17	31	36	40163	6315	6552	5,904	1.11
92	Oak Ave	31	48	40163	40164	230	383	0.60
92	Oak Ave	31	48	40164	40163	153	383	0.40
92	Study Area Total					282,405	268,506	1.05

D1RPM v1.0.3 2010 Base Year Model - US 17/92 Study Original Validation



D1RPM v1.0.3 2010 Base Year Model - US 17/92 Study Refined Validation



Forecast Model Development

Forecast model networks were developed by applying appropriate base year validation refinements to the 2040 LRTP Cost Feasible model network. The 2040 model input data was refined to include the following changes:

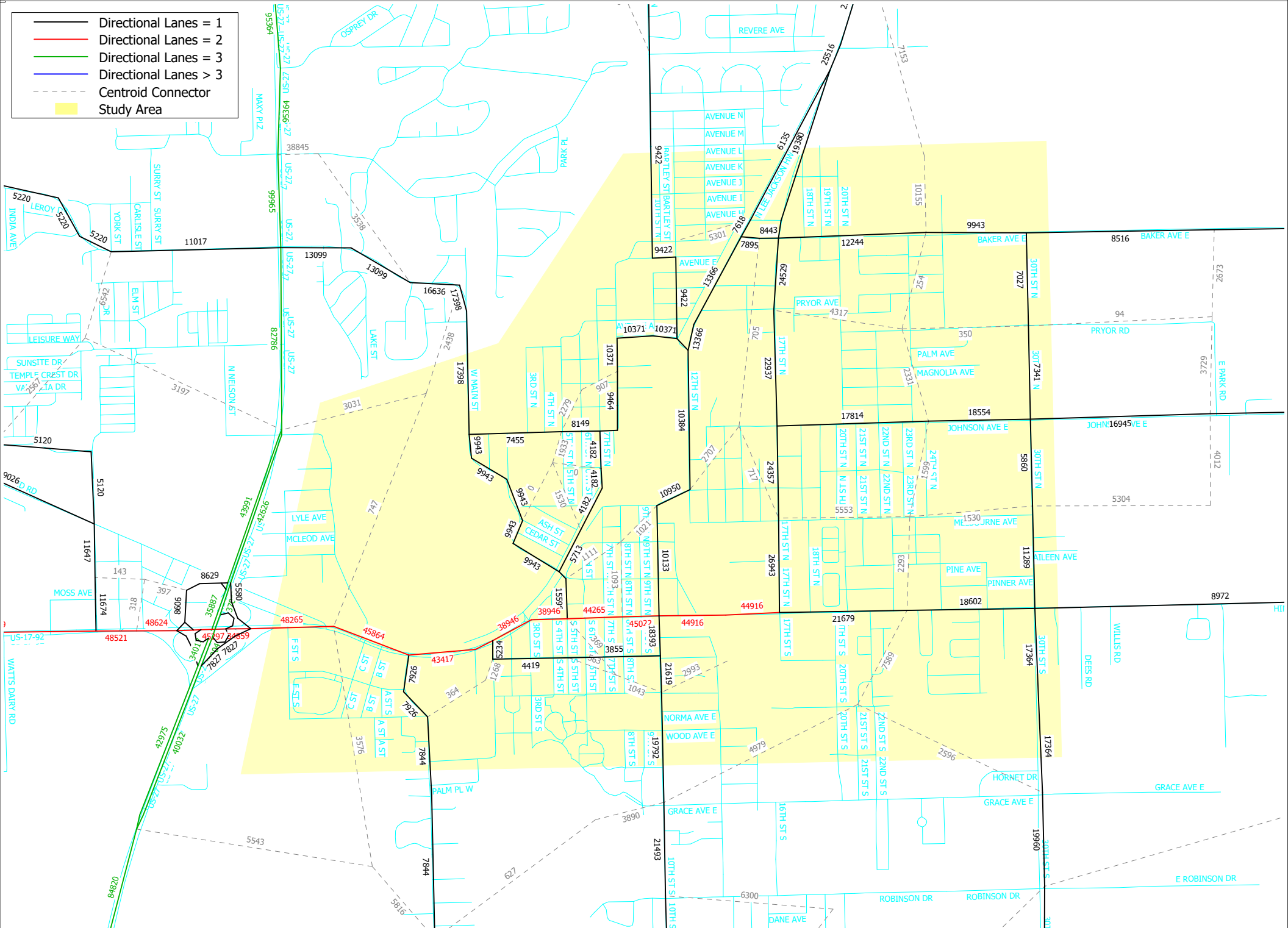
- Apply base year adjustments applied as appropriate
- Refine Poinciana Pkwy location/coding
- Remove Marigold external station
- Refine Assignment Volume Composition to/from Osceola County consistent with base year modification adjustment proportions.
- Add Osceola SE data (TAZ 1255 to 1261) to new Osceola TAZ 548 (1/2 + 15000 EE to CR 580 external 5651).
- Revise 2040 ZONEDATA as shown in the table below to reflect planned development information provided by Haines City (attached).

2010-2040				
Development	TAZ	DU	DU Growth	Added DU
BellaViva	494	349	382	334
Cassidy at 544	494	367		
Cassidy at Massee Rd	696	500	0	500
Cassidy Ridgecrest at North Blvd	677	491	67	424

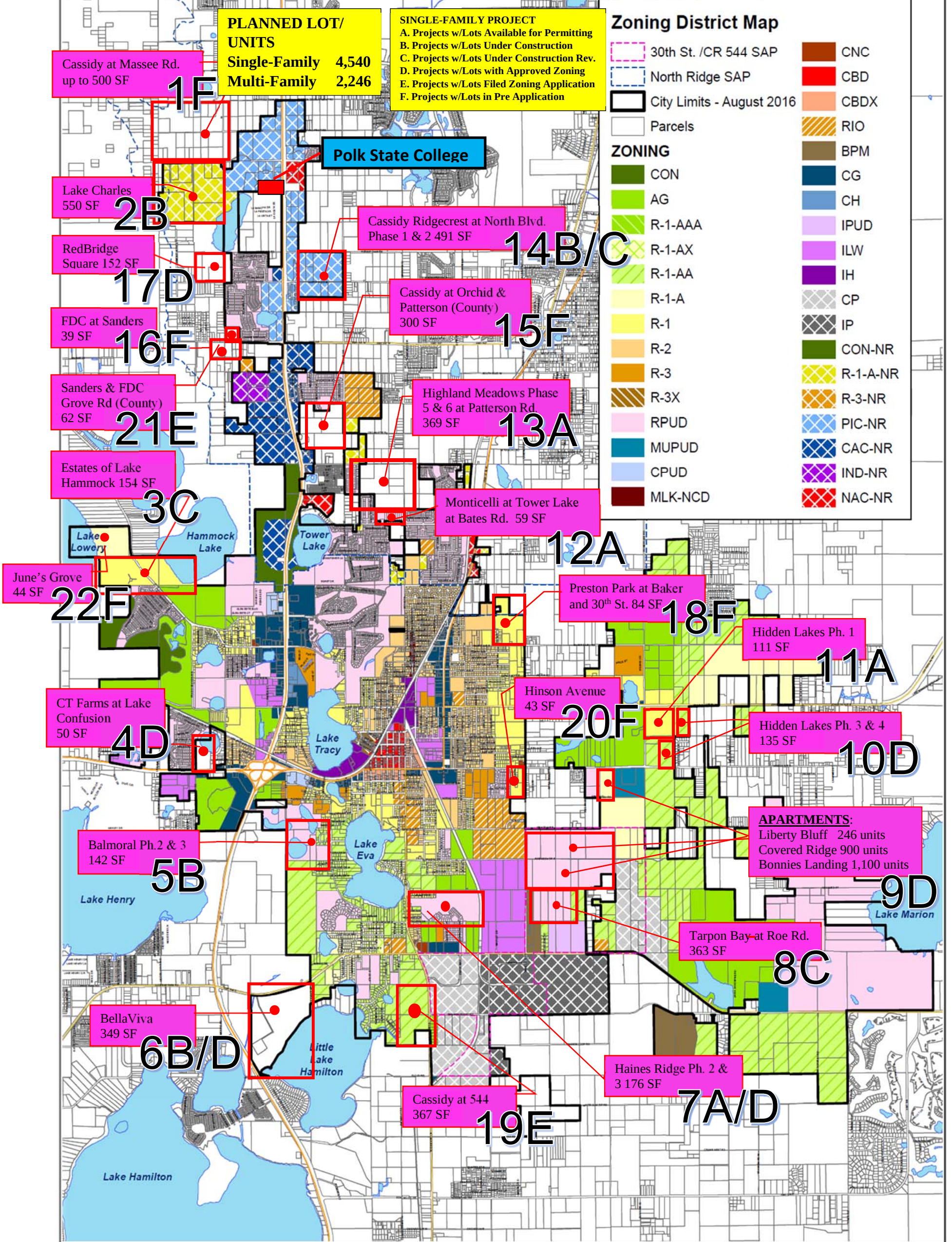
The following plot shows the resulting 2040 PSWT volume projections.

D1RPM v1.0.3 2040 Cost Feasible Model Refined for US 17/92 Study - PSWT Volumes

- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector
- Study Area



DEVELOPMENT MAP (as of 4-12-18)



This is to certify that this Official Zoning Map supersedes and replaces the Official Zoning Map adopted August 15, 2013 as part of Ordinance No. 13-1457 of the City of Haines City, Florida.

Haines City Zoning Districts

Adopted June 16, 2016
Ordinance No. 16-1533

0 0.5 1 2 Miles

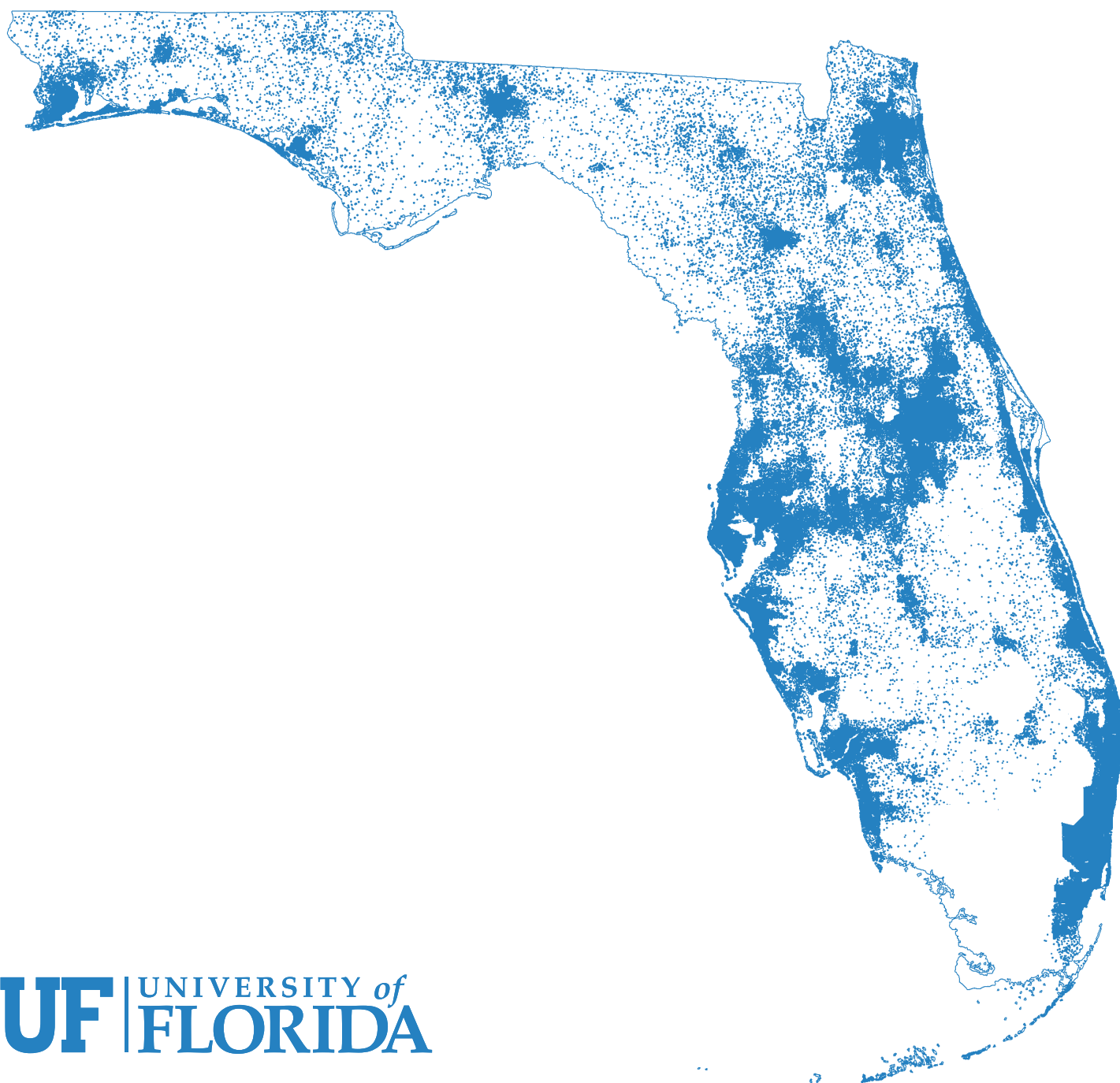


APPENDIX B

Supporting Documentation for Traffic Forecasting Growth Rates

2018 Florida Estimates of Population (BEBR)

Florida Estimates of Population 2018



Florida Estimates of Population 2018

April 1, 2018

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Methodology for Florida Estimates of Population: April 1, 2018

Guidelines for Population Estimates

This report provides population estimates for Florida and each of its counties and incorporated cities, as of April 1, 2018. These estimates were prepared under a contractual agreement between the Florida Legislature and the Bureau of Economic and Business Research (BEBR) at the University of Florida. The basic guidelines for producing population estimates were established by the 1972 Florida Legislature in Chapter 23, Section 23.019, Florida Statutes, entitled "Population census determination." These guidelines have been revised several times since 1972, the most recent being Section 186.901 of the 2014 Florida Statutes, which states:

(1) The Office of Economic and Demographic Research shall annually provide to the Executive Office of the Governor population estimates of local governmental units as of April 1 of each year, utilizing accepted statistical practices. The population of local governments provided by the Office of Economic and Demographic Research shall apply to any revenue sharing formula with local governments under the provisions of ss. 218.20-218.26, part II of chapter 218. The Office of Economic and Demographic Research shall additionally provide the Executive Office of the Governor population estimates for municipal annexations or consolidations occurring during the period April 1 through February 28, and the Executive Office of the Governor shall include these estimates in its certification to the Department of Revenue for the annual revenue-sharing calculation.

(2) (a) Population shall be computed as the number of residents, employing the same general guidelines used by the United States Bureau of the Census.

(b) For the purpose of revenue-sharing distribution formulas and distribution proportions for the local government half-cent sales tax, inmates and patients residing in institutions operated by the Federal Government, the Department of Corrections, the Department of Health, or the Department of Children and Families shall not be considered to be residents of the

governmental unit in which the institutions are located.

(c) Nothing herein shall be construed to prohibit the separate determination of any categories of persons, whether resident or nonresident.

(3) In cases of annexation or consolidation, local governments shall be required to submit to the Executive Office of the Governor, within 30 days following annexation or consolidation, a statement as to the population census effect of the action.

(4) Estimates of inmates and patients pursuant to paragraph (2)(b) shall be separately stated in population reports issued pursuant to this section.

It should be noted that these estimates refer solely to permanent residents of the state of Florida. According to Census Bureau guidelines, one's permanent residence is the place one lives and sleeps most of the time. Consequently, temporary residents such as tourists and snowbirds are not included in these estimates. Many places in Florida have large numbers of temporary residents during certain times of the year, making their total de facto populations much larger than their permanent resident populations.

Estimation Methodology

The Bureau of Economic and Business Research (BEBR) makes population estimates for every county and subcounty area in Florida, with subcounty areas defined as incorporated cities, towns and villages, and the unincorporated balance of each county. County estimates are calculated as the sum of the subcounty estimates for each county, and the state estimate is calculated as the sum of the county estimates. The estimates refer solely to permanent residents of Florida; they do not include seasonal or other types of temporary residents.

The estimates are produced using the housing unit

method, in which changes in population are based on changes in occupied housing units (or households). This is the most commonly used method for making local population estimates in the United States because it can utilize a wide variety of data sources, can be applied at any level of geography, and can produce estimates that are at least as accurate as those produced by any other method.

The foundation of the housing unit method is the fact that almost everyone lives in some type of housing structure, whether a traditional single family unit, an apartment, a mobile home, a college dormitory, or a state prison. The population of any geographic area can be calculated as the number of occupied housing units (households) times the average number of persons per household (PPH), plus the number of persons living in group quarters such as college dormitories, military barracks, nursing homes, and prisons:

$$P_t = (H_t \times PPH_t) + GQ_t$$

where P_t is the population at time t , H_t is the number of occupied housing units at time t , PPH_t is the average number of persons per household at time t , and GQ_t is the group quarters population at time t . Estimates of the number of people without permanent living quarters (e.g., the homeless population) are included in estimates of the group quarters population.

This is an identity, not an estimate. If these three components were known exactly, the total population would also be known. The problem, of course, is that these components are almost never known exactly. Rather, they must be estimated from various data sources, using one or more of several possible techniques. In this report, we describe the data and techniques used to develop population estimates for Florida's counties and subcounty areas for April 1, 2018.

Households

Census definitions require a person to be counted as an inhabitant of his/her usual place of residence, which is generally construed to mean the place where she/he lives and sleeps most of the time. This place is not necessarily the same as one's legal or voting resi-

dence. A household is the person or group of people occupying a housing unit; by definition, the number of occupied housing units is the same as the number of households. Households refer solely to permanent residents and a housing unit is classified as vacant even when it is continuously occupied, if all the occupants are temporary residents staying only for a few days, weeks, or months.

BEHR uses three different data sources to estimate the number of households in Florida. Our primary data source is active residential electric customers. We collect these data from each of the state's 54 electric utility companies. Households can be estimated by constructing a ratio of households to active residential electric customers using data from the most recent census year (e.g., 2010) and multiplying that ratio times the number of active residential customers in some later year (e.g., 2018). This procedure assumes that no changes have occurred in electric company bookkeeping practices, in the vacancy rate of active residential electric customers, or in the proportion of those customers who are permanent residents. Although changes do occur, they are generally small. In some places we adjust the household/electric customer ratio to account for changes in the vacancy rate or the proportion of housing units occupied by permanent residents.

We sometimes filter electric customer data to exclude customers using less than 200 kWh per month. We believe these "limited use" customers represent seasonal or other part-time residents or vacant units, and excluding them may give a more accurate measure of permanent residents. These data are not available for all areas of the state, but in places in which the data are available and appear to be reliable we may use them in conjunction with other data sources.

Our second data source is residential building permits, as collected and distributed by the U.S. Department of Commerce. The housing inventory in 2018 for a city or county that issues building permits can be estimated by adding permits issued since 2010 to the units counted in the 2010 census and subtracting units lost to destruction, demolition, or conversion to other uses. The time lag between the issuance of a permit and the completion of a unit is assumed to be three

months for single-family units and fifteen months for multifamily units. Building permits are not issued for mobile homes, but proxies can be derived from records of shipments to mobile home dealers in Florida. Creating a housing inventory for an entire county requires complete permit data for every permitting agency within the county. Although such data are not always available, coverage is sufficient in most Florida cities and counties to provide useful information.

There are no readily available data sources providing comprehensive up-to-date information on occupancy rates that are as reliable as those produced by the latest decennial census. Accurate information can be obtained through special censuses or large sample surveys, but in most instances these methods are too expensive to be feasible. A common solution is to use the occupancy rates reported in the most recent census. This is the procedure we follow in most places, but in some places we make adjustments to account for factors reflecting changes in occupancy rates over time. These factors may include data from the U.S. Census Bureau's American Community Survey (ACS) showing upward or downward trends over time since the last decennial census, changes in the proportion of seasonal population, etc.

The product of the inventory figure and the occupancy rate provides an estimate of the number of households. There are several potential problems with this estimate. Time lags between the issuance of permits and the completion of units may vary from place to place and from year to year. The proportion of permits resulting in completed units is usually unknown. Data on demolitions and conversions are incomplete and data on mobile homes must be estimated indirectly. Reliable estimates of changes in occupancy rates are generally unavailable. Certificate-of-occupancy data can eliminate problems related to completion rates and time lags but not those related to occupancy rates, demolitions, and conversions. Although these problems limit the usefulness of the data in some places, building permit data often provide reasonably accurate estimates of households.

Our third data source for estimates is the number of homestead exemptions by county reported by the Florida Department of Revenue. Households can be

estimated by constructing a ratio of households to exemptions using data from the most recent census year (e.g., 2010) and multiplying that ratio times the number of exemptions in some later year (e.g., 2018). An important advantage of these data is that they cover only housing units occupied by permanent residents, thereby excluding the impact of seasonal and other non-permanent residents. The primary disadvantage is that the data do not include households occupied by renters or other non-homeowners, but those households often change at a similar rate to the households with homestead exemptions. Homestead exemption data is also available from each county's property appraiser at the property parcel level, which can be summarized by subcounty areas. We sometimes use these data in places where our other primary data sources show differing trends.

Electric customer, building permit, and homestead exemption data all provide useful information regarding changes in households. Previous research on BEBR population estimates has shown that household estimates based on electric customer data are—on average—more accurate than those based on building permit and other data. However, we use our professional judgment to decide which data source(s) to use in each specific county and subcounty area. In many instances, we use averages of estimates from more than one data source. We also sometimes use GIS-based property parcel data (along with year built information and detailed land use codes from the Florida Department of Revenue) to evaluate which data source is best for a particular place.

Persons per Household

The second component of the housing unit method is the average number of persons per household (PPH). Florida's PPH dropped steadily from 3.22 in 1950 to 2.46 in 1990 but then leveled off, remaining constant between 1990 and 2000 before rising to 2.48 in 2010. There is a substantial amount of variation among local areas in Florida, with values in 2010 ranging from 2.1 to 3.1 for counties and from less than 1.4 to more than 4.0 for subcounty areas. PPH values have risen over time in some cities and counties and declined in others.

For each county and subcounty area, we base our PPH estimates on the local PPH value in the most recent census (e.g., 2010) and the county-level change in PPH since that census (as measured by the American Community Survey). In some instances, we use the local change in the mix of single-family, multifamily, and mobile home units since the last census, and/or indirect indicators of changes in PPH to adjust the estimates (e.g., changes in racial composition). Again, we use our professional judgment to decide which data sources and techniques to use in each county and subcounty area.

Group Quarters Population

The household population is calculated as the product of households and PPH. To obtain an estimate of the total population, we must add an estimate of the group quarters population. In most places, we estimate the group quarters population by assuming that it accounts for the same proportion of total population in 2018 as it did in 2010. For example, if the group quarters population accounted for 2% of the total population in 2010, we assume that it accounted for 2% in 2018. In places where there are large group quarters facilities, we collect data directly from the administrators of those facilities and add those estimates to the other group quarters population. Inmates in state and federal institutions are accounted for separately in all local areas; these data are available from the Federal Bureau of Prisons, the Florida Department of Corrections, the Florida Department of Veteran Affairs, the Florida Agency for Persons with Disabilities, the Florida Department of Health, the Florida Department of Juvenile Justice and the Florida Department of Children and Families. The total population estimate is made by adding the estimate of the group quarters population to the estimate of the household population.

Conclusion

The population estimates produced by BEBR are calculated by multiplying the number of households by the average number of persons per household and adding the number of persons living in group quarters. This methodology is conceptually simple but effective. It utilizes data that are available for all local areas, its components respond rapidly to population movements, and it can be applied systematically and uniformly everywhere in the state. A comparison of population estimates with census results for 1980, 1990, 2000, and 2010 showed the BEBR estimates to be quite accurate, especially when compared to other sets of estimates. We believe the housing unit method is the most effective method for making city and county population estimates in Florida and that it produces reliable estimates that provide a solid foundation for budgeting, planning, and analysis.

Note

The population numbers for 1990 and 2000 shown in this report include all official corrections made by the U.S. Census Bureau. Corrections for 2010 include all corrections received from the Census Bureau's Count Question Resolution program through February 11, 2014. Consequently, the census numbers for some cities or counties may differ from those published previously.

Acknowledgement

Funding for these estimates was provided by the Florida Legislature.

Table 1. Estimates of Population by County and City in Florida, 2018

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Alachua County	263,291	15,955	247,336	1,203	262,088
Alachua	10,155	1,096	9,059	0	10,155
Archer	1,168	50	1,118	0	1,168
Gainesville*	131,217	6,741	124,476	764	130,453
Hawthorne	1,422	5	1,417	0	1,422
High Springs	6,221	871	5,350	0	6,221
La Crosse	390	30	360	0	390
Micanopy	605	5	600	0	605
Newberry	6,249	1,299	4,950	0	6,249
Waldo	960	-55	1,015	0	960
UNINCORPORATED*	104,904	5,913	98,991	439	104,465
Baker County	27,652	537	27,115	2,375	25,277
Glen St. Mary	446	9	437	0	446
Macclenny	6,743	369	6,374	0	6,743
UNINCORPORATED	20,463	159	20,304	2,375	18,088
Bay County	181,199	12,347	168,852	1,129	180,070
Callaway	15,855	1,450	14,405	0	15,855
Lynn Haven	21,201	2,708	18,493	6	21,195
Mexico Beach	1,285	213	1,072	0	1,285
Panama City*	37,208	1,703	35,505	113	37,095
Panama City Beach	13,099	1,081	12,018	0	13,099
Parker	4,467	150	4,317	0	4,467
Springfield	9,621	718	8,903	0	9,621
UNINCORPORATED*	78,463	4,324	74,139	1,010	77,453
Bradford County	28,057	-463	28,520	3,558	24,499
Brooker	322	-16	338	0	322
Hampton	465	-35	500	0	465
Lawtey	718	-12	730	0	718
Starke	5,352	-97	5,449	10	5,342
UNINCORPORATED	21,200	-303	21,503	3,548	17,652
Brevard County	583,563	40,187	543,376	194	583,369
Cape Canaveral	10,227	315	9,912	0	10,227
Cocoa	19,286	2,146	17,140	0	19,286
Cocoa Beach	11,328	97	11,231	0	11,328
Grant-Valkaria	4,260	410	3,850	0	4,260
Indialantic	2,842	122	2,720	0	2,842
Indian Harbour Beach	8,526	301	8,225	0	8,526
Malabar	2,899	142	2,757	0	2,899
Melbourne*	82,040	5,835	76,205	30	82,010
Melbourne Beach	3,095	-6	3,101	0	3,095
Melbourne Village	673	11	662	0	673
Palm Bay	112,703	9,513	103,190	0	112,703

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1	Total	April 1	Revenue Sharing Use Only	
	2018	Change	2010		Estimates
	Estimate	2010–2018	Census	Inmates	less Inmates April 1, 2018
Brevard County (Continued)					
Palm Shores	1,108	208	900	0	1,108
Rockledge	26,882	1,956	24,926	22	26,860
Satellite Beach	10,346	237	10,109	0	10,346
Titusville	47,456	3,695	43,761	36	47,420
West Melbourne	21,990	3,635	18,355	0	21,990
UNINCORPORATED*	217,902	11,570	206,332	106	217,796
Broward County					
Coconut Creek	1,897,976	149,910	1,748,066	793	1,897,183
Cooper City	58,344	5,435	52,909	0	58,344
Coral Springs	33,906	5,359	28,547	6	33,900
Dania Beach	128,757	7,661	121,096	0	128,757
Davie	31,755	2,116	29,639	0	31,755
Deerfield Beach	103,171	11,179	91,992	6	103,165
Fort Lauderdale	78,573	3,555	75,018	0	78,573
Hallandale Beach	182,827	17,306	165,521	61	182,766
Hillsboro Beach	39,054	1,941	37,113	0	39,054
Hollywood	1,918	43	1,875	0	1,918
Lauderdale-By-The-Sea	149,028	8,260	140,768	0	149,028
Lauderdale Lakes	6,199	143	6,056	0	6,199
Lauderhill	36,475	3,882	32,593	0	36,475
Lazy Lake	71,751	4,864	66,887	0	71,751
Lighthouse Point	26	2	24	0	26
Margate	10,560	216	10,344	0	10,560
Miramar	58,329	5,045	53,284	0	58,329
North Lauderdale	137,107	15,066	122,041	0	137,107
Oakland Park	44,841	3,818	41,023	0	44,841
Parkland	45,276	3,913	41,363	0	45,276
Pembroke Park	32,742	8,780	23,962	0	32,742
Pembroke Pines*	6,384	282	6,102	0	6,384
Plantation	165,352	11,333	154,019	492	164,860
Pompano Beach	89,595	4,640	84,955	0	89,595
Sea Ranch Lakes	110,371	10,526	99,845	144	110,227
Southwest Ranches	695	25	670	0	695
Sunrise	7,706	361	7,345	0	7,706
Tamarac	92,663	8,224	84,439	0	92,663
Weston	64,663	4,236	60,427	0	64,663
West Park	66,972	1,639	65,333	0	66,972
Wilton Manors	14,985	829	14,156	0	14,985
UNINCORPORATED*	12,831	1,199	11,632	0	12,831
	15,120	-1,968	17,088	84	15,036
Calhoun County					
Altha	15,093	468	14,625	1,628	13,465
Blountstown	565	29	536	0	565
UNINCORPORATED	2,498	-16	2,514	0	2,498
	12,030	455	11,575	1,628	10,402

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Charlotte County	177,987	18,009	159,978	1,242	176,745
Punta Gorda	19,487	2,846	16,641	0	19,487
UNINCORPORATED	158,500	15,163	143,337	1,242	157,258
Citrus County	145,721	4,485	141,236	142	145,579
Crystal River	3,333	225	3,108	0	3,333
Inverness	7,380	170	7,210	0	7,380
UNINCORPORATED	135,008	4,090	130,918	142	134,866
Clay County	212,034	21,169	190,865	0	212,034
Green Cove Springs	7,813	905	6,908	0	7,813
Keystone Heights	1,364	14	1,350	0	1,364
Orange Park	8,630	218	8,412	0	8,630
Penney Farms	766	17	749	0	766
UNINCORPORATED	193,461	20,015	173,446	0	193,461
Collier County	367,347	45,827	321,520	24	367,323
Everglades	408	8	400	0	408
Marco Island	17,094	681	16,413	0	17,094
Naples	20,344	807	19,537	0	20,344
UNINCORPORATED	329,501	44,331	285,170	24	329,477
Columbia County	69,721	2,190	67,531	4,011	65,710
Fort White	552	-15	567	0	552
Lake City	12,322	276	12,046	333	11,989
UNINCORPORATED	56,847	1,929	54,918	3,678	53,169
DeSoto County	35,520	658	34,862	2,234	33,286
Arcadia	7,673	36	7,637	0	7,673
UNINCORPORATED	27,847	622	27,225	2,234	25,613
Dixie County	16,489	67	16,422	1,671	14,818
Cross City	1,696	-32	1,728	0	1,696
Horseshoe Beach	171	2	169	0	171
UNINCORPORATED	14,622	97	14,525	1,671	12,951
Duval County	952,861	88,598	864,263	598	952,263
Atlantic Beach	13,570	915	12,655	0	13,570
Baldwin	1,419	-6	1,425	0	1,419
Jacksonville	907,093	85,309	821,784	598	906,495
Jacksonville Beach	23,494	2,132	21,362	0	23,494
Neptune Beach	7,285	248	7,037	0	7,285

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Escambia County	318,560	20,941	297,619	2,588	315,972
Century	1,602	-96	1,698	0	1,602
Pensacola	54,801	2,878	51,923	67	54,734
UNINCORPORATED	262,157	18,159	243,998	2,521	259,636
Flagler County	107,511	11,815	95,696	0	107,511
Beverly Beach	356	18	338	0	356
Bunnell	3,056	380	2,676	0	3,056
Flagler Beach (part)	4,666	242	4,424	0	4,666
Marineland (part)	6	-10	16	0	6
Palm Coast	84,575	9,395	75,180	0	84,575
UNINCORPORATED	14,852	1,790	13,062	0	14,852
Franklin County	12,009	460	11,549	1,358	10,651
Apalachicola	2,363	132	2,231	0	2,363
Carrabelle	2,646	-132	2,778	1,085	1,561
UNINCORPORATED	7,000	460	6,540	273	6,727
Gadsden County	47,828	1,439	46,389	2,881	44,947
Chattahoochee	2,970	-682	3,652	814	2,156
Greensboro	591	-11	602	0	591
Gretna	1,656	196	1,460	0	1,656
Havana	1,800	46	1,754	0	1,800
Midway	3,409	405	3,004	0	3,409
Quincy	8,176	204	7,972	406	7,770
UNINCORPORATED	29,226	1,281	27,945	1,661	27,565
Gilchrist County	17,424	485	16,939	720	16,704
Bell	498	42	456	0	498
Fanning Springs (part)	358	80	278	0	358
Trenton	2,029	30	1,999	0	2,029
UNINCORPORATED	14,539	333	14,206	720	13,819
Glades County	13,002	118	12,884	949	12,053
Moore Haven	1,740	60	1,680	0	1,740
UNINCORPORATED	11,262	58	11,204	949	10,313
Gulf County	16,499	636	15,863	2,818	13,681
Port St. Joe	3,700	255	3,445	0	3,700
Wewahitchka	2,052	71	1,981	0	2,052
UNINCORPORATED	10,747	310	10,437	2,818	7,929

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Hamilton County	14,621	-178	14,799	2,459	12,162
Jasper	2,819	-1,727	4,546	1,215	1,604
Jennings	880	2	878	0	880
White Springs	764	-13	777	0	764
UNINCORPORATED	10,158	1,560	8,598	1,244	8,914
Hardee County	27,296	-435	27,731	1,526	25,770
Bowling Green	2,869	-61	2,930	0	2,869
Wauchula	5,133	132	5,001	0	5,133
Zolfo Springs	1,796	-31	1,827	0	1,796
UNINCORPORATED	17,498	-475	17,973	1,526	15,972
Hendry County	39,586	446	39,140	0	39,586
Clewiston	7,943	788	7,155	0	7,943
LaBelle	5,025	385	4,640	0	5,025
UNINCORPORATED	26,618	-727	27,345	0	26,618
Hernando County	185,604	12,826	172,778	509	185,095
Brooksville	8,410	691	7,719	0	8,410
Weeki Wachee	9	-3	12	0	9
UNINCORPORATED	177,185	12,138	165,047	509	176,676
Highlands County	102,525	3,739	98,786	84	102,441
Avon Park	11,187	2,351	8,836	0	11,187
Lake Placid	2,632	409	2,223	0	2,632
Sebring	11,087	596	10,491	0	11,087
UNINCORPORATED	77,619	383	77,236	84	77,535
Hillsborough County	1,408,864	179,638	1,229,226	818	1,408,046
Plant City	38,938	4,217	34,721	0	38,938
Tampa	378,531	42,822	335,709	632	377,899
Temple Terrace	26,512	1,971	24,541	0	26,512
UNINCORPORATED	964,883	130,628	834,255	186	964,697
Holmes County	20,133	206	19,927	1,451	18,682
Bonifay	2,677	-116	2,793	0	2,677
Esto	385	21	364	0	385
Noma	187	-24	211	0	187
Ponce de Leon	554	-44	598	0	554
Westville	286	-3	289	0	286
UNINCORPORATED	16,044	372	15,672	1,451	14,593
Indian River County	151,825	13,797	138,028	0	151,825
Fellsmere	5,571	374	5,197	0	5,571
Indian River Shores	4,208	307	3,901	0	4,208
Orchid	423	8	415	0	423

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	Revenue Sharing Use Only	
				Inmates	Estimates less Inmates April 1, 2018
Indian River County (Continued)					
Sebastian	24,630	2,701	21,929	0	24,630
Vero Beach*	16,274	1,051	15,223	0	16,274
UNINCORPORATED*	100,719	9,356	91,363	0	100,719
Jackson County					
Alford	50,435	689	49,746	7,313	43,122
Bascom	495	6	489	0	495
Campbellton	125	4	121	0	125
Cottondale	215	-15	230	0	215
Graceville	889	-44	933	0	889
Grand Ridge	2,182	-96	2,278	0	2,182
Greenwood	981	89	892	0	981
Jacob City	696	10	686	0	696
Malone	242	-8	250	0	242
Marianna	2,193	105	2,088	1,688	505
Sneads	7,621	1,519	6,102	1,485	6,136
UNINCORPORATED	1,893	44	1,849	0	1,893
	32,903	-925	33,828	4,140	28,763
Jefferson County					
Monticello	14,733	-28	14,761	1,110	13,623
UNINCORPORATED	2,412	-94	2,506	0	2,412
	12,321	66	12,255	1,110	11,211
Lafayette County					
Mayo	8,501	-369	8,870	1,407	7,094
UNINCORPORATED	1,208	-29	1,237	0	1,208
	7,293	-340	7,633	1,407	5,886
Lake County*					
Astatula	342,917	45,870	297,047	1,012	341,905
Clermont	1,908	98	1,810	0	1,908
Eustis	38,906	10,164	28,742	0	38,906
Fruitland Park	21,039	2,481	18,558	0	21,039
Groveland	8,963	4,885	4,078	0	8,963
Howey-in-the-Hills	16,407	7,678	8,729	0	16,407
Lady Lake	1,499	401	1,098	0	1,499
Leesburg	14,960	1,034	13,926	0	14,960
Mascotte	23,297	3,180	20,117	0	23,297
Minneola	5,829	728	5,101	0	5,829
Montverde	12,348	2,945	9,403	0	12,348
Mount Dora	1,846	383	1,463	0	1,846
Tavares	14,536	2,166	12,370	0	14,536
Umatilla	17,353	3,402	13,951	0	17,353
UNINCORPORATED*	4,081	625	3,456	0	4,081
	159,945	5,700	154,245	1,012	158,933

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Lee County	713,903	95,149	618,754	285	713,618
Bonita Springs*	51,181	7,324	43,857	5	51,176
Cape Coral	180,204	25,899	154,305	29	180,175
Estero**	31,806	31,806	0	0	31,806
Fort Myers	81,868	19,570	62,298	70	81,798
Fort Myers Beach	6,406	129	6,277	0	6,406
Sanibel	6,701	232	6,469	0	6,701
UNINCORPORATED*	355,737	10,189	345,548	181	355,556
Leon County	292,332	16,845	275,487	1,207	291,125
Tallahassee	192,381	11,005	181,376	1,207	191,174
UNINCORPORATED	99,951	5,840	94,111	0	99,951
Levy County	41,054	253	40,801	0	41,054
Bronson	1,133	20	1,113	0	1,133
Cedar Key	714	12	702	0	714
Chiefland	2,224	-21	2,245	0	2,224
Fanning Springs (part)	501	15	486	0	501
Inglis	1,292	-33	1,325	0	1,292
Otter Creek	122	-12	134	0	122
Williston	2,943	175	2,768	0	2,943
Yankeetown	504	2	502	0	504
UNINCORPORATED	31,621	95	31,526	0	31,621
Liberty County	8,915	550	8,365	1,776	7,139
Bristol	950	-46	996	0	950
UNINCORPORATED	7,965	596	7,369	1,776	6,189
Madison County	19,473	249	19,224	1,661	17,812
Greenville	797	-46	843	32	765
Lee	338	-14	352	0	338
Madison*	3,081	32	3,049	0	3,081
UNINCORPORATED*	15,257	277	14,980	1,629	13,628
Manatee County	377,826	54,993	322,833	198	377,628
Anna Maria	1,599	96	1,503	0	1,599
Bradenton	56,157	6,611	49,546	41	56,116
Bradenton Beach	1,194	23	1,171	0	1,194
Holmes Beach	3,934	98	3,836	0	3,934
Longboat Key (part)	2,428	30	2,398	0	2,428
Palmetto	13,307	701	12,606	48	13,259
UNINCORPORATED	299,207	47,434	251,773	109	299,098

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Marion County*	353,898	22,595	331,303	5,473	348,425
Bellevue	5,152	660	4,492	6	5,146
Dunnellon	1,805	72	1,733	0	1,805
McIntosh	453	1	452	0	453
Ocala	60,042	3,727	56,315	160	59,882
Reddick	547	41	506	0	547
UNINCORPORATED*	285,899	18,094	267,805	5,307	280,592
Martin County	155,556	9,238	146,318	2,061	153,495
Indiantown***	6,707	6,707	0	0	6,707
Jupiter Island	826	9	817	0	826
Ocean Breeze	163	-192	355	0	163
Sewall's Point	2,078	82	1,996	0	2,078
Stuart	16,425	832	15,593	24	16,401
UNINCORPORATED	129,357	1,800	127,557	2,037	127,320
Miami-Dade County*	2,779,322	282,865	2,496,457	9,798	2,769,524
Aventura	37,790	2,028	35,762	0	37,790
Bal Harbour	2,920	407	2,513	0	2,920
Bay Harbor Islands	5,908	280	5,628	0	5,908
Biscayne Park	3,218	163	3,055	0	3,218
Coral Gables*	50,631	3,855	46,776	0	50,631
Cutler Bay	45,373	5,087	40,286	0	45,373
Doral*	68,244	22,535	45,709	0	68,244
El Portal	2,140	-185	2,325	0	2,140
Florida City	13,076	1,831	11,245	24	13,052
Golden Beach	935	16	919	0	935
Hialeah*	238,906	14,239	224,667	0	238,906
Hialeah Gardens	23,614	1,870	21,744	0	23,614
Homestead*	73,863	13,354	60,509	18	73,845
Indian Creek	84	-2	86	0	84
Islandia****	0	-18	18		
Key Biscayne	12,887	543	12,344	0	12,887
Medley	842	4	838	0	842
Miami*	481,333	81,825	399,508	2,933	478,400
Miami Beach*	92,502	4,724	87,778	0	92,502
Miami Gardens*	113,628	6,462	107,166	0	113,628
Miami Lakes	31,118	1,757	29,361	12	31,106
Miami Shores	10,784	291	10,493	0	10,784
Miami Springs	14,192	383	13,809	0	14,192
North Bay Village	8,981	1,844	7,137	0	8,981
North Miami*	63,517	4,605	58,912	0	63,517
North Miami Beach	45,612	4,089	41,523	0	45,612
Opa-locka	18,017	2,798	15,219	0	18,017
Palmetto Bay*	24,144	736	23,408	0	24,144
Pinecrest	18,490	267	18,223	0	18,490

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	Revenue Sharing Use Only	
				Inmates	Estimates
					less Inmates April 1, 2018
Miami-Dade County* (Continued)					
South Miami	12,664	1,007	11,657	0	12,664
Sunny Isles Beach	22,505	1,673	20,832	0	22,505
Surfside	5,934	190	5,744	0	5,934
Sweetwater	21,499	8,000	13,499	0	21,499
Virginia Gardens	2,433	58	2,375	0	2,433
West Miami	7,806	1,841	5,965	0	7,806
UNINCORPORATED*	1,203,732	94,308	1,109,424	6,811	1,196,921
Monroe County					
Islamorada, Village of Islands	5,990	-129	6,119	0	5,990
Key Colony Beach	758	-39	797	0	758
Key West	24,509	-140	24,649	0	24,509
Layton	182	-2	184	0	182
Marathon	8,235	-62	8,297	0	8,235
UNINCORPORATED	34,266	1,222	33,044	0	34,266
Nassau County					
Callahan	1,305	182	1,123	0	1,305
Fernandina Beach	12,761	1,274	11,487	24	12,737
Hilliard	2,990	-96	3,086	0	2,990
UNINCORPORATED	65,692	8,074	57,618	48	65,644
Okaloosa County					
Cinco Bayou	404	21	383	0	404
Crestview	25,001	4,023	20,978	0	25,001
Destin	13,289	984	12,305	0	13,289
Fort Walton Beach	20,830	1,323	19,507	0	20,830
Laurel Hill	551	14	537	0	551
Mary Esther	3,971	120	3,851	0	3,971
Niceville	14,508	1,759	12,749	0	14,508
Shalimar	817	100	717	0	817
Valparaiso	5,284	248	5,036	0	5,284
UNINCORPORATED	113,497	8,738	104,759	1,377	112,120
Okeechobee County					
Okeechobee	5,561	-60	5,621	0	5,561
UNINCORPORATED	35,559	1,184	34,375	2,370	33,189
Orange County					
Apopka	51,676	10,134	41,542	0	51,676
Bay Lake	22	-25	47	0	22
Belle Isle	6,944	956	5,988	0	6,944
Eatonville	2,323	164	2,159	31	2,292
Edgewood	2,712	209	2,503	0	2,712
Lake Buena Vista	24	14	10	0	24

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	Revenue Sharing Use Only	
				Inmates	Estimates less Inmates April 1, 2018
Orange County (Continued)					
Maitland	18,612	2,861	15,751	0	18,612
Oakland	3,119	581	2,538	0	3,119
Ocoee	45,694	10,115	35,579	0	45,694
Orlando	285,099	46,799	238,300	635	284,464
Windermere	2,918	456	2,462	0	2,918
Winter Garden	44,935	10,367	34,568	0	44,935
Winter Park	30,212	2,360	27,852	0	30,212
UNINCORPORATED	855,307	118,650	736,657	2,648	852,659
Osceola County					
Kissimmee	352,496	83,811	268,685	352	352,144
St. Cloud	72,369	12,687	59,682	206	72,163
UNINCORPORATED	46,519	11,336	35,183	0	46,519
	233,608	59,788	173,820	146	233,462
Palm Beach County					
Atlantis	1,433,417	113,283	1,320,134	2,862	1,430,555
Belle Glade	2,021	16	2,005	0	2,021
Boca Raton	17,589	122	17,467	0	17,589
Boynton Beach	93,417	9,025	84,392	0	93,417
Briny Breezes	76,756	8,539	68,217	0	76,756
Cloud Lake	610	9	601	0	610
Delray Beach	137	2	135	0	137
Glen Ridge	66,580	6,058	60,522	0	66,580
Golf	223	4	219	0	223
Greenacres	257	5	252	0	257
Gulf Stream	39,568	1,995	37,573	0	39,568
Haverhill	1,005	219	786	0	1,005
Highland Beach	2,096	223	1,873	0	2,096
Hypoluxo	3,654	115	3,539	0	3,654
Juno Beach	2,741	153	2,588	0	2,741
Jupiter	3,427	251	3,176	0	3,427
Jupiter Inlet Colony	62,100	6,944	55,156	0	62,100
Lake Clarke Shores	409	9	400	0	409
Lake Park	3,422	46	3,376	0	3,422
Lake Worth	8,829	674	8,155	0	8,829
Lantana	38,257	3,347	34,910	0	38,257
Loxahatchee Groves	11,397	974	10,423	24	11,373
Manalapan	3,384	204	3,180	0	3,384
Mangonia Park	425	19	406	0	425
North Palm Beach	2,045	157	1,888	0	2,045
Ocean Ridge	12,596	581	12,015	0	12,596
Pahokee	1,827	41	1,786	0	1,827
Palm Beach*	5,909	260	5,649	373	5,536
Palm Beach Gardens*	8,295	134	8,161	0	8,295
Palm Beach Shores	53,800	5,360	48,440	0	53,800
	1,217	75	1,142	0	1,217

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1	Total	April 1	Revenue Sharing Use Only	
	2018	Change	2010	Estimates	
	Estimate	2010–2018	Census	Inmates	less Inmates April 1, 2018
Palm Beach County (Continued)					
Palm Springs	23,448	4,520	18,928	0	23,448
Riviera Beach	35,431	2,943	32,488	0	35,431
Royal Palm Beach	37,934	3,794	34,140	0	37,934
South Bay	5,174	298	4,876	1,909	3,265
South Palm Beach*	1,400	42	1,358	0	1,400
Tequesta	5,857	228	5,629	0	5,857
Wellington	62,304	5,796	56,508	0	62,304
Westlake*****	29	29	0	0	29
West Palm Beach*	112,906	12,563	100,343	268	112,638
UNINCORPORATED*	624,941	37,509	587,432	288	624,653
Pasco County					
Dade City	515,077	50,380	464,697	748	514,329
New Port Richey	7,162	725	6,437	0	7,162
Port Richey	15,863	952	14,911	0	15,863
St. Leo	2,879	208	2,671	0	2,879
San Antonio	1,319	-21	1,340	0	1,319
Zephyrhills	1,294	156	1,138	0	1,294
UNINCORPORATED	15,839	2,551	13,288	0	15,839
	470,721	45,809	424,912	748	469,973
Pinellas County					
Belleair	970,532	53,990	916,542	1,022	969,510
Belleair Beach	3,977	108	3,869	0	3,977
Belleair Bluffs	1,588	28	1,560	0	1,588
Belleair Shore	2,095	64	2,031	0	2,095
Clearwater	118	9	109	0	118
Dunedin	115,589	7,904	107,685	0	115,589
Gulfport	37,054	1,733	35,321	5	37,049
Indian Rocks Beach	12,544	515	12,029	0	12,544
Indian Shores	4,430	317	4,113	0	4,430
Kenneth City	1,470	50	1,420	0	1,470
Largo	5,103	123	4,980	0	5,103
Madeira Beach	83,526	5,878	77,648	0	83,526
North Redington Beach	4,421	158	4,263	0	4,421
Oldsmar	1,499	82	1,417	0	1,499
Pinellas Park	14,489	898	13,591	0	14,489
Redington Beach	53,144	4,065	49,079	0	53,144
Redington Shores	1,475	48	1,427	0	1,475
Safety Harbor	2,212	91	2,121	0	2,212
St. Pete Beach	17,470	586	16,884	6	17,464
St. Petersburg	9,510	164	9,346	0	9,510
Seminole	266,076	21,307	244,769	407	265,669
South Pasadena	18,865	1,632	17,233	0	18,865
Tarpon Springs	5,074	110	4,964	0	5,074
Treasure Island	25,455	1,971	23,484	0	25,455
UNINCORPORATED	6,858	153	6,705	0	6,858
	276,490	5,996	270,494	604	275,886

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Polk County	673,028	70,933	602,095	3,155	669,873
Auburndale	16,246	2,739	13,507	0	16,246
Bartow	19,342	2,044	17,298	158	19,184
Davenport	5,602	2,714	2,888	0	5,602
Dundee	4,662	945	3,717	0	4,662
Eagle Lake	2,574	319	2,255	0	2,574
Fort Meade	5,993	367	5,626	0	5,993
Frostproof	3,130	138	2,992	0	3,130
Haines City*	24,298	3,738	20,560	0	24,298
Highland Park	258	28	230	0	258
Hillcrest Heights	253	-1	254	0	253
Lake Alfred	5,950	935	5,015	0	5,950
Lake Hamilton	1,380	149	1,231	0	1,380
Lakeland	105,586	8,164	97,422	0	105,586
Lake Wales	15,791	1,566	14,225	0	15,791
Mulberry	3,865	48	3,817	0	3,865
Polk City	2,088	526	1,562	0	2,088
Winter Haven	42,828	8,954	33,874	0	42,828
UNINCORPORATED*	413,182	37,560	375,622	2,997	410,185
Putnam County	72,981	-1,383	74,364	481	72,500
Crescent City	1,553	-24	1,577	0	1,553
Interlachen	1,339	-64	1,403	0	1,339
Palatka	10,649	91	10,558	0	10,649
Pomona Park	871	-41	912	0	871
Welaka	712	11	701	0	712
UNINCORPORATED	57,857	-1,356	59,213	481	57,376
St. Johns County	238,742	48,703	190,039	156	238,586
Hastings*****	0	-580	580	0	0
Marineland (part)	2	2	0	0	2
St. Augustine	14,021	1,046	12,975	0	14,021
St. Augustine Beach	6,713	537	6,176	0	6,713
UNINCORPORATED	218,006	47,698	170,308	156	217,850
St. Lucie County	302,432	24,643	277,789	138	302,294
Fort Pierce	43,326	1,736	41,590	52	43,274
Port St. Lucie	185,843	21,240	164,603	6	185,837
St. Lucie Village	634	44	590	0	634
UNINCORPORATED	72,629	1,623	71,006	80	72,549
Santa Rosa County	174,887	23,515	151,372	4,807	170,080
Gulf Breeze	5,849	86	5,763	0	5,849
Jay	521	-12	533	0	521
Milton	10,186	1,360	8,826	60	10,126
UNINCORPORATED	158,331	22,081	136,250	4,747	153,584

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	<u>Revenue Sharing Use Only</u>	
				Inmates	Estimates less Inmates April 1, 2018
Sarasota County	417,442	37,994	379,448	6	417,436
Longboat Key (part)	4,562	72	4,490	0	4,562
North Port	70,631	13,274	57,357	0	70,631
Sarasota	55,832	3,915	51,917	6	55,826
Venice	22,781	2,033	20,748	0	22,781
UNINCORPORATED	263,636	18,700	244,936	0	263,636
Seminole County	463,560	40,842	422,718	138	463,422
Altamonte Springs	44,947	3,451	41,496	0	44,947
Casselberry	29,778	3,537	26,241	6	29,772
Lake Mary	16,746	2,924	13,822	0	16,746
Longwood	15,279	1,622	13,657	0	15,279
Oviedo	39,739	6,397	33,342	0	39,739
Sanford	59,033	5,463	53,570	39	58,994
Winter Springs	37,639	4,357	33,282	0	37,639
UNINCORPORATED	220,399	13,091	207,308	93	220,306
Sumter County	124,935	31,515	93,420	8,281	116,654
Bushnell	2,499	81	2,418	0	2,499
Center Hill	1,101	113	988	0	1,101
Coleman	721	18	703	0	721
Webster	818	33	785	0	818
Wildwood	9,511	2,802	6,709	0	9,511
UNINCORPORATED	110,285	28,468	81,817	8,281	102,004
Suwannee County	44,879	3,328	41,551	2,062	42,817
Branford	689	-23	712	0	689
Live Oak	6,837	-13	6,850	0	6,837
UNINCORPORATED	37,353	3,364	33,989	2,062	35,291
Taylor County	22,283	-287	22,570	2,215	20,068
Perry	7,025	8	7,017	0	7,025
UNINCORPORATED	15,258	-295	15,553	2,215	13,043
Union County	15,867	332	15,535	5,100	10,767
Lake Butler	1,813	-84	1,897	0	1,813
Raiford	243	-12	255	0	243
Worthington Springs*	350	-57	407	0	350
UNINCORPORATED*	13,461	485	12,976	5,100	8,361
Volusia County	531,062	36,469	494,593	1,902	529,160
Daytona Beach	66,267	5,262	61,005	30	66,237
Daytona Beach Shores	4,294	47	4,247	0	4,294
DeBary	20,774	1,454	19,320	0	20,774
DeLand	34,106	7,075	27,031	0	34,106
Deltona	91,007	5,825	85,182	0	91,007

Table 1. Estimates of Population by County and City in Florida, 2018

(Continued)

	Revenue Sharing Use Only				
County, City, and State	April 1 2018 Estimate	Total Change 2010–2018	April 1 2010 Census	Inmates	Estimates less Inmates April 1, 2018
Volusia County (Continued)					
Edgewater	23,319	2,569	20,750	0	23,319
Flagler Beach (part)	60	0	60	0	60
Holly Hill	11,958	299	11,659	0	11,958
Lake Helen	2,752	128	2,624	0	2,752
New Smyrna Beach	26,407	3,943	22,464	0	26,407
Oak Hill	1,997	205	1,792	0	1,997
Orange City	11,720	1,121	10,599	0	11,720
Ormond Beach	41,140	3,003	38,137	6	41,134
Pierson	1,760	24	1,736	0	1,760
Ponce Inlet	3,111	79	3,032	0	3,111
Port Orange	61,009	4,961	56,048	0	61,009
South Daytona	12,703	451	12,252	0	12,703
UNINCORPORATED	116,678	23	116,655	1,866	114,812
Wakulla County					
St. Marks	31,943	1,167	30,776	2,448	29,495
Sopchoppy	277	-16	293	0	277
UNINCORPORATED	473	16	457	0	473
UNINCORPORATED	31,193	1,167	30,026	2,448	28,745
Walton County					
DeFuniak Springs	67,656	12,613	55,043	1,551	66,105
Freeport	5,481	304	5,177	0	5,481
Paxton	3,845	2,058	1,787	0	3,845
UNINCORPORATED	610	-34	644	0	610
UNINCORPORATED	57,720	10,285	47,435	1,551	56,169
Washington County					
Caryville	25,129	233	24,896	2,215	22,914
Chipley	293	-118	411	0	293
Ebro	3,506	-99	3,605	0	3,506
Vernon	238	-32	270	0	238
Wausau	751	64	687	0	751
UNINCORPORATED	375	-8	383	0	375
UNINCORPORATED	19,966	426	19,540	2,215	17,751
Florida*					
Incorporated*	20,840,568	2,039,236	18,801,332	119,036	20,721,532
Unincorporated*	10,556,970	1,103,789	9,453,181	18,873	10,538,097
Unincorporated*	10,283,598	935,447	9,348,151	100,163	10,183,435

* Includes US Census Bureau corrections as of February 11, 2014.

** The Village of Estero was incorporated on December 31, 2014.

*** The Village of Indiantown was incorporated on December 31, 2017.

**** The City of Islandia was disincorporated on March 6, 2012.

***** The City of Westlake was incorporated on June 20, 2016.

***** The City of Hastings was disincorporated on February 28, 2018.

Table 2. Components of Population Change for Counties in Florida, 2010 to 2018

State and County	Total Change 2010–2018	Births	Deaths	Components of Change		Percent of Change Due to—	
				Natural Increase	Net Migration	Natural Increase	Net Migration
FLORIDA*	2,039,236	1,748,679	1,478,343	270,336	1,768,900	13.3	86.7
Alachua	15,955	23,018	14,550	8,468	7,487	53.1	46.9
Baker	537	2,738	1,883	855	-318	100.0	0.0
Bay	12,347	18,282	14,380	3,902	8,445	31.6	68.4
Bradford	-463	2,454	2,354	100	-563	0.0	100.0
Brevard	40,187	41,179	53,485	-12,306	52,493	0.0	100.0
Broward	149,910	174,540	116,944	57,596	92,314	38.4	61.6
Calhoun	468	1,140	1,307	-167	635	0.0	100.0
Charlotte	18,009	8,190	19,407	-11,217	29,226	0.0	100.0
Citrus	4,485	8,394	19,465	-11,071	15,556	0.0	100.0
Clay	21,169	17,106	12,810	4,296	16,873	20.3	79.7
Collier	45,827	25,888	24,570	1,318	44,509	2.9	97.1
Columbia	2,190	6,449	6,131	318	1,872	14.5	85.5
DeSoto	658	3,065	2,513	552	106	83.9	16.1
Dixie	67	1,239	1,697	-458	525	0.0	100.0
Duval	88,598	102,062	61,095	40,967	47,631	46.2	53.8
Escambia	20,941	31,194	25,393	5,801	15,140	27.7	72.3
Flagler	11,815	6,485	9,485	-3,000	14,815	0.0	100.0
Franklin	460	841	1,026	-185	645	0.0	100.0
Gadsden	1,439	4,573	3,675	898	541	62.4	37.6
Gilchrist	485	1,520	1,485	35	450	7.2	92.8
Glades	118	548	881	-333	451	0.0	100.0
Gulf	636	985	1,405	-420	1,056	0.0	100.0
Hamilton	-178	1,261	1,130	131	-309	0.0	100.0
Hardee	-435	3,147	1,661	1,486	-1,921	0.0	100.0
Hendry	446	4,732	2,227	2,505	-2,059	100.0	0.0
Hernando	12,826	12,111	20,430	-8,319	21,145	0.0	100.0
Highlands	3,739	7,298	11,859	-4,561	8,300	0.0	100.0
Hillsborough	179,638	135,048	78,857	56,191	123,447	31.3	68.7
Holmes	206	1,598	2,017	-419	625	0.0	100.0
Indian River	13,797	10,096	15,080	-4,984	18,781	0.0	100.0
Jackson	689	4,008	4,652	-644	1,333	0.0	100.0
Jefferson	-28	1,041	1,295	-254	226	100.0	0.0
Lafayette	-369	602	591	11	-380	0.0	100.0

Table 2. Components of Population Change for Counties in Florida, 2010 to 2018

(Continued)

State and County	Total Change 2010–2018	Births	Deaths	Components of Change		Percent of Change Due to—	
				Natural Increase	Net Migration	Natural Increase	Net Migration
Lake*	45,870	25,080	29,856	-4,776	50,646	0.0	100.0
Lee	95,149	51,947	51,952	-5	95,154	0.0	100.0
Leon	16,845	24,411	14,181	10,230	6,615	60.7	39.3
Levy	253	3,187	4,241	-1,054	1,307	0.0	100.0
Liberty	550	647	521	126	424	22.9	77.1
Madison	249	1,631	1,769	-138	387	0.0	100.0
Manatee	54,993	27,452	29,304	-1,852	56,845	0.0	100.0
Marion*	22,595	27,327	37,519	-10,192	32,787	0.0	100.0
Martin	9,238	9,777	14,639	-4,862	14,100	0.0	100.0
Miami-Dade*	282,865	253,227	152,110	101,117	181,748	35.7	64.3
Monroe	850	5,831	5,564	267	583	31.4	68.6
Nassau	9,434	6,232	6,067	165	9,269	1.7	98.3
Okaloosa	17,330	21,658	13,266	8,392	8,938	48.4	51.6
Okeechobee	1,124	4,226	3,434	792	332	70.5	29.5
Orange	203,641	128,618	58,748	69,870	133,771	34.3	65.7
Osceola	83,811	32,314	15,710	16,604	67,207	19.8	80.2
Palm Beach	113,283	115,071	110,726	4,345	108,938	3.8	96.2
Pasco	50,380	39,201	45,759	-6,558	56,938	0.0	100.0
Pinellas	53,990	67,754	91,964	-24,210	78,200	0.0	100.0
Polk	70,933	59,868	50,382	9,486	61,447	13.4	86.6
Putnam	-1,383	6,741	7,694	-953	-430	68.9	31.1
St. Johns	48,703	16,071	13,793	2,278	46,425	4.7	95.3
St. Lucie	24,643	24,097	23,674	423	24,220	1.7	98.3
Santa Rosa	23,515	14,824	10,520	4,304	19,211	18.3	81.7
Sarasota	37,994	23,084	42,074	-18,990	56,984	0.0	100.0
Seminole	40,842	36,241	25,240	11,001	29,841	26.9	73.1
Sumter	31,515	3,715	12,093	-8,378	39,893	0.0	100.0
Suwannee	3,328	3,710	4,372	-662	3,990	0.0	100.0
Taylor	-287	1,899	1,931	-32	-255	11.1	88.9
Union	332	1,299	1,730	-431	763	0.0	100.0
Volusia	36,469	38,433	52,837	-14,404	50,873	0.0	100.0
Wakulla	1,167	2,611	2,044	567	600	48.6	51.4
Walton	12,613	5,739	4,588	1,151	11,462	9.1	90.9
Washington	233	1,924	2,301	-377	610	0.0	100.0

* Includes US Census Bureau corrections as of February 11, 2014.

Table 3. Population and Population Change for Counties in Florida, 1990 to 2018

State and County	Population				Percent Change		
	2018	2010	2000	1990	2010 to 2018	2000 to 2010	1990 to 2000
FLORIDA*	20,840,568	18,801,332	15,982,824	12,938,071	10.8	17.6	23.5
Alachua	263,291	247,336	217,955	181,596	6.5	13.5	20.0
Baker	27,652	27,115	22,259	18,486	2.0	21.8	20.4
Bay	181,199	168,852	148,217	126,994	7.3	13.9	16.7
Bradford	28,057	28,520	26,088	22,515	-1.6	9.3	15.9
Brevard	583,563	543,376	476,230	398,978	7.4	14.1	19.4
Broward	1,897,976	1,748,066	1,623,018	1,255,531	8.6	7.7	29.3
Calhoun	15,093	14,625	13,017	11,011	3.2	12.4	18.2
Charlotte	177,987	159,978	141,627	110,975	11.3	13.0	27.6
Citrus	145,721	141,236	118,085	93,513	3.2	19.6	26.3
Clay	212,034	190,865	140,814	105,986	11.1	35.5	32.9
Collier	367,347	321,520	251,377	152,099	14.3	27.9	65.3
Columbia	69,721	67,531	56,513	42,613	3.2	19.5	32.6
DeSoto	35,520	34,862	32,209	23,865	1.9	8.2	35.0
Dixie	16,489	16,422	13,827	10,585	0.4	18.8	30.6
Duval	952,861	864,263	778,879	672,971	10.3	11.0	15.7
Escambia	318,560	297,619	294,410	262,798	7.0	1.1	12.0
Flagler	107,511	95,696	49,832	28,701	12.3	92.0	73.6
Franklin	12,009	11,549	9,829	8,967	4.0	17.5	9.6
Gadsden	47,828	46,389	45,087	41,116	3.1	2.9	9.7
Gilchrist	17,424	16,939	14,437	9,667	2.9	17.3	49.3
Glades	13,002	12,884	10,576	7,591	0.9	21.8	39.3
Gulf	16,499	15,863	14,560	11,504	4.0	8.9	26.6
Hamilton	14,621	14,799	13,327	10,930	-1.2	11.0	21.9
Hardee	27,296	27,731	26,938	19,499	-1.6	2.9	38.2
Hendry	39,586	39,140	36,210	25,773	1.1	8.1	40.5
Hernando	185,604	172,778	130,802	101,115	7.4	32.1	29.4
Highlands	102,525	98,786	87,366	68,432	3.8	13.1	27.7
Hillsborough	1,408,864	1,229,226	998,948	834,054	14.6	23.1	19.8
Holmes	20,133	19,927	18,564	15,778	1.0	7.3	17.7
Indian River	151,825	138,028	112,947	90,208	10.0	22.2	25.2
Jackson	50,435	49,746	46,755	41,375	1.4	6.4	13.0
Jefferson	14,733	14,761	12,902	11,296	-0.2	14.4	14.2
Lafayette	8,501	8,870	7,022	5,578	-4.2	26.3	25.9

Table 3. Population and Population Change for Counties in Florida, 1990 to 2018

(Continued)

State and County	Population				Percent Change		
	2018	2010	2000	1990	2010 to 2018	2000 to 2010	1990 to 2000
Lake*	342,917	297,047	210,527	152,104	15.4	41.1	38.4
Lee	713,903	618,754	440,888	335,113	15.4	40.3	31.6
Leon	292,332	275,487	239,452	192,493	6.1	15.0	24.4
Levy	41,054	40,801	34,450	25,912	0.6	18.4	32.9
Liberty	8,915	8,365	7,021	5,569	6.6	19.1	26.1
Madison	19,473	19,224	18,733	16,569	1.3	2.6	13.1
Manatee	377,826	322,833	264,002	211,707	17.0	22.3	24.7
Marion*	353,898	331,303	258,916	194,835	6.8	28.0	32.9
Martin	155,556	146,318	126,731	100,900	6.3	15.5	25.6
Miami-Dade*	2,779,322	2,496,457	2,253,779	1,937,194	11.3	10.8	16.3
Monroe	73,940	73,090	79,589	78,024	1.2	-8.2	2.0
Nassau	82,748	73,314	57,663	43,941	12.9	27.1	31.2
Okaloosa	198,152	180,822	170,498	143,777	9.6	6.1	18.6
Okeechobee	41,120	39,996	35,910	29,627	2.8	11.4	21.2
Orange	1,349,597	1,145,956	896,344	677,491	17.8	27.8	32.3
Osceola	352,496	268,685	172,493	107,728	31.2	55.8	60.1
Palm Beach	1,433,417	1,320,134	1,131,191	863,503	8.6	16.7	31.0
Pasco	515,077	464,697	344,768	281,131	10.8	34.8	22.6
Pinellas	970,532	916,542	921,495	851,659	5.9	-0.5	8.2
Polk	673,028	602,095	483,924	405,382	11.8	24.4	19.4
Putnam	72,981	74,364	70,423	65,070	-1.9	5.6	8.2
St. Johns	238,742	190,039	123,135	83,829	25.6	54.3	46.9
St. Lucie	302,432	277,789	192,695	150,171	8.9	44.2	28.3
Santa Rosa	174,887	151,372	117,743	81,608	15.5	28.6	44.3
Sarasota	417,442	379,448	325,961	277,776	10.0	16.4	17.3
Seminole	463,560	422,718	365,199	287,521	9.7	15.8	27.0
Sumter	124,935	93,420	53,345	31,577	33.7	75.1	68.9
Suwannee	44,879	41,551	34,844	26,780	8.0	19.2	30.1
Taylor	22,283	22,570	19,256	17,111	-1.3	17.2	12.5
Union	15,867	15,535	13,442	10,252	2.1	15.6	31.1
Volusia	531,062	494,593	443,343	370,737	7.4	11.6	19.6
Wakulla	31,943	30,776	22,863	14,202	3.8	34.6	61.0
Walton	67,656	55,043	40,601	27,759	22.9	35.6	46.3
Washington	25,129	24,896	20,973	16,919	0.9	18.7	24.0

* Includes US Census Bureau corrections as of February 11, 2014.

Table 4. Population and Population Change for Metropolitan Statistical Areas in Florida, 1990 to 2018

Metropolitan Statistical Area* and County	Population				Percent Change		
	2018	2010	2000	1990	2010	2000	1990
					to 2018	to 2010	to 2000
All MSAs	20,149,019	18,119,272	15,357,198	12,414,577	11.2	18.0	23.7
Cape Coral-Fort Myers	713,903	618,754	440,888	335,113	15.4	40.3	31.6
Lee	713,903	618,754	440,888	335,113	15.4	40.3	31.6
Crestview-Fort Walton							
Beach-Destin	265,808	235,865	211,099	171,536	12.7	11.7	23.1
Okaloosa	198,152	180,822	170,498	143,777	9.6	6.1	18.6
Walton	67,656	55,043	40,601	27,759	22.9	35.6	46.3
Deltona-Daytona Beach-							
Ormond Beach	638,573	590,289	493,175	399,438	8.2	19.7	23.5
Flagler	107,511	95,696	49,832	28,701	12.3	92.0	73.6
Volusia	531,062	494,593	443,343	370,737	7.4	11.6	19.6
Gainesville	321,769	305,076	266,842	217,186	5.5	14.3	22.9
Alachua	263,291	247,336	217,955	181,596	6.5	13.5	20.0
Gilchrist	17,424	16,939	14,437	9,667	2.9	17.3	49.3
Levy	41,054	40,801	34,450	25,923	0.6	18.4	32.9
Homosassa Springs	145,721	141,236	118,085	93,513	3.2	19.6	26.3
Citrus	145,721	141,236	118,085	93,513	3.2	19.6	26.3
Jacksonville	1,514,037	1,345,596	1,122,750	925,213	12.5	19.8	21.4
Baker	27,652	27,115	22,259	18,486	2.0	21.8	20.4
Clay	212,034	190,865	140,814	105,986	11.1	35.5	32.9
Duval	952,861	864,263	778,879	672,971	10.3	11.0	15.7
Nassau	82,748	73,314	57,663	43,941	12.9	27.1	31.2
St. Johns	238,742	190,039	123,135	83,829	25.6	54.3	46.9
Lakeland-Winter Haven	673,028	602,095	483,924	405,382	11.8	24.4	19.4
Polk	673,028	602,095	483,924	405,382	11.8	24.4	19.4
Miami-Fort Lauderdale-							
Pompano Beach	6,110,715	5,564,657	5,007,988	4,056,228	9.8	11.1	23.5
Broward	1,897,976	1,748,066	1,623,018	1,255,531	8.6	7.7	29.3
Miami-Dade**	2,779,322	2,496,457	2,253,779	1,937,194	11.3	10.8	16.3
Palm Beach	1,433,417	1,320,134	1,131,191	863,503	8.6	16.7	31.0
Naples-Marco Island	367,347	321,520	251,377	152,099	14.3	27.9	65.3
Collier	367,347	321,520	251,377	152,099	14.3	27.9	65.3
North Port-Sarasota-							
Bradenton	795,268	702,281	589,963	489,483	13.2	19.0	20.5
Manatee	377,826	322,833	264,002	211,707	17.0	22.3	24.7
Sarasota	417,442	379,448	325,961	277,776	10.0	16.4	17.3
Ocala	353,898	331,303	258,916	194,835	6.8	28.0	32.9
Marion**	353,898	331,303	258,916	194,835	6.8	28.0	32.9

Table 4. Population and Population Change for Metropolitan Statistical Areas in Florida, 1990 to 2018 (Continued)

Metropolitan Statistical Area* and County	Population				Percent Change		
	2018	2010	2000	1990	2010 to 2018	2000 to 2010	1990 to 2000
Orlando-Kissimmee-Sanford	2,508,570	2,134,406	1,644,563	1,224,844	17.5	29.8	34.3
Lake**	342,917	297,047	210,527	152,104	15.4	41.1	38.4
Orange	1,349,597	1,145,956	896,344	677,491	17.8	27.8	32.3
Osceola	352,496	268,685	172,493	107,728	31.2	55.8	60.1
Seminole	463,560	422,718	365,199	287,521	9.7	15.8	27.0
Palm Bay-Melbourne- Titusville	583,563	543,376	476,230	398,978	7.4	14.1	19.4
Brevard	583,563	543,376	476,230	398,978	7.4	14.1	19.4
Panama City Bay	181,199	168,852	148,217	126,994	7.3	13.9	16.7
	181,199	168,852	148,217	126,994	7.3	13.9	16.7
Pensacola-Ferry Pass-Brent	493,447	448,991	412,153	344,406	9.9	8.9	19.7
Escambia	318,560	297,619	294,410	262,798	7.0	1.1	12.0
Santa Rosa	174,887	151,372	117,743	81,608	15.5	28.6	44.3
Port St. Lucie	457,988	424,107	319,426	251,071	8.0	32.8	27.2
Martin	155,556	146,318	126,731	100,900	6.3	15.5	25.6
St. Lucie	302,432	277,789	192,695	150,171	8.9	44.2	28.3
Punta Gorda	177,987	159,978	141,627	110,975	11.3	13.0	27.6
Charlotte	177,987	159,978	141,627	110,975	11.3	13.0	27.6
Sebastian-Vero Beach	151,825	138,028	112,947	90,208	10.0	22.2	25.2
Indian River	151,825	138,028	112,947	90,208	10.0	22.2	25.2
Sebring-Avon Park	102,525	98,786	87,366	68,432	3.8	13.1	27.7
Highlands	102,525	98,786	87,366	68,432	3.8	13.1	27.7
Tallahassee	386,836	367,413	320,304	259,107	5.3	14.7	23.6
Gadsden	47,828	46,389	45,087	41,116	3.1	2.9	9.7
Jefferson	14,733	14,761	12,902	11,296	-0.2	14.4	14.2
Leon	292,332	275,487	239,452	192,493	6.1	15.0	24.4
Wakulla	31,909	30,776	22,863	14,202	3.7	34.6	61.0
Tampa-St. Petersburg- Clearwater	3,080,077	2,783,243	2,396,013	2,067,959	10.7	16.2	15.9
Hernando	185,604	172,778	130,802	101,115	7.4	32.1	29.4
Hillsborough	1,408,864	1,229,226	998,948	834,054	14.6	23.1	19.8
Pasco	515,077	464,697	344,768	281,131	10.8	34.8	22.6
Pinellas	970,532	916,542	921,495	851,659	5.9	-0.5	8.2
The Villages	124,935	93,420	53,345	31,577	33.7	75.1	68.9
Sumter	124,935	93,420	53,345	31,577	33.7	75.1	68.9

* Based on the September 14, 2018 US Office of Management and Budget MSA definitions, (OMB Bulletin No. 18-04).

** Includes US Census Bureau corrections as of February 11, 2014.

**Table 5. Population and Population Change for Regional Planning Councils In Florida,
1990 to 2018**

State, Regional Planning Council* and County	Population				Percent Change		
	2018	2010	2000	1990	2010 to 2018	2000 to 2010	1990 to 2000
FLORIDA**	20,840,568	18,801,332	15,982,824	12,938,071	10.8	17.6	23.5
Apalachee	489,787	467,561	411,486	337,533	4.8	13.6	21.9
Calhoun	15,093	14,625	13,017	11,011	3.2	12.4	18.2
Franklin	12,009	11,549	9,829	8,967	4.0	17.5	9.6
Gadsden	47,828	46,389	45,087	41,116	3.1	2.9	9.7
Gulf	16,499	15,863	14,560	11,504	4.0	8.9	26.6
Jackson	50,435	49,746	46,755	41,375	1.4	6.4	13.0
Jefferson	14,733	14,761	12,902	11,296	-0.2	14.4	14.2
Leon	292,332	275,487	239,452	192,493	6.1	15.0	24.4
Liberty	8,915	8,365	7,021	5,569	6.6	19.1	26.1
Wakulla	31,943	30,776	22,863	14,202	3.8	34.6	61.0
Central Florida	879,489	803,470	666,347	546,805	9.5	20.6	21.9
DeSoto	35,520	34,862	32,209	23,865	1.9	8.2	35.0
Hardee	27,296	27,731	26,938	19,499	-1.6	2.9	38.2
Highlands	102,525	98,786	87,366	68,432	3.8	13.1	27.7
Okeechobee	41,120	39,996	35,910	29,627	2.8	11.4	21.2
Polk	673,028	602,095	483,924	405,382	11.8	24.4	19.4
East Central Florida	3,748,130	3,265,795	2,617,481	2,026,136	14.8	24.8	29.2
Brevard	583,563	543,376	476,230	398,978	7.4	14.1	19.4
Lake**	342,917	297,047	210,527	152,104	15.4	41.1	38.4
Orange	1,349,597	1,145,956	896,344	677,491	17.8	27.8	32.3
Osceola	352,496	268,685	172,493	107,728	31.2	55.8	60.1
Seminole	463,560	422,718	365,199	287,521	9.7	15.8	27.0
Sumter	124,935	93,420	53,345	31,577	33.7	75.1	68.9
Volusia	531,062	494,593	443,343	370,737	7.4	11.6	19.6
North Central Florida	915,558	871,401	728,810	574,943	5.1	19.6	26.8
Alachua	263,291	247,336	217,955	181,596	6.5	13.5	20.0
Bradford	28,057	28,520	26,088	22,515	-1.6	9.3	15.9
Columbia	69,721	67,531	56,513	42,613	3.2	19.5	32.6
Dixie	16,489	16,422	13,827	10,585	0.4	18.8	30.6
Gilchrist	17,424	16,939	14,437	9,667	2.9	17.3	49.3
Hamilton	14,621	14,799	13,327	10,930	-1.2	11.0	21.9
Lafayette	8,501	8,870	7,022	5,578	-4.2	26.3	25.9
Levy	41,054	40,801	34,450	25,912	0.6	18.4	32.9
Madison	19,473	19,224	18,733	16,569	1.3	2.6	13.1
Marion**	353,898	331,303	258,916	194,835	6.8	28.0	32.9
Suwannee	44,879	41,551	34,844	26,780	8.0	19.2	30.1
Taylor	22,283	22,570	19,256	17,111	-1.3	17.2	12.5
Union	15,867	15,535	13,442	10,252	2.1	15.6	31.1

**Table 5. Population and Population Change for Regional Planning Councils In Florida,
1990 to 2018** (Continued)

State, Regional Planning Council* and County	Population				Percent Change		
	2018	2010	2000	1990	2010 to 2018	2000 to 2010	1990 to 2000
Northeast Florida	1,694,529	1,515,656	1,243,005	1,018,984	11.8	21.9	22.0
Baker	27,652	27,115	22,259	18,486	2.0	21.8	20.4
Clay	212,034	190,865	140,814	105,986	11.1	35.5	32.9
Duval	952,861	864,263	778,879	672,971	10.3	11.0	15.7
Flagler	107,511	95,696	49,832	28,701	12.3	92.0	73.6
Nassau	82,748	73,314	57,663	43,941	12.9	27.1	31.2
Putnam	72,981	74,364	70,423	65,070	-1.9	5.6	8.2
St. Johns	238,742	190,039	123,135	83,829	25.6	54.3	46.9
South Florida	4,751,238	4,317,613	3,956,386	3,270,749	10.0	9.1	21.0
Broward	1,897,976	1,748,066	1,623,018	1,255,531	8.6	7.7	29.3
Miami-Dade**	2,779,322	2,496,457	2,253,779	1,937,194	11.3	10.8	16.3
Monroe	73,940	73,090	79,589	78,024	1.2	-8.2	2.0
Southwest Florida	1,729,267	1,531,724	1,206,639	909,327	12.9	26.9	32.7
Charlotte	177,987	159,978	141,627	110,975	11.3	13.0	27.6
Collier	367,347	321,520	251,377	152,099	14.3	27.9	65.3
Glades	13,002	12,884	10,576	7,591	0.9	21.8	39.3
Hendry	39,586	39,140	36,210	25,773	1.1	8.1	40.5
Lee	713,903	618,754	440,888	335,113	15.4	40.3	31.6
Sarasota	417,442	379,448	325,961	277,776	10.0	16.4	17.3
Tampa Bay	3,603,624	3,247,312	2,778,100	2,373,179	11.0	16.9	17.1
Citrus	145,721	141,236	118,085	93,513	3.2	19.6	26.3
Hernando	185,604	172,778	130,802	101,115	7.4	32.1	29.4
Hillsborough	1,408,864	1,229,226	998,948	834,054	14.6	23.1	19.8
Manatee	377,826	322,833	264,002	211,707	17.0	22.3	24.7
Pasco	515,077	464,697	344,768	281,131	10.8	34.8	22.6
Pinellas	970,532	916,542	921,495	851,659	5.9	-0.5	8.2
Treasure Coast	2,043,230	1,882,269	1,563,564	1,204,782	8.6	20.4	29.8
Indian River	151,825	138,028	112,947	90,208	10.0	22.2	25.2
Martin	155,556	146,318	126,731	100,900	6.3	15.5	25.6
Palm Beach	1,433,417	1,320,134	1,131,191	863,503	8.6	16.7	31.0
St. Lucie	302,432	277,789	192,695	150,171	8.9	44.2	28.3
West Florida	985,716	898,531	811,006	675,633	9.7	10.8	20.0
Bay	181,199	168,852	148,217	126,994	7.3	13.9	16.7
Escambia	318,560	297,619	294,410	262,798	7.0	1.1	12.0
Holmes	20,133	19,927	18,564	15,778	1.0	7.3	17.7
Okaloosa	198,152	180,822	170,498	143,777	9.6	6.1	18.6
Santa Rosa	174,887	151,372	117,743	81,608	15.5	28.6	44.3
Walton	67,656	55,043	40,601	27,759	22.9	35.6	46.3
Washington	25,129	24,896	20,973	16,919	0.9	18.7	24.0

* During the 2015 Legislative Session, Chapter 2015-30, L.O.F., (CS/CS/SB 1216) designated 10 Regional Planning Councils (RPCs) and their respective county government memberships. The Withlacoochee RPC was dissolved and the five counties within that council were reassigned into three other councils.

** Includes US Census Bureau corrections as of February 11, 2014.

Table 6. Rank of Florida Counties by Population Size in 2018 and Population Distribution, 1990 to 2018

Rank	State and County	Population				Percent of State Population			
		2018	2010	2000	1990	2018	2010	2000	1990
	FLORIDA*	20,840,568	18,801,332	15,982,824	12,938,071	100.00	100.00	100.00	100.00
1	Miami-Dade*	2,779,322	2,496,457	2,253,779	1,937,194	13.34	13.28	14.10	14.97
2	Broward	1,897,976	1,748,066	1,623,018	1,255,531	9.11	9.30	10.15	9.70
3	Palm Beach	1,433,417	1,320,134	1,131,191	863,503	6.88	7.02	7.08	6.67
4	Hillsborough	1,408,864	1,229,226	998,948	834,054	6.76	6.54	6.25	6.45
5	Orange	1,349,597	1,145,956	896,344	677,491	6.48	6.10	5.61	5.24
6	Pinellas	970,532	916,542	921,495	851,659	4.66	4.87	5.77	6.58
7	Duval	952,861	864,263	778,879	672,971	4.57	4.60	4.87	5.20
8	Lee	713,903	618,754	440,888	335,113	3.43	3.29	2.76	2.59
9	Polk	673,028	602,095	483,924	405,382	3.23	3.20	3.03	3.13
10	Brevard	583,563	543,376	476,230	398,978	2.80	2.89	2.98	3.08
11	Volusia	531,062	494,593	443,343	370,737	2.55	2.63	2.77	2.87
12	Pasco	515,077	464,697	344,768	281,131	2.47	2.47	2.16	2.17
13	Seminole	463,560	422,718	365,199	287,521	2.22	2.25	2.28	2.22
14	Sarasota	417,442	379,448	325,961	277,776	2.00	2.02	2.04	2.15
15	Manatee	377,826	322,833	264,002	211,707	1.81	1.72	1.65	1.64
16	Collier	367,347	321,520	251,377	152,099	1.76	1.71	1.57	1.18
17	Marion*	353,898	331,303	258,916	194,835	1.70	1.76	1.62	1.51
18	Osceola	352,496	268,685	172,493	107,728	1.69	1.43	1.08	0.83
19	Lake*	342,917	297,047	210,527	152,104	1.65	1.58	1.32	1.18
20	Escambia	318,560	297,619	294,410	262,798	1.53	1.58	1.84	2.03
21	St. Lucie	302,432	277,789	192,695	150,171	1.45	1.48	1.21	1.16
22	Leon	292,332	275,487	239,452	192,493	1.40	1.47	1.50	1.49
23	Alachua	263,291	247,336	217,955	181,596	1.26	1.32	1.36	1.40
24	St. Johns	238,742	190,039	123,135	83,829	1.15	1.01	0.77	0.65
25	Clay	212,034	190,865	140,814	105,986	1.02	1.02	0.88	0.82
26	Okaloosa	198,152	180,822	170,498	143,777	0.95	0.96	1.07	1.11
27	Hernando	185,604	172,778	130,802	101,115	0.89	0.92	0.82	0.78
28	Bay	181,199	168,852	148,217	126,994	0.87	0.90	0.93	0.98
29	Charlotte	177,987	159,978	141,627	110,975	0.85	0.85	0.89	0.86
30	Santa Rosa	174,887	151,372	117,743	81,608	0.84	0.81	0.74	0.63
31	Martin	155,556	146,318	126,731	100,900	0.75	0.78	0.79	0.78
32	Indian River	151,825	138,028	112,947	90,208	0.73	0.73	0.71	0.70
33	Citrus	145,721	141,236	118,085	93,513	0.70	0.75	0.74	0.72
34	Sumter	124,935	93,420	53,345	31,577	0.60	0.50	0.33	0.24
35	Flagler	107,511	95,696	49,832	28,701	0.52	0.51	0.31	0.22

Table 6. Rank of Florida Counties by Population Size in 2018 and Population Distribution, 1990 to 2018 (Continued)

Rank	State and County	Population				Percent of State Population			
		2018	2010	2000	1990	2018	2010	2000	1990
36	Highlands	102,525	98,786	87,366	68,432	0.49	0.53	0.55	0.53
37	Nassau	82,748	73,314	57,663	43,941	0.40	0.39	0.36	0.34
38	Monroe	73,940	73,090	79,589	78,024	0.35	0.39	0.50	0.60
39	Putnam	72,981	74,364	70,423	65,070	0.35	0.40	0.44	0.50
40	Columbia	69,721	67,531	56,513	42,613	0.33	0.36	0.35	0.33
41	Walton	67,656	55,043	40,601	27,759	0.32	0.29	0.25	0.21
42	Jackson	50,435	49,746	46,755	41,375	0.24	0.26	0.29	0.32
43	Gadsden	47,828	46,389	45,087	41,116	0.23	0.25	0.28	0.32
44	Suwannee	44,879	41,551	34,844	26,780	0.22	0.22	0.22	0.21
45	Okeechobee	41,120	39,996	35,910	29,627	0.20	0.21	0.22	0.23
46	Levy	41,054	40,801	34,450	25,912	0.20	0.22	0.22	0.20
47	Hendry	39,586	39,140	36,210	25,773	0.19	0.21	0.23	0.20
48	DeSoto	35,520	34,862	32,209	23,865	0.17	0.19	0.20	0.18
49	Wakulla	31,943	30,776	22,863	14,202	0.15	0.16	0.14	0.11
50	Bradford	28,057	28,520	26,088	22,515	0.13	0.15	0.16	0.17
51	Baker	27,652	27,115	22,259	18,486	0.13	0.14	0.14	0.14
52	Hardee	27,296	27,731	26,938	19,499	0.13	0.15	0.17	0.15
53	Washington	25,129	24,896	20,973	16,919	0.12	0.13	0.13	0.13
54	Taylor	22,283	22,570	19,256	17,111	0.11	0.12	0.12	0.13
55	Holmes	20,133	19,927	18,564	15,778	0.10	0.11	0.12	0.12
56	Madison	19,473	19,224	18,733	16,569	0.09	0.10	0.12	0.13
57	Gilchrist	17,424	16,939	14,437	9,667	0.08	0.09	0.09	0.07
58	Gulf	16,499	15,863	14,560	11,504	0.08	0.08	0.09	0.09
59	Dixie	16,489	16,422	13,827	10,585	0.08	0.09	0.09	0.08
60	Union	15,867	15,535	13,442	10,252	0.08	0.08	0.08	0.08
61	Calhoun	15,093	14,625	13,017	11,011	0.07	0.08	0.08	0.09
62	Jefferson	14,733	14,761	12,902	11,296	0.07	0.08	0.08	0.09
63	Hamilton	14,621	14,799	13,327	10,930	0.07	0.08	0.08	0.08
64	Glades	13,002	12,884	10,576	7,591	0.06	0.07	0.07	0.06
65	Franklin	12,009	11,549	9,829	8,967	0.06	0.06	0.06	0.07
66	Liberty	8,915	8,365	7,021	5,569	0.04	0.04	0.04	0.04
67	Lafayette	8,501	8,870	7,022	5,578	0.04	0.05	0.04	0.04

* Includes US Census Bureau corrections as of February 11, 2014.

Table 7. Rank of Florida Counties by Percent Change in Population, 2010 to 2018

Rank	State and County	Percent Change	Population		Rank	State and County	Percent Change	Population	
			2018	2010				2018	2010
	FLORIDA*	10.8	20,840,568	18,801,332					
1	Sumter	33.7	124,935	93,420	34	Liberty	6.6	8,915	8,365
2	Osceola	31.2	352,496	268,685	35	Alachua	6.5	263,291	247,336
3	St. Johns	25.6	238,742	190,039	36	Martin	6.3	155,556	146,318
4	Walton	22.9	67,656	55,043	37	Leon	6.1	292,332	275,487
5	Orange	17.8	1,349,597	1,145,956	38	Pinellas	5.9	970,532	916,542
					39	Gulf	4.0	16,499	15,863
6	Manatee	17.0	377,826	322,833	40	Franklin	4.0	12,009	11,549
7	Santa Rosa	15.5	174,887	151,372	41	Wakulla	3.8	31,943	30,776
8	Lake*	15.4	342,917	297,047	42	Highlands	3.8	102,525	98,786
9	Lee	15.4	713,903	618,754	43	Columbia	3.2	69,721	67,531
10	Hillsborough	14.6	1,408,864	1,229,226	44	Calhoun	3.2	15,093	14,625
11	Collier	14.3	367,347	321,520	45	Citrus	3.2	145,721	141,236
12	Nassau	12.9	82,748	73,314	46	Gadsden	3.1	47,828	46,389
13	Flagler	12.3	107,511	95,696	47	Gilchrist	2.9	17,424	16,939
14	Polk	11.8	673,028	602,095	48	Okeechobee	2.8	41,120	39,996
15	Miami-Dade*	11.3	2,779,322	2,496,457	49	Union	2.1	15,867	15,535
16	Charlotte	11.3	177,987	159,978	50	Baker	2.0	27,652	27,115
17	Clay	11.1	212,034	190,865	51	DeSoto	1.9	35,520	34,862
18	Pasco	10.8	515,077	464,697	52	Jackson	1.4	50,435	49,746
19	Duval	10.3	952,861	864,263	53	Madison	1.3	19,473	19,224
20	Sarasota	10.0	417,442	379,448	54	Monroe	1.2	73,940	73,090
21	Indian River	10.0	151,825	138,028	55	Hendry	1.1	39,586	39,140
22	Seminole	9.7	463,560	422,718	56	Holmes	1.0	20,133	19,927
23	Okaloosa	9.6	198,152	180,822	57	Washington	0.9	25,129	24,896
24	St. Lucie	8.9	302,432	277,789	58	Glades	0.9	13,002	12,884
25	Palm Beach	8.6	1,433,417	1,320,134	59	Levy	0.6	41,054	40,801
26	Broward	8.6	1,897,976	1,748,066	60	Dixie	0.4	16,489	16,422
27	Suwannee	8.0	44,879	41,551	61	Jefferson	-0.2	14,733	14,761
28	Hernando	7.4	185,604	172,778	62	Hamilton	-1.2	14,621	14,799
29	Brevard	7.4	583,563	543,376	63	Taylor	-1.3	22,283	22,570
30	Volusia	7.4	531,062	494,593	64	Hardee	-1.6	27,296	27,731
31	Bay	7.3	181,199	168,852	65	Bradford	-1.6	28,057	28,520
32	Escambia	7.0	318,560	297,619	66	Putnam	-1.9	72,981	74,364
33	Marion*	6.8	353,898	331,303	67	Lafayette	-4.2	8,501	8,870

* Includes US Census Bureau corrections as of February 11, 2014.

Figure 1. Percent Change in Population, 2010 to 2018

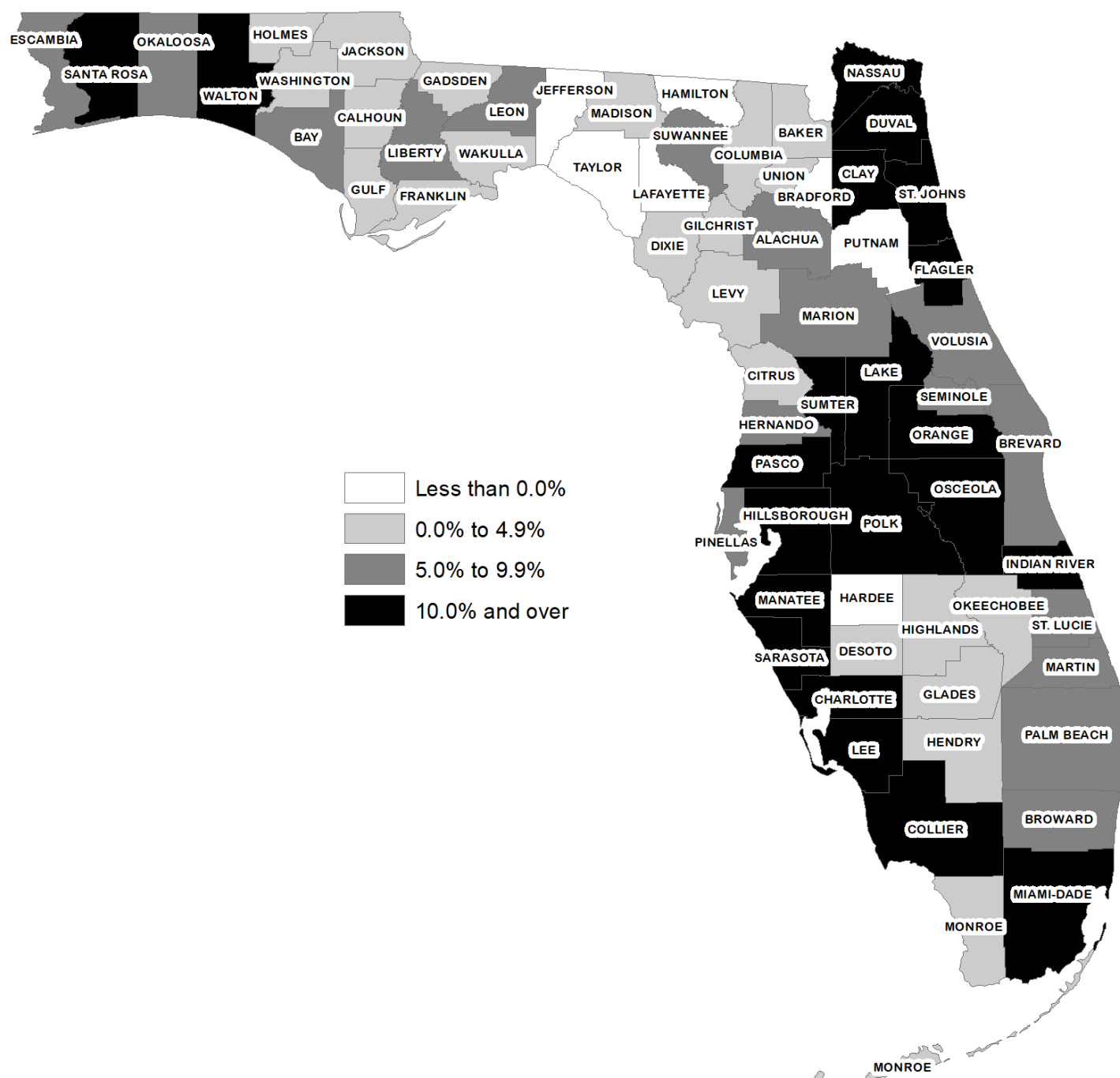


Table 8. Rank of Florida Counties by Population Change, 2010 to 2018

Rank	State and County	Change	Population		Rank	State and County	Change	Population	
			2018	2010				2018	2010
	FLORIDA*	2,039,236	20,840,568	18,801,332					
1	Miami-Dade*	282,865	2,779,322	2,496,457	34	Flagler	11,815	107,511	95,696
2	Orange	203,641	1,349,597	1,145,956	35	Nassau	9,434	82,748	73,314
3	Hillsborough	179,638	1,408,864	1,229,226	36	Martin	9,238	155,556	146,318
4	Broward	149,910	1,897,976	1,748,066	37	Citrus	4,485	145,721	141,236
5	Palm Beach	113,283	1,433,417	1,320,134	38	Highlands	3,739	102,525	98,786
6	Lee	95,149	713,903	618,754	39	Suwannee	3,328	44,879	41,551
7	Duval	88,598	952,861	864,263	40	Columbia	2,190	69,721	67,531
8	Osceola	83,811	352,496	268,685	41	Gadsden	1,439	47,828	46,389
9	Polk	70,933	673,028	602,095	42	Wakulla	1,167	31,943	30,776
10	Manatee	54,993	377,826	322,833	43	Okeechobee	1,124	41,120	39,996
11	Pinellas	53,990	970,532	916,542	44	Monroe	850	73,940	73,090
12	Pasco	50,380	515,077	464,697	45	Jackson	689	50,435	49,746
13	St. Johns	48,703	238,742	190,039	46	DeSoto	658	35,520	34,862
14	Lake*	45,870	342,917	297,047	47	Gulf	636	16,499	15,863
15	Collier	45,827	367,347	321,520	48	Liberty	550	8,915	8,365
16	Seminole	40,842	463,560	422,718	49	Baker	537	27,652	27,115
17	Brevard	40,187	583,563	543,376	50	Gilchrist	485	17,424	16,939
18	Sarasota	37,994	417,442	379,448	51	Calhoun	468	15,093	14,625
19	Volusia	36,469	531,062	494,593	52	Franklin	460	12,009	11,549
20	Sumter	31,515	124,935	93,420	53	Hendry	446	39,586	39,140
21	St. Lucie	24,643	302,432	277,789	54	Union	332	15,867	15,535
22	Santa Rosa	23,515	174,887	151,372	55	Levy	253	41,054	40,801
23	Marion*	22,595	353,898	331,303	56	Madison	249	19,473	19,224
24	Clay	21,169	212,034	190,865	57	Washington	233	25,129	24,896
25	Escambia	20,941	318,560	297,619	58	Holmes	206	20,133	19,927
26	Charlotte	18,009	177,987	159,978	59	Glades	118	13,002	12,884
27	Okaloosa	17,330	198,152	180,822	60	Dixie	67	16,489	16,422
28	Leon	16,845	292,332	275,487	61	Jefferson	-28	14,733	14,761
29	Alachua	15,955	263,291	247,336	62	Hamilton	-178	14,621	14,799
30	Indian River	13,797	151,825	138,028	63	Taylor	-287	22,283	22,570
31	Hernando	12,826	185,604	172,778	64	Lafayette	-369	8,501	8,870
32	Walton	12,613	67,656	55,043	65	Hardee	-435	27,296	27,731
33	Bay	12,347	181,199	168,852	66	Bradford	-463	28,057	28,520
					67	Putnam	-1,383	72,981	74,364

* Includes US Census Bureau corrections as of February 11, 2014.

Figure 2. Population Change, 2010 to 2018

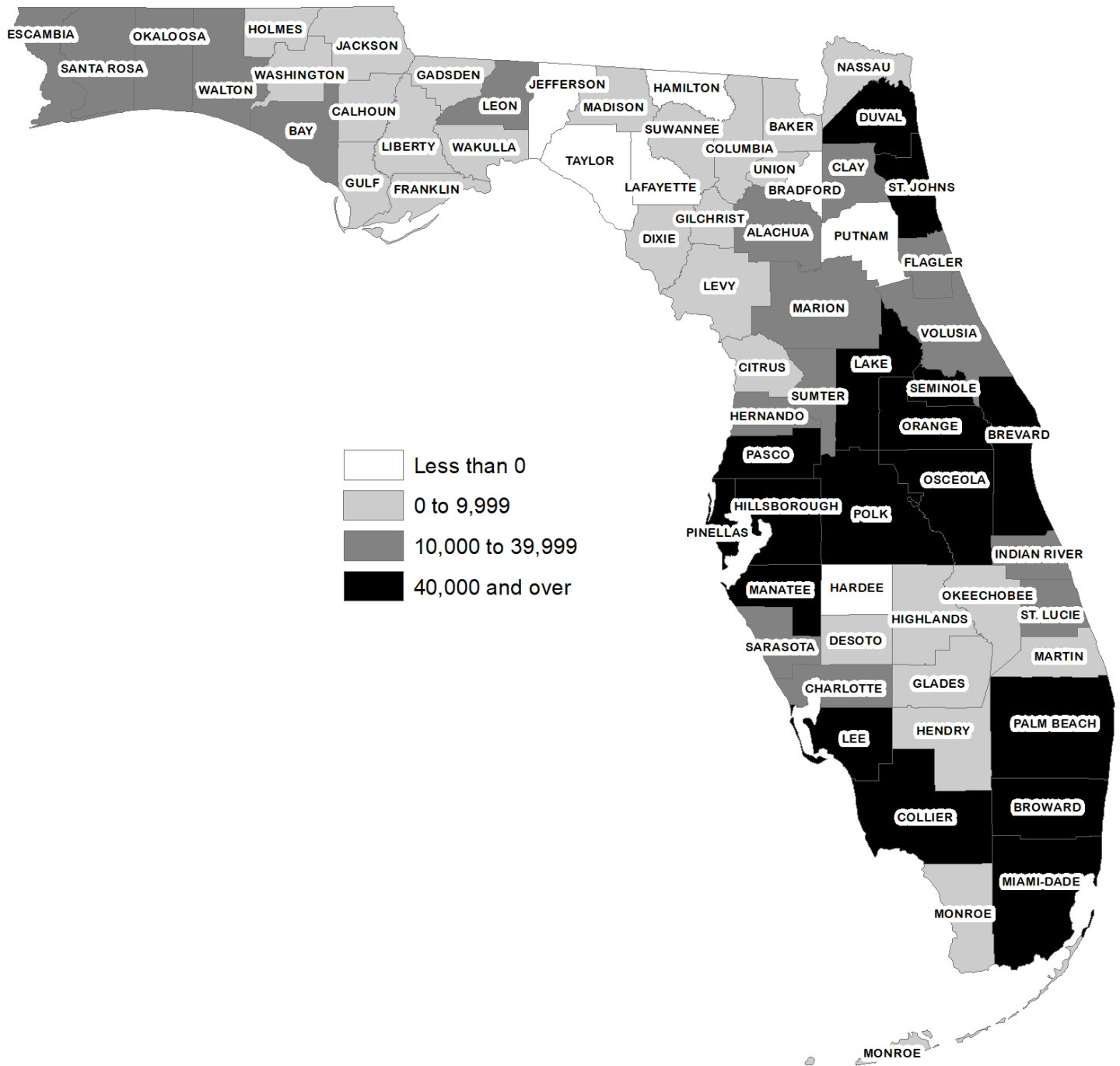


Table 9. Rank of Top 100 Cities in Florida by Population Size, 2000 to 2018

City	Population			Rank			Percent Change	
	2018	2010	2000	2018	2010	2000	2010 to 2018	2000 to 2010
Jacksonville	907,093	821,784	735,617	1	1	1	10.4	11.7
Miami*	481,333	399,508	362,470	2	2	2	20.5	10.2
Tampa	378,531	335,709	303,447	3	3	3	12.8	10.6
Orlando	285,099	238,300	185,951	4	5	6	19.6	28.2
St. Petersburg	266,076	244,769	248,232	5	4	4	8.7	-1.4
Hialeah*	238,906	224,667	226,419	6	6	5	6.3	-0.8
Tallahassee	192,381	181,376	150,624	7	7	8	6.1	20.4
Port St. Lucie	185,843	164,603	88,769	8	9	15	12.9	85.4
Fort Lauderdale	182,827	165,521	152,397	9	8	7	10.5	8.6
Cape Coral	180,204	154,305	102,286	10	10	13	16.8	50.9
Pembroke Pines*	165,352	154,019	137,427	11	11	10	7.4	12.1
Hollywood	149,028	140,768	139,368	12	12	9	5.9	1.0
Miramar	137,107	122,041	72,739	13	14	25	12.3	67.8
Gainesville*	131,217	124,476	95,447	14	13	14	5.4	30.4
Coral Springs	128,757	121,096	117,549	15	15	11	6.3	3.0
Clearwater	115,589	107,685	108,789	16	16	12	7.3	-1.0
Miami Gardens*	113,628	107,166	(X)	17	17	(X)	6.0	(X)
West Palm Beach*	112,906	100,343	82,103	18	19	19	12.5	22.2
Palm Bay	112,703	103,190	79,413	19	18	20	9.2	29.9
Pompano Beach	110,371	99,845	78,191	20	20	22	10.5	27.7
Lakeland	105,586	97,422	78,452	21	21	21	8.4	24.2
Davie	103,171	91,992	75,720	22	22	23	12.2	21.5
Boca Raton	93,417	84,392	74,764	23	27	24	10.7	12.9
Sunrise	92,663	84,439	85,787	24	26	17	9.7	-1.6
Miami Beach*	92,502	87,778	87,933	25	23	16	5.4	-0.2
Deltona	91,007	85,182	69,543	26	24	27	6.8	22.5
Plantation	89,595	84,955	82,934	27	25	18	5.5	2.4
Palm Coast	84,575	75,180	32,732	28	30	62	12.5	129.7
Largo	83,526	77,648	69,371	29	28	28	7.6	11.9
Melbourne*	82,040	76,205	71,382	30	29	26	7.7	6.8
Fort Myers	81,868	62,298	48,208	31	35	41	31.4	29.2
Deerfield Beach	78,573	75,018	64,585	32	31	29	4.7	16.2
Boynton Beach	76,756	68,217	60,389	33	32	31	12.5	13.0
Homestead*	73,863	60,509	31,909	34	38	64	22.1	89.6
Kissimmee	72,369	59,682	47,814	35	40	42	21.3	24.8
Lauderhill	71,751	66,887	57,585	36	33	34	7.3	16.2
North Port	70,631	57,357	22,797	37	42	80	23.1	151.6
Doral*	68,244	45,709	(X)	38	56	(X)	49.3	(X)
Weston	66,972	65,333	49,286	39	34	40	2.5	32.6
Delray Beach	66,580	60,522	60,020	40	37	32	10.0	0.8
Daytona Beach	66,267	61,005	64,112	41	36	30	8.6	-4.8
Tamarac	64,663	60,427	55,588	42	39	36	7.0	8.7
North Miami*	63,517	58,912	59,880	43	41	33	7.8	-1.6
Wellington	62,304	56,508	38,216	44	43	53	10.3	47.9
Jupiter	62,100	55,156	39,328	45	46	51	12.6	40.2
Port Orange	61,009	56,048	45,823	46	45	44	8.9	22.3
Ocala	60,042	56,315	45,943	47	44	43	6.6	22.6
Sanford	59,033	53,570	38,291	48	47	52	10.2	39.9
Coconut Creek	58,344	52,909	43,566	49	49	46	10.3	21.4
Margate	58,329	53,284	53,909	50	48	37	9.5	-1.2
Bradenton	56,157	49,546	49,504	51	52	39	13.3	0.1
Sarasota	55,832	51,917	52,715	52	51	38	7.5	-1.5

Table 9. Rank of Top 100 Cities in Florida by Population Size, 2000 to 2018

(Continued)

City	Population			Rank			Percent Change	
	2018	2010	2000	2018	2010	2000	2010 to 2018	2000 to 2010
Pensacola	54,801	51,923	56,255	53	50	35	5.5	-7.7
Palm Beach Gardens*	53,800	48,440	35,058	54	54	59	11.1	38.2
Pinellas Park	53,144	49,079	45,658	55	53	45	8.3	7.5
Apopka	51,676	41,542	26,642	56	60	72	24.4	55.9
Bonita Springs*	51,181	43,857	32,797	57	57	61	16.7	33.7
Coral Gables*	50,631	46,776	42,249	58	55	47	8.2	10.7
Titusville	47,456	43,761	40,670	59	58	50	8.4	7.6
St. Cloud	46,519	35,183	20,074	60	73	88	32.2	75.3
Ocoee	45,694	35,579	24,391	61	70	77	28.4	45.9
North Miami Beach	45,612	41,523	40,786	62	61	49	9.8	1.8
Cutler Bay	45,373	40,286	(X)	63	65	(X)	12.6	(X)
Oakland Park	45,276	41,363	30,966	64	63	66	9.5	33.6
Altamonte Springs	44,947	41,496	41,200	65	62	48	8.3	0.7
Winter Garden	44,935	34,568	14,351	66	76	111	30.0	140.9
North Lauderdale	44,841	41,023	32,264	67	64	63	9.3	27.1
Fort Pierce	43,326	41,590	37,516	68	59	54	4.2	10.9
Winter Haven	42,828	33,874	26,487	69	78	73	26.4	27.9
Ormond Beach	41,140	38,137	36,301	70	66	56	7.9	5.1
Oviedo	39,739	33,342	26,316	71	79	74	19.2	26.7
Greenacres	39,568	37,573	27,569	72	67	71	5.3	36.3
Hallandale Beach	39,054	37,113	34,282	73	68	60	5.2	8.3
Plant City	38,938	34,721	29,760	74	75	69	12.1	16.7
Clermont	38,906	28,742	9,338	75	85	156	35.4	207.8
Lake Worth	38,257	34,910	35,133	76	74	58	9.6	-0.6
Royal Palm Beach	37,934	34,140	21,523	77	77	81	11.1	58.6
Aventura	37,790	35,762	25,267	78	69	76	5.7	41.5
Winter Springs	37,639	33,282	30,860	79	80	67	13.1	7.8
Panama City*	37,208	35,505	36,417	80	71	55	4.8	-2.5
Dunedin	37,054	35,321	35,691	81	72	57	4.9	-1.0
Lauderdale Lakes	36,475	32,593	31,705	82	81	65	11.9	2.8
Riviera Beach	35,431	32,488	29,884	83	82	68	9.1	8.7
DeLand	34,106	27,031	20,904	84	88	86	26.2	29.3
Cooper City	33,906	28,547	27,914	85	86	70	18.8	2.3
Parkland	32,742	23,962	13,835	86	93	115	36.6	73.2
Estero**	31,806	(X)	(X)	87	(X)	(X)	(X)	(X)
Dania Beach	31,755	29,639	20,061	88	83	89	7.1	47.7
Miami Lakes	31,118	29,361	(X)	89	84	(X)	6.0	(X)
Winter Park	30,212	27,852	24,090	90	87	78	8.5	15.6
Casselberry	29,778	26,241	23,438	91	89	79	13.5	12.0
Rockledge	26,882	24,926	20,170	92	90	87	7.8	23.6
Temple Terrace	26,512	24,541	20,918	93	92	85	8.0	17.3
New Smyrna Beach	26,407	22,464	20,048	94	96	90	17.6	12.1
Tarpon Springs	25,455	23,484	21,003	95	94	82	8.4	11.8
Crestview	25,001	20,978	14,766	96	100	109	19.2	42.1
Sebastian	24,630	21,929	16,181	97	97	99	12.3	35.5
Key West	24,509	24,649	25,478	98	91	75	-0.6	-3.3
Haines City*	24,298	20,560	13,174	99	104	120	18.2	56.1
Palmetto Bay*	24,144	23,408	(X)	100	95	(X)	3.1	(X)

(X) Not incorporated at that time.

* Includes US Census Bureau corrections as of February 11, 2014.

** The City of Estero was incorporated on December 31, 2014.

Table 10. Rank of Top 100 Cities in Florida by Percent Change in Population, 2010 to 2018

Rank	City	Percent Change	Population		Rank	City	Percent Change	Population	
			2018	2010				2018	2010
1	Lake Buena Vista	140.0	24	10	51	Maitland	18.2	18,612	15,751
2	Fruitland Park	119.8	8,963	4,078	52	Umatilla	18.1	4,081	3,456
3	Freeport	115.2	3,845	1,787	53	New Smyrna Beach	17.6	26,407	22,464
4	Davenport	94.0	5,602	2,888	54	Mount Dora	17.5	14,536	12,370
5	Groveland	88.0	16,407	8,729	55	Punta Gorda	17.1	19,487	16,641
6	Sweetwater	59.3	21,499	13,499	56	Cape Coral	16.8	180,204	154,305
7	Doral*	49.3	68,244	45,709	57	Bonita Springs*	16.7	51,181	43,857
8	Wildwood	41.8	9,511	6,709	58	Florida City	16.3	13,076	11,245
9	Parkland	36.6	32,742	23,962	59	High Springs	16.3	6,221	5,350
10	Howey-in-the-Hills	36.5	1,499	1,098	60	Callahan	16.2	1,305	1,123
11	Clermont	35.4	38,906	28,742	61	Bal Harbour	16.2	2,920	2,513
12	Polk City	33.7	2,088	1,562	62	Belle Isle	16.0	6,944	5,988
13	St. Cloud	32.2	46,519	35,183	63	Leesburg	15.8	23,297	20,117
14	Fort Myers	31.4	81,868	62,298	64	Milton	15.4	10,186	8,826
15	Minneola	31.3	12,348	9,403	65	Bellevue	14.7	5,152	4,492
16	West Miami	30.9	7,806	5,965	66	Lynn Haven	14.6	21,201	18,493
17	Winter Garden	30.0	44,935	34,568	67	Mascotte	14.3	5,829	5,101
18	Ocoee	28.4	45,694	35,579	68	Bunnell	14.2	3,056	2,676
19	Gulf Stream	27.9	1,005	786	69	Eagle Lake	14.1	2,574	2,255
20	Avon Park	26.6	11,187	8,836	70	Shalimar	13.9	817	717
21	Winter Haven	26.4	42,828	33,874	71	Niceville	13.8	14,508	12,749
22	Newberry	26.2	6,249	4,950	72	San Antonio	13.7	1,294	1,138
23	Montverde	26.2	1,846	1,463	73	Midway	13.5	3,409	3,004
24	DeLand	26.2	34,106	27,031	74	Casselberry	13.5	29,778	26,241
25	North Bay Village	25.8	8,981	7,137	75	Gretna	13.4	1,656	1,460
26	Dundee	25.4	4,662	3,717	76	Eustis	13.4	21,039	18,558
27	Marianna	24.9	7,621	6,102	77	Bradenton	13.3	56,157	49,546
28	Apopka	24.4	51,676	41,542	78	Green Cove Springs	13.1	7,813	6,908
29	Tavares	24.4	17,353	13,951	79	Winter Springs	13.1	37,639	33,282
30	Palm Springs	23.9	23,448	18,928	80	Port St. Lucie	12.9	185,843	164,603
31	North Port	23.1	70,631	57,357	81	Tampa	12.8	378,531	335,709
32	Palm Shores	23.1	1,108	900	82	Cutler Bay	12.6	45,373	40,286
33	Oakland	22.9	3,119	2,538	83	Jupiter	12.6	62,100	55,156
34	Homestead*	22.1	73,863	60,509	84	Cocoa	12.5	19,286	17,140
35	Kissimmee	21.3	72,369	59,682	85	West Palm Beach*	12.5	112,906	100,343
36	Lake Mary	21.2	16,746	13,822	86	Boynton Beach	12.5	76,756	68,217
37	Miami*	20.5	481,333	399,508	87	Palm Coast	12.5	84,575	75,180
38	Auburndale	20.3	16,246	13,507	88	Fanning Springs	12.4	859	764
39	Mexico Beach	19.9	1,285	1,072	89	Edgewater	12.4	23,319	20,750
40	West Melbourne	19.8	21,990	18,355	90	Miramar	12.3	137,107	122,041
41	Orlando	19.6	285,099	238,300	91	Sebastian	12.3	24,630	21,929
42	Zephyrhills	19.2	15,839	13,288	92	Highland Park	12.2	258	230
43	Oviedo	19.2	39,739	33,342	93	Davie	12.2	103,171	91,992
44	Crestview	19.2	25,001	20,978	94	Plant City	12.1	38,938	34,721
45	Cooper City	18.8	33,906	28,547	95	Lake Hamilton	12.1	1,380	1,231
46	Lake Alfred	18.6	5,950	5,015	96	Alachua	12.1	10,155	9,059
47	Windermere	18.5	2,918	2,462	97	Lauderdale Lakes	11.9	36,475	32,593
48	Lake Placid	18.4	2,632	2,223	98	Haverhill	11.9	2,096	1,873
49	Opa-locka	18.4	18,017	15,219	99	Longwood	11.9	15,279	13,657
50	Haines City*	18.2	24,298	20,560	100	Bartow	11.8	19,342	17,298

* Includes US Census Bureau corrections as of February 11, 2014.

Table 11. Rank of Top 100 Cities in Florida by Population Change, 2010 to 2018

Rank	City	Change	Population		Rank	City	Change	Population	
			2018	2010				2018	2010
1	Jacksonville	85,309	907,093	821,784	51	Sanford	5,463	59,033	53,570
2	Miami*	81,825	481,333	399,508	52	Coconut Creek	5,435	58,344	52,909
3	Orlando	46,799	285,099	238,300	53	Palm Beach Gardens*	5,360	53,800	48,440
4	Tampa	42,822	378,531	335,709	54	Cooper City	5,359	33,906	28,547
5	Cape Coral	25,899	180,204	154,305	55	Daytona Beach	5,262	66,267	61,005
6	Doral*	22,535	68,244	45,709	56	Cutler Bay	5,087	45,373	40,286
7	St. Petersburg	21,307	266,076	244,769	57	Margate	5,045	58,329	53,284
8	Port St. Lucie	21,240	185,843	164,603	58	Port Orange	4,961	61,009	56,048
9	Fort Myers	19,570	81,868	62,298	59	Fruitland Park	4,885	8,963	4,078
10	Fort Lauderdale	17,306	182,827	165,521	60	Lauderhill	4,864	71,751	66,887
11	Miramar	15,066	137,107	122,041	61	Miami Beach*	4,724	92,502	87,778
12	Hialeah	14,239	238,906	224,667	62	Plantation	4,640	89,595	84,955
13	Homestead*	13,354	73,863	60,509	63	North Miami*	4,605	63,517	58,912
14	North Port	13,274	70,631	57,357	64	Palm Springs	4,520	23,448	18,928
15	Kissimmee	12,687	72,369	59,682	65	Winter Springs	4,357	37,639	33,282
16	West Palm Beach*	12,563	112,906	100,343	66	Tamarac	4,236	64,663	60,427
17	St. Cloud	11,336	46,519	35,183	67	Plant City	4,217	38,938	34,721
18	Pembroke Pines*	11,333	165,352	154,019	68	North Miami Beach	4,089	45,612	41,523
19	Davie	11,179	103,171	91,992	69	Pinellas Park	4,065	53,144	49,079
20	Tallahassee	11,005	192,381	181,376	70	Crestview	4,023	25,001	20,978
21	Pompano Beach	10,526	110,371	99,845	71	New Smyrna Beach	3,943	26,407	22,464
22	Winter Garden	10,367	44,935	34,568	72	Sarasota	3,915	55,832	51,917
23	Clermont	10,164	38,906	28,742	73	Oakland Park	3,913	45,276	41,363
24	Apopka	10,134	51,676	41,542	74	Lauderdale Lakes	3,882	36,475	32,593
25	Ocoee	10,115	45,694	35,579	75	Coral Gables*	3,855	50,631	46,776
26	Palm Bay	9,513	112,703	103,190	76	North Lauderdale	3,818	44,841	41,023
27	Palm Coast	9,395	84,575	75,180	77	Royal Palm Beach	3,794	37,934	34,140
28	Boca Raton	9,025	93,417	84,392	78	Haines City*	3,738	24,298	20,560
29	Winter Haven	8,954	42,828	33,874	79	Ocala	3,727	60,042	56,315
30	Parkland	8,780	32,742	23,962	80	Titusville	3,695	47,456	43,761
31	Boynton Beach	8,539	76,756	68,217	81	West Melbourne	3,635	21,990	18,355
32	Hollywood	8,260	149,028	140,768	82	Deerfield Beach	3,555	78,573	75,018
33	Sunrise	8,224	92,663	84,439	83	Casselberry	3,537	29,778	26,241
34	Lakeland	8,164	105,586	97,422	84	Altamonte Springs	3,451	44,947	41,496
35	Sweetwater	8,000	21,499	13,499	85	Tavares	3,402	17,353	13,951
36	Clearwater	7,904	115,589	107,685	86	Lake Worth	3,347	38,257	34,910
37	Groveland	7,678	16,407	8,729	87	Leesburg	3,180	23,297	20,117
38	Coral Springs	7,661	128,757	121,096	88	Ormond Beach	3,003	41,140	38,137
39	Bonita Springs*	7,324	51,181	43,857	89	Minneola	2,945	12,348	9,403
40	DeLand	7,075	34,106	27,031	90	Riviera Beach	2,943	35,431	32,488
41	Jupiter	6,944	62,100	55,156	91	Lake Mary	2,924	16,746	13,822
42	Gainesville*	6,741	131,217	124,476	92	Pensacola	2,878	54,801	51,923
43	Bradenton	6,611	56,157	49,546	93	Maitland	2,861	18,612	15,751
44	Miami Gardens*	6,462	113,628	107,166	94	Punta Gorda	2,846	19,487	16,641
45	Oviedo	6,397	39,739	33,342	95	Wildwood	2,802	9,511	6,709
46	Delray Beach	6,058	66,580	60,522	96	Opa-locka	2,798	18,017	15,219
47	Largo	5,878	83,526	77,648	97	Auburndale	2,739	16,246	13,507
48	Melbourne*	5,835	82,040	76,205	98	Davenport	2,714	5,602	2,888
49	Deltona	5,825	91,007	85,182	99	Lynn Haven	2,708	21,201	18,493
50	Wellington	5,796	62,304	56,508	100	Sebastian	2,701	24,630	21,929

* Includes US Census Bureau corrections as of February 11, 2014.

Table 12. Age Distribution (Percentage) of the Population of Florida and Its Counties, 1990 to 2017

State and County		Population				State and County		Population			
		2017	2010	2000	1990			2017	2010	2000	1990
FLORIDA	0–17	20.4	21.3	22.8	22.3	Citrus	0–17	14.9	15.9	17.2	17.7
	18–44	33.6	34.4	36.9	39.8		18–44	21.4	21.9	23.7	26.8
	45–64	26.4	27.0	22.7	19.7		45–64	29.5	30.3	26.9	24.3
	65+	19.5	17.3	17.6	18.2		65+	34.3	31.9	32.2	31.2
Alachua	0–17	17.6	17.9	20.2	21.9	Clay	0–17	24.6	26.3	28.0	28.9
	18–44	47.9	48.4	50.9	54.3		18–44	33.7	34.2	38.2	43.7
	45–64	20.8	22.9	19.3	14.5		45–64	27.0	27.8	24.0	18.9
	65+	13.7	10.8	9.6	9.2		65+	14.7	11.7	9.8	8.4
Baker	0–17	24.1	26.0	27.5	30.7	Collier	0–17	18.5	19.5	19.9	20.1
	18–44	36.2	36.7	40.6	44.1		18–44	27.6	28.0	31.2	35.3
	45–64	26.6	26.4	22.7	17.4		45–64	25.6	26.1	24.5	21.9
	65+	13.1	10.9	9.2	7.8		65+	28.2	26.4	24.5	22.7
Bay	0–17	21.6	22.0	24.0	25.6	Columbia	0–17	21.3	22.5	25.4	28.1
	18–44	34.7	35.4	38.8	42.3		18–44	33.2	33.9	36.7	38.5
	45–64	27.0	28.1	23.7	20.2		45–64	27.0	28.2	24.0	20.2
	65+	16.7	14.5	13.4	11.9		65+	18.4	15.4	14.0	13.2
Bradford	0–17	20.2	19.8	21.9	24.1	DeSoto	0–17	21.6	22.5	22.7	24.0
	18–44	34.9	37.6	41.6	44.2		18–44	35.5	35.8	37.9	36.9
	45–64	27.0	28.2	23.5	19.6		45–64	24.1	23.8	20.5	19.8
	65+	18.0	14.4	12.9	12.1		65+	18.8	17.9	19.0	19.2
Brevard	0–17	18.6	19.8	22.0	22.0	Dixie	0–17	17.9	19.1	22.1	24.6
	18–44	28.8	29.4	33.9	39.9		18–44	29.3	30.3	34.6	36.7
	45–64	29.8	30.4	24.3	21.5		45–64	30.2	31.2	26.2	24.2
	65+	22.9	20.4	19.9	16.6		65+	22.6	19.3	17.1	14.5
Broward	0–17	21.2	22.4	23.6	20.6	Duval	0–17	22.9	23.5	26.3	26.0
	18–44	34.8	35.6	38.6	40.2		18–44	37.9	38.9	42.0	46.0
	45–64	27.7	27.7	21.7	18.6		45–64	25.5	26.4	21.2	17.4
	65+	16.3	14.3	16.1	20.7		65+	13.7	11.1	10.5	10.6
Calhoun	0–17	20.6	21.4	23.2	26.2	Escambia	0–17	21.5	21.6	23.5	25.4
	18–44	34.4	36.0	40.5	39.9		18–44	36.1	37.2	41.1	43.3
	45–64	27.0	27.2	22.3	19.5		45–64	25.4	26.8	22.0	19.5
	65+	18.0	15.4	14.0	14.5		65+	17.0	14.4	13.3	11.9
Charlotte	0–17	13.3	14.3	15.7	15.7	Flagler	0–17	18.6	19.9	17.9	19.2
	18–44	20.7	21.2	23.3	26.9		18–44	27.9	26.9	25.1	29.6
	45–64	29.2	30.4	26.4	23.8		45–64	26.0	28.7	28.3	25.8
	65+	36.9	34.1	34.7	33.6		65+	27.4	24.5	28.6	25.4

Table 12. Age Distribution (Percentage) of the Population of Florida and Its Counties, 1990 to 2017 (Continued)

State and County		Population				State and County		Population			
		2017	2010	2000	1990			2017	2010	2000	1990
Franklin	0–17	17.3	17.1	20.2	24.1	Highlands	0–17	17.4	18.2	19.2	18.9
	18–44	34.1	36.2	32.6	33.6		18–44	23.7	24.3	25.6	26.0
	45–64	27.6	29.3	29.5	24.6		45–64	25.1	25.3	22.2	21.9
	65+	21.1	17.4	17.7	17.7		65+	33.8	32.2	33.0	33.2
Gadsden	0–17	22.2	24.2	26.4	29.8	Hillsborough	0–17	23.4	23.9	25.3	24.4
	18–44	33.8	33.6	38.4	39.5		18–44	38.2	38.8	41.0	44.8
	45–64	27.6	28.6	23.0	18.1		45–64	24.9	25.4	21.7	18.6
	65+	16.4	13.6	12.2	12.5		65+	13.5	11.8	12.0	12.2
Gilchrist	0–17	20.1	21.4	24.4	25.2	Holmes	0–17	20.4	21.5	23.1	25.0
	18–44	31.7	33.9	39.1	40.4		18–44	32.0	33.6	38.1	38.1
	45–64	27.6	27.8	22.9	20.8		45–64	27.5	27.7	24.0	21.2
	65+	20.7	16.9	13.6	13.6		65+	20.1	17.2	14.8	15.7
Glades	0–17	17.9	18.8	22.1	24.6	Indian River	0–17	17.6	18.8	19.2	19.5
	18–44	32.2	33.7	34.6	31.2		18–44	25.4	25.9	28.3	31.8
	45–64	25.7	26.0	24.5	24.8		45–64	27.3	28.1	23.3	21.6
	65+	24.2	21.5	18.8	19.3		65+	29.7	27.2	29.2	27.1
Gulf	0–17	15.7	16.2	19.9	24.8	Jackson	0–17	19.1	19.9	22.3	25.0
	18–44	35.0	37.4	39.8	37.2		18–44	35.4	36.2	39.3	40.5
	45–64	29.2	30.0	25.4	22.9		45–64	27.1	28.2	23.8	19.7
	65+	20.0	16.3	14.9	15.2		65+	18.4	15.7	14.6	14.9
Hamilton	0–17	19.1	19.7	23.5	29.0	Jefferson	0–17	18.0	18.6	22.7	29.1
	18–44	36.4	39.4	42.5	42.3		18–44	30.2	32.6	37.1	37.2
	45–64	27.1	27.8	22.8	17.3		45–64	31.0	32.3	25.7	19.0
	65+	17.4	13.1	11.2	11.4		65+	20.8	16.5	14.5	14.8
Hardee	0–17	26.8	27.7	27.6	29.4	Lafayette	0–17	21.2	20.1	21.7	24.9
	18–44	36.6	37.4	39.3	36.5		18–44	39.4	43.4	44.7	45.2
	45–64	22.5	22.0	19.2	19.0		45–64	24.3	24.3	21.3	18.9
	65+	14.2	12.9	13.9	15.1		65+	15.1	12.2	12.4	11.0
Hendry	0–17	27.9	27.8	30.0	31.7	Lake	0–17	19.8	20.8	20.3	20.0
	18–44	35.9	38.6	41.6	39.0		18–44	27.9	28.3	29.5	30.5
	45–64	22.7	22.1	18.3	18.5		45–64	26.7	26.7	23.8	22.1
	65+	13.5	11.5	10.1	10.9		65+	25.6	24.2	26.4	27.4
Hernando	0–14	18.5	19.8	18.9	18.5	Lee	0–17	18.8	19.5	19.6	19.7
	15–44	26.6	26.6	25.8	27.3		18–44	29.7	29.7	30.1	34.0
	45–64	27.0	27.9	24.4	23.6		45–64	26.1	27.3	24.8	21.7
	65+	27.9	25.8	30.9	30.6		65+	25.4	23.5	25.4	24.6

Table 12. Age Distribution (Percentage) of the Population of Florida and Its Counties, 1990 to 2017 (Continued)

State and County		Population				State and County		Population			
		2017	2010	2000	1990			2017	2010	2000	1990
Leon	0–17	19.2	19.6	21.3	22.6	Nassau	0–17	20.2	21.7	25.0	27.2
	18–44	46.6	48.0	50.4	54.2		18–44	29.4	31.1	36.0	41.5
	45–64	21.5	23.0	20.0	15.1		45–64	29.4	30.9	26.3	21.2
	65+	12.7	9.4	8.3	8.2		65+	20.9	16.2	12.6	10.1
Levy	0–17	19.7	21.1	23.6	24.4	Okaloosa	0–17	21.9	22.3	24.7	26.0
	18–44	28.4	28.8	31.9	34.2		18–44	35.3	36.0	40.7	45.4
	45–64	29.3	30.6	26.6	22.6		45–64	26.4	27.7	22.4	19.4
	65+	22.6	19.4	17.9	18.8		65+	16.4	13.9	12.1	9.2
Liberty	0–17	20.7	21.2	21.8	24.3	Okeechobee	0–17	22.9	24.0	25.2	27.4
	18–44	40.1	41.1	47.0	46.0		18–44	34.2	34.2	36.5	36.3
	45–64	27.0	27.1	21.0	18.5		45–64	24.7	24.9	21.9	20.3
	65+	12.2	10.6	10.2	11.2		65+	18.2	17.0	16.3	16.0
Madison	0–17	21.4	21.8	25.3	27.7	Orange	0–17	23.1	23.6	25.3	24.0
	18–44	32.6	34.2	37.5	39.7		18–44	41.6	42.6	44.7	48.1
	45–64	27.0	28.2	22.7	18.6		45–64	23.8	24.1	20.0	17.3
	65+	19.0	15.8	14.6	14.0		65+	11.5	9.7	10.0	10.6
Manatee	0–17	19.6	20.5	20.7	19.3	Osceola	0–17	24.7	26.2	26.8	25.3
	18–44	27.8	28.6	31.2	33.0		18–44	36.6	37.6	40.2	41.8
	45–64	26.9	27.6	23.3	19.8		45–64	25.7	25.2	21.6	19.0
	65+	25.7	23.3	24.9	28.0		65+	13.0	11.0	11.4	13.8
Marion	0–17	18.4	19.4	21.4	22.3	Palm Beach	0–17	19.5	20.4	21.3	19.8
	18–44	26.6	27.6	30.2	34.0		18–44	31.2	31.6	33.5	37.0
	45–64	26.6	27.3	23.9	21.7		45–64	26.0	26.4	22.0	19.0
	65+	28.4	25.8	24.5	22.0		65+	23.3	21.6	23.2	24.2
Martin	0–17	16.1	17.6	18.6	17.7	Pasco	0–17	20.4	21.2	20.2	18.0
	18–44	25.1	25.4	28.2	33.2		18–44	30.6	30.7	30.0	29.4
	45–64	29.0	29.7	24.9	21.8		45–64	26.4	27.4	23.1	20.4
	65+	29.8	27.3	28.2	27.3		65+	22.6	20.7	26.8	32.2
Miami–Dade	0–17	20.7	21.9	24.8	24.3	Pinellas	0–17	16.9	17.8	19.3	17.9
	18–44	37.1	38.5	40.1	41.5		18–44	29.2	30.3	33.8	36.0
	45–64	26.4	25.6	21.7	20.3		45–64	29.6	30.8	24.5	20.2
	65+	15.8	14.1	13.3	13.9		65+	24.2	21.2	22.5	25.9
Monroe	0–17	14.6	15.1	17.1	17.5	Polk	0–17	22.6	23.5	24.4	24.3
	18–44	31.2	32.5	37.4	43.0		18–44	32.2	32.8	34.7	37.0
	45–64	32.3	35.4	30.9	23.7		45–64	25.1	25.6	22.5	20.3
	65+	22.0	17.1	14.6	15.8		65+	20.1	18.0	18.3	18.4

Table 12. Age Distribution (Percentage) of the Population of Florida and Its Counties, 1990 to 2017 (Continued)

State and County		Population				State and County		Population			
		2017	2010	2000	1990			2017	2010	2000	1990
Putnam	0–17	21.7	22.6	24.6	25.6	Suwannee	0–17	21.2	22.7	24.0	26.6
	18–44	28.8	29.3	31.9	34.6		18–44	31.7	30.7	33.6	34.8
	45–64	28.0	29.2	25.1	22.0		45–64	26.1	27.7	25.4	21.8
	65+	21.5	18.9	18.5	17.8		65+	21.0	18.9	16.9	16.8
St. Johns	0–17	21.7	23.1	23.1	22.5	Taylor	0–17	19.5	19.7	24.6	28.3
	18–44	31.1	31.0	34.6	40.0		18–44	32.5	35.5	36.6	37.7
	45–64	28.4	30.2	26.4	21.2		45–64	27.7	29.2	24.8	20.7
	65+	18.8	15.7	15.9	16.3		65+	20.3	15.6	14.1	13.3
St. Lucie	0–17	21.1	22.3	22.6	23.2	Union	0–17	17.7	19.4	21.8	25.7
	18–44	30.8	31.0	31.7	35.7		18–44	38.6	38.8	48.5	50.4
	45–64	26.6	26.7	23.0	20.2		45–64	31.5	31.9	22.2	16.5
	65+	21.5	19.9	22.7	20.8		65+	12.2	10.0	7.5	7.5
Santa Rosa	0–17	22.4	23.9	26.6	27.2	Volusia	0–17	18.2	18.9	20.3	19.8
	18–44	34.6	34.5	38.3	42.9		18–44	29.7	30.8	33.5	37.3
	45–64	27.8	28.7	24.1	20.4		45–64	28.5	29.3	24.2	20.2
	65+	15.2	12.9	11.0	9.5		65+	23.6	21.1	22.1	22.7
Sarasota	0–17	14.9	15.7	16.2	15.8	Wakulla	0–17	21.8	22.5	25.6	28.3
	18–44	23.8	24.1	26.7	30.3		18–44	36.3	37.4	39.3	39.6
	45–64	27.3	29.0	25.6	21.8		45–64	28.1	29.3	24.7	20.5
	65+	34.1	31.2	31.5	32.1		65+	13.7	10.8	10.3	11.5
Seminole	0–17	21.8	23.0	25.4	25.5	Walton	0–17	20.4	20.6	21.7	23.9
	18–44	36.8	37.0	40.4	45.3		18–44	32.3	33.1	35.6	35.7
	45–64	26.7	28.0	23.6	19.0		45–64	28.8	30.1	26.9	24.1
	65+	14.8	12.0	10.6	10.3		65+	18.5	16.2	15.8	16.4
Sumter	0–17	8.6	9.1	16.1	22.4	Washington	0–17	20.3	21.2	23.4	25.4
	18–44	16.6	18.6	29.2	33.2		18–44	34.3	35.5	36.3	35.0
	45–64	22.7	28.9	27.3	22.2		45–64	27.9	27.9	24.7	22.1
	65+	52.0	43.4	27.4	22.3		65+	17.5	15.4	15.7	17.6

Note: Percentages may not add to 100 percent due to rounding.

Table 13. Rank of Florida Counties by Percent of Population Aged 17 and Younger, 2017

Rank	State and County	Aged 17 and Younger		Rank	State and County	Aged 17 and Younger	
		Percent	Number			Percent	Number
	FLORIDA	20.4	4,180,677				
1	Hendry	27.9	10,915	34	Nassau	20.2	16,255
2	Hardee	26.8	7,345	35	Bradford	20.2	5,575
3	Osceola	24.7	83,477	36	Gilchrist	20.1	3,454
4	Clay	24.6	51,327	37	Lake	19.8	65,516
5	Baker	24.1	6,547	38	Levy	19.7	8,085
				39	Manatee	19.6	72,398
6	Hillsborough	23.4	322,402	40	Palm Beach	19.5	276,372
7	Orange	23.1	304,021	41	Taylor	19.5	4,354
8	Duval	22.9	214,321	42	Leon	19.2	55,305
9	Okeechobee	22.9	9,401	43	Jackson	19.1	9,628
10	Polk	22.6	149,434	44	Hamilton	19.1	2,794
11	Santa Rosa	22.4	38,289	45	Lee	18.8	131,001
12	Gadsden	22.2	10,695	46	Flagler	18.6	19,600
13	Okaloosa	21.9	42,882	47	Brevard	18.6	106,902
14	Wakulla	21.8	6,971	48	Collier	18.5	66,218
15	Seminole	21.8	99,126	49	Hernando	18.5	33,632
16	St. Johns	21.7	49,843	50	Marion	18.4	64,358
17	Putnam	21.7	15,865	51	Volusia	18.2	95,035
18	DeSoto	21.6	7,699	52	Jefferson	18.0	2,627
19	Bay	21.6	38,568	53	Glades	17.9	2,347
20	Escambia	21.5	67,303	54	Dixie	17.9	2,999
21	Madison	21.4	4,143	55	Union	17.7	2,830
22	Columbia	21.3	14,715	56	Alachua	17.6	45,754
23	Broward	21.2	397,910	57	Indian River	17.6	26,201
24	Lafayette	21.2	1,800	58	Highlands	17.4	17,742
25	Suwannee	21.2	9,453	59	Franklin	17.3	2,102
26	St. Lucie	21.1	62,866	60	Pinellas	16.9	162,840
27	Miami-Dade	20.7	567,469	61	Martin	16.1	24,568
28	Liberty	20.7	1,802	62	Gulf	15.7	2,566
29	Calhoun	20.6	3,091	63	Citrus	14.9	21,362
30	Holmes	20.4	4,128	64	Sarasota	14.9	60,488
31	Pasco	20.4	103,054	65	Monroe	14.6	11,228
32	Walton	20.4	13,298	66	Charlotte	13.3	22,923
33	Washington	20.3	5,072	67	Sumter	8.6	10,386

Figure 3. Percent of Population Aged 17 and Younger, 2017

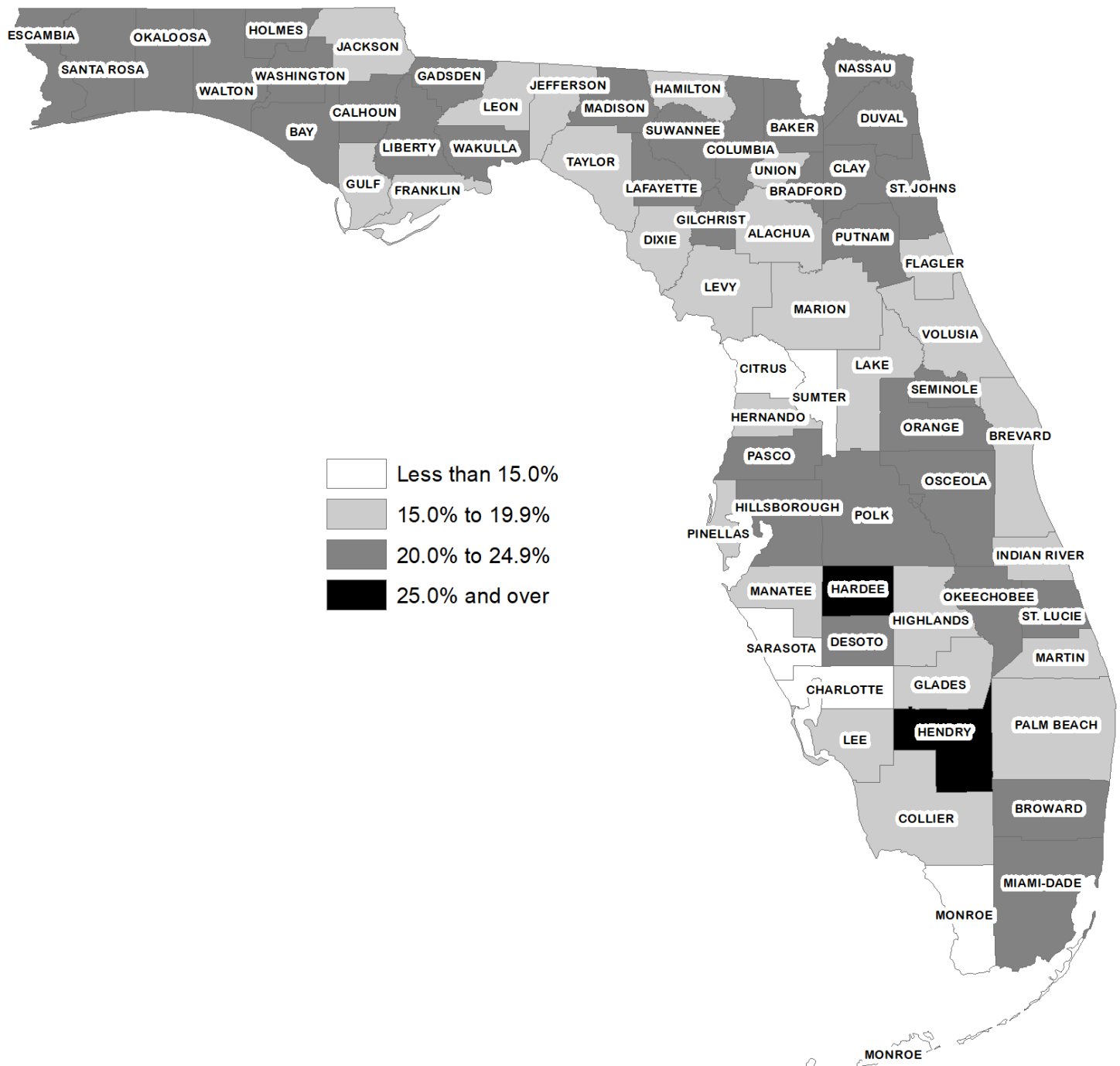


Table 14. Rank of Florida Counties by Percent of Population Aged 65 and Older, 2017

Rank	State and County	Aged 65 and Older		Rank	State and County	Aged 65 and Older	
		Percent	Number			Percent	Number
	FLORIDA	19.5	4,000,170				
1	Sumter	52.0	62,769	34	Gulf	20.0	3,257
2	Charlotte	36.9	63,669	35	Madison	19.0	3,679
3	Citrus	34.3	49,266	36	St. Johns	18.8	43,209
4	Sarasota	34.1	138,827	37	DeSoto	18.8	6,688
5	Highlands	33.8	34,504	38	Walton	18.5	12,111
				39	Jackson	18.4	9,295
6	Martin	29.8	45,552	40	Columbia	18.4	12,689
7	Indian River	29.7	44,221	41	Okeechobee	18.2	7,500
8	Marion	28.4	99,214	42	Calhoun	18.0	2,702
9	Collier	28.2	100,952	43	Bradford	18.0	4,963
10	Hernando	27.9	50,801	44	Washington	17.5	4,373
11	Flagler	27.4	28,862	45	Hamilton	17.4	2,551
12	Manatee	25.7	94,662	46	Escambia	17.0	53,325
13	Lake	25.6	84,828	47	Bay	16.7	29,933
14	Lee	25.4	177,331	48	Gadsden	16.4	7,920
15	Pinellas	24.2	233,270	49	Okaloosa	16.4	31,984
16	Glades	24.2	3,168	50	Broward	16.3	304,630
17	Volusia	23.6	123,596	51	Miami-Dade	15.8	434,269
18	Palm Beach	23.3	329,279	52	Santa Rosa	15.2	26,017
19	Brevard	22.9	131,708	53	Lafayette	15.1	1,277
20	Levy	22.6	9,273	54	Seminole	14.8	67,081
21	Pasco	22.6	114,315	55	Clay	14.7	30,641
22	Dixie	22.6	3,776	56	Hardee	14.2	3,883
23	Monroe	22.0	16,897	57	Duval	13.7	128,728
24	St. Lucie	21.5	64,110	58	Alachua	13.7	35,686
25	Putnam	21.5	15,748	59	Wakulla	13.7	4,361
26	Franklin	21.1	2,562	60	Hillsborough	13.5	186,281
27	Suwannee	21.0	9,368	61	Hendry	13.5	5,270
28	Nassau	20.9	16,838	62	Baker	13.1	3,573
29	Jefferson	20.8	3,034	63	Osceola	13.0	43,912
30	Gilchrist	20.7	3,559	64	Leon	12.7	36,541
31	Taylor	20.3	4,534	65	Union	12.2	1,942
32	Polk	20.1	132,831	66	Liberty	12.2	1,061
33	Holmes	20.1	4,053	67	Orange	11.5	151,461

Figure 4. Percent of Population Aged 65 and Older, 2017

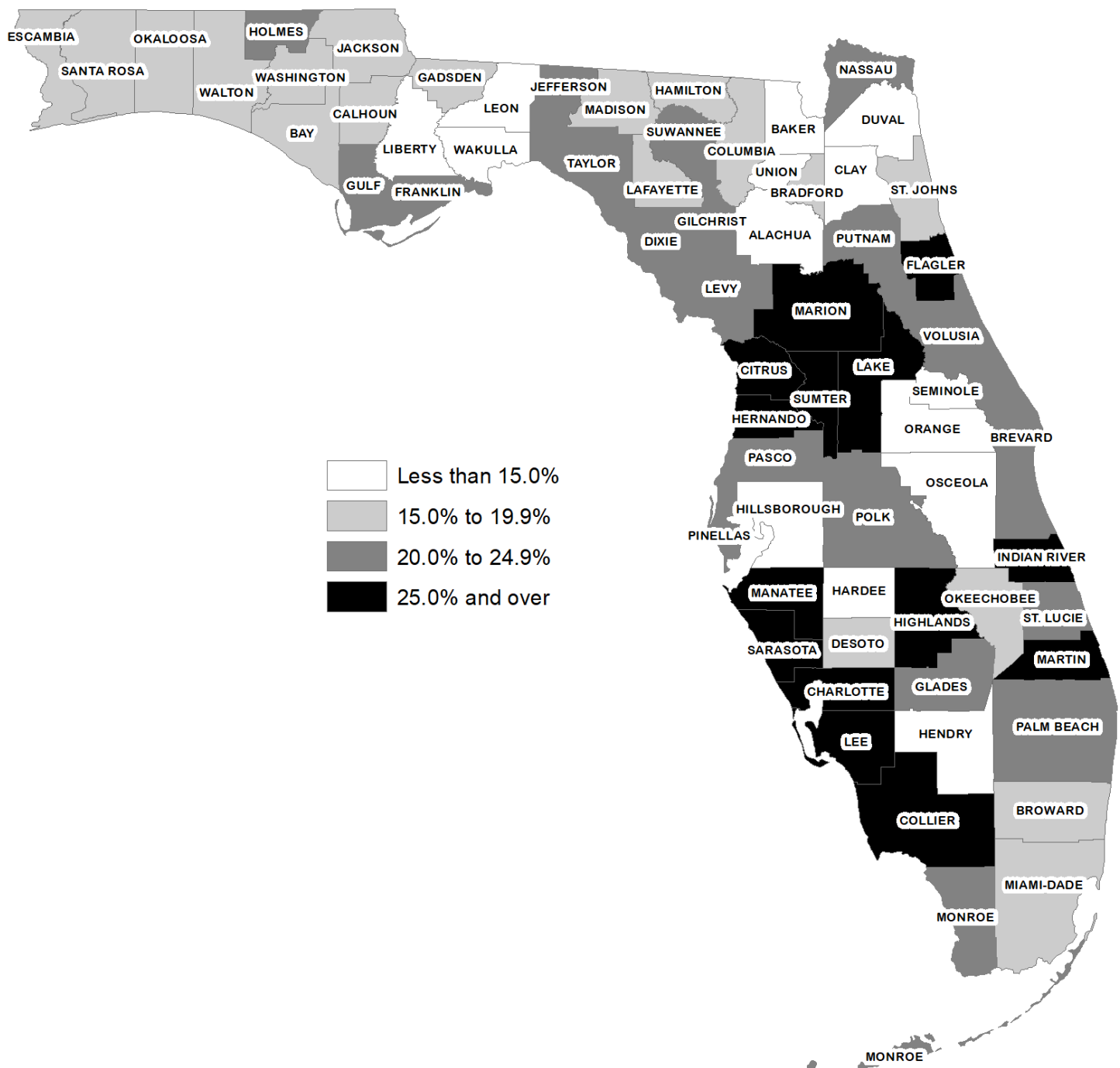


Table 15. Rank of Florida Counties by Percent of Black Population, 2017

Rank	State and County	Black Population		Rank	State and County	Black Population	
		Percent	Number			Percent	Number
	FLORIDA	17.6	3,599,724				
1	Gadsden	55.7	26,889	34	Lafayette	12.9	1,096
2	Madison	39.3	7,615	35	Flagler	12.8	13,445
3	Jefferson	35.6	5,206	36	Suwannee	12.8	5,706
4	Hamilton	34.0	4,992	37	Volusia	12.4	65,021
5	Leon	32.5	93,629	38	Clay	12.2	25,429
				39	Bay	12.1	21,701
6	Duval	32.2	301,524	40	Brevard	11.7	67,308
7	Broward	30.5	572,179	41	Pinellas	11.5	110,568
8	Jackson	27.5	13,885	42	Lake	11.4	37,679
9	Escambia	24.7	77,442	43	Glades	11.2	1,468
10	Orange	23.9	313,588	44	Okaloosa	10.8	21,021
11	Union	23.1	3,682	45	Highlands	10.3	10,567
12	Alachua	21.8	56,727	46	Manatee	10.0	36,725
13	St. Lucie	21.2	63,027	47	Levy	9.8	4,010
14	Taylor	20.1	4,473	48	Indian River	9.8	14,526
15	Miami-Dade	19.1	524,876	49	Lee	9.5	66,652
16	Bradford	19.1	5,276	50	Dixie	9.5	1,585
17	Palm Beach	19.0	269,240	51	Okeechobee	9.0	3,702
18	Hillsborough	18.7	257,884	52	Sumter	8.3	9,997
19	Columbia	18.7	12,878	53	Hardee	7.8	2,151
20	Liberty	17.4	1,518	54	Collier	7.6	27,167
21	Gulf	17.2	2,805	55	Charlotte	6.8	11,669
22	Putnam	16.6	12,179	56	Nassau	6.7	5,382
23	Polk	16.3	107,818	57	Monroe	6.6	5,107
24	Washington	15.3	3,827	58	Santa Rosa	6.5	11,151
25	Baker	14.7	3,997	59	Holmes	6.3	1,276
26	Wakulla	14.3	4,570	60	Hernando	6.3	11,392
27	Osceola	14.2	47,839	61	St. Johns	6.2	14,210
28	Calhoun	13.7	2,057	62	Pasco	6.1	30,656
29	Marion	13.5	47,110	63	Martin	6.0	9,181
30	Seminole	13.3	60,328	64	Walton	5.9	3,845
31	Hendry	13.2	5,174	65	Sarasota	5.4	21,981
32	DeSoto	13.2	4,704	66	Gilchrist	5.0	861
33	Franklin	13.1	1,589	67	Citrus	3.5	4,962

Figure 5. Black Population as Percent of Total Population, 2017

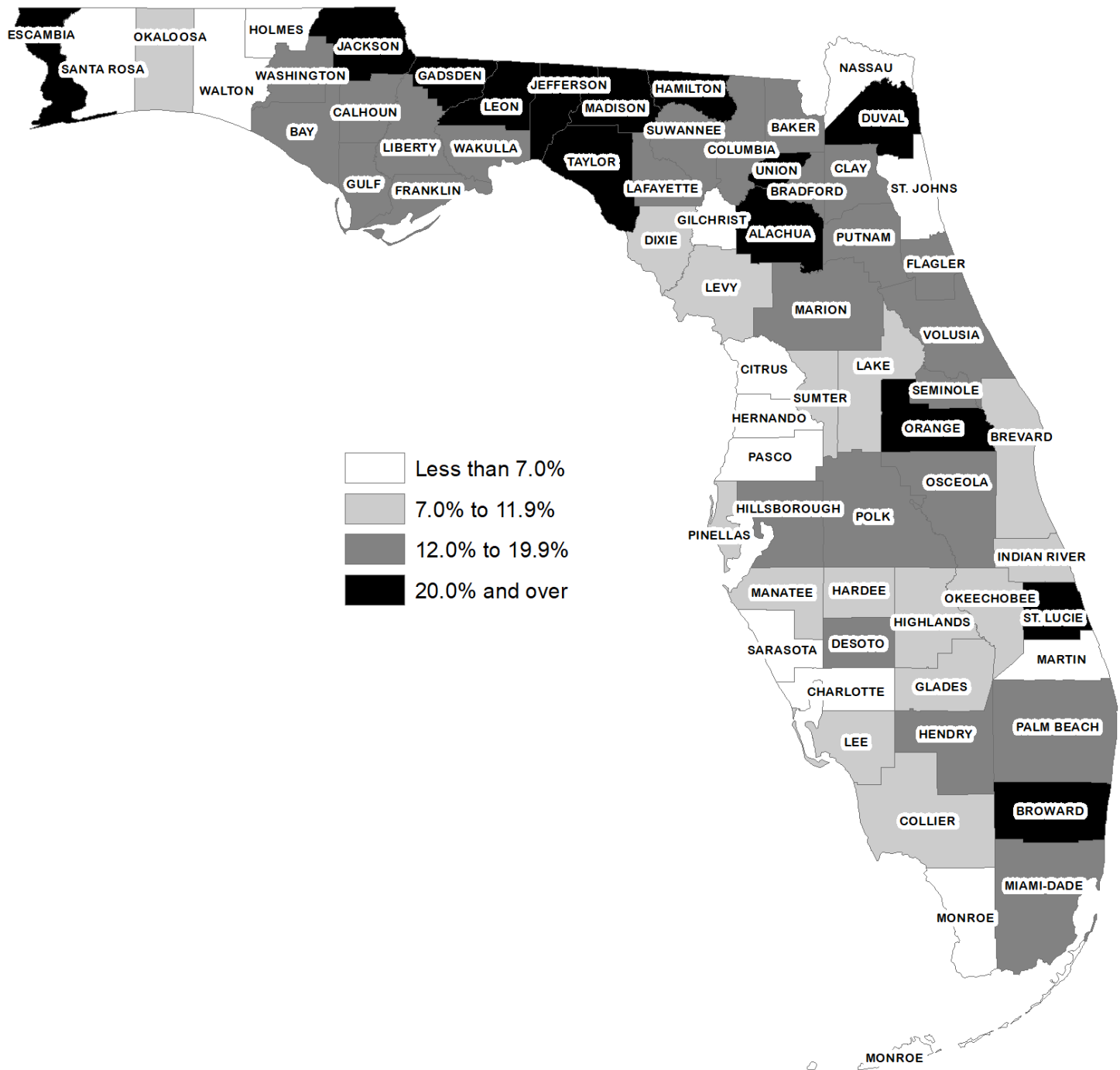


Table 16. Rank of Florida Counties by Percent of Hispanic Population, 2017

Rank	State and County	Hispanic Population		Rank	State and County	Hispanic Population	
		Percent	Number			Percent	Number
	FLORIDA	25.4	5,204,657				
1	Miami-Dade	67.5	1,852,323	34	Brevard	9.9	57,135
2	Hendry	54.8	21,388	35	Pinellas	9.9	95,180
3	Osceola	52.0	175,599	36	Sarasota	9.9	40,182
4	Hardee	44.2	12,113	37	Clay	9.5	19,807
5	DeSoto	33.1	11,780	38	Alachua	9.3	24,243
				39	Okaloosa	8.9	17,471
6	Orange	30.6	402,351	40	Levy	8.3	3,413
7	Collier	29.2	104,216	41	Charlotte	7.3	12,589
8	Broward	28.7	537,895	42	St. Johns	7.1	16,351
9	Hillsborough	28.5	393,326	43	Walton	7.0	4,552
10	Okeechobee	26.4	10,862	44	Liberty	6.8	596
11	Glades	24.9	3,261	45	Bay	6.8	12,113
12	Monroe	23.1	17,772	46	Gilchrist	6.7	1,159
13	Lee	22.4	156,691	47	Escambia	6.5	20,378
14	Polk	22.1	146,425	48	Leon	6.2	17,709
15	Palm Beach	22.0	311,718	49	Columbia	5.8	3,981
16	Seminole	20.1	91,375	50	Sumter	5.6	6,726
17	Highlands	20.0	20,408	51	Calhoun	5.5	829
18	St. Lucie	18.7	55,673	52	Madison	5.4	1,040
19	Manatee	18.0	66,278	53	Santa Rosa	5.3	9,027
20	Lake	14.9	49,376	54	Citrus	5.3	7,576
21	Martin	14.4	22,054	55	Jackson	5.2	2,643
22	Pasco	14.4	72,586	56	Union	5.2	823
23	Lafayette	14.0	1,184	57	Franklin	5.1	618
24	Indian River	13.3	19,770	58	Gulf	5.0	822
25	Marion	13.2	46,158	59	Nassau	4.4	3,543
26	Volusia	12.9	67,629	60	Jefferson	4.4	639
27	Hernando	12.6	22,844	61	Wakulla	3.9	1,247
28	Suwannee	10.6	4,746	62	Taylor	3.6	802
29	Hamilton	10.5	1,533	63	Bradford	3.5	975
30	Putnam	10.3	7,544	64	Washington	3.2	811
31	Flagler	10.3	10,831	65	Dixie	3.2	540
32	Duval	10.2	95,506	66	Holmes	2.6	518
33	Gadsden	10.0	4,820	67	Baker	2.1	584

Figure 6. Hispanic Population as Percent of Total Population, 2017

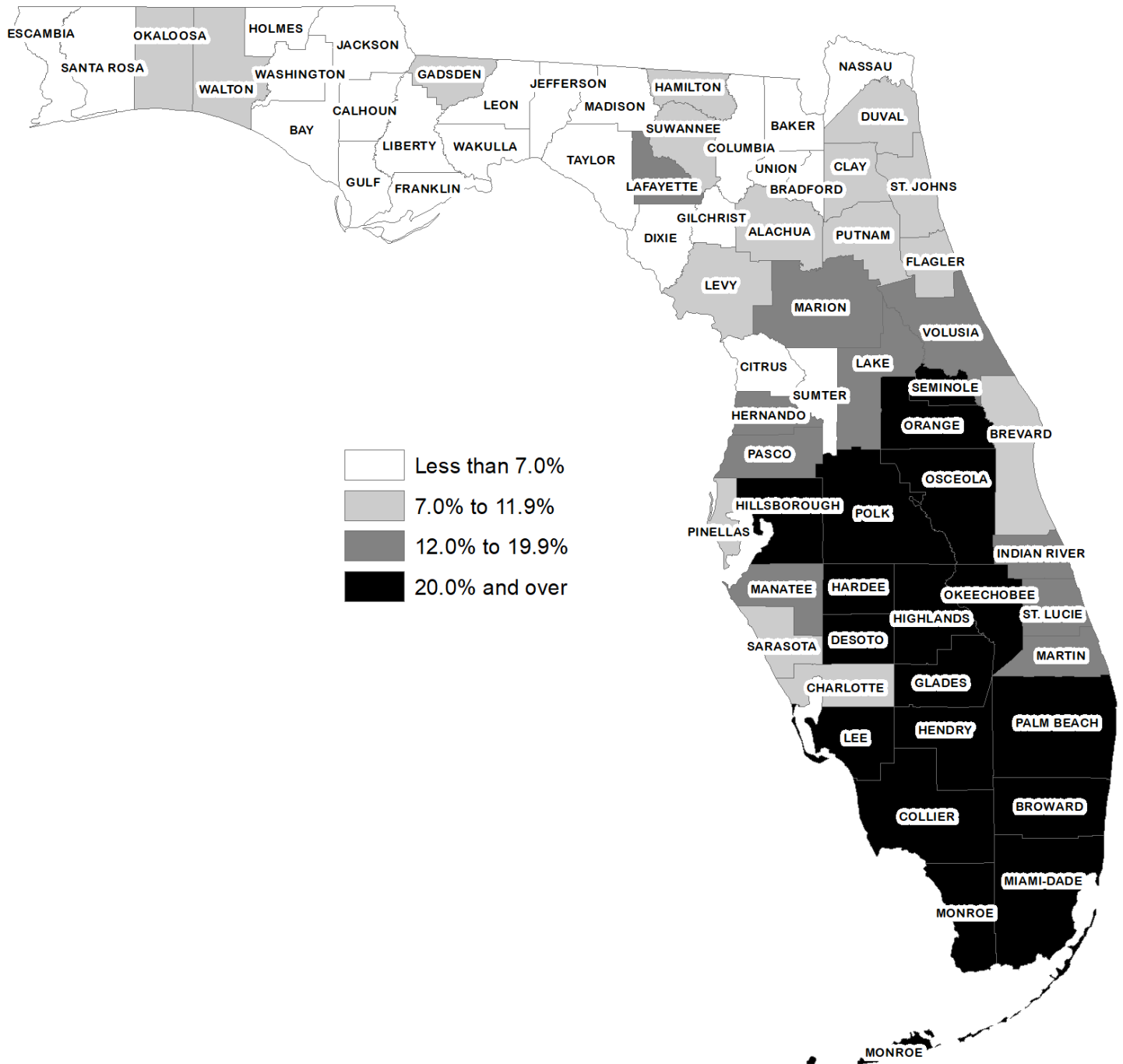


Table 17. Population Per Square Mile for Florida Counties, 2000 to 2018

State and County	Land area in 2010 (sq. miles)	Population Per Square Mile			County Ranking		
		2018	2010	2000	2018	2010	2000
FLORIDA*	53,625	389	351	298			
Pinellas	274	3,542	3,347	3,366	1	1	1
Broward	1,210	1,569	1,445	1,342	2	2	2
Seminole	309	1,500	1,367	1,181	3	3	4
Orange	903	1,495	1,268	992	4	5	6
Miami-Dade*	1,898	1,464	1,316	1,188	5	4	3
Hillsborough	1,020	1,381	1,205	979	6	6	7
Duval	762	1,250	1,134	1,022	7	7	5
Lee	785	909	789	562	8	8	10
Sarasota	556	751	683	586	9	9	8
Palm Beach	1,970	728	670	574	10	10	9
Pasco	747	690	622	462	11	11	12
Brevard	1,016	574	535	469	12	12	11
St. Lucie	572	529	486	337	13	13	17
Manatee	743	509	435	355	14	16	16
Escambia	656	486	453	448	15	14	13
Volusia	1,101	482	449	403	16	15	14
Leon	667	438	413	359	17	17	15
St. Johns	601	397	316	205	18	21	26
Hernando	473	392	366	277	19	18	18
Polk	1,798	374	335	269	20	19	19
Lake*	938	366	317	224	21	20	24
Clay	604	351	316	233	22	22	22
Indian River	503	302	274	225	23	24	23
Alachua	875	301	283	249	24	23	20
Martin	543	286	269	233	25	25	21
Osceola	1,327	266	202	130	26	30	31
Charlotte	680	262	235	208	27	27	25
Citrus	582	250	243	203	28	26	27
Bay	758	239	223	195	29	28	28
Sumter	547	228	171	98	30	33	35
Marion*	1,585	223	209	163	31	29	30
Flagler	485	222	197	103	32	31	34
Okaloosa	930	213	194	183	33	32	29
Collier	1,998	184	161	126	34	34	32
Santa Rosa	1,012	173	150	116	35	35	33

Table 17. Population Per Square Mile for Florida Counties, 2000 to 2018

(Continued)

State and County	Land area in 2010 (sq. miles)	Population Per Square Mile			County Ranking		
		2018	2010	2000	2018	2010	2000
Nassau	649	128	113	89	36	36	37
Highlands	1,017	101	97	86	37	38	40
Putnam	728	100	102	97	38	37	36
Bradford	294	95	97	89	39	39	38
Gadsden	516	93	90	87	40	40	39
Columbia	798	87	85	71	41	41	42
Monroe	983	75	74	81	42	42	41
Walton	1,038	65	53	39	43	47	50
Suwannee	689	65	60	51	44	44	45
Union	244	65	64	55	45	43	43
DeSoto	637	56	55	51	46	45	46
Jackson	918	55	54	51	47	46	44
Okeechobee	769	53	52	47	48	48	47
Wakulla	606	53	51	38	49	49	53
Gilchrist	350	50	48	41	50	50	49
Baker	585	47	46	38	51	51	52
Washington	583	43	43	36	52	53	54
Hardee	638	43	43	42	53	52	48
Holmes	479	42	42	39	54	54	51
Levy	1,118	37	36	31	55	55	56
Hendry	1,153	34	34	31	56	56	55
Gulf	564	29	28	26	57	58	59
Hamilton	514	28	29	26	58	57	58
Madison	696	28	28	27	59	59	57
Calhoun	567	27	26	23	60	60	60
Jefferson	598	25	25	22	61	61	61
Dixie	705	23	23	20	62	62	62
Franklin	535	22	22	18	63	64	64
Taylor	1,043	21	22	18	64	63	63
Glades	806	16	16	13	65	66	65
Lafayette	543	16	16	13	66	65	66
Liberty	836	11	10	8	67	67	67

* Includes US Census Bureau corrections as of February 11, 2014.

Figure 7. Population per Square Mile, 2018

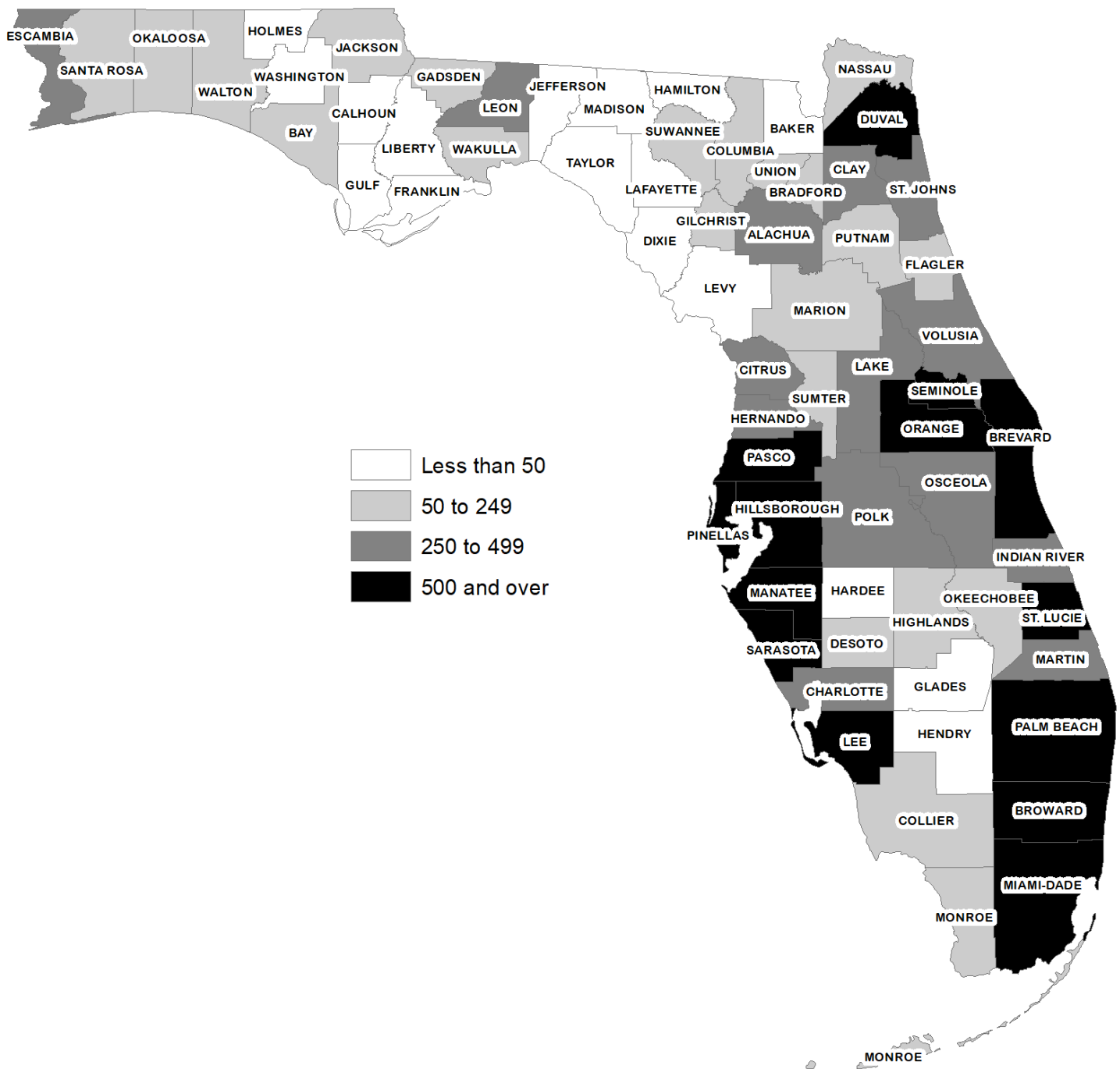


Table 18. Location of Florida Cities

City	County	City	County
Alachua	Alachua	Bunnell	Flagler
Alford	Jackson	Bushnell	Sumter
Altamonte Springs	Seminole	Callahan	Nassau
Altha	Calhoun	Callaway	Bay
Anna Maria	Manatee	Campbellton	Jackson
Apalachicola	Franklin	Cape Canaveral	Brevard
Apopka	Orange	Cape Coral	Lee
Arcadia	DeSoto	Carrabelle	Franklin
Archer	Alachua	Caryville	Washington
Astatula	Lake	Casselberry	Seminole
Atlantic Beach	Duval	Cedar Key	Levy
Atlantis	Palm Beach	Center Hill	Sumter
Auburndale	Polk	Century	Escambia
Aventura	Miami-Dade	Chattahoochee	Gadsden
Avon Park	Highlands	Chiefland	Levy
Bal Harbour	Miami-Dade	ChIPLEY	Washington
Baldwin	Duval	Cinco Bayou	Okaloosa
Bartow	Polk	Clearwater	Pinellas
Bascom	Jackson	Clermont	Lake
Bay Harbor Islands	Miami-Dade	Clewiston	Hendry
Bay Lake	Orange	Cloud Lake	Palm Beach
Bell	Gilchrist	Cocoa	Brevard
Belle Glade	Palm Beach	Cocoa Beach	Brevard
Belle Isle	Orange	Coconut Creek	Broward
Belleair	Pinellas	Coleman	Sumter
Belleair Beach	Pinellas	Cooper City	Broward
Belleair Bluffs	Pinellas	Coral Gables	Miami-Dade
Belleair Shore	Pinellas	Coral Springs	Broward
Belleview	Marion	Cottdale	Jackson
Beverly Beach	Flagler	Crescent City	Putnam
Biscayne Park	Miami-Dade	Crestview	Okaloosa
Blountstown	Calhoun	Cross City	Dixie
Boca Raton	Palm Beach	Crystal River	Citrus
Bonifay	Holmes	Cutler Bay	Miami-Dade
Bonita Springs	Lee	Dade City	Pasco
Bowling Green	Hardee	Dania Beach	Broward
Boynton Beach	Palm Beach	Davenport	Polk
Bradenton	Manatee	Davie	Broward
Bradenton Beach	Manatee	Daytona Beach	Volusia
Branford	Suwannee	Daytona Beach Shores	Volusia
Briny Breezes	Palm Beach	DeBary	Volusia
Bristol	Liberty	Deerfield Beach	Broward
Bronson	Levy	DeFuniak Springs	Walton
Brooker	Bradford	DeLand	Volusia
Brooksville	Hernando	Delray Beach	Palm Beach

Table 18. Location of Florida Cities

(Continued)

City	County	City	County
Deltona	Volusia	Groveland	Lake
Destin	Okaloosa	Gulf Breeze	Santa Rosa
Doral	Miami-Dade	Gulf Stream	Palm Beach
Dundee	Polk	Gulfport	Pinellas
Dunedin	Pinellas	Haines City	Polk
Dunnellon	Marion	Hallandale Beach	Broward
Eagle Lake	Polk	Hampton	Bradford
Eatonville	Orange	Hastings**	St. Johns
Ebro	Washington	Havana	Gadsden
Edgewater	Volusia	Haverhill	Palm Beach
Edgewood	Orange	Hawthorne	Alachua
El Portal	Miami-Dade	Hialeah	Miami-Dade
Estero*	Lee	Hialeah Gardens	Miami-Dade
Esto	Holmes	High Springs	Alachua
Eustis	Lake	Highland Beach	Palm Beach
Everglades	Collier	Highland Park	Polk
Fanning Springs	Gilchrist/Levy	Hillcrest Heights	Polk
Fellsmere	Indian River	Hilliard	Nassau
Fernandina Beach	Nassau	Hillsboro Beach	Broward
Flagler Beach	Flagler/Volusia	Holly Hill	Volusia
Florida City	Miami-Dade	Hollywood	Broward
Fort Lauderdale	Broward	Holmes Beach	Manatee
Fort Meade	Polk	Homestead	Miami-Dade
Fort Myers	Lee	Horseshoe Beach	Dixie
Fort Myers Beach	Lee	Howey-in-the-Hills	Lake
Fort Pierce	St. Lucie	Hypoluxo	Palm Beach
Fort Walton Beach	Okaloosa	Indianalantic	Brevard
Fort White	Columbia	Indian Creek	Miami-Dade
Freeport	Walton	Indian Harbour Beach	Brevard
Frostproof	Polk	Indian River Shores	Indian River
Fruitland Park	Lake	Indian Rocks Beach	Pinellas
Gainesville	Alachua	Indian Shores	Pinellas
Glen Ridge	Palm Beach	Indiantown***	Martin
Glen St. Mary	Baker	Inglis	Levy
Golden Beach	Miami-Dade	Interlachen	Putnam
Golf	Palm Beach	Inverness	Citrus
Graceville	Jackson	Islamorada, Village of Islands	Monroe
Grand Ridge	Jackson	Islandia****	Miami-Dade
Grant-Valkaria	Brevard	Jacksonville	Duval
Green Cove Springs	Clay	Jacksonville Beach	Duval
Greenacres	Palm Beach	Jacob City	Jackson
Greensboro	Gadsden	Jasper	Hamilton
Greenville	Madison	Jay	Santa Rosa
Greenwood	Jackson	Jennings	Hamilton
Gretna	Gadsden	Juno Beach	Palm Beach

Table 18. Location of Florida Cities

(Continued)

City	County	City	County
Jupiter	Palm Beach	Maitland	Orange
Jupiter Inlet Colony	Palm Beach	Malabar	Brevard
Jupiter Island	Martin	Malone	Jackson
Kenneth City	Pinellas	Manalapan	Palm Beach
Key Biscayne	Miami-Dade	Mangonia Park	Palm Beach
Key Colony Beach	Monroe	Marathon	Monroe
Key West	Monroe	Marco Island	Collier
Keystone Heights	Clay	Margate	Broward
Kissimmee	Osceola	Marianna	Jackson
La Crosse	Alachua	Marineland	Flagler/St. Johns
LaBelle	Hendry	Mary Esther	Okaloosa
Lady Lake	Lake	Mascotte	Lake
Lake Alfred	Polk	Mayo	Lafayette
Lake Buena Vista	Orange	McIntosh	Marion
Lake Butler	Union	Medley	Miami-Dade
Lake City	Columbia	Melbourne	Brevard
Lake Clarke Shores	Palm Beach	Melbourne Beach	Brevard
Lake Hamilton	Polk	Melbourne Village	Brevard
Lake Helen	Volusia	Mexico Beach	Bay
Lakeland	Polk	Miami	Miami-Dade
Lake Mary	Seminole	Miami Beach	Miami-Dade
Lake Park	Palm Beach	Miami Gardens	Miami-Dade
Lake Placid	Highlands	Miami Lakes	Miami-Dade
Lake Wales	Polk	Miami Shores	Miami-Dade
Lake Worth	Palm Beach	Miami Springs	Miami-Dade
Lantana	Palm Beach	Micanopy	Alachua
Largo	Pinellas	Midway	Gadsden
Lauderdale Lakes	Broward	Milton	Santa Rosa
Lauderdale-By-The-Sea	Broward	Minneola	Lake
Lauderhill	Broward	Miramar	Broward
Laurel Hill	Okaloosa	Monticello	Jefferson
Lawtey	Bradford	Montverde	Lake
Layton	Monroe	Moore Haven	Glades
Lazy Lake	Broward	Mount Dora	Lake
Lee	Madison	Mulberry	Polk
Leesburg	Lake	Naples	Collier
Lighthouse Point	Broward	Neptune Beach	Duval
Live Oak	Suwannee	New Port Richey	Pasco
Longboat Key	Manatee/Sarasota	New Smyrna Beach	Volusia
Longwood	Seminole	Newberry	Alachua
Loxahatchee Groves	Palm Beach	Niceville	Okaloosa
Lynn Haven	Bay	Noma	Holmes
Maccleddy	Baker	North Bay Village	Miami-Dade
Madeira Beach	Pinellas	North Lauderdale	Broward
Madison	Madison	North Miami	Miami-Dade

Table 18. Location of Florida Cities

(Continued)

City	County	City	County
North Miami Beach	Miami-Dade	Plant City	Hillsborough
North Palm Beach	Palm Beach	Plantation	Broward
North Port	Sarasota	Polk City	Polk
North Redington Beach	Pinellas	Pomona Park	Putnam
Oak Hill	Volusia	Pompano Beach	Broward
Oakland	Orange	Ponce de Leon	Holmes
Oakland Park	Broward	Ponce Inlet	Volusia
Ocala	Marion	Port Orange	Volusia
Ocean Breeze	Martin	Port Richey	Pasco
Ocean Ridge	Palm Beach	Port St. Joe	Gulf
Ocoee	Orange	Port St. Lucie	St. Lucie
Okeechobee	Okeechobee	Punta Gorda	Charlotte
Oldsmar	Pinellas	Quincy	Gadsden
Opa-locka	Miami-Dade	Raiford	Union
Orange City	Volusia	Reddick	Marion
Orange Park	Clay	Redington Beach	Pinellas
Orchid	Indian River	Redington Shores	Pinellas
Orlando	Orange	Riviera Beach	Palm Beach
Ormond Beach	Volusia	Rockledge	Brevard
Otter Creek	Levy	Royal Palm Beach	Palm Beach
Oviedo	Seminole	Safety Harbor	Pinellas
Pahokee	Palm Beach	St. Augustine	St. Johns
Palatka	Putnam	St. Augustine Beach	St. Johns
Palm Bay	Brevard	St. Cloud	Osceola
Palm Beach	Palm Beach	St. Leo	Pasco
Palm Beach Gardens	Palm Beach	St. Lucie Village	St. Lucie
Palm Beach Shores	Palm Beach	St. Marks	Wakulla
Palm Coast	Flagler	St. Pete Beach	Pinellas
Palm Shores	Brevard	St. Petersburg	Pinellas
Palm Springs	Palm Beach	San Antonio	Pasco
Palmetto	Manatee	Sanford	Seminole
Palmetto Bay	Miami-Dade	Sanibel	Lee
Panama City	Bay	Sarasota	Sarasota
Panama City Beach	Bay	Satellite Beach	Brevard
Parker	Bay	Sea Ranch Lakes	Broward
Parkland	Broward	Sebastian	Indian River
Paxton	Walton	Sebring	Highlands
Pembroke Park	Broward	Seminole	Pinellas
Pembroke Pines	Broward	Sewall's Point	Martin
Penney Farms	Clay	Shalimar	Okaloosa
Pensacola	Escambia	Sneads	Jackson
Perry	Taylor	Sopchoppy	Wakulla
Pierson	Volusia	South Bay	Palm Beach
Pinecrest	Miami-Dade	South Daytona	Volusia
Pinellas Park	Pinellas	South Miami	Miami-Dade

Table 18. Location of Florida Cities

(Continued)

City	County	City	County
South Palm Beach	Palm Beach	Weeki Wachee	Hernando
South Pasadena	Pinellas	Welaka	Putnam
Southwest Ranches	Broward	Wellington	Palm Beach
Springfield	Bay	Westlake*****	Palm Beach
Starke	Bradford	West Melbourne	Brevard
Stuart	Martin	West Miami	Miami-Dade
Sunny Isles Beach	Miami-Dade	West Palm Beach	Palm Beach
Sunrise	Broward	West Park	Broward
Surfside	Miami-Dade	Weston	Broward
Sweetwater	Miami-Dade	Westville	Holmes
Tallahassee	Leon	Wewahitchka	Gulf
Tamarac	Broward	White Springs	Hamilton
Tampa	Hillsborough	Wildwood	Sumter
Tarpon Springs	Pinellas	Williston	Levy
Tavares	Lake	Wilton Manors	Broward
Temple Terrace	Hillsborough	Windermere	Orange
Tequesta	Palm Beach	Winter Garden	Orange
Titusville	Brevard	Winter Haven	Polk
Treasure Island	Pinellas	Winter Park	Orange
Trenton	Gilchrist	Winter Springs	Seminole
Umatilla	Lake	Worthington Springs	Union
Valparaiso	Okaloosa	Yankeetown	Levy
Venice	Sarasota	Zephyrhills	Pasco
Vernon	Washington	Zolfo Springs	Hardee
Vero Beach	Indian River		
Virginia Gardens	Miami-Dade		
Waldo	Alachua		
Wauchula	Hardee		
Wausau	Washington		
Webster	Sumter		

* The Village of Estero was incorporated on December 31, 2014.

** The City of Hastings was disincorporated on February 28, 2018.

*** The Village of Indiantown was incorporated on December 31, 2017.

**** The City of Islandia was disincorporated on March 6, 2012.

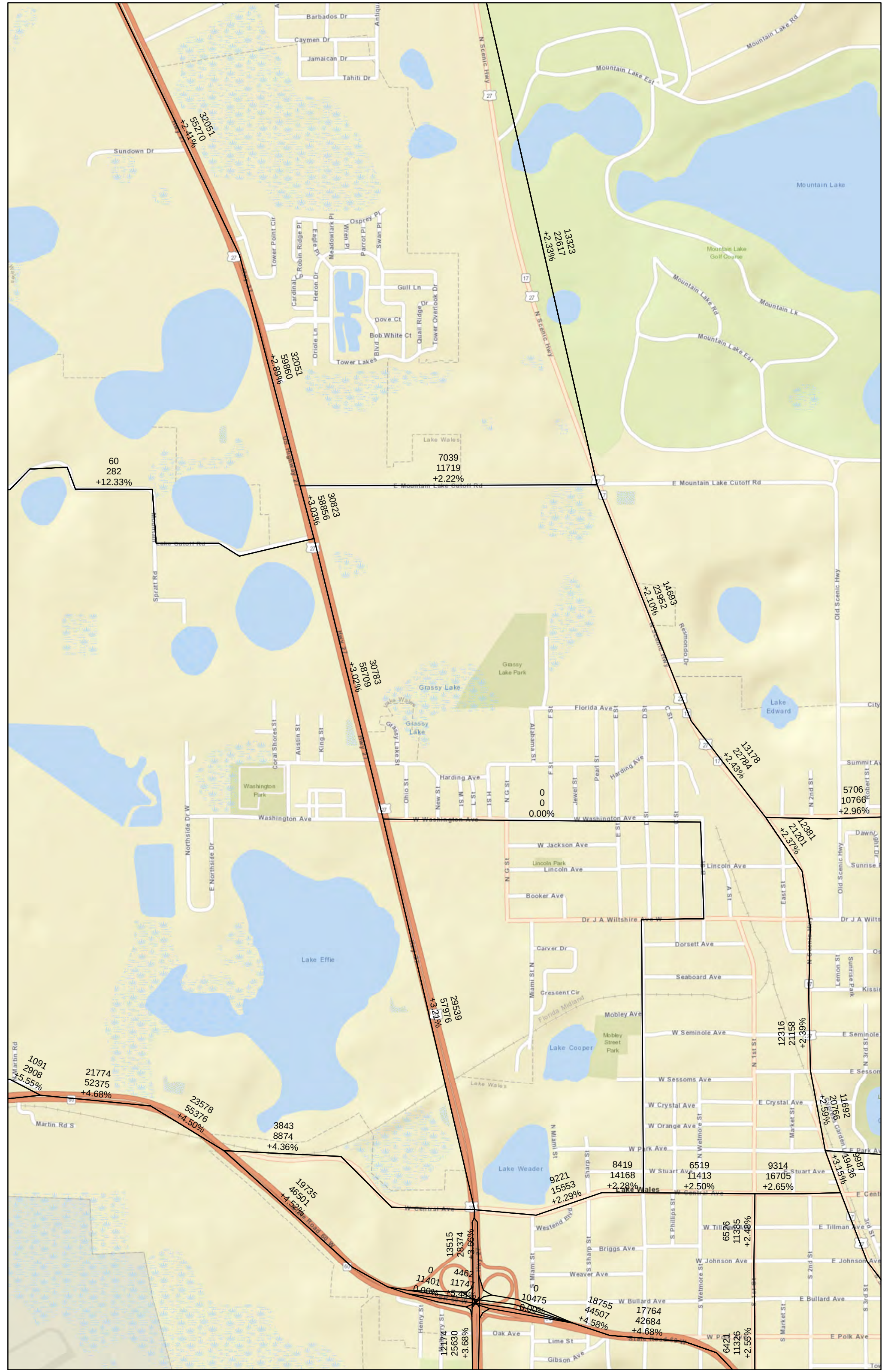
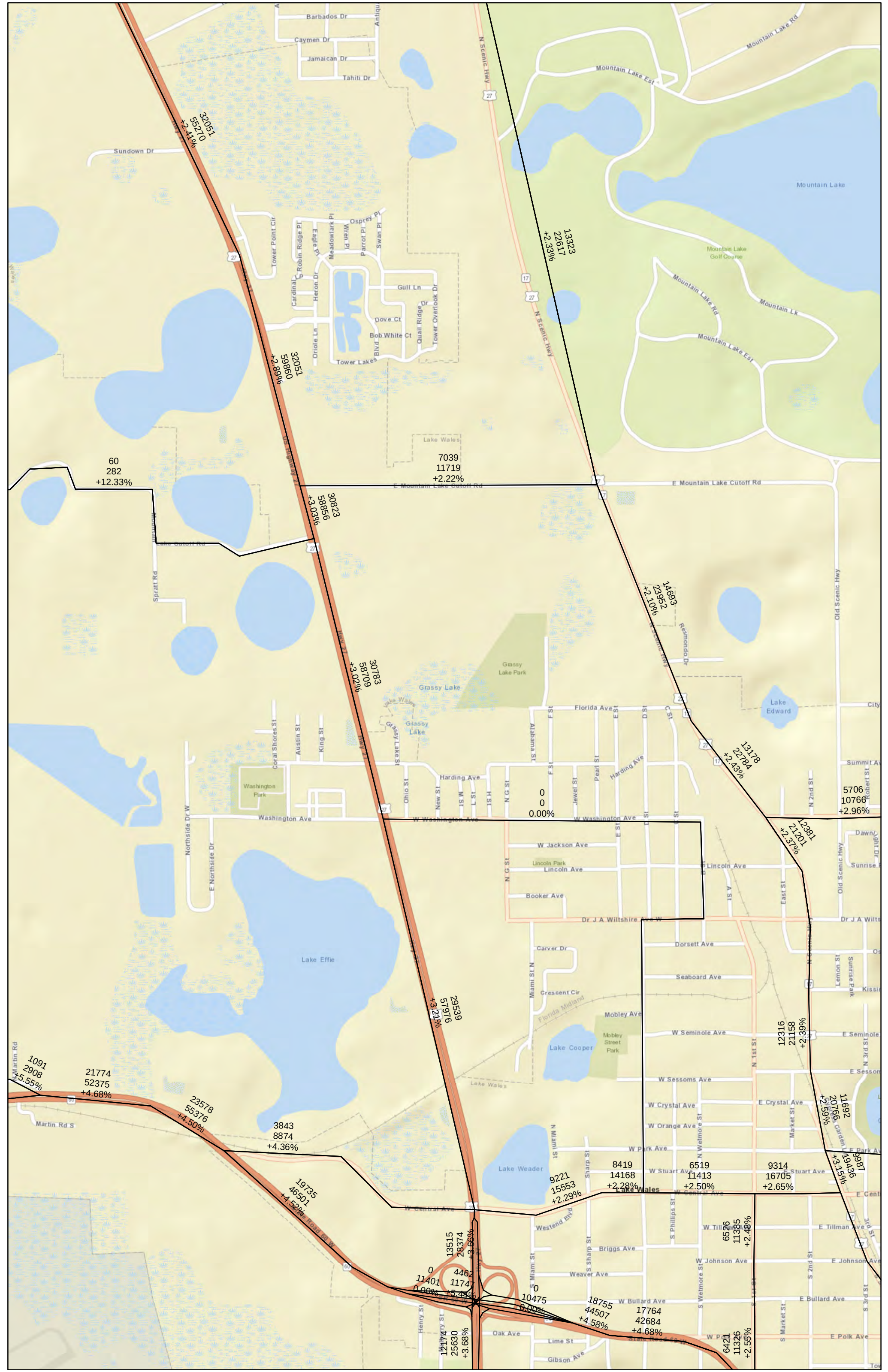
***** The City of Westlake was incorporated on June 20, 2016.

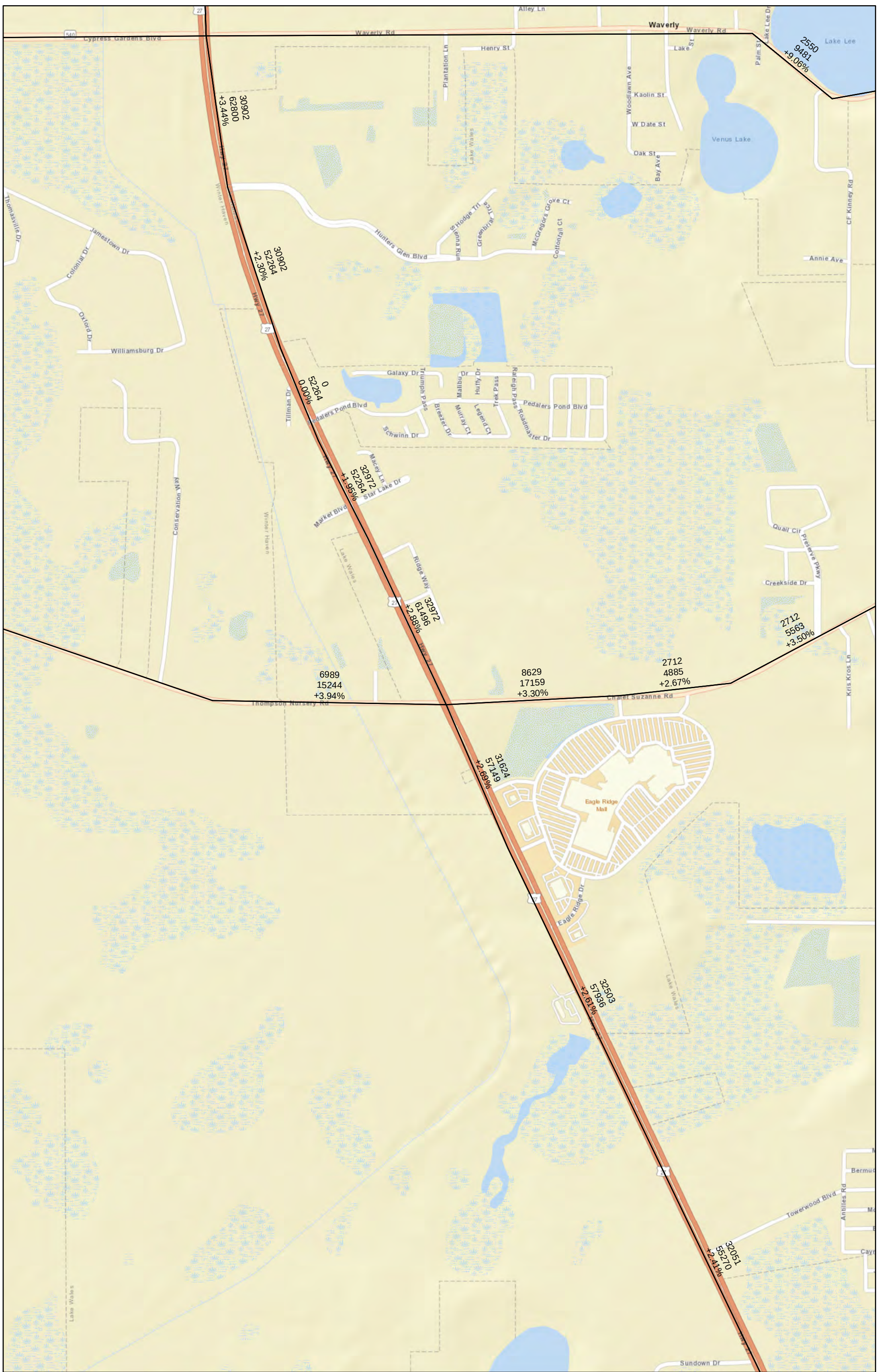


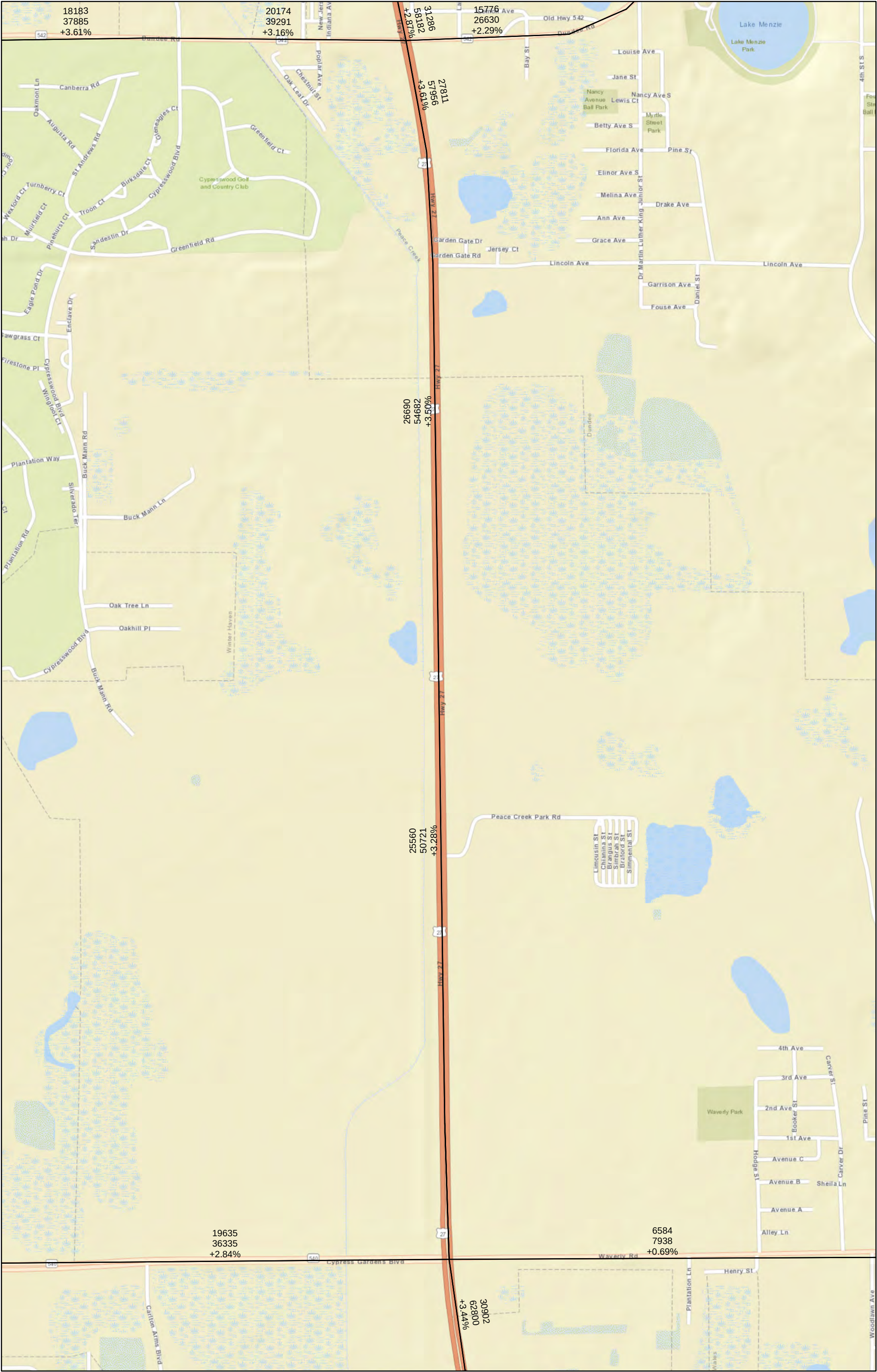
Ayers Technological Plaza
720 SW 2nd Ave, Suite 150
P.O. Box 117148
Gainesville, Florida 32611-7148
phone: 352-392-0171
www.bebr.ufl.edu

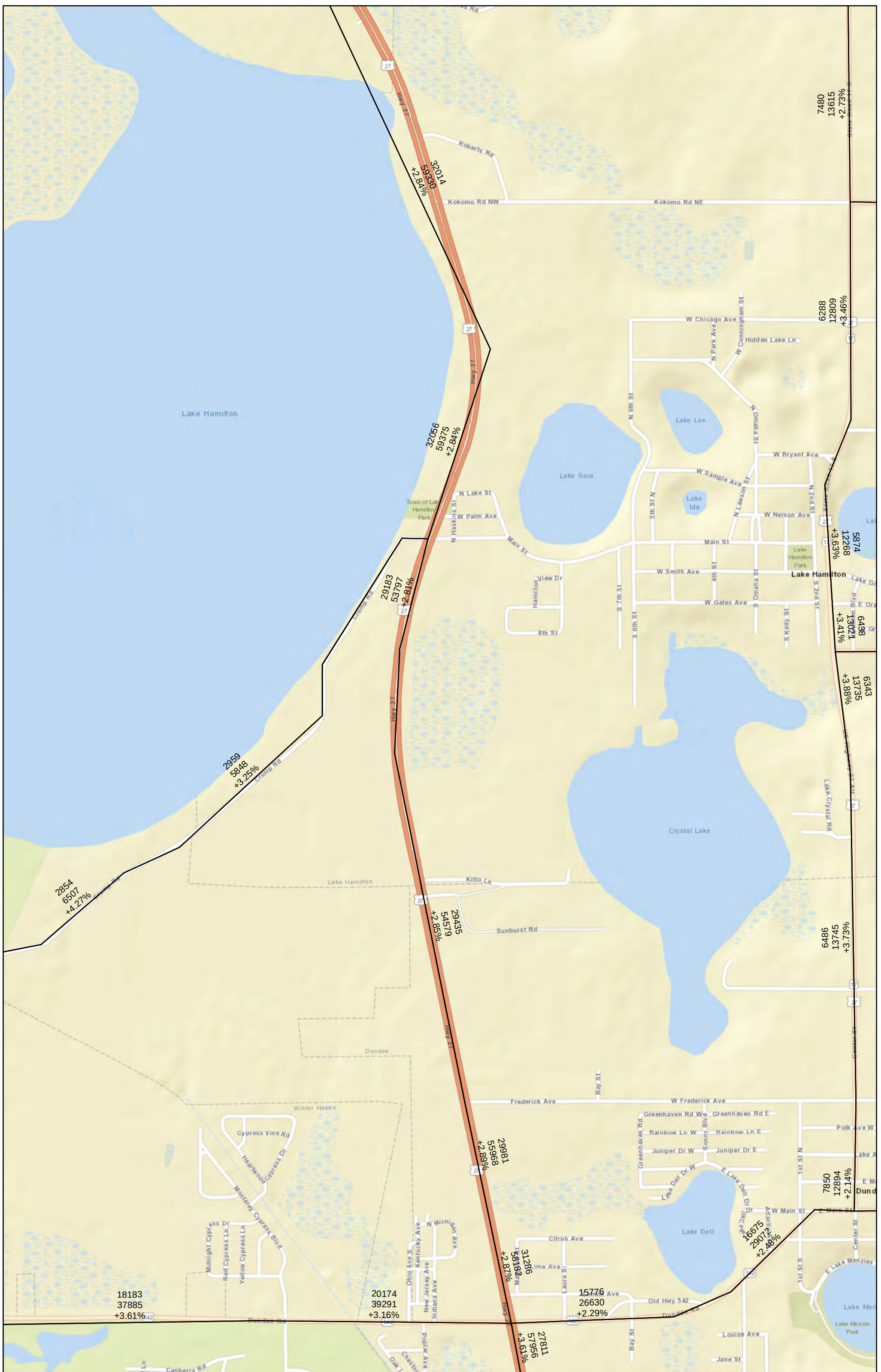


D1 TDM Model Growth Rates Map

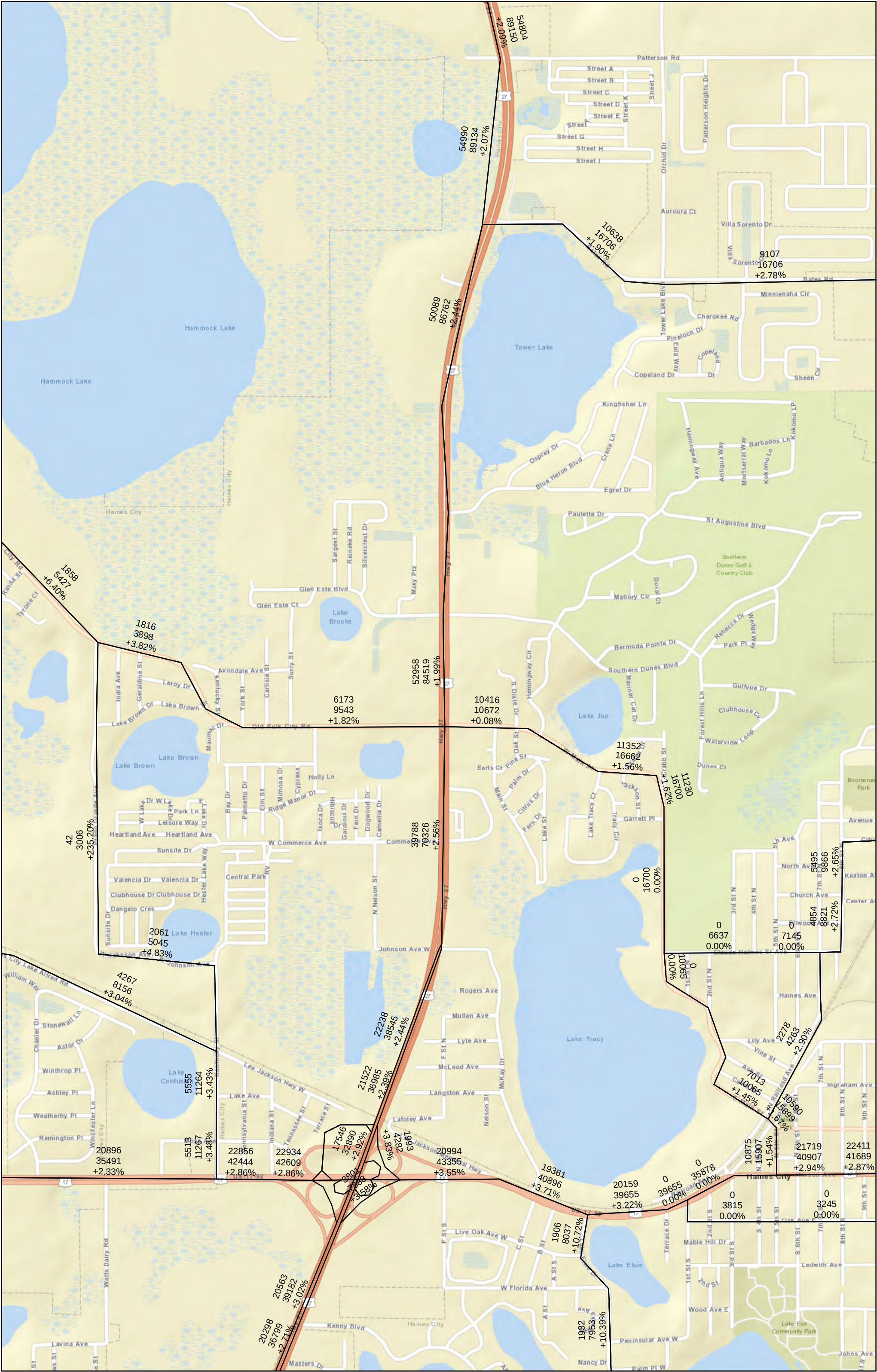


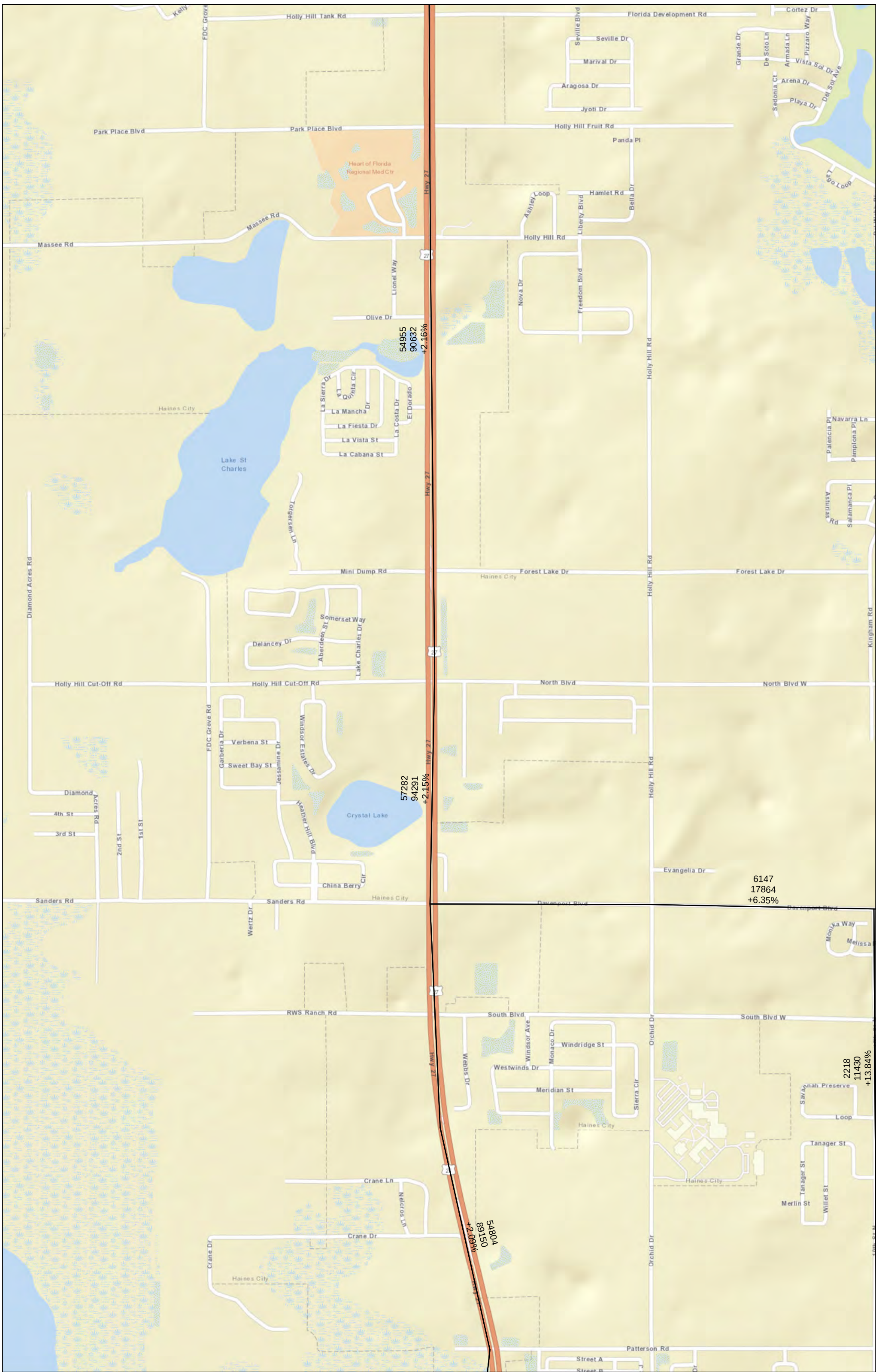


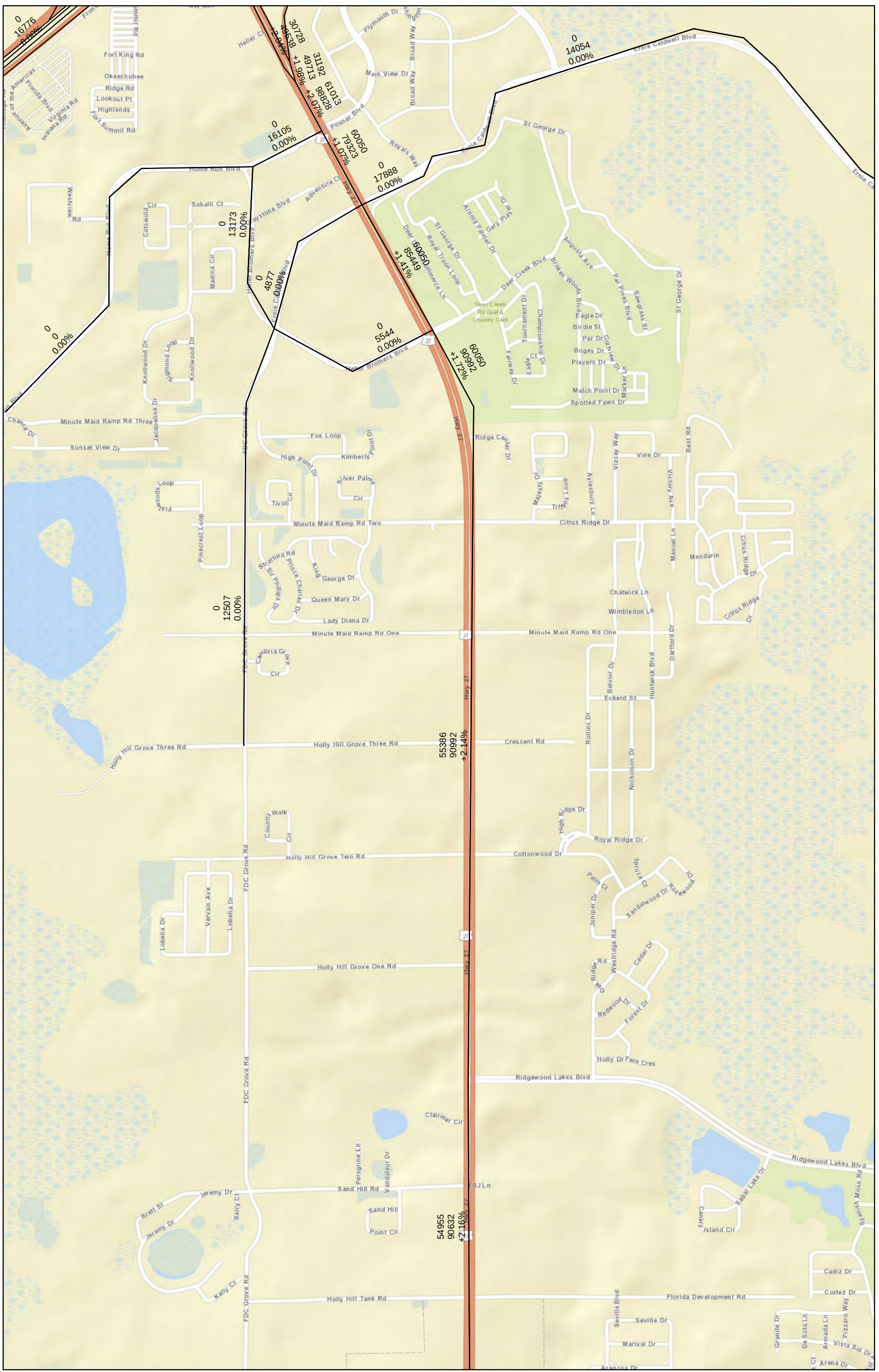


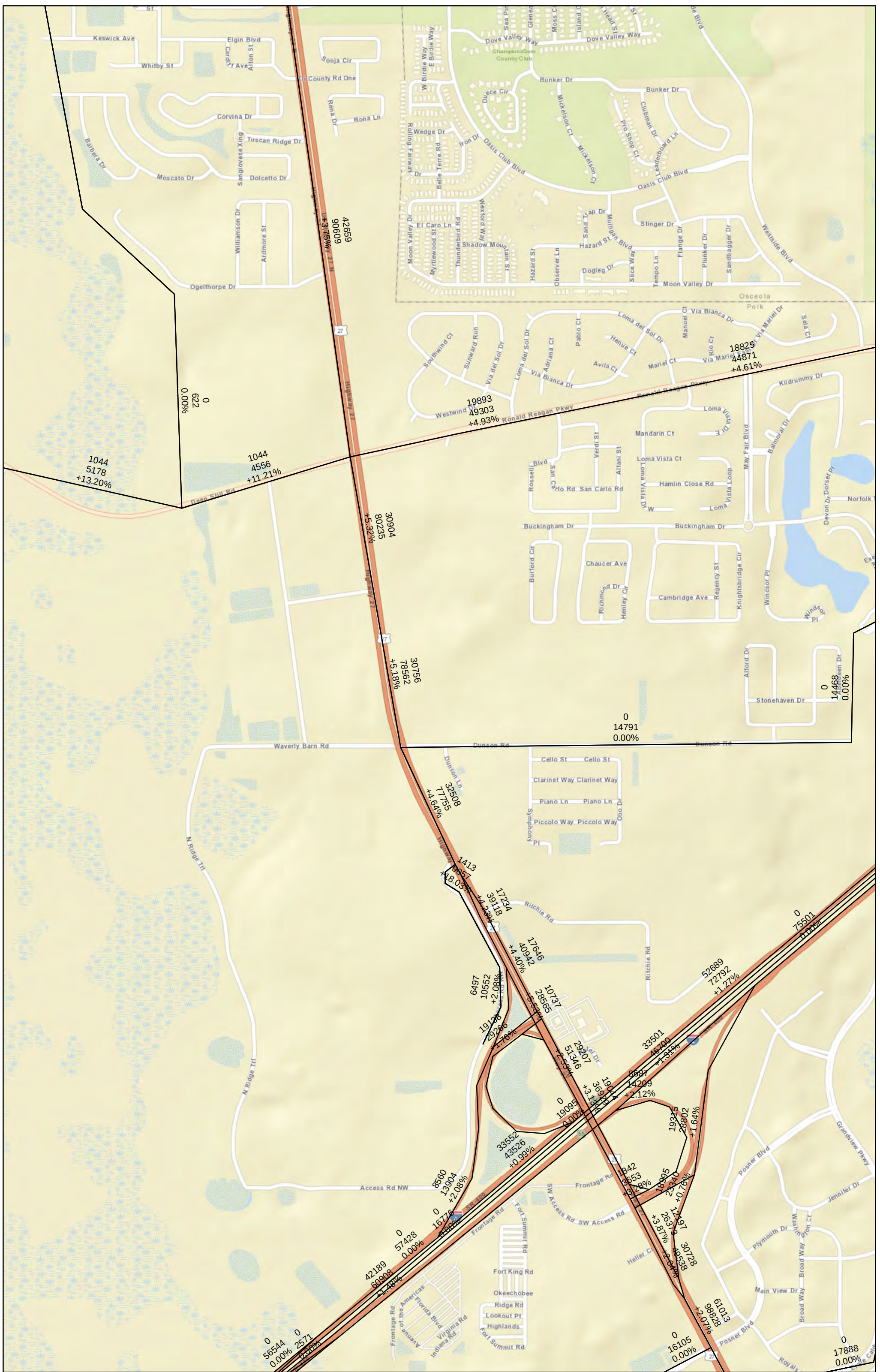


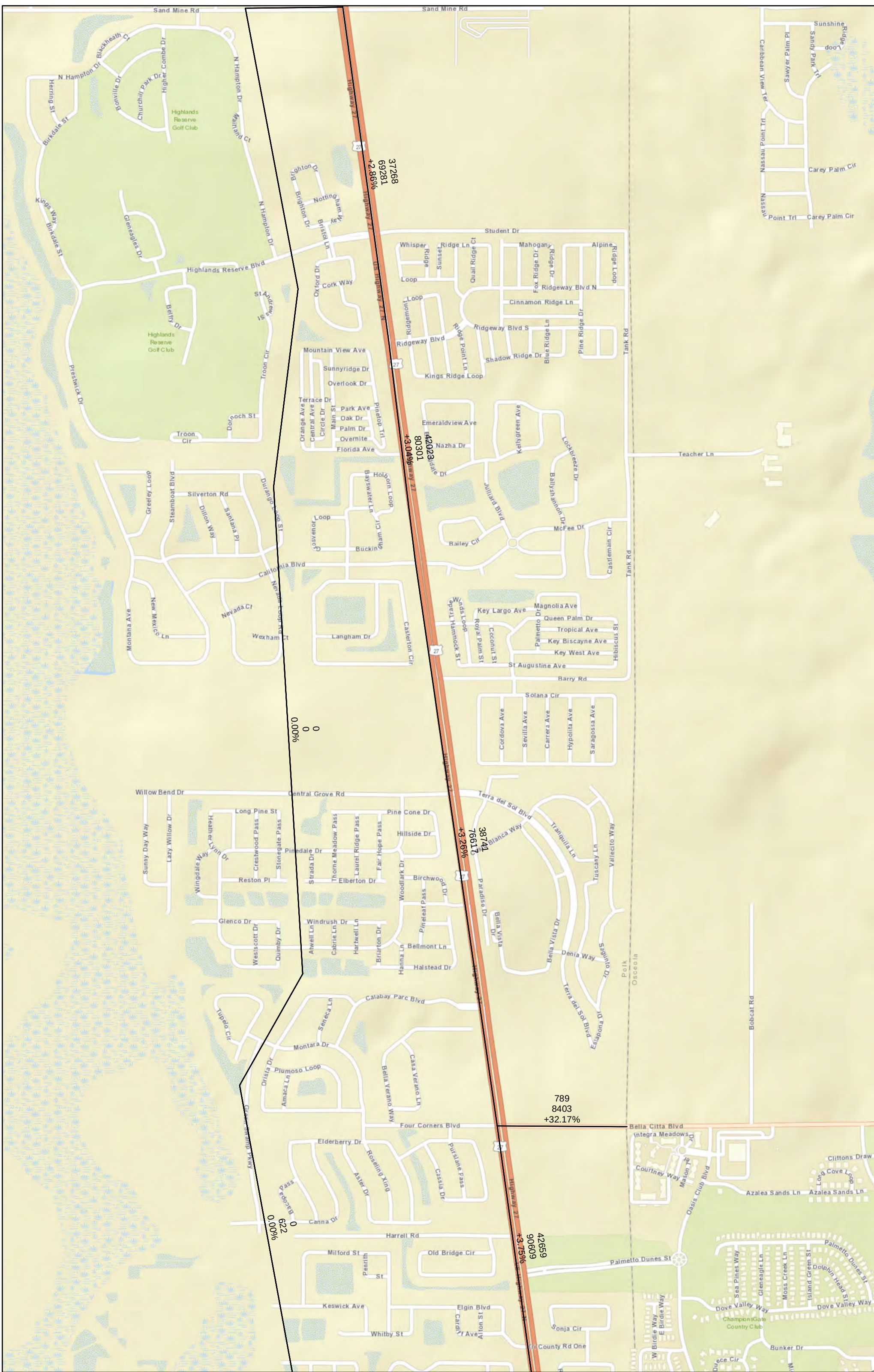


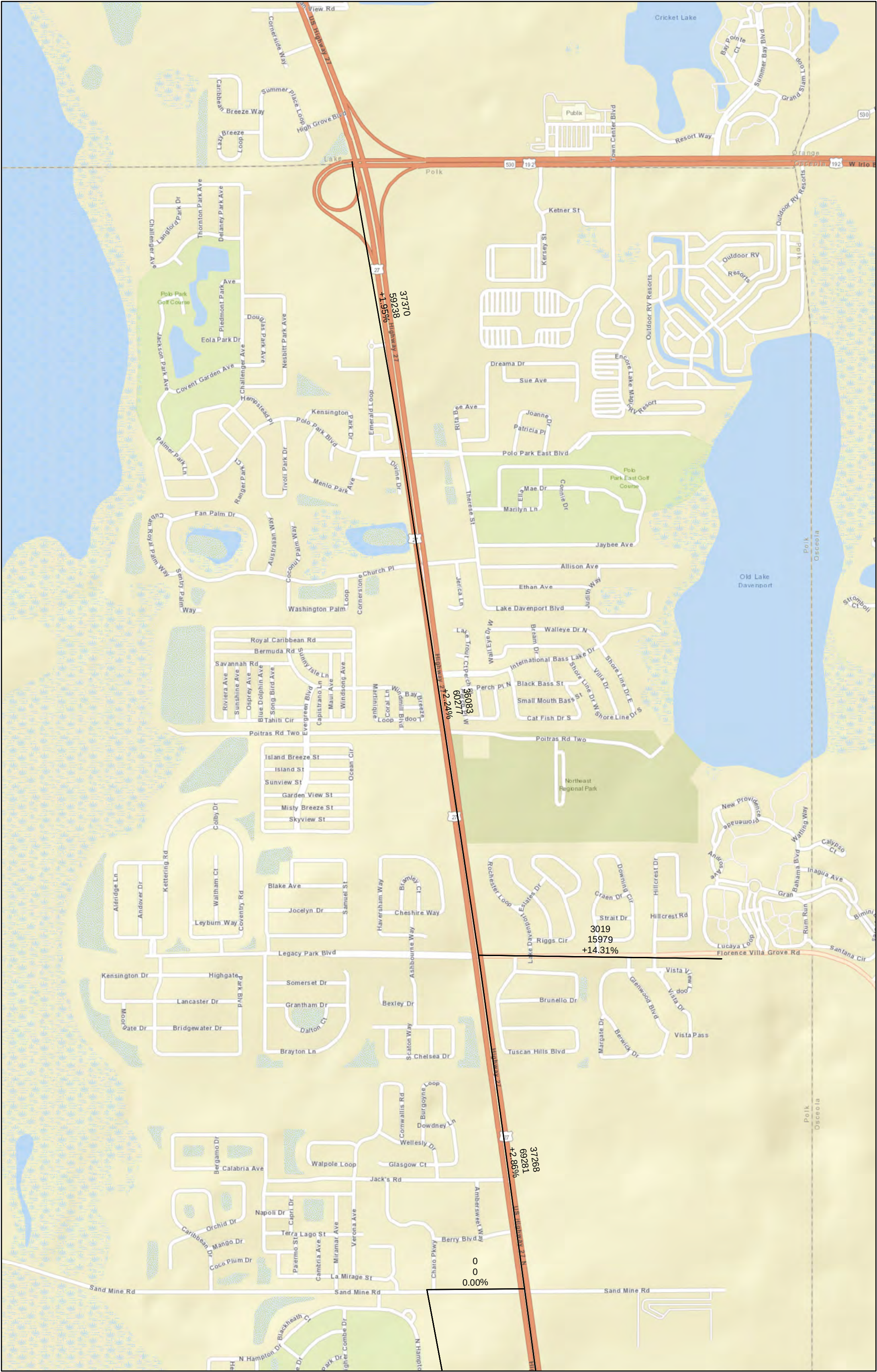












FTO Historical AADT Trends

Count Site	Description	AGR	Slope	Trend	BEBR	R^2
165127	NORTH OF CENTRAL AVENUE	1.39%	1.48%	1.47%	1.26%	0.78
165199	SOUTH OF CR 17A/THOMPSON NURSERY ROAD	0.87%	2.19%	2.64%	1.26%	0.56
160146	SOUTH OF SR 540/WAVERLY ROAD	2.36%	2.20%	2.23%	1.26%	0.78
160100	0.7 MI SOUTH OF SR 542/DUNDEE ROAD	2.98%	3.01%	3.16%	1.26%	0.91
160098	NORTH OF HUGHES ROAD	3.45%	2.91%	2.83%	1.26%	0.78
160097	SOUTH OF SR 600/US 17/92	2.74%	2.48%	2.41%	1.26%	0.84
165051	NORTH OF SR 600/US 17/92	0.93%	1.72%	1.70%	1.26%	0.63
160085	N OF CR17/OLD POLK CITY RD	0.93%	1.67%	1.70%	1.26%	0.45
165210	NORTH OF BATES ROAD	0.82%	1.02%	0.94%	1.26%	0.31
160310	280' S OF S HOLLY HILL TANK RD	3.86%	3.14%	3.02%	1.26%	0.86
160127	NORTH OF SR 400/I-4	0.85%	-0.93%	-1.71%	1.26%	0.06
165209	SOUTH OF SR 530/US 192	2.65%	2.28%	2.32%	1.26%	0.87

Count Site	Description	AGR*	Slope**	Trend***	BEBR****	R^2
165128	SR 60 - East of US 27	3.41%	2.53%	2.34%	1.26%	0.85
160069	SR 60 - West of US 27	2.78%	2.43%	2.31%	1.26%	0.70
164678	W Washington Ave - East of New St	1.22%	-0.03%	0.00%	1.26%	0.00
164935	Mountain Lake Cutoff Rd - West of US 27	201.85%	-19.67%	-24.73%	1.26%	0.77
164934	E Mountain Lake Cutoff Rd - East of US 27	4.46%	4.73%	4.99%	1.26%	0.86
164756	Chalet Suzanne Rd - West of Preserve Pkwy	4.21%	3.52%	3.42%	1.26%	0.91
160123	Cypress Gardens Blvd - West of US 27	2.12%	2.72%	2.87%	1.26%	0.77
164354	Waverly Rd - East of US 27	2.02%	2.10%	1.92%	1.26%	0.54
160033	Dundee Rd - West of US 27	2.78%	2.40%	2.21%	1.26%	0.76
164703	Kokomo Rd - East of US 27	7.35%	4.90%	4.72%	1.26%	0.93
163106	SR 544 - West of US 27	3.20%	2.17%	1.69%	1.26%	0.45
160021	SR 544 - East of US 27	3.31%	1.71%	1.21%	1.26%	0.50
160035	US 17 - West of US 27	4.27%	2.82%	2.51%	1.26%	0.79
160174	Bates Rd - East of US 27	0.28%	0.92%	1.17%	1.26%	0.05
160108-1	EB I-4 - West of US 27	5.64%	3.67%	3.57%	1.26%	0.89
160108-2	WB I-4 - West of US 27	6.21%	3.80%	3.65%	1.26%	0.90
160111-1	EB I-4 - East of US 27	4.28%	3.43%	3.42%	1.26%	0.91
160111-2	WB I-4 - East of US 27	3.98%	3.26%	3.24%	1.26%	0.91
164103	Ronald Reagan Pkwy - East of US 27	2.49%	2.49%	1.88%	1.26%	0.22
110470	US 192 - East of US 27	3.81%	4.35%	4.99%	1.26%	0.79

Growth Rate Comparisons

Roadway Segment/Location	Historical AADT Growth Rate from Florida Traffic Online (FTO)	D1 Travel Demand Model Growth Rate (2010 - 2040)	Polk County BEBR Growth Rate (Medium)	Selected Growth Rate
US 27 - South of SR 60	-	3.48%	1.26%	2.75%
US 27 - North of SR 60 / South of W Central Ave	-	3.65%		
US 27 - North of W Central Ave / South of Washington Ave	1.48%	3.21%		
US 27 - North of Washington Ave / South of Mountain Lake Cutoff Rd	-	3.02%		
US 27 - North of Mountain Lake Cutoff Rd / South of E Mountain Lake Cutoff Rd	-	3.03%		
US 27 - North of E Mountain Lake Cutoff Rd / South of Tower Point Cir	-	2.89%		
US 27 - North of Tower Point Cir	-	2.41%		
US 27 - South of Eagle Ridge Mall Ent S	-	2.61%		
US 27 - North of Eagle Ridge Mall Ent S / South of Thompson Nursery Rd-Chalet Suzanne Rd	2.19%	2.69%		
US 27 - North of Thompson Nursery Rd-Chalet Suzanne Rd / South of Market Blvd-Star Lake Dr	-	2.88%		
US 27 - North of Market Blvd-Star Lake Dr	-	1.95%		
US 27 - South of SR 540-Cypress Gardens Blvd-Waverly Rd	2.20%	3.44%		
US 27 - North of SR 540-Cypress Gardens Blvd-Waverly Rd	-	3.28%		
US 27 - South of Lincoln Ave	3.01%	3.50%		
US 27 - North of Lincoln Ave / South of SR 542-Dundee Rd	-	3.61%		
US 27 - North of SR 542-Dundee Rd	-	2.87%		
US 27 - South of Frederick Ave	-	2.89%		
US 27 - North of Frederick Ave	-	2.85%		
US 27 - South of Crump Rd-Main St	-	2.81%		
US 27 - North of Crump Rd-Main St / South of Kokomo Rd	-	2.84%		
US 27 - North of Kokomo Rd	-	2.84%		
US 27 - South of Sunshine Dr-Paradise Island Pl	2.91%	2.84%		
US 27 - North of Sunshine Dr-Paradise Island Pl / South of SR 544-Lucerne Park Rd-Scenic Hwy	-	2.77%		
US 27 - North of SR 544-Lucerne Park Rd-Scenic Hwy	-	2.86%		
US 27 - South of SR 600-US 17/92	2.48%	2.86%		
US 27 - North of SR 600-US 17/92 / South of Johnson Ave	1.72%	2.42%		
US 27 - North of Johnson Ave / South of Commerce Ave	-	2.56%		
US 27 - North of Commerce Ave / South of Old Polk City Rd-W Main St	-	2.56%		
US 27 - North of Old Polk City Rd-W Main St / South of Glen Este Blvd-Southern Dunes Blvd	1.67%	1.99%		
US 27 - North of Glen Este Blvd-Southern Dunes Blvd	-	2.44%		
US 27 - South of Bates Rd	-	2.44%		
US 27 - North of Bates Rd / South of Patterson Rd	1.02%	2.07%		2.00%
US 27 - North of Patterson Rd	-	2.09%		
US 27 - South of RWS Ranch Rd-South Blvd	-	2.09%		
US 27 - North of RWS Ranch Rd-South Blvd / South of CR 547-Sanders Rd-Davenport Blvd	-	2.09%		
US 27 - North of CR 547-Sanders Rd-Davenport Blvd / South of Holly Hill Cutoff Rd-North Blvd	-	2.15%		
US 27 - North of Holly Hill Cutoff Rd-North Blvd / South of La Casa Del Sol Blvd	-	2.16%		
US 27 - North of La Casa Del Sol Blvd / South of Massee Rd-Holly Hill Rd	-	2.16%		
US 27 - North of Massee Rd-Holly Hill Rd / South of Holly Hill Tank Rd-Florida Development Rd	3.14%	2.16%		
US 27 - North of Holly Hill Tank Rd-Florida Development Rd / South of Ridgewood Lakes Blvd	-	2.16%		
US 27 - North of Ridgewood Lakes Blvd / South of Holly Hill Grove Two Rd-Cottonwood Dr	-	2.14%		
US 27 - North of Holly Hill Grove Two Rd-Cottonwood Dr / South of Minute Maid Raid Rd Two-Citrus Ridge Dr	-	2.14%		
US 27 - North of Minute Maid Raid Rd Two-Citrus Ridge Dr	-	2.14%		
US 27 - South of Heller Bros Blvd-Deer Creek Blvd	-	1.72%		
US 27 - North of Heller Bros Blvd-Deer Creek Blvd	-	1.41%		
US 27 - South of Home Run Blvd-Posner Blvd	-	1.07%		
US 27 - North of Home Run Blvd-Posner Blvd / South of I-4	-	2.07%		
US 27 - North of I-4 / South of Access Rd-Ritchie Bros Driveway	-0.93%	4.45%		4.00%
US 27 - North of Access Rd-Ritchie Bros Driveway / South of Waverly Barn Rd-Dunson Rd	-	4.64%		
US 27 - North of Waverly Barn Rd-Dunson Rd	-	5.18%		
US 27 - South of Dean Still Rd-Ronald Reagan Pkwy	-	5.32%		
US 27 - North of Dean Still Rd-Ronald Reagan Pkwy / South of Ogelthorpe Dr	-	3.75%		
US 27 - North of Ogelthorpe Dr / South of Elgin Blvd-Tri County Rd One	-	3.75%	2.75%	2.75%
US 27 - North of Elgin Blvd-Tri County Rd One / South of Four Corners Blvd-Bella Citta Blvd	-	3.75%		
US 27 - North of Four Corners Blvd-Bella Citta Blvd / South of Central Grove Rd-Terra del Sol Blvd	-	3.26%		
US 27 - North of Central Grove Rd-Terra del Sol Blvd / South of California Blvd-McFee Dr	-	3.26%		
US 27 - North of California Blvd-McFee Dr / South of Highlands Reserve Blvd-Student Dr	-	3.04%		
US 27 - North of Highlands Reserve Blvd-Student Dr / South of Sand Mine Rd	-	2.86%		
US 27 - North of Sand Mine Rd / South of Legacy Park Blvd-Florence Villa Grove Rd	-	2.86%		
US 27 - North of Legacy Park Blvd-Florence Villa Grove Rd / South of Polo Park Blvd	-	2.24%		
US 27 - North of Polo Park Blvd / South of US 192	2.28%	1.95%		

Roadway Segment/Location	Category	Historical AADT Growth Rate from Florida Traffic Online (FTO)	D1 Travel Demand Model Growth Rate (2010 - 2040)	Polk County BEBR Growth Rate (Medium)	Selected Growth Rate
SR 60 - West of US 27	Broader Roadway Network	2.43%	4.52%	1.26%	3.50%
SR 60 - East of US 27	Broader Roadway Network	2.53%	4.58%		
W Central Ave - West of US 27	Minimal Roadway Connectivity	-	4.36%		3.00%
W Central Ave - East of US 27	Minimal Roadway Connectivity	-	2.29%		
Washington Ave - West of US 27	Minimal Roadway Connectivity	-	-		1.00%
Washington Ave - East of US 27	Minimal Roadway Connectivity	-0.03%	0.00%		
Mountain Lake Cutoff Rd - West of US 27	Minimal Roadway Connectivity	-19.67%	12.33%		0.50%
E Mountain Lake Cutoff Rd - East of US 27	Minimal Roadway Connectivity	4.73%	2.22%		3.00%
Vanguard School Ent - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Tower Point Cir - East of US 27	Isolated Access Residential/Commercial Area	-	-		
Eagle Ridge Mall Ent S - East of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Thompson Nursery Rd - West of US 27	Broader Roadway Network	-	3.94%		
Chalet Suzanne Rd - East of US 27	Broader Roadway Network	4.73%	3.30%		4.00%
Market Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Star Lake Dr - East of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
SR 540-Cypress Gardens Blvd - West of US 27	Broader Roadway Network	2.72%	2.84%		2.75%
Waverly Rd - East of US 27	Broader Roadway Network	2.10%	0.69%		1.00%
Lincoln Ave - East of US 27	Minimal Roadway Connectivity	-	-		2.00%
SR 542-Dundee Rd - West of US 27	Broader Roadway Network	2.40%	3.16%		
SR 542-Dundee Rd - East of US 27	Broader Roadway Network	-	2.29%		3.00%
FairBridge Inn Express Dundee - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Frederick Ave - East of US 27	Minimal Roadway Connectivity	-	-		1.00%
Crump Rd - West of US 27	Minimal Roadway Connectivity	-	3.25%		1.00%
Main St - East of US 27	Minimal Roadway Connectivity	-	-		1.00%
Kokomo Rd - East of US 27	Broader Roadway Network	4.90%	-		4.00%
Sunshine Dr - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Paradise Island Pl - East of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
SR 544-Lucerne Park Rd - West of US 27	Broader Roadway Network	2.17%	3.96%		
SR 544-Scenic Hwy - East of US 27	Broader Roadway Network	1.71%	10.86%		4.00%
SR 600-US 17/92 - West of US 27	Broader Roadway Network	2.82%	2.86%		
SR 600-US 17/92 - East of US 27	Broader Roadway Network	-	3.55%		3.50%
Johnson Ave W - West of US 27	Minimal Roadway Connectivity	-	-		1.00%
Johnson Ave W - East of US 27	Minimal Roadway Connectivity	-	-		1.00%
Commerce Ave - West of US 27	Minimal Roadway Connectivity	-	-		0.50%
Pilot Travel Center Entrance - East of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Old Polk City Rd - West of US 27	Broader Roadway Network	-	1.82%		2.00%
W Main St - East of US 27	Broader Roadway Network	-	0.08%		0.50%
Glen Este Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Southern Dunes Blvd - East of US 27	Minimal Roadway Connectivity	-	-		0.50%
Bates Rd - West of US 27	Isolated Access Residential/Commercial Area	-	-		3.00%
Bates Rd - East of US 27	Broader Roadway Network	0.92%	1.90%		2.00%
Patterson Rd - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Patterson Rd - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
RWS Ranch Rd - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
South Blvd - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
Sanders Rd - West of US 27	Minimal Roadway Connectivity	-	-		0.50%
Davenport Blvd - East of US 27	Minimal Roadway Connectivity	-	6.35%		3.00%
Holly Hill Cutoff Rd - West of US 27	Minimal Roadway Connectivity	-	-		1.00%
North Blvd - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
La Casa Del Sol Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-		0.50%
Massee Rd - West of US 27	Minimal Roadway Connectivity	-	-		
Holly Hill Rd - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
Holly Hill Tank Rd - West of US 27	Minimal Roadway Connectivity	-	-		3.00%
Florida Development Rd - East of US 27	Minimal Roadway Connectivity	-	-		1.00%
Ridgewood Lakes Blvd - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
Holly Hill Grove Two Rd - West of US 27	Minimal Roadway Connectivity	-	-		3.00%
Cottonwood Dr - East of US 27	Minimal Roadway Connectivity	-	-		0.50%
Minute Maid Ramp Rd Two - West of US 27	Minimal Roadway Connectivity	-	-		
Citrus Ridge Dr - East of US 27	Minimal Roadway Connectivity	-	-		3.00%
Heller Bros Blvd - West of US 27	Minimal Roadway Connectivity	-	-		3.00%
Deer Creek Blvd - East of US 27	Minimal Roadway Connectivity	-	-		0.50%
Home Run Blvd - West of US 27	Minimal Roadway Connectivity	-	-		1.00%
Posner Blvd - East of US 27	Minimal Roadway Connectivity	-	-		4.00%
EB I-4 Ramp Term- West of US 27	Broader Roadway Network	3.67%	2.80%		2.00%

EB I-4 Ramp Term- East of US 27	Broader Roadway Network	3.80%	2.70%	5.00%
WB I-4 Ramp Term - East of US 27	Broader Roadway Network	3.43%	2.49%	3.00%
WB I-4 Ramp Term - West of US 27	Broader Roadway Network	3.26%	2.48%	
Access Rd - West of US 27	Isolated Access Residential/Commercial Area	-	18.03%	5.00%
Ritchie Bros Driveway - East of US 27	Isolated Access Residential/Commercial Area	-	-	1.00%
Waverly Barn Rd - West of US 27	Minimal Roadway Connectivity	-	-	1.00%
Dunson Rd - East of US 27	Minimal Roadway Connectivity	-	-	1.00%
Dean Still Rd - West of US 27	Broader Roadway Network	-	11.21%	1.00%
Ronald Reagan Pkwy - East of US 27	Broader Roadway Network	2.49%	4.93%	4.00%
Ogelthorpe Dr - West of US 27	Isolated Access Residential/Commercial Area	-	-	2.00%
Elgin Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
Tri County Rd One - East of US 27	Isolated Access Residential/Commercial Area	-	-	
Four Corners Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	1.00%
Bella Citta Blvd - East of US 27	Minimal Roadway Connectivity	-	32.17%	5.00%
Central Grove Rd - West of US 27	Isolated Access Residential/Commercial Area	-	-	2.00%
Terra del Sol Blvd - East of US 27	Isolated Access Residential/Commercial Area	-	-	5.00%
California Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
McFee Dr - East of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
Highlands Reserve Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
Student Dr - East of US 27	Isolated Access Residential/Commercial Area	-	-	3.00%
Sand Mine Rd - West of US 27	Isolated Access Residential/Commercial Area	-	-	1.00%
Sand Mine Rd - East of US 27	Isolated Access Residential/Commercial Area	-	-	3.00%
Legacy Park Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
Florence Villa Grove Rd - East of US 27	Isolated Access Residential/Commercial Area	-	14.31%	3.00%
Polo Park Blvd - West of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
Polo Park Blvd - East of US 27	Isolated Access Residential/Commercial Area	-	-	0.50%
US 192 - East of US 27	Broader Roadway Network	4.35%	-	4.00%

APPENDIX C

2045 and 2030 No-Build Traffic Volume Databases

(Provided Electronically)

APPENDIX D

2045 and 2030 No-Build Roadway Segment LOS Calculations

2045 Segment AADT							
	Segment	AADT	% Difference (Red if > 10%)	LOS	Roadway Characteristics	LOS C Threshold ³	LOS D Threshold ³
1	From W Central Avenue to E Mountain Lake Cutoff Road ¹	56,000		C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		57,500	2.7%				
		57,500	0.0%				
		57,500	0.0%				
2	From E Mountain Lake Cutoff Road to Cypress Gardens Boulevard (SR 540) ¹	64,500	12.2%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		67,000	3.9%				
		62,500	6.7%				
		62,500	0.0%				
		67,000	7.2%				
		69,500	3.7%				
3	From Cypress Gardens Boulevard to Dundee Road (SR 542) ¹	60,000	13.7%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		62,500	4.2%				
		65,500	4.8%				
4	From Dundee Road (SR 542) to Hughes Road ¹	58,500	10.7%	C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
5	North of Hughes Road to just south of Scenic Highway (SR 544) ¹	65,500	12.0%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		69,500	6.1%				
6	From Scenic Highway (SR 544) to just south of Bates Road ¹	83,500	20.1%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		83,500	0.0%				
		89,000	6.6%				
		96,000	7.9%				
		91,500	4.7%				
		98,500	7.7%				
7	Just north of Bates Road ¹	79,500	19.3%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
8	From just south of Davenport Boulevard to just north of Minute Maid Ramp Road 2/ Citrus Ridge Drive ¹	88,500	11.3%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		84,000	5.1%				
		84,000	0.0%				
		88,000	4.8%				
		92,500	5.1%				
		94,500	2.2%				
		88,000	6.9%				
9	Just south of Heller Brothers Boulevard/ Deer Creek Boulevard ¹	99,500	13.1%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
10	Heller Brothers Boulevard/ Deer Creek Boulevard to Home Run Boulevard/Posner Boulevard ¹	85,500	14.1%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		82,500	3.5%				
		88,500	7.3%				
11	Home Run Boulevard/Posner Boulevard to NB US 27 On-Ramp to EB I-4 ¹	110,000	24.3%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
12	From NB US 27 On-Ramp to EB I-4 to California Boulevard/McFee Dr ²	69,500	15.8%	F	Class I, 6 lane divided, right turn lanes (+5%)	54,705	56,175
		86,500	2.3%				
13	California Boulevard/McFee Dr to US 192 ²	72,500	16.2%	F	Class I, 6 lane divided, right turn lanes (+5%)	54,705	56,175

1: FDOT Generalized Annual Average Daily Volumes for Florida's Urbanized Areas (Table 1)

2: FDOT Generalized Annual Average Daily Volumes for Florida's Transitioning Areas and Areas Over 5,000 Not In Urbanized Areas (Table 2)

3: LOS thresholds for state signalized arterials, class I (Table 1 or 2, based on area type - refer to above footnotes)

2030 Segment AADT							
	Segment	AADT	% Difference (Red if > 10%)	LOS	Roadway Characteristics	LOS C Threshold ³	LOS D Threshold ³
1	From W Central Avenue to E Mountain Lake Cutoff Road ¹	42,500		C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		44,000	3.5%				
		44,000	0.0%				
		44,000	0.0%				
2	From E Mountain Lake Cutoff Road to Cypress Gardens Boulevard (SR 540) ¹	49,000	11.4%	C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		51,000	4.1%				
		48,000	5.9%				
		48,000	0.0%				
		51,000	6.3%				
		53,000	3.9%				
3	From Cypress Gardens Boulevard to Dundee Road (SR 542) ¹	46,000	13.2%	C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		48,000	4.3%				
		50,000	4.2%				
4	From Dundee Road (SR 542) to Hughes Road ¹	44,500	11.0%	C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
5	North of Hughes Road to just south of Scenic Highway (SR 544) ¹	50,000	12.4%	C	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		53,000	6.0%				
6	From Scenic Highway (SR 544) to just south of Bates Road ¹	64,000	20.8%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		64,000	0.0%				
		68,000	6.3%				
		73,000	7.4%				
		70,000	4.1%				
		75,000	7.1%				
7	Just north of Bates Road ¹	64,000	14.7%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
8	From just south of Davenport Boulevard to just north of Minute Maid Ramp Road 2/ Citrus Ridge Drive ¹	71,500	11.7%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		67,500	5.6%				
		67,500	0.0%				
		70,500	4.4%				
		74,500	5.7%				
		76,500	2.7%				
		70,500	7.8%				
9	Just south of Heller Brothers Boulevard/ Deer Creek Boulevard ¹	80,000	13.5%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
10	Heller Brothers Boulevard/ Deer Creek Boulevard to Home Run Boulevard/Posner Boulevard ¹	69,000	13.8%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
		66,500	3.6%				
		71,500	7.5%				
11	Home Run Boulevard/Posner Boulevard to NB US 27 On-Ramp to EB I-4 ¹	88,500	23.8%	F	Class I, 6 lane divided, right turn lanes (+5%)	61,320	62,895
12	From NB US 27 On-Ramp to EB I-4 to California Boulevard/McFee Dr ²	49,500	25.6%	F	Class I, 6 lane divided, right turn lanes (+5%)	54,705	56,175
		61,500	14.0%				
13	California Boulevard/McFee Dr to US 192 ²	55,000	10.6%	D	Class I, 6 lane divided, right turn lanes (+5%)	54,705	56,175

1: FDOT Generalized Annual Average Daily Volumes for Florida's Urbanized Areas (Table 1)

2: FDOT Generalized Annual Average Daily Volumes for Florida's Transitioning Areas and Areas Over 5,000 Not In Urbanized Areas (Table 2)

3: LOS thresholds for state signalized arterials, class I (Table 1 or 2, based on area type - refer to above footnotes)

APPENDIX E

2045 and 2030 No-Build AM and PM Peak Hour Intersection Analysis Synchro 10 Reports

2045 No-Build AM and PM Peak Hour Intersection Analysis

HCM 6th Signalized Intersection Summary

3: US 27 & Polo Park Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	139	26	34	89	13	234	20	4095	79	34	2163	14
Future Volume (veh/h)	139	26	34	89	13	234	20	4095	79	34	2163	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1841	1900	1796	1856	1796	1737	1900
Adj Flow Rate, veh/h	143	27	35	92	13	241	21	4222	81	35	2230	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	4	0	7	3	7	11	0
Cap, veh/h	125	24	131	265	37	259	33	2699	865	44	2655	901
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.02	0.55	0.55	0.03	0.56	0.56
Sat Flow, veh/h	1534	290	1610	1595	225	1560	1810	4904	1572	1711	4742	1610
Grp Volume(v), veh/h	170	0	35	105	0	241	21	4222	81	35	2230	14
Grp Sat Flow(s),veh/h/ln	1823	0	1610	1820	0	1560	1810	1635	1572	1711	1581	1610
Q Serve(g_s), s	14.4	0.0	3.6	9.0	0.0	27.0	2.0	97.4	4.3	3.6	69.2	0.7
Cycle Q Clear(g_c), s	14.4	0.0	3.6	9.0	0.0	27.0	2.0	97.4	4.3	3.6	69.2	0.7
Prop In Lane	0.84		1.00	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	148	0	131	302	0	259	33	2699	865	44	2655	901
V/C Ratio(X)	1.15	0.00	0.27	0.35	0.00	0.93	0.64	1.56	0.09	0.79	0.84	0.02
Avail Cap(c_a), veh/h	148	0	131	327	0	280	69	2699	865	62	2655	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.3	0.0	76.3	65.3	0.0	72.8	86.3	39.8	18.9	85.7	32.4	17.3
Incr Delay (d2), s/veh	118.5	0.0	1.1	0.7	0.0	34.5	18.7	255.9	0.0	35.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.2	0.0	2.8	7.7	0.0	19.4	2.0	154.1	2.8	3.6	33.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	199.8	0.0	77.4	66.0	0.0	107.3	105.0	295.7	18.9	120.7	34.9	17.3
LnGrp LOS	F	A	E	E	A	F	F	F	B	F	C	B
Approach Vol, veh/h		205			346			4324			2279	
Approach Delay, s/veh		178.9			94.8			289.5			36.2	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	105.3		22.0	11.5	107.0		36.5				
Change Period (Y+Rc), s	* 8.6	* 7.9		7.6	* 8.3	7.9		7.1				
Max Green Setting (Gmax), s	* 6.4	* 97		14.4	* 6.7	97.1		31.8				
Max Q Clear Time (g_c+I1), s	5.6	99.4		16.4	4.0	71.2		29.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	18.0		0.4				

Intersection Summary

HCM 6th Ctrl Delay 196.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: US 27 & Legacy Park Blvd/Florence Villa Grove Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	110	226	390	31	141	93	3020	694	177	2319	43
Future Volume (veh/h)	206	110	226	390	31	141	93	3020	694	177	2319	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1826	1781	1841	1900	1722	1826
Adj Flow Rate, veh/h	222	118	243	419	33	152	100	3247	746	190	2494	46
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	5	8	4	0	12	5
Cap, veh/h	271	83	171	267	21	97	118	1821	584	155	1863	613
Arrive On Green	0.15	0.15	0.15	0.22	0.22	0.22	0.07	0.37	0.37	0.09	0.40	0.40
Sat Flow, veh/h	1810	554	1141	1220	96	443	1739	4863	1560	1810	4701	1547
Grp Volume(v), veh/h	222	0	361	604	0	0	100	3247	746	190	2494	46
Grp Sat Flow(s),veh/h/ln	1810	0	1695	1759	0	0	1739	1621	1560	1810	1567	1547
Q Serve(g_s), s	20.8	0.0	26.2	38.3	0.0	0.0	9.9	65.5	65.5	15.0	69.3	3.2
Cycle Q Clear(g_c), s	20.8	0.0	26.2	38.3	0.0	0.0	9.9	65.5	65.5	15.0	69.3	3.2
Prop In Lane	1.00		0.67	0.69		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	0	254	385	0	0	118	1821	584	155	1863	613
V/C Ratio(X)	0.82	0.00	1.42	1.57	0.00	0.00	0.84	1.78	1.28	1.22	1.34	0.08
Avail Cap(c_a), veh/h	271	0	254	385	0	0	149	1821	584	155	1863	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.1	0.0	74.4	68.3	0.0	0.0	80.6	54.7	54.7	79.9	52.8	32.9
Incr Delay (d2), s/veh	17.7	0.0	211.4	267.8	0.0	0.0	28.5	354.5	137.5	145.0	156.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.5	0.0	40.2	69.8	0.0	0.0	9.1	133.5	67.9	20.5	78.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.7	0.0	285.7	336.1	0.0	0.0	109.1	409.2	192.2	225.0	209.0	32.9
LnGrp LOS	F	A	F	F	A	A	F	F	F	F	F	C
Approach Vol, veh/h	583			604			4093			2730		
Approach Delay, s/veh	211.1			336.1			362.3			207.2		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.9	77.0		45.0	23.7	73.2		33.0				
Change Period (Y+Rc), s	8.0	7.7		* 6.7	8.7	* 7.7		6.8				
Max Green Setting (Gmax), s	15.0	66.0		* 38	15.0	* 66		26.2				
Max Q Clear Time (g_c+I1), s	11.9	71.3		40.3	17.0	67.5		28.2				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 296.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

9: US 27 & Sand Mine Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	78	274	253	42	266	315	3018	460	340	2184	220
Future Volume (veh/h)	388	78	274	253	42	266	315	3018	460	340	2184	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1411	1811	1604	1856	1856	1870	1589	1826	1826	1870	1811	1129
Adj Flow Rate, veh/h	516	0	319	294	49	309	366	3509	535	395	2540	256
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	33	6	20	3	3	2	21	5	5	2	6	52
Cap, veh/h	424	0	215	206	34	214	393	2173	674	431	2133	413
Arrive On Green	0.16	0.00	0.16	0.13	0.13	0.13	0.13	0.44	0.44	0.12	0.43	0.43
Sat Flow, veh/h	2688	0	1359	1525	254	1585	2935	4985	1547	3456	4944	957
Grp Volume(v), veh/h	516	0	319	343	0	309	366	3509	535	395	2540	256
Grp Sat Flow(s),veh/h/ln	1344	0	1359	1779	0	1585	1468	1662	1547	1728	1648	957
Q Serve(g_s), s	33.8	0.0	33.8	28.9	0.0	28.9	26.4	93.3	63.8	24.2	92.4	44.5
Cycle Q Clear(g_c), s	33.8	0.0	33.8	28.9	0.0	28.9	26.4	93.3	63.8	24.2	92.4	44.5
Prop In Lane	1.00		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	424	0	215	240	0	214	393	2173	674	431	2133	413
V/C Ratio(X)	1.22	0.00	1.49	1.43	0.00	1.44	0.93	1.62	0.79	0.92	1.19	0.62
Avail Cap(c_a), veh/h	424	0	215	240	0	214	410	2173	674	484	2133	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	90.2	0.0	90.2	92.6	0.0	92.6	91.8	60.4	52.1	92.6	60.9	47.2
Incr Delay (d2), s/veh	117.2	0.0	242.4	215.2	0.0	224.4	27.6	279.0	6.4	21.0	90.7	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	28.2	0.0	41.0	42.1	0.0	38.8	17.0	144.2	33.6	17.6	76.4	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	207.4	0.0	332.5	307.8	0.0	317.0	119.4	339.4	58.5	113.6	151.6	49.9
LnGrp LOS	F	A	F	F	A	F	F	F	E	F	F	D
Approach Vol, veh/h	835			652			4410			3191		
Approach Delay, s/veh	255.2			312.1			287.0			138.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	35.3	102.0		40.8	37.3	100.0		36.0				
Change Period (Y+Rc), s	* 8.6	* 8.7		7.0	8.7	7.6		7.1				
Max Green Setting (Gmax), s	* 30	* 92		33.8	29.9	92.4		28.9				
Max Q Clear Time (g_c+I1), s	26.2	95.3		35.8	28.4	94.4		30.9				
Green Ext Time (p_c), s	0.5	0.0		0.0	0.2	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 233.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 27 & Highlands Reserve Blvd/Student Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	37	25	56	115	10	220	50	3617	98	220	2446	10
Future Volume (veh/h)	37	25	56	115	10	220	50	3617	98	220	2446	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1737	1159	1159	1870	1870	1811	1900	1841	1767	1648
Adj Flow Rate, veh/h	41	28	62	128	11	244	56	4019	109	244	2718	11
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
Percent Heavy Veh, %	0	0	11	50	50	2	2	6	0	4	9	17
Cap, veh/h	48	22	175	58	0	189	73	2750	895	222	3120	904
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.56	0.56	0.13	0.65	0.65
Sat Flow, veh/h	0	184	1472	0	0	1585	1781	4944	1610	1753	4823	1397
Grp Volume(v), veh/h	69	0	62	139	0	244	56	4019	109	244	2718	11
Grp Sat Flow(s),veh/h/ln	184	0	1472	0	0	1585	1781	1648	1610	1753	1608	1397
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	14.1	3.7	65.9	3.8	15.0	54.0	0.3
Cycle Q Clear(g_c), s	14.1	0.0	4.6	14.1	0.0	14.1	3.7	65.9	3.8	15.0	54.0	0.3
Prop In Lane	0.59		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	0	175	58	0	189	73	2750	895	222	3120	904
V/C Ratio(X)	0.98	0.00	0.35	2.38	0.00	1.29	0.77	1.46	0.12	1.10	0.87	0.01
Avail Cap(c_a), veh/h	70	0	175	58	0	189	225	2750	895	222	3120	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	0.0	48.0	59.3	0.0	52.2	56.3	26.3	12.5	51.8	16.9	7.4
Incr Delay (d2), s/veh	100.7	0.0	1.2	671.1	0.0	165.7	15.6	209.8	0.1	89.6	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.3	0.0	3.1	22.4	0.0	22.6	3.4	114.8	2.2	18.2	23.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	155.7	0.0	49.2	730.4	0.0	217.9	71.9	236.1	12.6	141.3	19.8	7.4
LnGrp LOS	F	A	D	F	A	F	E	F	B	F	B	A
Approach Vol, veh/h	131			383			4184			2973		
Approach Delay, s/veh	105.3			403.9			228.1			29.8		
Approach LOS	F			F			F			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.5	73.4		21.6	12.7	84.2		21.6				
Change Period (Y+Rc), s	8.5	7.5		7.5	7.9	7.5		7.5				
Max Green Setting (Gmax), s	15.0	65.9		14.1	15.0	66.5		14.1				
Max Q Clear Time (g_c+I1), s	17.0	67.9		16.1	5.7	56.0		16.1				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	9.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	157.9											
HCM 6th LOS	F											
Notes												

HCM 6th Signalized Intersection Summary

15: US 27 & California Blvd/McFee Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	10	76	58	10	96	137	3294	33	27	2932	33
Future Volume (veh/h)	88	10	76	58	10	96	137	3294	33	27	2932	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1856	1885	1796	1796	1900	1781	1752
Adj Flow Rate, veh/h	95	11	82	62	11	103	147	3542	35	29	3153	35
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	3	0	0	3	1	7	7	0	8	10
Cap, veh/h	46	3	272	45	5	272	172	3151	978	43	2764	844
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.10	0.64	0.64	0.02	0.57	0.57
Sat Flow, veh/h	0	17	1572	0	26	1572	1795	4904	1522	1810	4863	1485
Grp Volume(v), veh/h	106	0	82	73	0	103	147	3542	35	29	3153	35
Grp Sat Flow(s),veh/h/ln	17	0	1572	26	0	1572	1795	1635	1522	1810	1621	1485
Q Serve(g_s), s	0.0	0.0	6.8	0.0	0.0	8.6	12.0	95.4	1.2	2.4	84.4	1.5
Cycle Q Clear(g_c), s	25.7	0.0	6.8	25.7	0.0	8.6	12.0	95.4	1.2	2.4	84.4	1.5
Prop In Lane	0.90		1.00	0.85		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	0	272	49	0	272	172	3151	978	43	2764	844
V/C Ratio(X)	2.17	0.00	0.30	1.48	0.00	0.38	0.86	1.12	0.04	0.68	1.14	0.04
Avail Cap(c_a), veh/h	49	0	272	49	0	272	302	3151	978	305	2764	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	0.0	53.6	71.9	0.0	54.3	66.2	26.5	9.7	71.9	32.0	14.2
Incr Delay (d2), s/veh	585.9	0.0	0.6	297.0	0.0	0.9	11.5	60.7	0.0	17.5	68.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.7	0.0	5.0	10.8	0.0	6.4	9.9	67.1	0.7	2.3	64.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	658.6	0.0	54.2	368.9	0.0	55.2	77.7	87.2	9.7	89.4	100.2	14.2
LnGrp LOS	F	A	D	F	A	E	E	F	A	F	F	B
Approach Vol, veh/h	188			176			3724			3217		
Approach Delay, s/veh	395.0			185.3			86.1			99.2		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	103.4		33.4	22.7	92.4		33.4				
Change Period (Y+Rc), s	8.2	8.0		7.7	8.5	* 8		7.7				
Max Green Setting (Gmax), s	25.0	84.3		25.7	25.0	* 84		25.7				
Max Q Clear Time (g_c+I1), s	4.4	97.4		27.7	14.0	86.4		27.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.2	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 102.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

21: US 27 & 4 Corners Blvd/Tri County Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	55	119	146	38	608	36	3024	179	507	2622	39
Future Volume (veh/h)	119	55	119	146	38	608	36	3024	179	507	2622	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1693	1693	1856	1900	1781	1856	1885	1796	1811
Adj Flow Rate, veh/h	128	59	128	157	41	654	39	3252	192	545	2819	42
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	14	14	3	0	8	3	1	7	6
Cap, veh/h	74	33	50	241	52	500	50	1805	584	250	2365	740
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.03	0.37	0.37	0.14	0.48	0.48
Sat Flow, veh/h	127	103	158	622	163	1572	1810	4863	1572	1795	4904	1535
Grp Volume(v), veh/h	315	0	0	198	0	654	39	3252	192	545	2819	42
Grp Sat Flow(s),veh/h/ln	388	0	0	785	0	1572	1810	1621	1572	1795	1635	1535
Q Serve(g_s), s	13.3	0.0	0.0	0.0	0.0	48.0	3.2	56.0	13.2	21.0	72.8	2.2
Cycle Q Clear(g_c), s	48.0	0.0	0.0	34.7	0.0	48.0	3.2	56.0	13.2	21.0	72.8	2.2
Prop In Lane	0.41		0.41	0.79		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	0	292	0	500	50	1805	584	250	2365	740
V/C Ratio(X)	2.01	0.00	0.00	0.68	0.00	1.31	0.77	1.80	0.33	2.18	1.19	0.06
Avail Cap(c_a), veh/h	157	0	0	292	0	500	60	1805	584	250	2365	740
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	0.0	0.0	46.9	0.0	51.5	72.9	47.4	34.0	64.9	39.1	20.8
Incr Delay (d2), s/veh	474.5	0.0	0.0	6.1	0.0	152.3	39.5	363.1	0.3	544.5	90.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	46.1	0.0	0.0	11.6	0.0	59.1	3.6	128.9	8.6	73.4	66.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	538.6	0.0	0.0	53.0	0.0	203.7	112.3	410.5	34.3	609.5	129.8	20.8
LnGrp LOS	F	A	A	D	A	F	F	F	C	F	F	C
Approach Vol, veh/h		315			852			3483			3406	
Approach Delay, s/veh		538.6			168.7			386.4			205.2	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	80.8		56.9	30.0	64.0		56.9				
Change Period (Y+Rc), s	9.0	8.0		* 8.9	9.0	8.0		* 8.9				
Max Green Setting (Gmax), s	5.0	72.0		* 48	21.0	56.0		* 48				
Max Q Clear Time (g_c+I1), s	5.2	74.8		50.0	23.0	58.0		50.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 292.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

27: US 27 & Waverly Barn Rd/Dunson Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	21	30	73	141	10	129	242	3026	462	691	3490	164
Future Volume (veh/h)	21	30	73	141	10	129	242	3026	462	691	3490	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1559	1900	1900	1900	1485	1737	1885	1826	1811	1841
Adj Flow Rate, veh/h	23	33	80	155	11	142	266	3325	508	759	3835	180
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	23	0	0	0	28	11	1	5	6	4
Cap, veh/h	57	82	99	179	13	164	135	1688	569	311	2166	684
Arrive On Green	0.07	0.07	0.07	0.21	0.21	0.21	0.10	0.36	0.36	0.18	0.44	0.44
Sat Flow, veh/h	765	1097	1321	863	61	790	1414	4742	1598	1739	4944	1560
Grp Volume(v), veh/h	56	0	80	308	0	0	266	3325	508	759	3835	180
Grp Sat Flow(s),veh/h/ln	1862	0	1321	1715	0	0	1414	1581	1598	1739	1648	1560
Q Serve(g_s), s	4.9	0.0	10.2	29.5	0.0	0.0	16.2	60.6	51.1	30.4	74.6	12.5
Cycle Q Clear(g_c), s	4.9	0.0	10.2	29.5	0.0	0.0	16.2	60.6	51.1	30.4	74.6	12.5
Prop In Lane	0.41		1.00	0.50		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	0	99	356	0	0	135	1688	569	311	2166	684
V/C Ratio(X)	0.40	0.00	0.81	0.87	0.00	0.00	1.98	1.97	0.89	2.44	1.77	0.26
Avail Cap(c_a), veh/h	547	0	388	584	0	0	135	1688	569	311	2166	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.1	0.0	77.6	65.2	0.0	0.0	77.0	54.8	51.8	69.9	47.8	30.4
Incr Delay (d2), s/veh	1.9	0.0	14.4	13.1	0.0	0.0	465.0	438.6	16.2	659.6	348.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	0.0	7.0	20.5	0.0	0.0	37.2	145.1	30.0	109.1	155.2	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.0	0.0	92.0	78.3	0.0	0.0	542.0	493.4	68.0	729.6	396.3	30.5
LnGrp LOS	E	A	F	E	A	A	F	F	E	F	F	C
Approach Vol, veh/h	136				308				4099			
Approach Delay, s/veh	85.9				78.3				443.9			
Approach LOS	F				E				F			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	39.0	68.4		20.1	25.0	82.4		42.7				
Change Period (Y+Rc), s	* 8.6	7.8		7.4	8.8	* 7.8		7.4				
Max Green Setting (Gmax), s	* 30	60.4		50.0	16.2	* 75		58.0				
Max Q Clear Time (g_c+I1), s	32.4	62.6		12.2	18.2	76.6		31.5				
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	0.0		3.8				

Intersection Summary

HCM 6th Ctrl Delay 422.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Deen Still Rd/Ronald Reagan Pkwy

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				  		  	  	
Traffic Volume (veh/h)	73	116	109	853	193	711	165	2739	493	700	2763	103
Future Volume (veh/h)	73	116	109	853	193	711	165	2739	493	700	2763	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1618	1648	1500	1870	1796	1781	1530	1796	1781	1811	1826	1441
Adj Flow Rate, veh/h	81	129	121	948	214	790	183	3043	548	778	3070	114
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
Percent Heavy Veh, %	19	17	27	2	7	8	25	7	8	6	5	31
Cap, veh/h	117	182	140	436	362	304	184	1857	572	633	2202	539
Arrive On Green	0.04	0.11	0.11	0.13	0.20	0.20	0.13	0.38	0.38	0.19	0.44	0.44
Sat Flow, veh/h	2990	1648	1271	3456	1796	1510	1457	4904	1510	3346	4985	1221
Grp Volume(v), veh/h	81	129	121	948	214	790	183	3043	548	778	3070	114
Grp Sat Flow(s),veh/h/ln	1495	1648	1271	1728	1796	1510	1457	1635	1510	1673	1662	1221
Q Serve(g_s), s	4.2	12.0	14.8	20.0	17.1	31.9	19.9	60.0	56.1	30.0	70.0	9.1
Cycle Q Clear(g_c), s	4.2	12.0	14.8	20.0	17.1	31.9	19.9	60.0	56.1	30.0	70.0	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	182	140	436	362	304	184	1857	572	633	2202	539
V/C Ratio(X)	0.69	0.71	0.86	2.17	0.59	2.60	1.00	1.64	0.96	1.23	1.39	0.21
Avail Cap(c_a), veh/h	377	260	201	436	362	304	184	1857	572	633	2202	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.2	68.1	69.3	69.2	57.3	63.3	69.2	49.2	48.0	64.2	44.2	27.2
Incr Delay (d2), s/veh	7.0	5.1	22.5	535.6	2.5	727.4	65.0	290.0	27.4	116.2	180.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	9.0	9.5	64.4	12.5	115.7	15.8	113.0	33.0	33.6	94.8	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.2	73.1	91.9	604.9	59.9	790.7	134.1	339.2	75.5	180.4	224.5	27.4
LnGrp LOS	F	E	F	F	E	F	F	F	E	F	F	C
Approach Vol, veh/h	331			1952			3774			3962		
Approach Delay, s/veh	82.2			620.3			291.0			210.1		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.6	67.6	27.8	24.5	28.6	77.6	13.3	38.9				
Change Period (Y+Rc), s	* 8.6	7.6	* 7.8	* 7	* 8.6	7.6	7.1	7.0				
Max Green Setting (Gmax), s	* 30	60.0	* 20	* 25	* 20	60.0	20.0	25.0				
Max Q Clear Time (g_c+I1), s	32.0	62.0	22.0	16.8	21.9	72.0	6.2	33.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.0				

Intersection Summary

HCM 6th Ctrl Delay 316.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

35: US 27 & Access Rd/Ritchie Bros Driveway

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	10	199	10	10	10	456	3825	10	80	3478	161
Future Volume (veh/h)	111	10	199	10	10	10	456	3825	10	80	3478	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1693	1900	1900	1900	1856	1796	1900	1856	1796	1767
Adj Flow Rate, veh/h	116	10	207	10	10	10	475	3984	0	83	3623	168
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	14	0	0	0	3	7	0	3	7	9
Cap, veh/h	59	3	265	46	32	297	564	2755		107	2237	683
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.16	0.56	0.00	0.06	0.46	0.46
Sat Flow, veh/h	0	15	1434	0	176	1610	3428	4904	1610	1767	4904	1497
Grp Volume(v), veh/h	126	0	207	20	0	10	475	3984	0	83	3623	168
Grp Sat Flow(s),veh/h/ln	15	0	1434	176	0	1610	1714	1635	1610	1767	1635	1497
Q Serve(g_s), s	0.0	0.0	16.1	0.0	0.0	0.6	15.7	65.8	0.0	5.4	53.4	8.0
Cycle Q Clear(g_c), s	21.6	0.0	16.1	21.6	0.0	0.6	15.7	65.8	0.0	5.4	53.4	8.0
Prop In Lane	0.92		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	0	265	79	0	297	564	2755		107	2237	683
V/C Ratio(X)	2.04	0.00	0.78	0.25	0.00	0.03	0.84	1.45		0.78	1.62	0.25
Avail Cap(c_a), veh/h	62	0	265	79	0	297	1025	2755		528	2237	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	0.0	45.5	41.0	0.0	39.2	47.4	25.6	0.0	54.2	31.8	19.5
Incr Delay (d2), s/veh	518.0	0.0	16.1	3.6	0.0	0.1	3.5	202.8	0.0	11.3	280.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.3	0.0	11.1	1.0	0.0	0.4	11.0	112.7	0.0	4.8	120.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	575.5	0.0	61.5	44.6	0.0	39.3	50.9	228.5	0.0	65.5	312.7	19.9
LnGrp LOS	F	A	E	D	A	D	D	F		E	F	B
Approach Vol, veh/h	333				30				4459			
Approach Delay, s/veh	256.0				42.8				209.6			
Approach LOS	F				D				F			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.1	61.0		29.0	14.7	73.4		29.0				
Change Period (Y+Rc), s	* 7.8	7.6		7.4	7.6	7.6		7.4				
Max Green Setting (Gmax), s	* 35	53.4		21.6	35.0	53.6		21.6				
Max Q Clear Time (g_c+I1), s	17.7	55.4		23.6	7.4	67.8		23.6				
Green Ext Time (p_c), s	1.5	0.0		0.0	0.2	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 248.7

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

47: US 27 & Heller Bros Blvd/Deer Creek Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	22	198	64	10	152	24	5875	40	11	2489	10
Future Volume (veh/h)	45	22	198	64	10	152	24	5875	40	11	2489	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1811	1811	1900	1900	1900	1841	1900	1900	1781	1900
Adj Flow Rate, veh/h	49	24	215	70	11	165	26	6386	43	12	2705	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	6	6	0	0	0	4	0	0	8	0
Cap, veh/h	64	349	148	104	12	185	208	2828	906	25	2245	743
Arrive On Green	0.04	0.10	0.10	0.06	0.12	0.12	0.15	0.75	0.75	0.01	0.46	0.46
Sat Flow, veh/h	1810	3610	1535	1725	102	1524	1810	5025	1610	1810	4863	1610
Grp Volume(v), veh/h	49	24	215	70	0	176	26	6386	43	12	2705	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1535	1725	0	1626	1810	1675	1610	1810	1621	1610
Q Serve(g_s), s	3.2	0.7	11.6	4.8	0.0	12.8	1.5	67.5	0.5	0.8	55.4	0.3
Cycle Q Clear(g_c), s	3.2	0.7	11.6	4.8	0.0	12.8	1.5	67.5	0.5	0.8	55.4	0.3
Prop In Lane	1.00		1.00	1.00		0.94	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	349	148	104	0	198	208	2828	906	25	2245	743
V/C Ratio(X)	0.77	0.07	1.45	0.68	0.00	0.89	0.13	2.26	0.05	0.48	1.20	0.01
Avail Cap(c_a), veh/h	115	349	148	152	0	198	208	2828	906	127	2245	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	49.3	54.2	55.2	0.0	51.9	45.6	15.1	2.1	58.8	32.3	8.3
Incr Delay (d2), s/veh	17.6	0.1	235.7	7.4	0.0	35.5	0.3	567.2	0.1	13.8	96.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	0.6	23.0	4.1	0.0	11.5	1.2	263.0	0.6	0.8	57.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.0	49.4	289.9	62.7	0.0	87.4	45.9	582.3	2.2	72.5	128.9	8.3
LnGrp LOS	E	D	F	E	A	F	D	F	A	E	F	A
Approach Vol, veh/h	288			246			6455			2728		
Approach Delay, s/veh	233.3			80.3			576.3			128.2		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.4	64.0	11.6	22.0	10.2	76.1	14.6	19.0				
Change Period (Y+Rc), s	* 8.6	* 8.6	7.4	7.4	* 8.6	* 8.6	7.4	7.4				
Max Green Setting (Gmax), s	* 10	* 55	7.6	14.6	* 8.4	* 57	10.6	11.6				
Max Q Clear Time (g_c+I1), s	3.5	57.4	5.2	14.8	2.8	69.5	6.8	13.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 427.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

51: US 27 & Minute Maid Ramp Rd 2/Citrus Ridge Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	201	10	123	103	10	351	46	5123	41	111	2776	39
Future Volume (veh/h)	201	10	123	103	10	351	46	5123	41	111	2776	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1885	1826	1826	1544	1781	1752	1737
Adj Flow Rate, veh/h	207	10	127	106	10	362	47	5281	42	114	2862	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	1	5	5	24	8	10	11
Cap, veh/h	59	0	441	57	3	438	60	1973	518	144	2092	644
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.40	0.40	0.17	0.87	0.87
Sat Flow, veh/h	0	0	1610	0	11	1598	1739	4985	1309	1697	4782	1472
Grp Volume(v), veh/h	217	0	127	116	0	362	47	5281	42	114	2862	40
Grp Sat Flow(s),veh/h/ln	0	0	1610	11	0	1598	1739	1662	1309	1697	1594	1472
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	25.5	3.2	47.5	2.4	7.7	52.5	0.4
Cycle Q Clear(g_c), s	32.9	0.0	7.5	32.9	0.0	25.5	3.2	47.5	2.4	7.7	52.5	0.4
Prop In Lane	0.95		1.00	0.91		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	0	441	60	0	438	60	1973	518	144	2092	644
V/C Ratio(X)	3.70	0.00	0.29	1.92	0.00	0.83	0.78	2.68	0.08	0.79	1.37	0.06
Avail Cap(c_a), veh/h	59	0	441	60	0	438	167	1973	518	233	2092	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	34.3	58.4	0.0	40.9	57.5	36.3	22.6	48.8	7.5	4.2
Incr Delay (d2), s/veh	1256.6	0.0	0.4	469.1	0.0	12.3	19.3	755.9	0.3	9.5	168.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	39.7	0.0	5.3	17.5	0.0	16.8	3.0	250.9	1.3	5.9	54.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1316.6	0.0	34.7	527.5	0.0	53.2	76.8	792.1	22.9	58.3	176.2	4.4
LnGrp LOS	F	A	C	F	A	D	E	F	C	E	F	A
Approach Vol, veh/h		344			478			5370			3016	
Approach Delay, s/veh		843.3			168.3			779.8			169.4	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	61.0		40.0	18.7	55.0		40.0				
Change Period (Y+Rc), s	8.5	* 8.5		* 7.1	8.5	7.5		* 7.1				
Max Green Setting (Gmax), s	11.5	* 53		* 33	16.5	47.5		* 33				
Max Q Clear Time (g_c+I1), s	5.2	54.5		34.9	9.7	49.5		34.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 550.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	223	0	317	10	0	4833	74	88	3376
Future Volume (veh/h)	0	0	0	223	0	317	10	0	4833	74	88	3376
Initial Q (Qb), veh				0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No				No
Adj Sat Flow, veh/h/ln				1841	0	1870		0	1826	1856	1826	1781
Adj Flow Rate, veh/h				230	0	327		0	4982	76	91	3480
Peak Hour Factor				0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				4	0	2		0	5	3	5	8
Cap, veh/h				225	0	203		0	3378	1066	61	3739
Arrive On Green				0.13	0.00	0.13		0.00	0.68	0.68	0.04	0.77
Sat Flow, veh/h				1753	0	1585		0	5149	1572	1739	5024
Grp Volume(v), veh/h				230	0	327		0	4982	76	91	3480
Grp Sat Flow(s), veh/h/ln				1753	0	1585		0	1662	1572	1739	1621
Q Serve(g_s), s				18.3	0.0	18.3		0.0	96.7	2.3	5.0	83.0
Cycle Q Clear(g_c), s				18.3	0.0	18.3		0.0	96.7	2.3	5.0	83.0
Prop In Lane				1.00		1.00		0.00		1.00	1.00	
Lane Grp Cap(c), veh/h				225	0	203		0	3378	1066	61	3739
V/C Ratio(X)				1.02	0.00	1.61		0.00	1.47	0.07	1.49	0.93
Avail Cap(c_a), veh/h				225	0	203		0	3378	1066	61	3739
HCM Platoon Ratio				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				62.2	0.0	62.2		0.0	23.0	7.8	68.8	13.4
Incr Delay (d2), s/veh				66.1	0.0	295.6		0.0	215.3	0.0	290.4	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				18.3	0.0	48.7		0.0	149.9	1.3	12.4	30.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				128.3	0.0	357.8		0.0	238.3	7.8	359.3	18.3
LnGrp LOS				F	A	F		A	F	A	F	B
Approach Vol, veh/h					557				5058			3571
Approach Delay, s/veh					263.0				234.9			27.0
Approach LOS					F				F			C
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.0	104.7		25.0		117.7						
Change Period (Y+Rc), s	8.0	8.0		* 6.7		8.0						
Max Green Setting (Gmax), s	5.0	96.7		* 18		96.7						
Max Q Clear Time (g_c+I1), s	7.0	98.7		20.3		85.0						
Green Ext Time (p_c), s	0.0	0.0		0.0		10.9						

Intersection Summary

HCM 6th Ctrl Delay 155.8

HCM 6th LOS F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

Movement	SBR
Left	
Left Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1781
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.97
Percent Heavy Veh, %	8
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

64: US 27 & Massee Rd/Holly Hill Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	85	10	132	10	44	448	82	4742	27	253	2556	144
Future Volume (veh/h)	85	10	132	10	44	448	82	4742	27	253	2556	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1826	1767	1856	1752	1870
Adj Flow Rate, veh/h	91	11	142	11	47	482	88	5099	29	272	2748	155
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	5	9	3	10	2
Cap, veh/h	123	41	532	427	49	499	65	1892	568	99	1911	633
Arrive On Green	0.03	0.35	0.35	0.01	0.34	0.34	0.04	0.38	0.38	0.06	0.40	0.40
Sat Flow, veh/h	1810	117	1511	1810	145	1487	1810	4985	1497	1767	4782	1585
Grp Volume(v), veh/h	91	0	153	11	0	529	88	5099	29	272	2748	155
Grp Sat Flow(s),veh/h/ln	1810	0	1628	1810	0	1632	1810	1662	1497	1767	1594	1585
Q Serve(g_s), s	5.1	0.0	10.2	0.6	0.0	48.2	5.4	57.4	1.9	8.5	60.4	9.8
Cycle Q Clear(g_c), s	5.1	0.0	10.2	0.6	0.0	48.2	5.4	57.4	1.9	8.5	60.4	9.8
Prop In Lane	1.00		0.93	1.00		0.91	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	0	573	427	0	547	65	1892	568	99	1911	633
V/C Ratio(X)	0.74	0.00	0.27	0.03	0.00	0.97	1.36	2.69	0.05	2.74	1.44	0.24
Avail Cap(c_a), veh/h	123	0	573	465	0	557	65	1892	568	99	1911	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	35.0	32.6	0.0	49.4	72.9	46.9	29.7	71.3	45.4	30.2
Incr Delay (d2), s/veh	20.5	0.0	0.2	0.0	0.0	29.5	235.3	764.0	0.1	809.6	200.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	7.5	0.5	0.0	31.7	11.7	250.9	1.2	41.1	87.3	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	0.0	35.3	32.6	0.0	79.0	308.2	810.9	29.7	880.9	245.7	30.6
LnGrp LOS	E	A	D	C	A	E	F	F	C	F	F	C
Approach Vol, veh/h	244		540				5216		3175			
Approach Delay, s/veh	44.7		78.0				798.1		289.6			
Approach LOS	D		E				F		F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	68.2	8.2	60.7	17.0	65.2	10.8	58.2				
Change Period (Y+Rc), s	* 8.6	7.8	6.4	* 7.5	* 8.5	* 7.8	* 5.7	* 7.5				
Max Green Setting (Gmax), s	* 5.4	60.2	5.0	* 51	* 8.5	* 57	* 5.1	* 52				
Max Q Clear Time (g_c+I1), s	7.4	62.4	2.6	12.2	10.5	59.4	7.1	50.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay 559.7

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

69: US 27 & Holly Hill Cutoff Rd/North Blvd W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	99	20	33	48	10	91	32	4433	253	147	2686	38
Future Volume (veh/h)	99	20	33	48	10	91	32	4433	253	147	2686	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1826	1900	1900	1900	1693	1826	1841	1856	1767	1544
Adj Flow Rate, veh/h	110	22	37	53	11	101	36	4926	281	163	2984	42
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
Percent Heavy Veh, %	0	0	5	0	0	0	14	5	4	3	9	24
Cap, veh/h	125	16	189	32	11	17	45	3247	1016	114	3320	901
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.65	0.65	0.06	0.69	0.69
Sat Flow, veh/h	660	132	1547	0	89	140	1612	4985	1560	1767	4823	1309
Grp Volume(v), veh/h	132	0	37	165	0	0	36	4926	281	163	2984	42
Grp Sat Flow(s),veh/h/ln	792	0	1547	228	0	0	1612	1662	1560	1767	1608	1309
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	0.0	3.3	97.7	11.5	9.7	75.9	1.5
Cycle Q Clear(g_c), s	18.3	0.0	3.2	18.3	0.0	0.0	3.3	97.7	11.5	9.7	75.9	1.5
Prop In Lane	0.83		1.00	0.32		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	0	189	60	0	0	45	3247	1016	114	3320	901
V/C Ratio(X)	0.94	0.00	0.20	2.77	0.00	0.00	0.81	1.52	0.28	1.43	0.90	0.05
Avail Cap(c_a), veh/h	141	0	189	60	0	0	55	3247	1016	114	3320	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.3	0.0	59.2	67.0	0.0	0.0	72.5	26.2	11.1	70.2	19.1	7.5
Incr Delay (d2), s/veh	57.5	0.0	0.5	840.9	0.0	0.0	50.0	234.4	0.1	234.9	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.8	0.0	2.3	28.2	0.0	0.0	3.5	158.9	6.6	19.2	32.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	125.8	0.0	59.7	907.9	0.0	0.0	122.5	260.5	11.3	305.0	22.8	7.5
LnGrp LOS	F	A	E	F	A	A	F	F	B	F	C	A
Approach Vol, veh/h	169			165			5243			3189		
Approach Delay, s/veh	111.3			907.9			246.2			37.1		
Approach LOS	F			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	107.0		24.0	13.4	112.6		24.0				
Change Period (Y+Rc), s	9.3	9.3		* 5.7	9.3	9.3		* 5.7				
Max Green Setting (Gmax), s	9.7	97.7		* 18	5.1	102.3		* 18				
Max Q Clear Time (g_c+I1), s	11.7	99.7		20.3	5.3	77.9		20.3				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	22.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	180.0											
HCM 6th LOS	F											
Notes												

HCM 6th Signalized Intersection Summary

72: US 27 & Sanders Rd/Davenport Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	50	56	414	26	707	20	4441	315	235	2381	15
Future Volume (veh/h)	70	50	56	414	26	707	20	4441	315	235	2381	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1856	1856	1841	1900	1900	1574	1811	1841	1826	1752	1678
Adj Flow Rate, veh/h	78	56	62	460	29	786	22	4934	350	261	2646	17
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
Percent Heavy Veh, %	2	3	3	4	0	0	22	6	4	5	10	15
Cap, veh/h	51	149	165	207	11	289	31	2361	745	284	2966	882
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.48	0.48	0.16	0.62	0.62
Sat Flow, veh/h	670	805	891	1254	58	1561	1499	4944	1560	1739	4782	1422
Grp Volume(v), veh/h	78	0	118	460	0	815	22	4934	350	261	2646	17
Grp Sat Flow(s),veh/h/ln	670	0	1695	1254	0	1619	1499	1648	1560	1739	1594	1422
Q Serve(g_s), s	0.0	0.0	8.6	17.4	0.0	26.0	2.0	67.0	21.2	20.7	66.0	0.6
Cycle Q Clear(g_c), s	26.0	0.0	8.6	26.0	0.0	26.0	2.0	67.0	21.2	20.7	66.0	0.6
Prop In Lane	1.00		0.53	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	0	314	207	0	300	31	2361	745	284	2966	882
V/C Ratio(X)	1.52	0.00	0.38	2.22	0.00	2.72	0.72	2.09	0.47	0.92	0.89	0.02
Avail Cap(c_a), veh/h	51	0	314	207	0	300	160	2361	745	310	2966	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	0.0	50.0	63.6	0.0	57.1	68.3	36.6	24.7	57.8	22.6	10.2
Incr Delay (d2), s/veh	311.1	0.0	0.7	564.2	0.0	781.8	26.3	491.8	1.0	29.9	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	0.0	6.7	64.2	0.0	118.1	1.8	213.0	12.1	16.6	30.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	381.2	0.0	50.8	627.8	0.0	838.9	94.7	528.5	25.7	87.7	26.7	10.3
LnGrp LOS	F	A	D	F	A	F	F	F	C	F	C	B
Approach Vol, veh/h	196			1275			5306			2924		
Approach Delay, s/veh	182.3			762.8			493.5			32.1		
Approach LOS	F			F			F			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	94.6		34.2	31.5	74.6		34.2				
Change Period (Y+Rc), s	* 8.6	7.6		* 8.2	* 8.6	7.6		* 8.2				
Max Green Setting (Gmax), s	* 15	77.0		* 26	* 25	67.0		* 26				
Max Q Clear Time (g_c+I1), s	4.0	68.0		28.0	22.7	69.0		28.0				
Green Ext Time (p_c), s	0.0	8.9		0.0	0.2	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 383.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

81: US 27 & Miracle Toyota/Bates Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	18	10	25	616	17	455	27	4015	371	274	3138	35
Future Volume (veh/h)	18	10	25	616	17	455	27	4015	371	274	3138	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1841	1900	1900	1900	1752	1841	1856	1767	1811
Adj Flow Rate, veh/h	18	10	26	629	17	464	28	4097	379	280	3202	36
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	4	0	0	0	10	4	3	9	6
Cap, veh/h	62	22	57	499	18	499	42	2000	653	91	2158	687
Arrive On Green	0.02	0.05	0.05	0.28	0.32	0.32	0.02	0.42	0.42	0.05	0.45	0.45
Sat Flow, veh/h	3510	467	1214	1753	57	1562	1810	4782	1560	1767	4823	1535
Grp Volume(v), veh/h	18	0	36	629	0	481	28	4097	379	280	3202	36
Grp Sat Flow(s),veh/h/ln	1755	0	1681	1753	0	1619	1810	1594	1560	1767	1608	1535
Q Serve(g_s), s	0.8	0.0	3.1	42.7	0.0	43.2	2.3	62.7	9.7	7.7	67.1	2.0
Cycle Q Clear(g_c), s	0.8	0.0	3.1	42.7	0.0	43.2	2.3	62.7	9.7	7.7	67.1	2.0
Prop In Lane	1.00		0.72	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	0	78	499	0	517	42	2000	653	91	2158	687
V/C Ratio(X)	0.29	0.00	0.46	1.26	0.00	0.93	0.67	2.05	0.58	3.09	1.48	0.05
Avail Cap(c_a), veh/h	164	0	605	499	0	649	72	2000	653	91	2158	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.8	0.0	69.7	53.7	0.0	49.4	72.7	43.6	4.0	71.2	41.4	23.5
Incr Delay (d2), s/veh	2.6	0.0	4.1	133.2	0.0	17.6	17.3	473.4	3.7	967.4	220.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	2.6	53.6	0.0	26.9	2.2	177.4	6.1	43.3	104.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	0.0	73.8	186.9	0.0	67.1	90.0	517.0	7.7	1038.6	261.8	23.6
LnGrp LOS	E	A	E	F	A	E	F	F	A	F	F	C
Approach Vol, veh/h	54			1110			4504			3518		
Approach Delay, s/veh	74.3			134.9			471.5			321.2		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	74.7	8.8	54.8	16.0	70.3	49.6	14.1				
Change Period (Y+Rc), s	8.2	7.6	* 6.2	* 6.9	* 8.3	7.6	* 6.9	7.1				
Max Green Setting (Gmax), s	6.0	48.1	* 7	* 60	* 7.7	46.3	* 12	54.0				
Max Q Clear Time (g_c+I1), s	4.3	69.1	2.8	45.2	9.7	64.7	44.7	5.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 370.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

84: US 27 & Glen Este Blvd/Southern Dunes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	42	52	198	32	142	59	4523	131	90	3675	31
Future Volume (veh/h)	176	42	52	198	32	142	59	4523	131	90	3675	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1900	1811	1811	1885	1870	1796	1856	1856	1781	1900
Adj Flow Rate, veh/h	183	44	54	206	33	148	61	4711	136	94	3828	32
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	6	6	1	2	7	3	3	8	0
Cap, veh/h	170	57	70	249	128	113	203	2794	896	115	2532	838
Arrive On Green	0.10	0.07	0.07	0.07	0.07	0.07	0.11	0.57	0.57	0.06	0.52	0.52
Sat Flow, veh/h	1781	776	952	3346	1811	1598	1781	4904	1572	1767	4863	1610
Grp Volume(v), veh/h	183	0	98	206	33	148	61	4711	136	94	3828	32
Grp Sat Flow(s),veh/h/ln	1781	0	1729	1673	1811	1598	1781	1635	1572	1767	1621	1610
Q Serve(g_s), s	14.3	0.0	8.4	9.1	2.6	10.6	4.7	85.5	6.1	7.9	78.1	0.9
Cycle Q Clear(g_c), s	14.3	0.0	8.4	9.1	2.6	10.6	4.7	85.5	6.1	7.9	78.1	0.9
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	127	249	128	113	203	2794	896	115	2532	838
V/C Ratio(X)	1.08	0.00	0.77	0.83	0.26	1.31	0.30	1.69	0.15	0.82	1.51	0.04
Avail Cap(c_a), veh/h	170	0	150	259	128	113	203	2794	896	166	2532	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.8	0.0	68.2	68.5	66.0	69.7	61.0	32.3	15.2	69.3	35.9	6.6
Incr Delay (d2), s/veh	91.3	0.0	18.3	19.1	1.1	189.5	3.8	310.4	0.4	18.5	232.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.8	0.0	7.8	8.1	2.2	16.9	4.1	173.9	4.3	7.3	126.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	159.1	0.0	86.5	87.6	67.0	259.2	64.7	342.7	15.6	87.7	268.3	6.7
LnGrp LOS	F	A	F	F	E	F	E	F	B	F	F	A
Approach Vol, veh/h		281			387			4908			3954	
Approach Delay, s/veh		133.8			151.5			330.1			261.9	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.0	85.0	21.0	20.0	16.6	92.4	20.5	20.5				
Change Period (Y+Rc), s	6.9	6.9	* 6.7	* 9.4	6.9	6.9	* 9.4	* 9.4				
Max Green Setting (Gmax), s	17.1	78.1	* 14	* 11	14.1	81.1	* 12	* 13				
Max Q Clear Time (g_c+I1), s	6.7	80.1	16.3	12.6	9.9	87.5	11.1	10.4				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 288.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

87: US 27 & Old Polk City Rd/Main St W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	154	268	128	124	124	482	3884	33	114	3671	222
Future Volume (veh/h)	351	154	268	128	124	124	482	3884	33	114	3671	222
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1885	1574	1826	1870	1841	1648	1737	1856	1885	1767	1856
Adj Flow Rate, veh/h	358	157	273	131	127	127	492	3963	34	116	3746	227
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	1	22	5	2	4	17	11	3	1	9	3
Cap, veh/h	217	172	121	197	161	134	336	2661	882	138	2029	661
Arrive On Green	0.09	0.09	0.09	0.08	0.09	0.09	0.28	0.75	0.75	0.08	0.42	0.42
Sat Flow, veh/h	1725	1885	1334	1739	1870	1560	1570	4742	1572	1795	4823	1572
Grp Volume(v), veh/h	358	157	273	131	127	127	492	3963	34	116	3746	227
Grp Sat Flow(s),veh/h/ln	1725	1885	1334	1739	1870	1560	1570	1581	1572	1795	1608	1572
Q Serve(g_s), s	12.9	12.4	13.7	10.2	10.0	12.2	32.1	84.2	0.8	9.6	63.1	14.7
Cycle Q Clear(g_c), s	12.9	12.4	13.7	10.2	10.0	12.2	32.1	84.2	0.8	9.6	63.1	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	172	121	197	161	134	336	2661	882	138	2029	661
V/C Ratio(X)	1.65	0.92	2.25	0.67	0.79	0.95	1.46	1.49	0.04	0.84	1.85	0.34
Avail Cap(c_a), veh/h	217	172	121	205	161	134	336	2661	882	175	2029	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	67.6	68.2	56.8	67.2	68.2	53.7	19.0	8.5	68.3	43.4	29.4
Incr Delay (d2), s/veh	310.4	45.0	587.6	7.5	22.7	61.4	224.9	222.3	0.1	24.2	382.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	33.0	12.8	39.4	8.6	9.8	11.5	50.2	115.7	0.6	9.0	151.7	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	372.1	112.6	655.8	64.3	89.9	129.6	278.5	241.3	8.5	92.5	426.3	30.8
LnGrp LOS	F	F	F	E	F	F	F	F	A	F	F	C
Approach Vol, veh/h	788			385			4489			4089		
Approach Delay, s/veh	418.7			94.3			243.6			394.8		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.0	70.0	20.0	20.0	18.9	91.1	19.2	20.8				
Change Period (Y+Rc), s	7.9	6.9	7.1	7.1	7.4	6.9	7.1	7.1				
Max Green Setting (Gmax), s	32.1	63.1	12.9	12.9	14.6	81.1	12.9	12.9				
Max Q Clear Time (g_c+I1), s	34.1	65.1	14.9	14.2	11.6	86.2	12.2	15.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 315.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

90: US 27 & Commerce Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	18	34	89	11	32	27	4323	124	44	3886	36
Future Volume (veh/h)	65	18	34	89	11	32	27	4323	124	44	3886	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1337	1900	1900	1781	1796	1559	1515	1767	1856
Adj Flow Rate, veh/h	71	20	37	97	12	35	29	4699	135	48	4224	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	38	0	0	8	7	23	26	9	3
Cap, veh/h	178	71	132	133	51	149	40	2553	688	107	2736	892
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.52	0.52	0.15	1.00	1.00
Sat Flow, veh/h	1380	597	1104	962	428	1248	1697	4904	1321	1443	4823	1572
Grp Volume(v), veh/h	71	0	57	97	0	47	29	4699	135	48	4224	39
Grp Sat Flow(s),veh/h/ln	1380	0	1701	962	0	1675	1697	1635	1321	1443	1608	1572
Q Serve(g_s), s	7.4	0.0	4.6	13.3	0.0	3.8	2.5	78.1	8.2	4.6	0.0	0.0
Cycle Q Clear(g_c), s	11.2	0.0	4.6	17.9	0.0	3.8	2.5	78.1	8.2	4.6	0.0	0.0
Prop In Lane	1.00		0.65	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	203	133	0	200	40	2553	688	107	2736	892
V/C Ratio(X)	0.40	0.00	0.28	0.73	0.00	0.24	0.73	1.84	0.20	0.45	1.54	0.04
Avail Cap(c_a), veh/h	178	0	203	133	0	200	85	2553	688	107	2736	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	60.2	69.1	0.0	59.8	72.8	36.0	19.2	61.1	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.7	17.9	0.0	0.6	22.5	379.7	0.6	13.1	246.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	3.7	7.9	0.0	3.0	2.4	189.5	4.7	3.6	98.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.4	0.0	60.9	87.0	0.0	60.4	95.3	415.7	19.8	74.2	246.6	0.1
LnGrp LOS	E	A	E	F	A	E	F	F	B	E	F	A
Approach Vol, veh/h	128			144			4863			4311		
Approach Delay, s/veh	63.9			78.4			402.8			242.4		
Approach LOS	E			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	92.0		25.4	18.0	85.0		25.4				
Change Period (Y+Rc), s	7.5	6.9		7.5	6.9	6.9		* 7.5				
Max Green Setting (Gmax), s	7.5	81.1		14.5	11.1	78.1		* 18				
Max Q Clear Time (g_c+I1), s	4.5	2.0		13.2	6.6	80.1		19.9				
Green Ext Time (p_c), s	0.0	78.7		0.1	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 320.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

18: US 27 & Central Grove Rd/Terra del Sol Blvd

03/09/2020

Intersection												
Int Delay, s/veh	92.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑↑↑	↔	↔	↑↑↑	↔
Traffic Vol, veh/h	178	10	46	19	10	70	17	3505	15	10	2806	65
Future Vol, veh/h	178	10	46	19	10	70	17	3505	15	10	2806	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	605	-	460	550	-	420
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	0	20	0	0	5	0	6	17	0	6	11
Mvmt Flow	191	11	49	20	11	75	18	3769	16	11	3017	70

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4588	6860	1509	5039	6914	1885	3087	0	0	3785	0	0
Stage 1	3039	3039	-	3805	3805	-	-	-	-	-	-	-
Stage 2	1549	3821	-	1234	3109	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.5	7.5	6.4	6.5	7.2	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.34	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4	4.1	3.8	4	3.95	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 1	0	79	~ 1	0	~ 50	35	-	-	15	-	-
Stage 1	~ 6	30	-	~ 2	12	-	-	-	-	-	-	-
Stage 2	~ 106	11	-	170	28	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	79	0	0	~ 50	35	-	-	15	-	-
Mov Cap-2 Maneuver	~ 2	~ 22	-	~ 1	12	-	-	-	-	-	-	-
Stage 1	~ 3	~ 8	-	~ 1	~ 6	-	-	-	-	-	-	-
Stage 2	~ 21	~ 5	-	-	~ 7	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		\$ 6235.4	0.9	1.6
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	35	-	-	- 1 50	15	-	-
HCM Lane V/C Ratio	0.522	-	-	-31.183 1.505 0.717	-	-	-
HCM Control Delay (s)	189.4	-	-	\$ 20226.5\$ 439.1\$ 466.7	-	-	-
HCM Lane LOS	F	-	-	F F F	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	- 5.8 7.1 1.8	-	-	-

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

HCM 6th TWSC

24: US 27 & Cardiff Ave/Tri County 1 Rd

03/09/2020

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	45	10	70	23	10	26	16	3093	10	26	3262	20
Future Vol, veh/h	45	10	70	23	10	26	16	3093	10	26	3262	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	580	-	430	515	-	435
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	0	5	0	0	9	7	7	14	0	7	17
Mvmt Flow	48	11	74	24	11	28	17	3290	11	28	3470	21

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4882	6861	1735	4774	6871	1645	3491	0	0	3301	0	0
Stage 1	3526	3526	-	3324	3324	-	-	-	-	-	-	-
Stage 2	1356	3335	-	1450	3547	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.5	7.2	6.4	6.5	7.28	5.44	-	-	5.3	-	-
Critical Hdwy Stg 1	7.36	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4	3.95	3.8	4	3.99	3.17	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 1	0	~ 63	~ 1	0	70	19	-	-	~ 27	-	-
Stage 1	~ 3	16	-	~ 4	21	-	-	-	-	-	-	-
Stage 2	139	21	-	125	16	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	~ 63	-	0	70	19	-	-	~ 27	-	-
Mov Cap-2 Maneuver	0	0	-	0	~ 2	-	-	-	-	-	-	-
Stage 1	0	0	-	0	~ 2	-	-	-	-	-	-	-
Stage 2	-	~ 2	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2.3	3.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	-	63	-	~ 27	-	-
HCM Lane V/C Ratio	0.896	-	-	-	1.182	-	1.024	-	-
HCM Control Delay (s)	\$ 448.4	-	-	-	282.2	-	\$ 391.8	-	-
HCM Lane LOS	F	-	-	-	F	-	F	-	-
HCM 95th %tile Q(veh)	2.4	-	-	-	6	-	3.3	-	-

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

HCM 6th TWSC

30: US 27 & Laurel Estates Entrance

03/09/2020

Intersection							
Int Delay, s/veh	15.4						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	56	72	46	2942	85	3354	35
Future Vol, veh/h	56	72	46	2942	85	3354	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	550	-	495	-	325
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	3	5	17	7	0	6	7
Mvmt Flow	60	77	49	3130	90	3568	37
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	5098	1784	3605	0	2285	-	0
Stage 1	3748	-	-	-	-	-	-
Stage 2	1350	-	-	-	-	-	-
Critical Hdwy	5.76	7.2	5.64	-	5.6	-	-
Critical Hdwy Stg 1	6.66	-	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-	-
Follow-up Hdwy	3.83	3.95	3.27	-	2.3	-	-
Pot Cap-1 Maneuver	~ 1	~ 59	~ 13	-	~ 85	-	-
Stage 1	~ 4	-	-	-	-	-	-
Stage 2	183	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	0	~ 59	~ 13	-	~ 85	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Approach	EB	NB		SB			
HCM Control Delay, s		28.2		5			
HCM LOS	-						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	~ 13	-	-	59	~ 85	-	-
HCM Lane V/C Ratio	3.764	-	-	1.298	1.064	-	-
HCM Control Delay (s)	\$ 1829.1	-	-	\$ 333.5	204.8	-	-
HCM Lane LOS	F	-	-	F	F	-	-
HCM 95th %tile Q(veh)	7.1	-	-	6.6	6.2	-	-
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

HCM 6th TWSC

55: US 27 & Holly Hill Grove Rd 2/Cottonwood Rd

03/09/2020

Intersection												
Int Delay, s/veh	68.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	12	10	23	30	10	128	80	4941	17	35	3382	27
Future Vol, veh/h	12	10	23	30	10	128	80	4941	17	35	3382	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	505	-	485	515	-	450
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	4	3	5	7	3	8	17
Mvmt Flow	13	11	25	32	11	138	86	5313	18	38	3637	29

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6016	9216	1819	7021	9227	2657	3666	0	0	5331	0	0
Stage 1	3713	3713	-	5485	5485	-	-	-	-	-	-	-
Stage 2	2303	5503	-	1536	3742	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.18	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	3.94	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	0	0	58	0	0	~ 14	~ 16	-	-	~ 2	-	-
Stage 1	~ 2	13	-	0	~ 1	-	-	-	-	-	-	-
Stage 2	35	~ 1	-	110	13	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	58	-	0	~ 14	~ 16	-	-	~ 2	-	-
Mov Cap-2 Maneuver	~ 2	0	-	0	0	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	0	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			38.8	116
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 16	-	-	-	~ 2	-	-
HCM Lane V/C Ratio	5.376	-	-	-	18.817	-	-
HCM Control Delay (s)	\$ 2445.1	-	-	-	\$ 11409.7	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	11.5	-	-	-	6.6	-	-

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

HCM 6th TWSC

61: US 27 & Holly Hill Tank Rd/Florida Development Rd

03/09/2020

Intersection												
Int Delay, s/veh	62.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	10	29	10	70	19	4738	44	52	3505	10
Future Vol, veh/h	10	10	10	29	10	70	19	4738	44	52	3505	10
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	-	-	-	-	-	-	495	-	380	490	-	430
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	33	0	17	0	0	8	0	5	11	0	8	0
Mvmt Flow	11	11	11	31	11	74	20	4987	46	55	3689	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	5839	8872	1845	6618	8837	2494	3700	0	0	5033	0	0
Stage 1	3799	3799	-	5027	5027	-	-	-	-	-	-	-
Stage 2	2040	5073	-	1591	3810	-	-	-	-	-	-	-
Critical Hdwy	7.06	6.5	7.44	6.4	6.5	7.26	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.96	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.36	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.13	4	4.07	3.8	4	3.98	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	47	0	0	~ 17	~ 17	-	-	~ 3	-	-
Stage 1	~ 1	12	-	0	~ 2	-	-	-	-	-	-	-
Stage 2	35	~ 2	-	101	11	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	47	-	0	~ 17	~ 17	-	-	~ 3	-	-
Mov Cap-2 Maneuver	~ 1	0	-	0	0	-	-	-	-	-	-	-
Stage 1	~ 1	0	-	0	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2.3	146.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 17	-	-	-	~ 3	-	-
HCM Lane V/C Ratio	1.176	-	-	-	18.246	-	-
HCM Control Delay (s)	\$ 593.6	-	-	-	\$ 10076.2	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	2.9	-	-	-	8.8	-	-

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

HCM 6th TWSC

67: US 27 & La Casa Del Sol Blvd

03/09/2020

Intersection							
Int Delay, s/veh	5.9						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	18	18	10	4637	10	2905	10
Future Vol, veh/h	18	18	10	4637	10	2905	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	510	-	510	-	400
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	5	0	9	14
Mvmt Flow	19	19	10	4830	10	3026	10
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	4998	1513	3036	0	3526	-	0
Stage 1	3046	-	-	-	-	-	-
Stage 2	1952	-	-	-	-	-	-
Critical Hdwy	5.7	7.1	5.3	-	5.6	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	3.9	3.1	-	2.3	-	-
Pot Cap-1 Maneuver	~ 2	95	38	-	16	-	-
Stage 1	~ 12	-	-	-	-	-	-
Stage 2	86	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	~ 1	95	38	-	16	-	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-	-
Stage 1	~ 9	-	-	-	-	-	-
Stage 2	32	-	-	-	-	-	-
Approach	EB	NB		SB			
HCM Control Delay, s	1085.4	0.3		1.4			
HCM LOS	F						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	38	-	6	95	16	-	-
HCM Lane V/C Ratio	0.274	-	3.125	0.197	0.651	-	-
HCM Control Delay (s)	132.3	\$	2118.7	52	\$ 420	-	-
HCM Lane LOS	F	-	F	F	F	-	-
HCM 95th %tile Q(veh)	0.9	-	3.6	0.7	1.7	-	-
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

HCM 6th TWSC
75: US 27 & South Blvd

AM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	677											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	21	10	10	62	10	185	15	4422	214	144	3225	16
Future Vol, veh/h	21	10	10	62	10	185	15	4422	214	144	3225	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	400	-	300	510	-	260
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	73	0	20	4	33	1	23	6	3	7	8	29
Mvmt Flow	23	11	11	69	11	206	17	4913	238	160	3583	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	5908	9088	1792	6706	8868	2457	3601	0	0	5151	0	0
Stage 1	3903	3903	-	4947	4947	-	-	-	-	-	-	-
Stage 2	2005	5185	-	1759	3921	-	-	-	-	-	-	-
Critical Hdwy	7.86	6.5	7.5	6.48	7.16	7.12	5.76	-	-	5.44	-	-
Critical Hdwy Stg 1	8.76	5.5	-	7.38	6.16	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.16	5.5	-	6.78	6.16	-	-	-	-	-	-	-
Follow-up Hdwy	4.53	4	4.1	3.84	4.33	3.91	3.33	-	-	3.17	-	-
Pot Cap-1 Maneuver	0	0	49	0	0	~ 20	~ 12	-	-	~ 2	-	-
Stage 1	0	~ 10	-	0	~ 1	-	-	-	-	-	-	-
Stage 2	~ 23	~ 2	-	76	~ 5	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	49	-	0	~ 20	~ 12	-	-	~ 2	-	-
Mov Cap-2 Maneuver	0	0	-	0	0	-	-	-	-	-	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2.7	\$ 1663
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 12	-	-	-	~ 2	-	-
HCM Lane V/C Ratio	1.389	-	-	-	80	-	-
HCM Control Delay (s)	\$ 834.3	-	-	-	\$ 39092.8	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	2.8	-	-	-	22.4	-	-

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

HCM 6th TWSC

78: US 27 & Section 7 Airport Rd/Patterson Rd

03/09/2020

Intersection													
Int Delay, s/veh	447.8												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕		↑↑↑	↗	↖	↑↑↑	
Traffic Vol, veh/h	0	0	0	59	0	149	10	0	4389	141	143	3251	0
Future Vol, veh/h	0	0	0	59	0	149	10	0	4389	141	143	3251	0
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	345	-	280	405	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	2	0	2	0	0	6	4	2	8	0
Mvmt Flow	0	0	0	65	0	164	11	0	4823	155	157	3573	0
Major/Minor	Minor2		Minor1		Major1		Major2						
Conflicting Flow All	5838	8887	1787	6588	8732	2412	2608	-	0	0	4978	0	0
Stage 1	3887	3887	-	4845	4845	-	-	-	-	-	-	-	-
Stage 2	1951	5000	-	1743	3887	-	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.44	6.5	7.14	5.6	-	-	-	5.34	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.34	5.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.74	5.5	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.82	4	3.92	2.3	-	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	62	0	0	~ 22	56	0	-	-	~ 3	-	-
Stage 1	1	10	-	0	3	-	-	0	-	-	-	-	-
Stage 2	59	2	-	79	10	-	-	0	-	-	-	-	-
Platoon blocked, %									-	-		-	-
Mov Cap-1 Maneuver	-	0	62	-	0	~ 22	56	-	-	-	~ 3	-	-
Mov Cap-2 Maneuver	1	0	-	0	2	-	-	-	-	-	-	-	-
Stage 1	1	0	-	0	2	-	-	-	-	-	-	-	-
Stage 2	-	2	-	-	0	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB						
HCM Control Delay, s	0				0.2		\$ 1074						
HCM LOS	A		-										
Minor Lane/Major Mvmt	NBU	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	56	-	-	-	-	~ 3	-	-					
HCM Lane V/C Ratio	0.196	-	-	-	-	-52.381	-	-					
HCM Control Delay (s)	84.4	-	-	0	\$ 25491.1	-	-	-					
HCM Lane LOS	F	-	-	A	-	F	-	-					
HCM 95th %tile Q(veh)	0.7	-	-	-	-	22	-	-					
Notes													
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon							

HCM 6th TWSC
93: US 27 & W Johnson Ave

AM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	171											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	36	11	10	55	134	4427	16	66	3403	10
Future Vol, veh/h	10	10	36	11	10	55	134	4427	16	66	3403	10
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	-	-	-	-	-	-	305	-	220	300	-	290
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	100	0	6	0	0	12	0	8	17	8	10	0
Mvmt Flow	11	11	40	12	11	60	147	4865	18	73	3740	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6132	9063	1870	6807	9056	2433	3751	0	0	4883	0	0
Stage 1	3886	3886	-	5159	5159	-	-	-	-	-	-	-
Stage 2	2246	5177	-	1648	3897	-	-	-	-	-	-	-
Critical Hdwy	8.4	6.5	7.22	6.4	6.5	7.34	5.3	-	-	5.46	-	-
Critical Hdwy Stg 1	9.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.8	4	3.96	3.8	4	4.02	3.1	-	-	3.18	-	-
Pot Cap-1 Maneuver	0	0	50	0	0	~ 18	~ 16	-	-	~ 3	-	-
Stage 1	0	~ 10	-	0	~ 2	-	-	-	-	-	-	-
Stage 2	~ 10	~ 2	-	93	~ 10	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	50	-	0	~ 18	~ 16	-	-	~ 3	-	-
Mov Cap-2 Maneuver	0	0	-	0	0	-	-	-	-	-	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			121.8	242.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 16	-	-	-	~ 3	-	-
HCM Lane V/C Ratio	9.203	-	-	-	-24.176	-	-
HCM Control Delay (s)	\$ 4158.7	-	-	-	\$ 12763.6	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	19.3	-	-	-	11.1	-	-

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

HCM 6th Signalized Intersection Summary

3: US 27 & SR 544

03/09/2020

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	914	346	334	247	648	278	498	2833	61	243	2212	1035	
Future Volume (veh/h)	914	346	334	247	648	278	498	2833	61	243	2212	1035	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No			No			No			No			
Adj Sat Flow, veh/h/ln	1796	1841	1841	1885	1841	1722	1737	1796	1841	1752	1722	1811	
Adj Flow Rate, veh/h	962	364	352	260	682	293	524	2982	0	256	2328	0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Percent Heavy Veh, %	7	4	4	1	4	12	11	7	4	10	12	6	
Cap, veh/h	436	547	463	320	547	433	223	1661		133	1354		
Arrive On Green	0.11	0.30	0.30	0.10	0.30	0.30	0.13	0.34	0.00	0.08	0.29	0.00	
Sat Flow, veh/h	3319	1841	1560	1795	1841	1459	1654	4904	1560	1668	4701	1535	
Grp Volume(v), veh/h	962	364	352	260	682	293	524	2982	0	256	2328	0	
Grp Sat Flow(s),veh/h/ln	1659	1841	1560	1795	1841	1459	1654	1635	1560	1668	1567	1535	
Q Serve(g_s), s	18.9	30.6	36.2	17.9	52.5	31.2	23.8	59.9	0.0	14.1	50.9	0.0	
Cycle Q Clear(g_c), s	18.9	30.6	36.2	17.9	52.5	31.2	23.8	59.9	0.0	14.1	50.9	0.0	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	436	547	463	320	547	433	223	1661		133	1354		
V/C Ratio(X)	2.21	0.67	0.76	0.81	1.25	0.68	2.35	1.79		1.92	1.72		
Avail Cap(c_a), veh/h	436	547	463	320	547	433	223	1661		133	1354		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	57.5	54.5	56.4	41.1	62.1	54.7	76.5	58.4	0.0	81.3	62.9	0.0	
Incr Delay (d2), s/veh	549.8	4.1	8.5	15.2	126.1	5.4	622.6	360.1	0.0	442.3	327.1	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln	61.7	20.8	21.4	14.0	61.2	17.6	75.6	123.6	0.0	35.6	94.1	0.0	
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	607.3	58.6	64.9	56.3	188.3	60.1	699.1	418.6	0.0	523.6	390.1	0.0	
LnGrp LOS	F	E	E	E	F	E	F	F		F	F		
Approach Vol, veh/h	1678			1235				3506		A		2584	A
Approach Delay, s/veh	374.5			130.1				460.5				403.3	
Approach LOS	F			F				F				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	32.0	58.8	26.0	60.0	23.0	67.8	26.0	60.0					
Change Period (Y+Rc), s	* 8.2	7.9	* 7.1	7.5	* 8.9	7.9	7.5	7.5					
Max Green Setting (Gmax), s	* 24	50.9	* 19	52.5	* 14	59.9	18.5	52.5					
Max Q Clear Time (g_c+I1), s	25.8	52.9	20.9	54.5	16.1	61.9	19.9	38.2					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3					

Intersection Summary

HCM 6th Ctrl Delay 382.7

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

9: US 27 & Kokomo Rd

03/09/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	215	459	2971	128	268	2376
Future Volume (veh/h)	215	459	2971	128	268	2376
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1811	1811	1781	1752
Adj Flow Rate, veh/h	222	473	3063	0	276	2449
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	6	6	8	10
Cap, veh/h	141	299	2342		203	3085
Arrive On Green	0.27	0.27	0.47	0.00	0.12	0.65
Sat Flow, veh/h	520	1108	5107	1535	1697	4940
Grp Volume(v), veh/h	696	0	3063	0	276	2449
Grp Sat Flow(s),veh/h/ln	1630	0	1648	1535	1697	1594
Q Serve(g_s), s	47.3	0.0	82.9	0.0	20.9	65.2
Cycle Q Clear(g_c), s	47.3	0.0	82.9	0.0	20.9	65.2
Prop In Lane	0.32	0.68		1.00	1.00	
Lane Grp Cap(c), veh/h	441	0	2342		203	3085
V/C Ratio(X)	1.58	0.00	1.31		1.36	0.79
Avail Cap(c_a), veh/h	441	0	2342		203	3085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	63.9	0.0	46.1	0.0	77.1	22.6
Incr Delay (d2), s/veh	271.5	0.0	141.7	0.0	191.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	80.8	0.0	90.9	0.0	30.4	30.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	335.4	0.0	187.7	0.0	268.5	24.1
LnGrp LOS	F	A	F		F	C
Approach Vol, veh/h	696		3063	A		2725
Approach Delay, s/veh	335.4		187.7			48.8
Approach LOS	F		F			D
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	30.0	92.0			122.0	53.0
Change Period (Y+Rc), s	* 9.1	* 9.1			* 9.1	5.7
Max Green Setting (Gmax), s	* 21	* 83			* 1.1E2	47.3
Max Q Clear Time (g_c+I1), s	22.9	84.9			67.2	49.3
Green Ext Time (p_c), s	0.0	0.0			29.5	0.0

Intersection Summary

HCM 6th Ctrl Delay 145.2

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

12: US 27 & Crump Rd/W Main St

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	22	19	41	47	30	72	2820	69	49	2689	160
Future Volume (veh/h)	73	22	19	41	47	30	72	2820	69	49	2689	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1900	1900	1856	1900	1900	1781	1767	1767	1900	1737	1900
Adj Flow Rate, veh/h	77	23	20	43	49	32	76	2968	73	52	2831	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	3	0	0	8	9	9	0	11	0
Cap, veh/h	129	68	59	128	78	51	96	2868	890	68	2731	927
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.59	0.59	0.04	0.58	0.58
Sat Flow, veh/h	1781	938	815	1767	1073	701	1697	4823	1497	1810	4742	1610
Grp Volume(v), veh/h	77	0	43	43	0	81	76	2968	73	52	2831	168
Grp Sat Flow(s),veh/h/ln	1781	0	1753	1767	0	1774	1697	1608	1497	1810	1581	1610
Q Serve(g_s), s	5.7	0.0	3.2	3.2	0.0	6.1	6.1	81.4	2.8	3.9	78.8	6.8
Cycle Q Clear(g_c), s	5.7	0.0	3.2	3.2	0.0	6.1	6.1	81.4	2.8	3.9	78.8	6.8
Prop In Lane	1.00		0.47	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	0	127	128	0	128	96	2868	890	68	2731	927
V/C Ratio(X)	0.60	0.00	0.34	0.34	0.00	0.63	0.79	1.03	0.08	0.76	1.04	0.18
Avail Cap(c_a), veh/h	286	0	282	248	0	249	310	2868	890	331	2731	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	60.4	60.3	0.0	61.7	63.8	27.7	11.8	65.2	29.0	13.7
Incr Delay (d2), s/veh	4.4	0.0	1.6	1.5	0.0	5.0	13.6	26.6	0.1	16.1	27.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	2.7	2.7	0.0	5.3	5.2	44.8	1.6	3.7	43.7	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	0.0	61.9	61.9	0.0	66.7	77.4	54.3	11.9	81.3	56.6	13.9
LnGrp LOS	E	A	E	E	A	E	E	F	B	F	F	B
Approach Vol, veh/h	120			124			3117			3051		
Approach Delay, s/veh	64.5			65.0			53.9			54.7		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.9	86.0		16.9	13.3	88.6		18.0				
Change Period (Y+Rc), s	8.2	7.2		7.0	8.2	7.2		8.1				
Max Green Setting (Gmax), s	25.0	78.8		22.0	25.0	78.8		19.2				
Max Q Clear Time (g_c+I1), s	8.1	80.8		7.7	5.9	83.4		8.1				
Green Ext Time (p_c), s	0.1	0.0		0.3	0.1	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay 54.7

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

18: US 27 & SR 542/Dundee Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	562	463	588	421	876	128	667	2119	130	136	1814	463
Future Volume (veh/h)	562	463	588	421	876	128	667	2119	130	136	1814	463
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1841	1796	1870	1781	1856	1796	1767	1900	1737	1870
Adj Flow Rate, veh/h	585	482	612	439	912	133	695	2207	135	142	1890	482
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	7	2	8	3	7	9	0	11	2
Cap, veh/h	318	390	325	189	417	337	325	2013	615	164	1512	505
Arrive On Green	0.09	0.21	0.21	0.11	0.22	0.22	0.18	0.41	0.41	0.09	0.32	0.32
Sat Flow, veh/h	3456	1870	1560	1711	1870	1510	1767	4904	1497	1810	4742	1585
Grp Volume(v), veh/h	585	482	612	439	912	133	695	2207	135	142	1890	482
Grp Sat Flow(s),veh/h/ln	1728	1870	1560	1711	1870	1510	1767	1635	1497	1810	1581	1585
Q Serve(g_s), s	15.0	34.0	34.0	18.0	36.4	12.2	30.0	66.9	9.5	12.6	52.0	48.5
Cycle Q Clear(g_c), s	15.0	34.0	34.0	18.0	36.4	12.2	30.0	66.9	9.5	12.6	52.0	48.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	390	325	189	417	337	325	2013	615	164	1512	505
V/C Ratio(X)	1.84	1.24	1.88	2.33	2.18	0.39	2.14	1.10	0.22	0.87	1.25	0.95
Avail Cap(c_a), veh/h	318	390	325	189	417	337	325	2013	615	222	1512	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	64.6	64.6	72.6	63.4	54.0	66.6	48.1	31.1	73.2	55.5	54.4
Incr Delay (d2), s/veh	390.3	126.6	408.4	612.6	541.0	0.8	522.4	51.9	0.1	22.7	118.2	28.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	37.8	43.0	78.5	62.5	124.5	8.2	94.1	48.8	6.2	11.1	53.2	30.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	464.4	191.1	472.9	685.2	604.4	54.7	588.9	100.0	31.3	95.9	173.8	82.9
LnGrp LOS	F	F	F	F	F	D	F	F	C	F	F	F
Approach Vol, veh/h	1679			1484			3037			2514		
Approach Delay, s/veh	389.1			579.0			208.8			152.0		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	59.2	22.4	43.6	23.0	74.1	24.8	41.2				
Change Period (Y+Rc), s	* 7.9	7.2	7.4	* 7.2	8.2	7.2	* 6.8	* 7.2				
Max Green Setting (Gmax), s	* 30	52.0	15.0	* 34	20.0	52.0	* 18	* 34				
Max Q Clear Time (g_c+l1), s	32.0	54.0	17.0	38.4	14.6	68.9	20.0	36.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 290.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

23: US 27 & Cypress Gardens Blvd/Waverly Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	131	965	49	261	77	980	2231	65	49	1794	768
Future Volume (veh/h)	660	131	965	49	261	77	980	2231	65	49	1794	768
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1841	1870	1900	1811	1811	1870	1767	1796	1900	1707	1885
Adj Flow Rate, veh/h	710	141	1038	53	281	83	1054	2399	70	53	1929	826
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	4	2	0	6	6	2	9	7	0	13	1
Cap, veh/h	645	471	405	68	144	43	651	2437	769	68	1630	559
Arrive On Green	0.19	0.26	0.26	0.04	0.11	0.11	0.19	0.51	0.51	0.04	0.35	0.35
Sat Flow, veh/h	3428	1841	1585	1810	1343	397	3456	4823	1522	1810	4661	1598
Grp Volume(v), veh/h	710	141	1038	53	0	364	1054	2399	70	53	1929	826
Grp Sat Flow(s),veh/h/ln	1714	1841	1585	1810	0	1740	1728	1608	1522	1810	1554	1598
Q Serve(g_s), s	35.0	11.5	47.5	5.4	0.0	20.0	35.0	91.0	4.4	5.4	65.0	65.0
Cycle Q Clear(g_c), s	35.0	11.5	47.5	5.4	0.0	20.0	35.0	91.0	4.4	5.4	65.0	65.0
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	645	471	405	68	0	187	651	2437	769	68	1630	559
V/C Ratio(X)	1.10	0.30	2.56	0.78	0.00	1.94	1.62	0.98	0.09	0.78	1.18	1.48
Avail Cap(c_a), veh/h	645	471	405	195	0	187	651	2437	769	195	1630	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.4	55.8	69.2	88.7	0.0	83.0	75.4	45.3	23.8	88.7	60.5	60.4
Incr Delay (d2), s/veh	65.9	0.4	710.0	17.3	0.0	444.1	286.0	14.7	0.0	17.3	89.2	224.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	30.0	9.1	155.6	5.1	0.0	50.1	62.9	47.7	2.9	5.1	53.9	90.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	141.4	56.1	779.2	106.0	0.0	527.1	361.5	60.0	23.9	106.0	149.7	285.4
LnGrp LOS	F	E	F	F	A	F	F	E	C	F	F	F
Approach Vol, veh/h	1889				417				3523			
Approach Delay, s/veh	485.5				473.6				149.5			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.0	73.0	42.0	26.9	15.1	101.9	14.5	54.4				
Change Period (Y+Rc), s	9.0	8.0	7.0	6.9	* 8.1	8.0	7.5	6.9				
Max Green Setting (Gmax), s	35.0	65.0	35.0	20.0	* 20	65.0	20.0	20.0				
Max Q Clear Time (g_c+I1), s	37.0	67.0	37.0	22.0	7.4	93.0	7.4	49.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay 251.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

26: US 27 & Market Blvd/Star Lake Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	51	10	118	59	20	72	89	2884	10	45	3022	10
Future Volume (veh/h)	51	10	118	59	20	72	89	2884	10	45	3022	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1796	1900	1900	1826	1841	1796	1737	1856	1767	1530
Adj Flow Rate, veh/h	56	11	130	65	22	79	98	3169	11	49	3321	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	7	0	0	5	4	7	11	3	9	25
Cap, veh/h	51	6	165	48	10	168	120	3325	998	63	3098	833
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.14	1.00	1.00	0.04	0.64	0.64
Sat Flow, veh/h	0	53	1522	0	91	1547	1753	4904	1472	1767	4823	1296
Grp Volume(v), veh/h	67	0	130	87	0	79	98	3169	11	49	3321	11
Grp Sat Flow(s),veh/h/ln	53	0	1522	91	0	1547	1753	1635	1472	1767	1608	1296
Q Serve(g_s), s	0.0	0.0	10.8	0.0	0.0	6.2	7.1	0.0	0.0	3.6	83.5	0.4
Cycle Q Clear(g_c), s	14.1	0.0	10.8	14.1	0.0	6.2	7.1	0.0	0.0	3.6	83.5	0.4
Prop In Lane	0.84		1.00	0.75		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	0	165	58	0	168	120	3325	998	63	3098	833
V/C Ratio(X)	1.18	0.00	0.79	1.49	0.00	0.47	0.82	0.95	0.01	0.77	1.07	0.01
Avail Cap(c_a), veh/h	57	0	165	58	0	168	198	3325	998	178	3098	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.6	0.0	56.5	62.7	0.0	54.4	55.3	0.0	0.0	62.2	23.2	8.4
Incr Delay (d2), s/veh	178.1	0.0	21.9	292.7	0.0	2.0	12.7	8.0	0.0	17.9	39.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.4	0.0	8.9	12.0	0.0	4.6	5.9	4.4	0.0	3.4	49.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	241.7	0.0	78.4	355.4	0.0	56.5	68.0	8.0	0.0	80.1	62.7	8.4
LnGrp LOS	F	A	E	F	A	E	E	A	A	F	F	A
Approach Vol, veh/h		197			166			3278			3381	
Approach Delay, s/veh		133.9			213.1			9.7			62.7	
Approach LOS		F			F			A			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	91.8		21.0	12.6	96.4		21.0				
Change Period (Y+Rc), s	8.3	8.3		6.9	7.9	8.3		6.9				
Max Green Setting (Gmax), s	14.7	77.7		14.1	13.1	79.7		14.1				
Max Q Clear Time (g_c+I1), s	9.1	85.5		16.1	5.6	2.0		16.1				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	75.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay 43.6

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

29: US 27 & Thompson Nursery Rd/Chalet Suzanne Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	415	154	509	488	353	755	267	2267	44	197	2400	209
Future Volume (veh/h)	415	154	509	488	353	755	267	2267	44	197	2400	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1856	1811	1856	1796	1841	1767	1781	1826	1885	1752	1767
Adj Flow Rate, veh/h	461	171	566	542	392	839	297	2519	49	219	2667	232
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
Percent Heavy Veh, %	4	3	6	3	7	4	9	8	5	1	10	9
Cap, veh/h	260	231	191	315	238	206	144	2099	668	271	1990	623
Arrive On Green	0.12	0.12	0.12	0.13	0.13	0.13	0.17	0.86	0.86	0.16	0.83	0.83
Sat Flow, veh/h	1753	1856	1535	1767	1796	1560	1682	4863	1547	3483	4782	1497
Grp Volume(v), veh/h	461	171	566	542	392	839	297	2519	49	219	2667	232
Grp Sat Flow(s),veh/h/ln	1753	1856	1535	1767	1796	1560	1682	1621	1547	1742	1594	1497
Q Serve(g_s), s	15.2	11.6	16.2	17.2	17.2	13.3	11.1	56.1	0.4	7.9	54.1	4.9
Cycle Q Clear(g_c), s	15.2	11.6	16.2	17.2	17.2	13.3	11.1	56.1	0.4	7.9	54.1	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	231	191	315	238	206	144	2099	668	271	1990	623
V/C Ratio(X)	1.77	0.74	2.96	1.72	1.65	4.07	2.07	1.20	0.07	0.81	1.34	0.37
Avail Cap(c_a), veh/h	260	231	191	315	238	206	144	2099	668	271	1990	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	54.9	56.9	46.4	56.4	33.6	53.9	8.9	1.7	54.0	10.9	6.8
Incr Delay (d2), s/veh	362.0	11.9	895.7	338.0	310.4	1390.8	503.5	95.0	0.2	22.4	156.5	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	51.7	10.1	83.6	48.8	43.9	129.0	38.6	32.8	0.4	7.1	50.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	408.3	66.7	952.6	384.4	366.8	1424.3	557.4	103.9	1.9	76.4	167.4	8.5
LnGrp LOS	F	E	F	F	F	F	F	F	A	E	F	A
Approach Vol, veh/h	1198				1773				2865			
Approach Delay, s/veh	616.7				872.6				149.2			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	63.0	23.0	25.0	19.0	64.0	24.0	24.0				
Change Period (Y+Rc), s	* 8.9	* 8.9	7.8	7.8	8.9	* 7.9	6.8	7.8				
Max Green Setting (Gmax), s	* 11	* 54	15.2	17.2	9.1	* 56	17.2	16.2				
Max Q Clear Time (g_c+I1), s	13.1	56.1	17.2	19.2	9.9	58.1	19.2	18.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 355.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Eagle Ridge Mall Ent S

03/09/2020

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	88	60	40	3077	72	76	2594
Future Volume (veh/h)	88	60	40	3077	72	76	2594
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1870	1870		1767	1826	1811	1722
Adj Flow Rate, veh/h	89	61		3108	73	77	2620
Peak Hour Factor	0.99	0.99		0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2		9	5	6	12
Cap, veh/h	192	88		3518	1129	122	3924
Arrive On Green	0.06	0.06		0.73	0.73	0.04	0.83
Sat Flow, veh/h	3456	1585		4982	1547	3346	4856
Grp Volume(v), veh/h	89	61		3108	73	77	2620
Grp Sat Flow(s),veh/h/ln	1728	1585		1608	1547	1673	1567
Q Serve(g_s), s	3.2	4.9		63.7	1.7	2.9	27.1
Cycle Q Clear(g_c), s	3.2	4.9		63.7	1.7	2.9	27.1
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	192	88		3518	1129	122	3924
V/C Ratio(X)	0.46	0.69		0.88	0.06	0.63	0.67
Avail Cap(c_a), veh/h	494	227		3518	1129	414	3924
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.5	60.3		13.4	5.0	61.8	4.0
Incr Delay (d2), s/veh	1.7	9.4		3.6	0.1	5.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	8.0		24.9	0.9	2.3	7.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	61.3	69.7		17.0	5.1	67.0	4.9
LnGrp LOS	E	E		B	A	E	A
Approach Vol, veh/h	150			3181			2697
Approach Delay, s/veh	64.7			16.7			6.7
Approach LOS	E			B			A
Timer - Assigned Phs							
	2			4	5	6	
Phs Duration (G+Y+Rc), s	116.4			13.6	13.7	102.7	
Change Period (Y+Rc), s	7.9			6.4	* 8.9	7.9	
Max Green Setting (Gmax), s	77.1			18.6	* 16	72.1	
Max Q Clear Time (g_c+l1), s	29.1			6.9	4.9	65.7	
Green Ext Time (p_c), s	44.9			0.3	0.1	6.4	
Intersection Summary							
HCM 6th Ctrl Delay			13.4				
HCM 6th LOS			B				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved ignoring U-Turning movement.							
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.							

HCM 6th Signalized Intersection Summary

37: US 27 & Huston Kia/E Mountain Lake Cutoff Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	136	10	498	10	2288	93	633	2394	10
Future Volume (veh/h)	10	10	10	136	10	498	10	2288	93	633	2394	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1900	1752	1618	1870	1767	1767
Adj Flow Rate, veh/h	11	11	11	153	11	560	11	2571	104	711	2690	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	3	0	10	19	2	9	9
Cap, veh/h	36	34	17	146	7	210	23	1984	569	475	3317	14
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.01	0.41	0.41	0.27	0.67	0.67
Sat Flow, veh/h	0	259	129	710	51	1572	1810	4782	1372	1781	4958	20
Grp Volume(v), veh/h	33	0	0	164	0	560	11	2571	104	711	1744	957
Grp Sat Flow(s),veh/h/ln	388	0	0	761	0	1572	1810	1594	1372	1781	1608	1763
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	18.0	0.8	56.0	6.5	36.0	52.9	53.1
Cycle Q Clear(g_c), s	18.0	0.0	0.0	18.0	0.0	18.0	0.8	56.0	6.5	36.0	52.9	53.1
Prop In Lane	0.33		0.33	0.93		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	87	0	0	153	0	210	23	1984	569	475	2151	1179
V/C Ratio(X)	0.38	0.00	0.00	1.07	0.00	2.67	0.49	1.30	0.18	1.50	0.81	0.81
Avail Cap(c_a), veh/h	87	0	0	153	0	210	67	1984	569	475	2151	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	0.0	61.5	0.0	58.5	66.2	39.5	25.0	49.5	16.2	16.2
Incr Delay (d2), s/veh	2.7	0.0	0.0	93.3	0.0	765.4	15.2	137.1	0.3	234.4	2.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	0.0	14.5	0.0	81.0	0.8	66.7	3.7	70.0	23.5	26.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	0.0	154.8	0.0	823.9	81.4	176.6	25.3	283.9	18.9	21.2
LnGrp LOS	E	A	A	F	A	F	F	F	C	F	B	C
Approach Vol, veh/h	33			724			2686			3412		
Approach Delay, s/veh	55.1			672.3			170.3			74.8		
Approach LOS	E			F			F			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	98.3		26.0	45.0	64.0		26.0				
Change Period (Y+Rc), s	9.0	8.0		8.0	9.0	8.0		8.0				
Max Green Setting (Gmax), s	5.0	87.0		18.0	36.0	56.0		18.0				
Max Q Clear Time (g_c+I1), s	2.8	55.1		20.0	38.0	58.0		20.0				
Green Ext Time (p_c), s	0.0	30.5		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	175.2											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

40: US 27 & Washington Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	67	42	79	31	124	67	2248	118	224	2528	34
Future Volume (veh/h)	25	67	42	79	31	124	67	2248	118	224	2528	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1500	1159	1159	1559	1411	1411	1070	1767	1693	1633	1767	1100
Adj Flow Rate, veh/h	29	79	49	93	36	146	79	2645	0	264	2974	40
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	27	50	50	23	33	33	56	9	14	18	9	54
Cap, veh/h	65	100	62	100	36	148	115	2423		292	2884	557
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.05	0.50	0.00	0.15	0.60	0.60
Sat Flow, veh/h	964	669	415	1052	244	989	1019	4823	1434	1555	4823	932
Grp Volume(v), veh/h	29	0	128	93	0	182	79	2645	0	264	2974	40
Grp Sat Flow(s),veh/h/ln	964	0	1084	1052	0	1233	1019	1608	1434	1555	1608	932
Q Serve(g_s), s	0.3	0.0	13.1	4.1	0.0	16.9	4.3	57.8	0.0	14.5	68.8	2.1
Cycle Q Clear(g_c), s	17.2	0.0	13.1	17.2	0.0	16.9	4.3	57.8	0.0	14.5	68.8	2.1
Prop In Lane	1.00		0.38	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	0	162	100	0	184	115	2423		292	2884	557
V/C Ratio(X)	0.45	0.00	0.79	0.93	0.00	0.99	0.69	1.09		0.90	1.03	0.07
Avail Cap(c_a), veh/h	65	0	162	100	0	184	284	2423		401	2884	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	47.2	56.7	0.0	48.8	26.9	28.6	0.0	37.2	23.1	9.7
Incr Delay (d2), s/veh	4.8	0.0	22.6	67.3	0.0	62.5	7.0	48.7	0.0	18.9	25.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	8.0	8.1	0.0	13.1	2.1	42.4	0.0	13.4	38.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	0.0	69.7	124.0	0.0	111.3	33.9	77.4	0.0	56.1	48.5	9.8
LnGrp LOS	E	A	E	F	A	F	C	F		E	F	A
Approach Vol, veh/h	157			275			2724			A		
Approach Delay, s/veh	68.4			115.6			76.1			48.7		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.1	77.0		23.9	25.2	66.0		23.9				
Change Period (Y+Rc), s	8.2	8.2		* 6.7	8.2	8.2		* 6.7				
Max Green Setting (Gmax), s	25.0	57.8		* 17	25.0	57.8		* 17				
Max Q Clear Time (g_c+I1), s	6.3	70.8		19.2	16.5	59.8		19.2				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.5	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 63.6

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

43: US 27 & W Central Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	157	10	243	171	228	90	2100	341	289	2056	237
Future Volume (veh/h)	236	157	10	243	171	228	90	2100	341	289	2056	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1693	1870	1870	1841	1856	1870	1900	1767	1885	1870	1722	1856
Adj Flow Rate, veh/h	257	171	11	264	186	248	98	2283	0	314	2235	258
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	14	2	2	4	3	2	0	9	1	2	12	3
Cap, veh/h	195	296	19	239	345	295	89	2286		295	2436	815
Arrive On Green	0.04	0.17	0.17	0.05	0.19	0.19	0.05	0.47	0.00	0.09	0.52	0.52
Sat Flow, veh/h	1612	1738	112	1753	1856	1585	1810	4823	1598	3456	4701	1572
Grp Volume(v), veh/h	257	0	182	264	186	248	98	2283	0	314	2235	258
Grp Sat Flow(s),veh/h/ln	1612	0	1850	1753	1856	1585	1810	1608	1598	1728	1567	1572
Q Serve(g_s), s	5.0	0.0	12.3	7.1	12.3	20.5	6.7	64.2	0.0	11.6	59.3	12.9
Cycle Q Clear(g_c), s	5.0	0.0	12.3	7.1	12.3	20.5	6.7	64.2	0.0	11.6	59.3	12.9
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	0	316	239	345	295	89	2286		295	2436	815
V/C Ratio(X)	1.32	0.00	0.58	1.10	0.54	0.84	1.10	1.00		1.06	0.92	0.32
Avail Cap(c_a), veh/h	195	0	571	239	601	513	89	2286		295	2436	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	0.0	51.8	55.6	50.0	53.4	64.6	35.7	0.0	62.1	30.1	18.9
Incr Delay (d2), s/veh	175.5	0.0	2.4	88.6	1.9	8.9	124.4	18.5	0.0	70.4	6.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.6	0.0	9.9	16.6	9.9	13.7	10.4	35.7	0.0	12.7	29.6	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	232.9	0.0	54.2	144.1	51.9	62.2	189.0	54.2	0.0	132.6	36.5	19.3
LnGrp LOS	F	A	D	F	D	E	F	D		F	D	B
Approach Vol, veh/h	439				698				2381			
Approach Delay, s/veh	158.8				90.5				59.8			
Approach LOS	F				F				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	78.0	11.8	32.1	20.0	72.0	13.9	30.0				
Change Period (Y+Rc), s	* 7.3	7.6	* 6.8	* 6.8	* 8.4	* 7.6	* 6.8	* 6.8				
Max Green Setting (Gmax), s	* 6.7	70.0	* 5	* 44	* 12	* 64	* 7.1	* 42				
Max Q Clear Time (g_c+I1), s	8.7	61.3	7.0	22.5	13.6	66.2	9.1	14.3				
Green Ext Time (p_c), s	0.0	8.4	0.0	2.8	0.0	0.0	0.0	1.4				

Intersection Summary

HCM 6th Ctrl Delay 63.8

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

6: US 27 & Sunshine Dr/Paradise Island Dr

03/09/2020

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↑↑↑	↗	↖	↑↑↑	↗
Traffic Vol, veh/h	39	10	22	20	10	26	22	3217	10	16	2776	10
Future Vol, veh/h	39	10	22	20	10	26	22	3217	10	16	2776	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	400	-	355	400	-	415
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	13	7	0	22	0	6	29	21	10	13
Mvmt Flow	43	11	24	22	11	29	24	3574	11	18	3084	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4603	6753	1542	4897	6753	1787	3095	0	0	3585	0	0
Stage 1	3120	3120	-	3622	3622	-	-	-	-	-	-	-
Stage 2	1483	3633	-	1275	3131	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.36	6.54	6.5	7.54	5.3	-	-	5.72	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.44	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.03	3.87	4	4.12	3.1	-	-	3.31	-	-
Pot Cap-1 Maneuver	~ 1	0	80	~ 1	0	49	35	-	-	~ 13	-	-
Stage 1	~ 6	27	-	~ 2	15	-	-	-	-	-	-	-
Stage 2	119	14	-	152	27	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	80	-	0	49	35	-	-	~ 13	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 1	~ 6	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	~ 1	~ 5	-	-	-	-	-	-	-
Stage 2	-	~ 4	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.6	4.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	35	-	-	-	80	-	49	~ 13	-	-
HCM Lane V/C Ratio	0.698	-	-	-	0.306	-	0.59	1.368	-	-
HCM Control Delay (s)	232.2	-	-	-	68.7	-	153.5	785.6	-	-
HCM Lane LOS	F	-	-	-	F	-	F	F	-	-
HCM 95th %tile Q(veh)	2.4	-	-	-	1.1	-	2.3	2.9	-	-

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

HCM 6th TWSC

15: US 27 & FairBridge Inn Express/Frederick Ave

03/09/2020

Intersection												
Int Delay, s/veh	158.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	
Traffic Vol, veh/h	10	10	10	59	10	129	12	3004	140	205	2523	10
Future Vol, veh/h	10	10	10	59	10	129	12	3004	140	205	2523	10
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	-	-	-	-	-	-	340	-	360	340	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	50	4	0	3	9	8	2	4	10	0
Mvmt Flow	11	11	11	65	11	142	13	3301	154	225	2773	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4581	6710	1392	4892	6561	1651	2784	0	0	3455	0	0
Stage 1	3229	3229	-	3327	3327	-	-	-	-	-	-	-
Stage 2	1352	3481	-	1565	3234	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	8.1	6.48	6.5	7.16	5.48	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.38	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.78	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.4	3.84	4	3.93	3.19	-	-	3.14	-	-
Pot Cap-1 Maneuver	~ 1	0	74	~ 1	0	~ 74	44	-	-	~ 21	-	-
Stage 1	~ 5	24	-	~ 4	21	-	-	-	-	-	-	-
Stage 2	144	17	-	101	24	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	74	-	0	~ 74	44	-	-	~ 21	-	-
Mov Cap-2 Maneuver	~ 4	0	-	~ 4	~ -89	-	-	-	-	-	-	-
Stage 1	~ 4	0	-	~ 3	15	-	-	-	-	-	-	-
Stage 2	-	12	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.5	\$ 354.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	44	-	-	-	~ 21	-	-
HCM Lane V/C Ratio	0.3	-	-	-	-10.727	-	-
HCM Control Delay (s)	118.6	-	-	-	\$ 4735.3	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	1	-	-	-	28.5	-	-

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

HCM 6th TWSC
21: US 27 & Lincoln Ave

AM Peak Hour

03/09/2020

Intersection							
Int Delay, s/veh	41.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	39	24	0	2638	22	42	3052
Future Vol, veh/h	39	24	0	2638	22	42	3052
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	215	-	235	235	-
Veh in Median Storage, #	1	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	13	13	0	8	0	6	9
Mvmt Flow	41	25	0	2748	23	44	3179
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	4108	1374	2321	0	0	2771	0
Stage 1	2748	-	-	-	-	-	-
Stage 2	1360	-	-	-	-	-	-
Critical Hdwy	5.96	7.36	5.6	-	-	5.42	-
Critical Hdwy Stg 1	6.86	-	-	-	-	-	-
Critical Hdwy Stg 2	6.26	-	-	-	-	-	-
Follow-up Hdwy	3.93	4.03	2.3	-	-	3.16	-
Pot Cap-1 Maneuver	~ 5	105	81	-	-	47	-
Stage 1	~ 15	-	-	-	-	-	-
Stage 2	165	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	0	105	81	-	-	47	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-	-
Stage 1	~ 15	-	-	-	-	-	-
Stage 2	~ 11	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, \$	3641.7	0		3.3			
HCM LOS	F						
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	81	-	-	9	47	-	
HCM Lane V/C Ratio	-	-	-	7.292	0.931	-	
HCM Control Delay (s)	0	-	-	\$ 3641.7	245.8	-	
HCM Lane LOS	A	-	-	F	F	-	
HCM 95th %tile Q(veh)	0	-	-	9.6	3.9	-	
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

HCM 6th TWSC

34: US 27 & Vanguard School Ent/Tower Point Ent

03/09/2020

Intersection												
Int Delay, s/veh	9.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	10	53	10	33	52	2694	27	17	3037	20
Future Vol, veh/h	10	10	10	53	10	33	52	2694	27	17	3037	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	280	-	525	510	-	380
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	12	0	4	0	8	17	13	8	0
Mvmt Flow	11	11	11	59	11	37	58	2993	30	19	3374	22
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4731	6551	1687	4502	6543	1497	3396	0	0	3023	0	0
Stage 1	3412	3412	-	3109	3109	-	-	-	-	-	-	-
Stage 2	1319	3139	-	1393	3434	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.64	6.5	7.18	5.3	-	-	5.56	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.54	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.94	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.92	4	3.94	3.1	-	-	3.23	-	-
Pot Cap-1 Maneuver	~ 1	0	72	~ 1	0	94	~ 24	-	-	30	-	-
Stage 1	~ 3	19	-	~ 5	28	-	-	-	-	-	-	-
Stage 2	151	27	-	122	18	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	72	-	0	94	~ 24	-	-	30	-	-
Mov Cap-2 Maneuver	~ 4	~ 10	-	~ 5	0	-	-	-	-	-	-	-
Stage 1	~ 3	~ 7	-	~ 5	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	~ 7	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					18.5		1.3					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	~ 24	-	-	-	-	94	30	-	-			
HCM Lane V/C Ratio	2.407	-	-	-	-	0.39	0.63	-	-			
HCM Control Delay (s)	\$ 984.3	-	-	-	-	65.9	244	-	-			
HCM Lane LOS	F	-	-	-	-	F	F	-	-			
HCM 95th %tile Q(veh)	7.2	-	-	-	-	1.6	2.1	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th Signalized Intersection Summary

3: US 27 & Polo Park Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	83	14	35	98	11	140	65	2516	101	120	3691	68
Future Volume (veh/h)	83	14	35	98	11	140	65	2516	101	120	3691	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1900	1885	1900	1856	1900	1885	1856	1900
Adj Flow Rate, veh/h	86	15	36	102	11	146	68	2621	105	125	3845	71
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	4	0	0	1	0	3	0	1	3	0
Cap, veh/h	105	18	105	174	19	169	86	2830	900	145	3009	956
Arrive On Green	0.07	0.07	0.07	0.11	0.11	0.11	0.05	0.56	0.56	0.08	0.59	0.59
Sat Flow, veh/h	1552	271	1560	1641	177	1598	1810	5066	1610	1795	5066	1610
Grp Volume(v), veh/h	101	0	36	113	0	146	68	2621	105	125	3845	71
Grp Sat Flow(s),veh/h/ln	1822	0	1560	1818	0	1598	1810	1689	1610	1795	1689	1610
Q Serve(g_s), s	9.1	0.0	3.7	9.9	0.0	15.0	6.2	78.9	5.1	11.5	99.1	3.1
Cycle Q Clear(g_c), s	9.1	0.0	3.7	9.9	0.0	15.0	6.2	78.9	5.1	11.5	99.1	3.1
Prop In Lane	0.85		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	0	105	193	0	169	86	2830	900	145	3009	956
V/C Ratio(X)	0.82	0.00	0.34	0.59	0.00	0.86	0.79	0.93	0.12	0.86	1.28	0.07
Avail Cap(c_a), veh/h	155	0	133	272	0	239	149	2897	921	166	3009	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.8	0.0	74.2	71.1	0.0	73.4	78.7	33.7	17.4	75.8	33.9	14.4
Incr Delay (d2), s/veh	23.5	0.0	1.9	2.8	0.0	19.6	15.0	5.7	0.0	31.5	127.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	0.0	2.8	8.4	0.0	11.5	5.7	40.5	3.3	10.6	103.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.3	0.0	76.2	73.9	0.0	93.0	93.7	39.4	17.4	107.3	161.6	14.4
LnGrp LOS	F	A	E	E	A	F	F	D	B	F	F	B
Approach Vol, veh/h		137			259			2794			4041	
Approach Delay, s/veh		94.0			84.7			39.9			157.4	
Approach LOS		F			F			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.1	101.1		18.9	16.2	107.0		24.8				
Change Period (Y+Rc), s	* 8.6	* 7.9		7.6	* 8.3	7.9		7.1				
Max Green Setting (Gmax), s	* 15	* 95		14.2	* 14	97.1		25.0				
Max Q Clear Time (g_c+I1), s	13.5	80.9		11.1	8.2	101.1		17.0				
Green Ext Time (p_c), s	0.0	12.3		0.2	0.0	0.0		0.7				

Intersection Summary

HCM 6th Ctrl Delay 108.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: US 27 & Legacy Park Blvd/Florence Villa Grove Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	46	114	676	142	197	141	2135	346	189	3470	194
Future Volume (veh/h)	143	46	114	676	142	197	141	2135	346	189	3470	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1870	1856	1900	1870	1856	1885
Adj Flow Rate, veh/h	146	47	116	690	145	201	144	2179	353	193	3541	198
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	2	3	0	2	3	1
Cap, veh/h	206	55	136	228	48	66	163	2122	675	163	2144	676
Arrive On Green	0.11	0.11	0.11	0.19	0.19	0.19	0.09	0.42	0.42	0.09	0.42	0.42
Sat Flow, veh/h	1810	486	1199	1185	249	345	1781	5066	1610	1781	5066	1598
Grp Volume(v), veh/h	146	0	163	1036	0	0	144	2179	353	193	3541	198
Grp Sat Flow(s),veh/h/ln	1810	0	1684	1779	0	0	1781	1689	1610	1781	1689	1598
Q Serve(g_s), s	12.7	0.0	15.5	31.5	0.0	0.0	13.1	68.5	26.7	15.0	69.2	13.3
Cycle Q Clear(g_c), s	12.7	0.0	15.5	31.5	0.0	0.0	13.1	68.5	26.7	15.0	69.2	13.3
Prop In Lane	1.00		0.71	0.67		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	192	343	0	0	163	2122	675	163	2144	676
V/C Ratio(X)	0.71	0.00	0.85	3.02	0.00	0.00	0.88	1.03	0.52	1.18	1.65	0.29
Avail Cap(c_a), veh/h	332	0	309	343	0	0	163	2122	675	163	2144	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.8	0.0	71.1	66.0	0.0	0.0	73.4	47.5	35.4	74.3	47.2	31.1
Incr Delay (d2), s/veh	4.4	0.0	11.7	918.4	0.0	0.0	38.6	26.7	0.5	127.5	295.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	0.0	11.8	157.5	0.0	0.0	12.1	42.7	15.5	19.4	133.3	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.3	0.0	82.8	984.4	0.0	0.0	112.0	74.2	35.9	201.7	342.6	31.2
LnGrp LOS	E	A	F	F	A	A	F	F	D	F	F	C
Approach Vol, veh/h	309			1036			2676			3932		
Approach Delay, s/veh	78.8			984.4			71.2			320.0		
Approach LOS	E			F			E			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	76.9		38.2	23.7	76.2		25.4				
Change Period (Y+Rc), s	8.0	7.7		* 6.7	8.7	* 7.7		6.8				
Max Green Setting (Gmax), s	15.0	69.0		* 32	15.0	* 69		30.0				
Max Q Clear Time (g_c+I1), s	15.1	71.2		33.5	17.0	70.5		17.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		1.1				

Intersection Summary

HCM 6th Ctrl Delay 313.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

9: US 27 & Sand Mine Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	31	397	98	38	77	322	2268	143	225	3330	238
Future Volume (veh/h)	305	31	397	98	38	77	322	2268	143	225	3330	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1900	1870	1900	1900	1870	1856	1856	1826	1856	1856	1870
Adj Flow Rate, veh/h	341	0	414	102	40	80	335	2362	149	234	3469	248
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	2	0	0	2	3	3	5	3	3	2
Cap, veh/h	581	0	258	121	47	145	382	2523	771	278	2397	750
Arrive On Green	0.16	0.00	0.16	0.09	0.09	0.09	0.11	0.50	0.50	0.08	0.47	0.47
Sat Flow, veh/h	3563	0	1585	1317	517	1585	3428	5066	1547	3428	5066	1585
Grp Volume(v), veh/h	341	0	414	142	0	80	335	2362	149	234	3469	248
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1834	0	1585	1714	1689	1547	1714	1689	1585
Q Serve(g_s), s	16.7	0.0	30.8	14.4	0.0	9.1	18.2	82.9	10.1	12.7	89.4	18.5
Cycle Q Clear(g_c), s	16.7	0.0	30.8	14.4	0.0	9.1	18.2	82.9	10.1	12.7	89.4	18.5
Prop In Lane	1.00		1.00	0.72		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	581	0	258	168	0	145	382	2523	771	278	2397	750
V/C Ratio(X)	0.59	0.00	1.60	0.85	0.00	0.55	0.88	0.94	0.19	0.84	1.45	0.33
Avail Cap(c_a), veh/h	581	0	258	319	0	276	579	2523	771	544	2397	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.2	0.0	79.1	84.5	0.0	82.1	82.7	44.6	26.3	85.6	49.8	31.1
Incr Delay (d2), s/veh	1.5	0.0	288.4	11.0	0.0	3.2	9.7	7.5	0.1	6.7	203.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.3	0.0	51.5	11.9	0.0	7.0	13.2	44.4	6.7	9.8	121.1	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	0.0	367.5	95.5	0.0	85.3	92.4	52.1	26.5	92.3	253.4	31.3
LnGrp LOS	E	A	F	F	A	F	F	D	C	F	F	C
Approach Vol, veh/h	755			222			2846			3951		
Approach Delay, s/veh	235.3			91.8			55.5			230.0		
Approach LOS	F			F			E			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.9	102.8		37.8	29.7	97.0		24.4				
Change Period (Y+Rc), s	* 8.6	* 8.7		7.0	8.7	7.6		7.1				
Max Green Setting (Gmax), s	* 30	* 91		30.8	31.9	89.4		32.9				
Max Q Clear Time (g_c+I1), s	14.7	84.9		32.8	20.2	91.4		16.4				
Green Ext Time (p_c), s	0.6	5.8		0.0	0.9	0.0		0.9				

Intersection Summary

HCM 6th Ctrl Delay 162.7

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 27 & Highlands Reserve Blvd/Student Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	44	10	49	85	10	107	59	2650	14	108	3664	30
Future Volume (veh/h)	44	10	49	85	10	107	59	2650	14	108	3664	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1856	1900	1870	1856	1841
Adj Flow Rate, veh/h	46	10	51	89	10	111	61	2760	15	112	3817	31
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	3	0	2	3	4
Cap, veh/h	59	7	218	61	4	218	80	2920	928	139	3121	961
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.58	0.58	0.08	0.62	0.62
Sat Flow, veh/h	0	55	1610	0	28	1610	1810	5066	1610	1781	5066	1560
Grp Volume(v), veh/h	56	0	51	99	0	111	61	2760	15	112	3817	31
Grp Sat Flow(s),veh/h/ln	55	0	1610	28	0	1610	1810	1689	1610	1781	1689	1560
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	7.2	3.7	56.7	0.4	6.9	68.9	0.9
Cycle Q Clear(g_c), s	15.1	0.0	3.2	15.1	0.0	7.2	3.7	56.7	0.4	6.9	68.9	0.9
Prop In Lane	0.82		1.00	0.90		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	66	0	218	65	0	218	80	2920	928	139	3121	961
V/C Ratio(X)	0.85	0.00	0.23	1.52	0.00	0.51	0.77	0.95	0.02	0.80	1.22	0.03
Avail Cap(c_a), veh/h	66	0	218	65	0	218	243	2941	935	239	3121	961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	43.2	55.0	0.0	44.9	52.9	22.0	10.1	50.7	21.5	8.4
Incr Delay (d2), s/veh	61.1	0.0	0.5	299.1	0.0	2.0	14.1	7.4	0.0	10.3	103.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	2.3	13.0	0.0	5.4	3.5	27.9	0.3	6.0	73.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.0	0.0	43.7	354.1	0.0	46.9	67.0	29.4	10.1	60.9	124.9	8.4
LnGrp LOS	F	A	D	F	A	D	E	C	B	E	F	A
Approach Vol, veh/h	107			210			2836			3960		
Approach Delay, s/veh	81.0			191.7			30.1			122.2		
Approach LOS	F			F			C			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	71.9		22.6	12.8	76.4		22.6				
Change Period (Y+Rc), s	8.5	7.5		7.5	7.9	7.5		7.5				
Max Green Setting (Gmax), s	15.0	64.9		15.1	15.0	65.5		15.1				
Max Q Clear Time (g_c+I1), s	8.9	58.7		17.1	5.7	70.9		17.1				
Green Ext Time (p_c), s	0.1	5.8		0.0	0.1	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 86.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

15: US 27 & California Blvd/McFee Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	57	10	57	31	10	61	115	2823	33	54	3501	123
Future Volume (veh/h)	57	10	57	31	10	61	115	2823	33	54	3501	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1900	1856	1885	1856	1856	1870	1856	1900
Adj Flow Rate, veh/h	59	10	59	32	10	63	119	2910	34	56	3609	127
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	4	0	0	3	1	3	3	2	3	0
Cap, veh/h	46	4	264	43	8	266	143	3172	985	73	2964	942
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.63	0.63	0.04	0.59	0.59
Sat Flow, veh/h	0	26	1560	0	48	1572	1795	5066	1572	1781	5066	1610
Grp Volume(v), veh/h	69	0	59	42	0	63	119	2910	34	56	3609	127
Grp Sat Flow(s),veh/h/ln	26	0	1560	48	0	1572	1795	1689	1572	1781	1689	1610
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	5.1	9.5	73.6	1.2	4.5	85.4	5.2
Cycle Q Clear(g_c), s	24.7	0.0	4.8	24.7	0.0	5.1	9.5	73.6	1.2	4.5	85.4	5.2
Prop In Lane	0.86		1.00	0.76		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	0	264	52	0	266	143	3172	985	73	2964	942
V/C Ratio(X)	1.38	0.00	0.22	0.81	0.00	0.24	0.83	0.92	0.03	0.77	1.22	0.13
Avail Cap(c_a), veh/h	50	0	264	52	0	266	308	3172	985	305	2964	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.8	0.0	52.3	68.2	0.0	52.5	66.2	24.0	10.4	69.3	30.3	13.6
Incr Delay (d2), s/veh	255.7	0.0	0.4	62.1	0.0	0.5	11.6	4.8	0.0	15.7	101.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	0.0	3.5	4.5	0.0	3.7	8.3	35.3	0.7	4.2	82.5	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	326.5	0.0	52.8	130.3	0.0	52.9	77.8	28.8	10.4	85.0	131.4	13.7
LnGrp LOS	F	A	D	F	A	D	E	C	B	F	F	B
Approach Vol, veh/h		128			105			3063			3792	
Approach Delay, s/veh		200.3			83.9			30.5			126.8	
Approach LOS		F			F			C			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.1	99.4		32.4	20.1	93.4		32.4				
Change Period (Y+Rc), s	8.2	8.0		7.7	8.5	* 8		7.7				
Max Green Setting (Gmax), s	25.0	85.3		24.7	25.0	* 85		24.7				
Max Q Clear Time (g_c+I1), s	6.5	75.6		26.7	11.5	87.4		26.7				
Green Ext Time (p_c), s	0.1	8.9		0.0	0.2	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 85.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

21: US 27 & 4 Corners Blvd/Tri County Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	37	77	252	64	612	103	2711	125	410	2977	102
Future Volume (veh/h)	67	37	77	252	64	612	103	2711	125	410	2977	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1885	1841	1856	1900	1885	1856	1841
Adj Flow Rate, veh/h	71	39	81	265	67	644	108	2854	132	432	3134	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	1	4	3	0	1	3	4
Cap, veh/h	33	18	13	158	29	275	130	2148	683	416	2947	907
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.07	0.42	0.42	0.23	0.58	0.58
Sat Flow, veh/h	0	106	78	667	169	1598	1753	5066	1610	1795	5066	1560
Grp Volume(v), veh/h	191	0	0	332	0	644	108	2854	132	432	3134	107
Grp Sat Flow(s),veh/h/ln	184	0	0	835	0	1598	1753	1689	1610	1795	1689	1560
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	26.0	9.2	64.0	7.8	35.0	87.8	4.6
Cycle Q Clear(g_c), s	26.0	0.0	0.0	26.0	0.0	26.0	9.2	64.0	7.8	35.0	87.8	4.6
Prop In Lane	0.37		0.42	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	0	187	0	275	130	2148	683	416	2947	907
V/C Ratio(X)	2.96	0.00	0.00	1.78	0.00	2.34	0.83	1.33	0.19	1.04	1.06	0.12
Avail Cap(c_a), veh/h	64	0	0	187	0	275	267	2148	683	416	2947	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	0.0	0.0	65.4	0.0	62.4	68.9	43.4	27.3	57.9	31.6	14.2
Incr Delay (d2), s/veh	923.6	0.0	0.0	370.4	0.0	614.0	12.5	151.1	0.1	54.1	36.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	33.3	0.0	0.0	42.7	0.0	90.3	7.9	80.8	5.2	29.8	55.2	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	986.9	0.0	0.0	435.8	0.0	676.5	81.4	194.5	27.4	112.1	68.1	14.2
LnGrp LOS	F	A	A	F	A	F	F	F	C	F	F	B
Approach Vol, veh/h		191			976			3094			3673	
Approach Delay, s/veh		986.9			594.6			183.5			71.7	
Approach LOS		F			F			F			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.2	95.8		34.9	44.0	72.0		34.9				
Change Period (Y+Rc), s	9.0	8.0		* 8.9	9.0	8.0		* 8.9				
Max Green Setting (Gmax), s	23.0	60.0		* 26	35.0	64.0		* 26				
Max Q Clear Time (g_c+I1), s	11.2	89.8		28.0	37.0	66.0		28.0				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 201.6

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

27: US 27 & Waverly Barn Rd/Dunson Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	72	10	160	88	10	77	338	3461	196	190	3332	218
Future Volume (veh/h)	72	10	160	88	10	77	338	3461	196	190	3332	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1159	1159	1752	1900	1900	1900	1633	1826	1856	1870	1826	1781
Adj Flow Rate, veh/h	77	11	172	95	11	83	363	3722	211	204	3583	234
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	50	50	10	0	0	0	18	5	3	2	5	8
Cap, veh/h	128	18	196	114	13	100	174	2430	766	118	2197	665
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.49	0.49	0.07	0.44	0.44
Sat Flow, veh/h	972	139	1485	865	100	756	1555	4985	1572	1781	4985	1510
Grp Volume(v), veh/h	88	0	172	189	0	0	363	3722	211	204	3583	234
Grp Sat Flow(s),veh/h/ln	1110	0	1485	1721	0	0	1555	1662	1572	1781	1662	1510
Q Serve(g_s), s	12.8	0.0	19.5	18.4	0.0	0.0	19.2	83.6	13.6	11.4	75.6	17.6
Cycle Q Clear(g_c), s	12.8	0.0	19.5	18.4	0.0	0.0	19.2	83.6	13.6	11.4	75.6	17.6
Prop In Lane	0.87		1.00	0.50		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	196	228	0	0	174	2430	766	118	2197	665
V/C Ratio(X)	0.60	0.00	0.88	0.83	0.00	0.00	2.08	1.53	0.28	1.72	1.63	0.35
Avail Cap(c_a), veh/h	311	0	415	562	0	0	174	2430	766	118	2197	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	0.0	73.1	72.5	0.0	0.0	76.2	44.0	26.0	80.1	48.0	31.7
Incr Delay (d2), s/veh	3.9	0.0	11.8	14.9	0.0	0.0	507.2	241.5	0.1	358.3	285.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.0	12.8	14.1	0.0	0.0	50.6	132.1	8.7	27.2	135.7	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.1	0.0	84.9	87.5	0.0	0.0	583.4	285.4	26.2	438.3	333.9	32.0
LnGrp LOS	E	A	F	F	A	A	F	F	C	F	F	C
Approach Vol, veh/h	260			189			4296			4021		
Approach Delay, s/veh	81.3			87.5			297.9			321.6		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.0	91.4		30.0	28.0	83.4		30.1				
Change Period (Y+Rc), s	* 8.6	7.8		7.4	8.8	* 7.8		7.4				
Max Green Setting (Gmax), s	* 11	83.4		48.0	19.2	* 76		56.0				
Max Q Clear Time (g_c+I1), s	13.4	85.6		21.5	21.2	77.6		20.4				
Green Ext Time (p_c), s	0.0	0.0		1.1	0.0	0.0		2.3				

Intersection Summary

HCM 6th Ctrl Delay 297.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Deen Still Rd/Ronald Reagan Pkwy

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	127	75	751	385	563	161	2855	619	847	2435	272
Future Volume (veh/h)	104	127	75	751	385	563	161	2855	619	847	2435	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1707	1856	1856	1885	1530	1841	1870	1870	1856	1781
Adj Flow Rate, veh/h	112	137	81	808	414	605	173	3070	666	911	2618	292
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	13	3	3	1	25	4	2	2	3	8
Cap, veh/h	159	167	128	443	328	282	188	1949	615	670	2292	683
Arrive On Green	0.05	0.09	0.09	0.13	0.18	0.18	0.13	0.39	0.39	0.19	0.45	0.45
Sat Flow, veh/h	3483	1885	1447	3428	1856	1598	1457	5025	1585	3456	5066	1510
Grp Volume(v), veh/h	112	137	81	808	414	605	173	3070	666	911	2618	292
Grp Sat Flow(s),veh/h/ln	1742	1885	1447	1714	1856	1598	1457	1675	1585	1728	1689	1510
Q Serve(g_s), s	4.9	11.0	8.4	20.0	27.4	27.4	18.2	60.0	60.0	30.0	70.0	20.3
Cycle Q Clear(g_c), s	4.9	11.0	8.4	20.0	27.4	27.4	18.2	60.0	60.0	30.0	70.0	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	167	128	443	328	282	188	1949	615	670	2292	683
V/C Ratio(X)	0.70	0.82	0.63	1.82	1.26	2.14	0.92	1.58	1.08	1.36	1.14	0.43
Avail Cap(c_a), veh/h	450	305	234	443	328	282	188	1949	615	670	2292	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.8	69.3	68.1	67.4	63.7	63.7	66.6	47.4	47.4	62.4	42.4	28.8
Incr Delay (d2), s/veh	5.5	9.4	5.0	379.3	140.2	525.7	43.2	261.5	61.0	171.4	69.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	9.7	5.8	50.1	37.7	81.9	13.7	108.6	45.2	43.3	58.1	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	78.7	73.1	446.7	203.9	589.4	109.8	308.8	108.4	233.8	112.2	29.1
LnGrp LOS	E	E	E	F	F	F	F	F	F	F	F	C
Approach Vol, veh/h	330			1827			3909			3821		
Approach Delay, s/veh	77.2			438.9			265.9			134.9		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.6	67.6	27.8	20.7	28.6	77.6	14.2	34.4				
Change Period (Y+Rc), s	* 8.6	7.6	* 7.8	* 7	* 8.6	7.6	7.1	7.0				
Max Green Setting (Gmax), s	* 30	60.0	* 20	* 25	* 20	60.0	20.0	25.0				
Max Q Clear Time (g_c+I1), s	32.0	62.0	22.0	13.0	20.2	72.0	6.9	29.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0				

Intersection Summary

HCM 6th Ctrl Delay 240.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

35: US 27 & Access Rd/Ritchie Bros Driveway

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	10	479	120	10	33	423	3332	17	12	3774	126
Future Volume (veh/h)	129	10	479	120	10	33	423	3332	17	12	3774	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1811	1900	1900	1900	1707	1767	1900	1900	1811	1826
Adj Flow Rate, veh/h	137	11	510	128	11	35	450	3545	0	13	4015	134
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	6	0	0	0	13	9	0	0	6	5
Cap, veh/h	59	0	337	59	3	353	529	2766		27	2070	648
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.17	0.57	0.00	0.01	0.42	0.42
Sat Flow, veh/h	0	0	1535	0	13	1610	3155	4823	1610	1810	4944	1547
Grp Volume(v), veh/h	148	0	510	139	0	35	450	3545	0	13	4015	134
Grp Sat Flow(s),veh/h/ln	0	0	1535	13	0	1610	1577	1608	1610	1810	1648	1547
Q Serve(g_s), s	0.0	0.0	25.8	0.0	0.0	2.0	16.3	67.4	0.0	0.8	49.2	6.5
Cycle Q Clear(g_c), s	25.8	0.0	25.8	25.8	0.0	2.0	16.3	67.4	0.0	0.8	49.2	6.5
Prop In Lane	0.93		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	0	337	62	0	353	529	2766		27	2070	648
V/C Ratio(X)	2.51	0.00	1.51	2.26	0.00	0.10	0.85	1.28		0.49	1.94	0.21
Avail Cap(c_a), veh/h	59	0	337	62	0	353	939	2766		539	2070	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	0.0	45.9	57.6	0.0	36.6	47.5	25.1	0.0	57.5	34.2	21.7
Incr Delay (d2), s/veh	726.4	0.0	245.9	613.4	0.0	0.3	3.9	129.7	0.0	13.2	424.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	24.6	0.0	50.6	22.2	0.0	1.5	10.7	81.3	0.0	0.8	158.9	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	785.2	0.0	291.8	671.0	0.0	36.8	51.4	154.8	0.0	70.6	458.8	22.1
LnGrp LOS	F	A	F	F	A	D	D	F		E	F	C
Approach Vol, veh/h	658			174			3995			A	4162	
Approach Delay, s/veh	402.8			543.5			143.1				443.5	
Approach LOS	F			F			F				F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.5	56.8		33.2	9.3	75.0		33.2				
Change Period (Y+Rc), s	* 7.8	7.6		7.4	7.6	7.6		7.4				
Max Green Setting (Gmax), s	* 35	49.2		25.8	35.0	49.4		25.8				
Max Q Clear Time (g_c+I1), s	18.3	51.2		27.8	2.8	69.4		27.8				
Green Ext Time (p_c), s	1.4	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 309.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

47: US 27 & Heller Bros Blvd/Deer Creek Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	25	142	164	16	103	44	4247	44	40	3732	22
Future Volume (veh/h)	41	25	142	164	16	103	44	4247	44	40	3732	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1900	1796	1856	1900	1841	1900
Adj Flow Rate, veh/h	43	26	148	171	17	107	46	4424	46	42	3888	23
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	2	0	0	0	0	7	3	0	4	0
Cap, veh/h	56	220	97	168	28	174	232	3177	1019	54	2761	885
Arrive On Green	0.03	0.06	0.06	0.09	0.12	0.12	0.17	0.86	0.86	0.03	0.55	0.55
Sat Flow, veh/h	1810	3610	1585	1810	225	1419	1810	4904	1572	1810	5025	1610
Grp Volume(v), veh/h	43	26	148	171	0	124	46	4424	46	42	3888	23
Grp Sat Flow(s),veh/h/ln	1810	1805	1585	1810	0	1645	1810	1635	1572	1810	1675	1610
Q Serve(g_s), s	4.5	1.3	11.6	17.6	0.0	13.6	4.1	123.1	0.4	4.4	104.4	0.9
Cycle Q Clear(g_c), s	4.5	1.3	11.6	17.6	0.0	13.6	4.1	123.1	0.4	4.4	104.4	0.9
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	56	220	97	168	0	202	232	3177	1019	54	2761	885
V/C Ratio(X)	0.77	0.12	1.53	1.02	0.00	0.61	0.20	1.39	0.05	0.77	1.41	0.03
Avail Cap(c_a), veh/h	139	220	97	168	0	204	232	3177	1019	147	2761	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.4	84.4	89.2	86.2	0.0	79.0	70.4	13.1	1.2	91.5	42.8	10.9
Incr Delay (d2), s/veh	19.9	0.2	283.4	74.9	0.0	5.3	0.4	178.7	0.1	20.2	185.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	1.1	20.4	17.6	0.0	10.2	3.4	102.8	0.6	4.2	131.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.3	84.6	372.6	161.1	0.0	84.3	70.8	191.8	1.2	111.7	228.7	10.9
LnGrp LOS	F	F	F	F	A	F	E	F	A	F	F	B
Approach Vol, veh/h		217			295			4516			3953	
Approach Delay, s/veh		286.3			128.8			188.6			226.2	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.0	113.0	13.2	30.8	14.3	131.7	25.0	19.0				
Change Period (Y+Rc), s	* 8.6	* 8.6	7.4	7.4	* 8.6	* 8.6	7.4	7.4				
Max Green Setting (Gmax), s	* 15	* 1E2	14.6	23.6	* 15	* 1E2	17.6	11.6				
Max Q Clear Time (g_c+I1), s	6.1	106.4	6.5	15.6	6.4	125.1	19.6	13.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 205.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

51: US 27 & Minute Maid Ramp Rd 2/Citrus Ridge Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	96	41	109	71	10	159	67	3583	69	272	4141	96
Future Volume (veh/h)	96	41	109	71	10	159	67	3583	69	272	4141	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1826	1900	1900	1856	1900	1811	1811	1900	1841	1870
Adj Flow Rate, veh/h	98	42	111	72	10	162	68	3656	70	278	4226	98
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	5	0	0	3	0	6	6	0	4	2
Cap, veh/h	32	6	375	36	3	381	62	2613	811	205	3026	954
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.53	0.53	0.15	0.80	0.80
Sat Flow, veh/h	0	24	1547	0	11	1572	1810	4944	1535	1810	5025	1585
Grp Volume(v), veh/h	140	0	111	82	0	162	68	3656	70	278	4226	98
Grp Sat Flow(s),veh/h/ln	24	0	1547	11	0	1572	1810	1648	1535	1810	1675	1585
Q Serve(g_s), s	0.0	0.0	11.1	0.0	0.0	16.5	6.5	100.4	4.3	21.5	114.4	2.5
Cycle Q Clear(g_c), s	46.0	0.0	11.1	46.0	0.0	16.5	6.5	100.4	4.3	21.5	114.4	2.5
Prop In Lane	0.70		1.00	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	0	375	38	0	381	62	2613	811	205	3026	954
V/C Ratio(X)	3.67	0.00	0.30	2.14	0.00	0.43	1.10	1.40	0.09	1.36	1.40	0.10
Avail Cap(c_a), veh/h	38	0	375	38	0	381	62	2613	811	205	3026	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.9	0.0	58.8	91.7	0.0	60.8	91.8	44.8	22.1	80.7	18.9	7.8
Incr Delay (d2), s/veh	1264.2	0.0	0.4	588.6	0.0	0.8	144.1	182.1	0.2	189.3	180.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	27.5	0.0	7.9	14.7	0.0	10.9	9.5	122.4	2.8	31.1	115.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1352.1	0.0	59.2	680.3	0.0	61.6	235.8	226.9	22.3	270.0	199.5	8.0
LnGrp LOS	F	A	E	F	A	E	F	F	C	F	F	A
Approach Vol, veh/h		251			244			3794			4602	
Approach Delay, s/veh		780.4			269.5			223.3			199.7	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	122.9		53.1	30.0	107.9		53.1				
Change Period (Y+Rc), s	8.5	* 8.5		* 7.1	8.5	7.5		* 7.1				
Max Green Setting (Gmax), s	6.5	* 1.1E2		* 46	20.5	100.4		* 46				
Max Q Clear Time (g_c+I1), s	8.5	116.4		48.0	23.5	102.4		48.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 228.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	138	0	158	10	0	3904	162	211	4285
Future Volume (veh/h)	0	0	0	138	0	158	10	0	3904	162	211	4285
Initial Q (Qb), veh				0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No				No
Adj Sat Flow, veh/h/ln				1856	0	1856		0	1811	1900	1900	1856
Adj Flow Rate, veh/h				142	0	163		0	4025	167	218	4418
Peak Hour Factor				0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	0	3		0	6	0	0	3
Cap, veh/h				208	0	185		0	3149	1026	154	3944
Arrive On Green				0.12	0.00	0.12		0.00	0.64	0.64	0.08	0.78
Sat Flow, veh/h				1767	0	1572		0	5107	1610	1810	5233
Grp Volume(v), veh/h				142	0	163		0	4025	167	218	4418
Grp Sat Flow(s),veh/h/ln				1767	0	1572		0	1648	1610	1810	1689
Q Serve(g_s), s				10.9	0.0	14.4		0.0	90.0	5.9	12.0	110.0
Cycle Q Clear(g_c), s				10.9	0.0	14.4		0.0	90.0	5.9	12.0	110.0
Prop In Lane				1.00		1.00		0.00		1.00	1.00	
Lane Grp Cap(c), veh/h				208	0	185		0	3149	1026	154	3944
V/C Ratio(X)				0.68	0.00	0.88		0.00	1.28	0.16	1.42	1.12
Avail Cap(c_a), veh/h				225	0	200		0	3149	1026	154	3944
HCM Platoon Ratio				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				59.8	0.0	61.4		0.0	25.6	10.4	64.6	15.6
Incr Delay (d2), s/veh				7.5	0.0	32.2		0.0	127.7	0.0	222.0	58.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				9.2	0.0	19.8		0.0	96.9	3.4	23.7	67.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				67.4	0.0	93.6		0.0	153.3	10.4	286.6	73.7
LnGrp LOS				E	A	F		A	F	B	F	F
Approach Vol, veh/h					305				4192			4636
Approach Delay, s/veh					81.4				147.6			83.7
Approach LOS					F				F			F
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.0	98.0		23.3		118.0						
Change Period (Y+Rc), s	8.0	8.0		* 6.7		8.0						
Max Green Setting (Gmax), s	12.0	90.0		* 18		97.0						
Max Q Clear Time (g_c+I1), s	14.0	92.0		16.4		112.0						
Green Ext Time (p_c), s	0.0	0.0		0.2		0.0						

Intersection Summary

HCM 6th Ctrl Delay 113.0

HCM 6th LOS F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

Movement	SBR
Left	
Left Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1856
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.97
Percent Heavy Veh, %	3
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

64: US 27 & Massee Rd/Holly Hill Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	42	147	157	26	324	78	3212	35	431	3823	98
Future Volume (veh/h)	147	42	147	157	26	324	78	3212	35	431	3823	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1811	1811	1900	1900	1900	1900	1796	1900	1885	1841	1870
Adj Flow Rate, veh/h	152	43	152	162	27	334	80	3311	36	444	3941	101
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	6	6	0	0	0	0	7	0	1	4	2
Cap, veh/h	157	85	301	287	30	371	73	1887	620	195	2272	717
Arrive On Green	0.04	0.24	0.24	0.04	0.25	0.25	0.04	0.38	0.38	0.11	0.45	0.45
Sat Flow, veh/h	1781	350	1238	1810	122	1507	1810	4904	1610	1795	5025	1585
Grp Volume(v), veh/h	152	0	195	162	0	361	80	3311	36	444	3941	101
Grp Sat Flow(s),veh/h/ln	1781	0	1588	1810	0	1629	1810	1635	1610	1795	1675	1585
Q Serve(g_s), s	5.3	0.0	14.2	5.0	0.0	28.7	5.4	51.4	1.9	14.5	60.4	5.0
Cycle Q Clear(g_c), s	5.3	0.0	14.2	5.0	0.0	28.7	5.4	51.4	1.9	14.5	60.4	5.0
Prop In Lane	1.00		0.78	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	386	287	0	401	73	1887	620	195	2272	717
V/C Ratio(X)	0.97	0.00	0.51	0.56	0.00	0.90	1.09	1.75	0.06	2.28	1.73	0.14
Avail Cap(c_a), veh/h	157	0	606	287	0	627	73	1887	620	195	2272	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	0.0	43.6	44.8	0.0	48.8	64.1	41.1	25.9	59.5	36.6	21.4
Incr Delay (d2), s/veh	62.9	0.0	1.0	2.5	0.0	11.0	133.1	341.7	0.1	591.1	332.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	0.0	9.6	4.8	0.0	18.5	9.0	123.8	1.3	60.0	145.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	112.9	0.0	44.6	47.3	0.0	59.7	197.1	382.8	25.9	650.6	368.9	21.6
LnGrp LOS	F	A	D	D	A	E	F	F	C	F	F	C
Approach Vol, veh/h		347			523			3427			4486	
Approach Delay, s/veh		74.5			55.9			374.7			388.9	
Approach LOS		E			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	68.2	11.4	40.0	23.0	59.2	11.0	40.4				
Change Period (Y+Rc), s	* 8.6	7.8	6.4	* 7.5	* 8.5	* 7.8	* 5.7	* 7.5				
Max Green Setting (Gmax), s	* 5.4	60.2	5.0	* 51	* 15	* 51	* 5.3	* 51				
Max Q Clear Time (g_c+I1), s	7.4	62.4	7.0	16.2	16.5	53.4	7.3	30.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.2				

Intersection Summary

HCM 6th Ctrl Delay 351.1

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

69: US 27 & Holly Hill Cutoff Rd/North Blvd W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	43	10	24	42	10	112	74	3458	48	98	3786	113
Future Volume (veh/h)	43	10	24	42	10	112	74	3458	48	98	3786	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1900	1841	1841	1826
Adj Flow Rate, veh/h	45	11	25	44	11	118	78	3640	51	103	3985	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	0	4	4	5
Cap, veh/h	109	22	180	48	15	70	69	3303	1076	102	3457	1065
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	0.67	0.67	0.06	0.69	0.69
Sat Flow, veh/h	588	199	1610	164	130	629	1810	4944	1610	1753	5025	1547
Grp Volume(v), veh/h	56	0	25	173	0	0	78	3640	51	103	3985	119
Grp Sat Flow(s),veh/h/ln	787	0	1610	923	0	0	1810	1648	1610	1753	1675	1547
Q Serve(g_s), s	0.0	0.0	2.1	6.9	0.0	0.0	5.7	100.2	1.6	8.7	103.2	3.9
Cycle Q Clear(g_c), s	9.9	0.0	2.1	16.8	0.0	0.0	5.7	100.2	1.6	8.7	103.2	3.9
Prop In Lane	0.80		1.00	0.25		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	0	180	133	0	0	69	3303	1076	102	3457	1065
V/C Ratio(X)	0.43	0.00	0.14	1.30	0.00	0.00	1.13	1.10	0.05	1.01	1.15	0.11
Avail Cap(c_a), veh/h	131	0	180	133	0	0	69	3303	1076	102	3457	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	0.0	60.1	69.5	0.0	0.0	72.2	24.9	8.5	70.7	23.4	7.9
Incr Delay (d2), s/veh	2.2	0.0	0.3	177.7	0.0	0.0	149.7	51.2	0.0	92.8	72.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	1.6	19.1	0.0	0.0	9.6	65.0	0.9	10.6	77.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	0.0	60.4	247.2	0.0	0.0	221.9	76.1	8.6	163.5	95.8	8.0
LnGrp LOS	E	A	E	F	A	A	F	F	A	F	F	A
Approach Vol, veh/h	81		173				3769				4207	
Approach Delay, s/veh	63.9		247.2				78.2				95.0	
Approach LOS	E		F				E				F	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	18.0	109.5	22.5		15.0	112.5	22.5					
Change Period (Y+Rc), s	9.3	9.3	* 5.7		9.3	9.3	* 5.7					
Max Green Setting (Gmax), s	8.7	100.2	* 17		5.7	103.2	* 17					
Max Q Clear Time (g_c+I1), s	10.7	102.2	11.9		7.7	105.2	18.8					
Green Ext Time (p_c), s	0.0	0.0	0.1		0.0	0.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	90.2											
HCM 6th LOS	F											
Notes												

HCM 6th Signalized Intersection Summary

72: US 27 & Sanders Rd/Davenport Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	28	43	392	27	419	30	3257	324	483	3607	53
Future Volume (veh/h)	41	28	43	392	27	419	30	3257	324	483	3607	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1752	1752	1870	1781	1781	1900	1811	1870	1841	1826	1900
Adj Flow Rate, veh/h	42	29	44	400	28	428	31	3323	331	493	3681	54
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	10	10	2	8	8	0	6	2	4	5	0
Cap, veh/h	51	115	174	240	17	261	45	2326	746	308	3097	1000
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.02	0.47	0.47	0.18	0.62	0.62
Sat Flow, veh/h	950	628	953	1327	94	1430	1810	4944	1585	1753	4985	1610
Grp Volume(v), veh/h	42	0	73	400	0	456	31	3323	331	493	3681	54
Grp Sat Flow(s),veh/h/ln	950	0	1580	1327	0	1524	1810	1648	1585	1753	1662	1610
Q Serve(g_s), s	0.0	0.0	5.6	20.4	0.0	26.0	2.4	67.0	19.9	25.0	88.5	1.9
Cycle Q Clear(g_c), s	26.0	0.0	5.6	26.0	0.0	26.0	2.4	67.0	19.9	25.0	88.5	1.9
Prop In Lane	1.00		0.60	1.00		0.94	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	0	289	240	0	278	45	2326	746	308	3097	1000
V/C Ratio(X)	0.83	0.00	0.25	1.66	0.00	1.64	0.69	1.43	0.44	1.60	1.19	0.05
Avail Cap(c_a), veh/h	51	0	289	240	0	278	191	2326	746	308	3097	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.2	0.0	49.9	63.2	0.0	58.2	68.9	37.7	25.2	58.7	27.0	10.6
Incr Delay (d2), s/veh	67.9	0.0	0.5	316.7	0.0	303.2	17.2	195.3	0.9	285.6	88.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	0.0	4.1	47.2	0.0	51.9	2.3	100.6	11.7	54.1	77.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.1	0.0	50.3	379.9	0.0	361.4	86.1	233.0	26.1	344.3	115.4	10.6
LnGrp LOS	F	A	D	F	A	F	F	F	C	F	F	B
Approach Vol, veh/h	115			856			3685			4228		
Approach Delay, s/veh	82.7			370.0			213.2			140.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	96.1		34.2	33.6	74.6		34.2				
Change Period (Y+Rc), s	* 8.6	7.6		* 8.2	* 8.6	7.6		* 8.2				
Max Green Setting (Gmax), s	* 15	77.0		* 26	* 25	67.0		* 26				
Max Q Clear Time (g_c+I1), s	4.4	90.5		28.0	27.0	69.0		28.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 192.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

81: US 27 & Miracle Toyota/Bates Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	  		 		
Traffic Volume (veh/h)	27	16	27	503	10	310	20	3760	382	520	3325	11
Future Volume (veh/h)	27	16	27	503	10	310	20	3760	382	520	3325	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1900	1900	1796	1870	1885	1826	1900
Adj Flow Rate, veh/h	28	17	28	524	10	323	21	3917	398	542	3464	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	0	0	0	7	2	1	5	0
Cap, veh/h	81	30	50	356	11	357	35	2376	768	128	2677	865
Arrive On Green	0.02	0.05	0.05	0.20	0.23	0.23	0.02	0.48	0.48	0.07	0.54	0.54
Sat Flow, veh/h	3510	645	1063	1795	49	1569	1810	4904	1585	1795	4985	1610
Grp Volume(v), veh/h	28	0	45	524	0	333	21	3917	398	542	3464	11
Grp Sat Flow(s),veh/h/ln	1755	0	1709	1795	0	1618	1810	1635	1585	1795	1662	1610
Q Serve(g_s), s	1.2	0.0	3.9	29.7	0.0	30.0	1.7	72.7	11.1	10.7	80.6	0.5
Cycle Q Clear(g_c), s	1.2	0.0	3.9	29.7	0.0	30.0	1.7	72.7	11.1	10.7	80.6	0.5
Prop In Lane	1.00		0.62	1.00		0.97	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	80	356	0	369	35	2376	768	128	2677	865
V/C Ratio(X)	0.35	0.00	0.56	1.47	0.00	0.90	0.60	1.65	0.52	4.23	1.29	0.01
Avail Cap(c_a), veh/h	164	0	615	356	0	637	72	2376	768	128	2677	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.2	0.0	70.0	60.1	0.0	56.3	73.0	38.7	4.9	69.7	34.7	16.2
Incr Delay (d2), s/veh	2.5	0.0	6.1	227.6	0.0	9.4	15.1	293.7	2.5	1472.6	135.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	3.3	54.3	0.0	19.0	1.7	142.6	7.0	85.7	91.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	0.0	76.1	287.8	0.0	65.8	88.1	332.4	7.4	1542.2	169.8	16.2
LnGrp LOS	E	A	E	F	A	E	F	F	A	F	F	B
Approach Vol, veh/h	73			857			4336			4017		
Approach Delay, s/veh	75.6			201.5			301.4			354.6		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	88.2	9.6	41.1	19.0	80.3	36.6	14.1				
Change Period (Y+Rc), s	8.2	7.6	* 6.2	* 6.9	* 8.3	7.6	* 6.9	7.1				
Max Green Setting (Gmax), s	6.0	49.1	* 7	* 59	* 11	44.3	* 11	54.0				
Max Q Clear Time (g_c+I1), s	3.7	82.6	3.2	32.0	12.7	74.7	31.7	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 313.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

84: US 27 & Glen Este Blvd/Southern Dunes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	75	75	251	51	103	102	3722	286	118	4230	60
Future Volume (veh/h)	167	75	75	251	51	103	102	3722	286	118	4230	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1885	1900	1870	1885	1796	1870	1870	1826	1841
Adj Flow Rate, veh/h	174	78	78	261	53	107	106	3877	298	123	4406	62
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	1	0	2	1	7	2	2	5	4
Cap, veh/h	197	89	89	310	194	162	255	2489	804	146	2230	698
Arrive On Green	0.11	0.10	0.10	0.09	0.10	0.10	0.14	0.51	0.51	0.08	0.45	0.45
Sat Flow, veh/h	1810	858	858	3483	1900	1585	1795	4904	1585	1781	4985	1560
Grp Volume(v), veh/h	174	0	156	261	53	107	106	3877	298	123	4406	62
Grp Sat Flow(s),veh/h/ln	1810	0	1716	1742	1900	1585	1795	1635	1585	1781	1662	1560
Q Serve(g_s), s	14.2	0.0	13.4	11.1	3.9	9.7	8.1	76.1	17.1	10.2	67.1	2.2
Cycle Q Clear(g_c), s	14.2	0.0	13.4	11.1	3.9	9.7	8.1	76.1	17.1	10.2	67.1	2.2
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	179	310	194	162	255	2489	804	146	2230	698
V/C Ratio(X)	0.88	0.00	0.87	0.84	0.27	0.66	0.42	1.56	0.37	0.84	1.98	0.09
Avail Cap(c_a), veh/h	233	0	206	385	198	165	255	2489	804	227	2230	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	0.0	66.2	67.3	62.2	64.8	58.7	36.9	22.4	67.9	41.5	9.7
Incr Delay (d2), s/veh	27.3	0.0	28.6	12.8	0.7	9.1	4.9	253.0	1.3	15.4	440.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.8	0.0	11.8	9.4	3.5	7.8	7.1	132.6	11.1	8.9	186.1	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.2	0.0	94.8	80.1	62.9	73.9	63.6	290.0	23.7	83.3	482.3	10.0
LnGrp LOS	F	A	F	F	E	E	E	F	C	F	F	A
Approach Vol, veh/h		330			421			4281			4591	
Approach Delay, s/veh		94.0			76.4			265.8			465.2	
Approach LOS		F			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.2	74.0	23.0	24.8	19.2	83.0	22.8	25.0				
Change Period (Y+Rc), s	6.9	6.9	* 6.7	* 9.4	6.9	6.9	* 9.4	* 9.4				
Max Green Setting (Gmax), s	18.1	67.1	* 19	* 16	19.1	66.1	* 17	* 18				
Max Q Clear Time (g_c+I1), s	10.1	69.1	16.2	11.7	12.2	78.1	13.1	15.4				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.2	0.1	0.0	0.3	0.2				

Intersection Summary

HCM 6th Ctrl Delay 346.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

87: US 27 & Old Polk City Rd/Main St W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	201	300	115	125	105	551	3661	58	141	3706	316
Future Volume (veh/h)	283	201	300	115	125	105	551	3661	58	141	3706	316
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1796	1885	1870	1870	1752	1811	1841	1856	1811	1856
Adj Flow Rate, veh/h	295	209	312	120	130	109	574	3814	60	147	3860	329
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	7	1	2	2	10	6	4	3	6	3
Cap, veh/h	255	217	177	185	157	133	357	2585	816	172	1991	633
Arrive On Green	0.11	0.12	0.12	0.07	0.08	0.08	0.14	0.35	0.35	0.07	0.27	0.27
Sat Flow, veh/h	1781	1870	1522	1795	1870	1585	1668	4944	1560	1767	4944	1572
Grp Volume(v), veh/h	295	209	312	120	130	109	574	3814	60	147	3860	329
Grp Sat Flow(s),veh/h/ln	1781	1870	1522	1795	1870	1585	1668	1648	1560	1767	1648	1572
Q Serve(g_s), s	15.9	16.7	17.4	9.0	10.3	10.1	32.1	78.4	3.8	12.4	60.4	26.7
Cycle Q Clear(g_c), s	15.9	16.7	17.4	9.0	10.3	10.1	32.1	78.4	3.8	12.4	60.4	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	217	177	185	157	133	357	2585	816	172	1991	633
V/C Ratio(X)	1.16	0.96	1.76	0.65	0.83	0.82	1.61	1.48	0.07	0.86	1.94	0.52
Avail Cap(c_a), veh/h	255	217	177	243	198	168	357	2585	816	290	1991	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	66.0	66.3	57.5	67.6	67.6	64.2	48.7	24.5	69.1	54.8	42.4
Incr Delay (d2), s/veh	106.1	50.2	366.3	3.8	20.1	21.7	286.2	216.0	0.2	12.0	424.3	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.3	16.4	39.3	7.7	9.8	8.5	65.0	127.8	2.7	10.3	164.4	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	165.8	116.2	432.6	61.3	87.7	89.2	350.5	264.7	24.7	81.1	479.1	45.5
LnGrp LOS	F	F	F	E	F	F	F	F	C	F	F	D
Approach Vol, veh/h	816			359			4448			4336		
Approach Delay, s/veh	255.1			79.3			272.5			432.7		
Approach LOS	F			E			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.0	67.3	23.0	19.7	22.0	85.3	18.2	24.5				
Change Period (Y+Rc), s	7.9	6.9	7.1	7.1	7.4	6.9	7.1	7.1				
Max Green Setting (Gmax), s	32.1	57.1	15.9	15.9	24.6	65.1	15.9	12.9				
Max Q Clear Time (g_c+I1), s	34.1	62.4	17.9	12.3	14.4	80.4	11.0	19.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.2	0.0	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay 333.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

90: US 27 & Commerce Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	10	39	90	10	68	67	3758	166	106	4277	86
Future Volume (veh/h)	96	10	39	90	10	68	67	3758	166	106	4277	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1900	1900	1707	1900	1900	1900	1811	1693	1693	1826	1885
Adj Flow Rate, veh/h	100	10	41	94	10	71	70	3915	173	110	4455	90
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	13	0	0	0	6	14	14	5	1
Cap, veh/h	140	38	157	158	24	169	88	2179	632	195	2535	812
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	0.44	0.44	0.16	0.68	0.68
Sat Flow, veh/h	1286	325	1334	1236	203	1438	1810	4944	1434	1612	4985	1598
Grp Volume(v), veh/h	100	0	51	94	0	81	70	3915	173	110	4455	90
Grp Sat Flow(s),veh/h/ln	1286	0	1660	1236	0	1641	1810	1648	1434	1612	1662	1598
Q Serve(g_s), s	10.7	0.0	4.2	11.2	0.0	6.9	5.7	66.1	11.5	9.5	76.3	3.0
Cycle Q Clear(g_c), s	17.6	0.0	4.2	15.4	0.0	6.9	5.7	66.1	11.5	9.5	76.3	3.0
Prop In Lane	1.00		0.80	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	195	158	0	193	88	2179	632	195	2535	812
V/C Ratio(X)	0.71	0.00	0.26	0.59	0.00	0.42	0.79	1.80	0.27	0.57	1.76	0.11
Avail Cap(c_a), veh/h	140	0	195	177	0	218	103	2179	632	195	2535	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	0.0	60.3	67.3	0.0	61.5	70.6	42.0	26.7	59.3	24.3	12.4
Incr Delay (d2), s/veh	15.8	0.0	0.7	4.3	0.0	1.5	29.6	360.5	1.1	11.4	342.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.0	3.3	6.8	0.0	5.4	6.0	155.0	7.3	7.7	163.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	0.0	61.0	71.6	0.0	62.9	100.1	402.4	27.8	70.7	366.9	12.7
LnGrp LOS	F	A	E	E	A	E	F	F	C	E	F	B
Approach Vol, veh/h	151			175			4158			4655		
Approach Delay, s/veh	77.5			67.6			381.7			353.0		
Approach LOS	E			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	83.2		25.1	25.0	73.0		25.1				
Change Period (Y+Rc), s	7.5	6.9		7.5	6.9	6.9		* 7.5				
Max Green Setting (Gmax), s	8.5	75.1		17.5	18.1	66.1		* 20				
Max Q Clear Time (g_c+I1), s	7.7	78.3		19.6	11.5	68.1		17.4				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay 356.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

18: US 27 & Central Grove Rd/Terra del Sol Blvd

03/09/2020

Intersection												
Int Delay, s/veh	12											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕↕↕	↕	↕	↕↕↕	↕
Traffic Vol, veh/h	96	10	30	10	10	29	44	2888	24	34	3409	154
Future Vol, veh/h	96	10	30	10	10	29	44	2888	24	34	3409	154
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	605	-	460	550	-	420
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	6	0	0	0	5	3	9	0	3	0
Mvmt Flow	101	11	32	11	11	31	46	3040	25	36	3588	162

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4974	6817	1794	4645	6954	1520	3750	0	0	3065	0	0
Stage 1	3660	3660	-	3132	3132	-	-	-	-	-	-	-
Stage 2	1314	3157	-	1513	3822	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.22	6.4	6.5	7.1	5.4	-	-	5.3	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.96	3.8	4	3.9	3.15	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 1	0	57	~ 1	0	94	~ 14	-	-	36	-	-
Stage 1	~ 2	14	-	~ 6	27	-	-	-	-	-	-	-
Stage 2	152	26	-	114	11	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	57	-	0	94	~ 14	-	-	36	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 7	0	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	~ 6	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			23.7	3
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	~ 14	-	-	-	94	36	-
HCM Lane V/C Ratio	3.308	-	-	-	0.325	0.994	-
HCM Control Delay (s)	\$ 1589.3	-	-	-	60.7\$	315.2	-
HCM Lane LOS	F	-	-	-	F	F	-
HCM 95th %tile Q(veh)	6.7	-	-	-	1.2	3.6	-

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

HCM 6th TWSC

24: US 27 & Cardiff Ave/Tri County 1 Rd

03/09/2020

Intersection												
Int Delay, s/veh	22											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔↔↔	↔	↔	↔↔↔	↔
Traffic Vol, veh/h	28	10	37	13	10	16	68	2910	23	30	3521	42
Future Vol, veh/h	28	10	37	13	10	16	68	2910	23	30	3521	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	580	-	430	515	-	435
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	6	0	0	0	0	3	0	0	3	3
Mvmt Flow	29	11	39	14	11	17	72	3063	24	32	3706	44

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	5145	7001	1853	4759	7021	1532	3750	0	0	3087	0	0
Stage 1	3770	3770	-	3207	3207	-	-	-	-	-	-	-
Stage 2	1375	3231	-	1552	3814	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.22	6.4	6.5	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.96	3.8	4	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 1	0	52	~ 1	0	92	~ 16	-	-	35	-	-
Stage 1	~ 2	12	-	~ 5	25	-	-	-	-	-	-	-
Stage 2	139	24	-	107	11	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	52	-	0	92	~ 16	-	-	35	-	-
Mov Cap-2 Maneuver	~ 2	~ 1	-	~ 5	0	-	-	-	-	-	-	-
Stage 1	~ 2	~ 1	-	~ 5	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	~ 1	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			46.3	2.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 16	-	-	-	52	-	35	-	-
HCM Lane V/C Ratio	4.474	-	-	-	0.749	-	0.902	-	-
HCM Control Delay (s)	\$ 2043	-	-	-	180.6	-	291.4	-	-
HCM Lane LOS	F	-	-	-	F	-	F	-	-
HCM 95th %tile Q(veh)	9.7	-	-	-	3.1	-	3.2	-	-

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

HCM 6th TWSC

30: US 27 & Laurel Estates Entrance

03/09/2020

Intersection								
Int Delay, s/veh	69.1							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	
Lane Configurations								
Traffic Vol, veh/h	30	41	123	2907	40	3419	69	
Future Vol, veh/h	30	41	123	2907	40	3419	69	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	-	None	
Storage Length	0	0	550	-	495	-	325	
Veh in Median Storage, #	1	-	-	0	-	0	-	
Grade, %	0	-	-	0	-	0	-	
Peak Hour Factor	94	94	94	94	94	94	94	
Heavy Vehicles, %	0	3	0	3	0	3	0	
Mvmt Flow	32	44	131	3093	43	3637	73	
Major/Minor	Minor2		Major1		Major2			
Conflicting Flow All	5222	1819	3710	0	2258	-	0	
Stage 1	3723	-	-	-	-	-	-	
Stage 2	1499	-	-	-	-	-	-	
Critical Hdwy	5.7	7.16	5.3	-	5.6	-	-	
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	
Critical Hdwy Stg 2	6	-	-	-	-	-	-	
Follow-up Hdwy	3.8	3.93	3.1	-	2.3	-	-	
Pot Cap-1 Maneuver	~ 1	57	~ 16	-	88	-	-	
Stage 1	~ 4	-	-	-	-	-	-	
Stage 2	155	-	-	-	-	-	-	
Platoon blocked, %				-		-	-	
Mov Cap-1 Maneuver	0	57	~ 16	-	88	-	-	
Mov Cap-2 Maneuver	0	-	-	-	-	-	-	
Stage 1	0	-	-	-	-	-	-	
Stage 2	79	-	-	-	-	-	-	
Approach	EB		NB		SB			
HCM Control Delay, s			150.2		0.9			
HCM LOS	-							
Minor Lane/Major Mvmt	NBL		NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	~ 16		-	-	57	88	-	-
HCM Lane V/C Ratio	8.178		-	-	0.765	0.484	-	-
HCM Control Delay (s)	\$ 3698.9		-	-	172	79.4	-	-
HCM Lane LOS	F		-	-	F	F	-	-
HCM 95th %tile Q(veh)	17.2		-	-	3.3	2.1	-	-
Notes								
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon		

HCM 6th TWSC

55: US 27 & Holly Hill Grove Rd 2/Cottonwood Rd

03/09/2020

Intersection												
Int Delay, s/veh	78.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	20	25	10	66	41	3826	62	93	4517	27
Future Vol, veh/h	10	10	20	25	10	66	41	3826	62	93	4517	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	505	-	485	515	-	450
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	8	0	3	0	4	2	6	3	0
Mvmt Flow	10	10	21	26	10	69	43	3985	65	97	4705	28

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6584	9035	2353	6152	8998	1993	4733	0	0	4050	0	0
Stage 1	4899	4899	-	4071	4071	-	-	-	-	-	-	-
Stage 2	1685	4136	-	2081	4927	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.56	6.5	7.16	5.3	-	-	5.42	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.46	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.88	4	3.93	3.1	-	-	3.16	-	-
Pot Cap-1 Maneuver	0	0	25	0	0	~ 43	~ 5	-	-	~ 9	-	-
Stage 1	0	~ 3	-	~ 1	~ 8	-	-	-	-	-	-	-
Stage 2	88	~ 8	-	44	~ 3	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	25	-	0	~ 43	~ 5	-	-	~ 9	-	-
Mov Cap-2 Maneuver	0	0	-	~ 1	0	-	-	-	-	-	-	-
Stage 1	0	0	-	~ 1	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			50.1	104.3
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 5	-	-	-	~ 9	-	-
HCM Lane V/C Ratio	8.542	-	-	-	10.764	-	-
HCM Control Delay (s)	\$ 4798.2	-	-	-	\$ 5202.6	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	7	-	-	-	13.6	-	-

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

HCM 6th TWSC

61: US 27 & Holly Hill Tank Rd/Florida Development Rd

03/09/2020

Intersection												
Int Delay, s/veh	42.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	10	30	10	33	21	3985	69	71	4295	10
Future Vol, veh/h	10	10	10	30	10	33	21	3985	69	71	4295	10
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	-	-	-	-	-	-	495	-	380	490	-	430
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	8	0	4	0	6	5	5	4	20
Mvmt Flow	10	10	10	31	10	34	22	4108	71	73	4428	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6266	8797	2214	6074	8736	2054	4438	0	0	4179	0	0
Stage 1	4574	4574	-	4152	4152	-	-	-	-	-	-	-
Stage 2	1692	4223	-	1922	4584	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.56	6.5	7.18	5.3	-	-	5.4	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.46	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.88	4	3.94	3.1	-	-	3.15	-	-
Pot Cap-1 Maneuver	0	0	31	0	0	38	~7	-	-	~8	-	-
Stage 1	0	~4	-	~1	~7	-	-	-	-	-	-	-
Stage 2	87	~7	-	56	~4	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	31	-	0	38	~7	-	-	~8	-	-
Mov Cap-2 Maneuver	0	0	-	~1	0	-	-	-	-	-	-	-
Stage 1	0	0	-	~1	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			10.1	74.2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~7	-	-	-	~8	-	-
HCM Lane V/C Ratio	3.093	-	-	-	9.149	-	-
HCM Control Delay (s)	\$ 1958.4	-	-	-	\$ 4572.3	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	3.9	-	-	-	10.7	-	-

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

HCM 6th TWSC

67: US 27 & La Casa Del Sol Blvd

03/09/2020

Intersection							
Int Delay, s/veh	1.3						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↑↑↑	↰	↑↑↑	↱
Traffic Vol, veh/h	13	10	10	3514	12	4017	18
Future Vol, veh/h	13	10	10	3514	12	4017	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	510	-	510	-	400
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	6	0	4	0
Mvmt Flow	14	10	10	3660	13	4184	19
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	5694	2092	4203	0	2672	-	0
Stage 1	4210	-	-	-	-	-	-
Stage 2	1484	-	-	-	-	-	-
Critical Hdwy	5.7	7.1	5.3	-	5.6	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	3.9	3.1	-	2.3	-	-
Pot Cap-1 Maneuver	~ 1	38	~ 9	-	51	-	-
Stage 1	~ 2	-	-	-	-	-	-
Stage 2	158	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	0	38	~ 9	-	51	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	118	-	-	-	-	-	-
Approach	EB		NB		SB		
HCM Control Delay, s			2.5		0.3		
HCM LOS	-						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	~ 9	-	-	38	51	-	-
HCM Lane V/C Ratio	1.157	-	-	0.274	0.245	-	-
HCM Control Delay (s)	\$ 898.2	-	-	132.3	97.1	-	-
HCM Lane LOS	F	-	-	F	F	-	-
HCM 95th %tile Q(veh)	2.1	-	-	0.9	0.8	-	-
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

HCM 6th TWSC
75: US 27 & South Blvd

PM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	198.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	31	10	23	92	10	170	17	3713	103	167	3956	14
Future Vol, veh/h	31	10	23	92	10	170	17	3713	103	167	3956	14
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	-	-	-	-	-	-	400	-	300	510	-	260
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	7	0	40	3	0	3	27	6	0	2	4	58
Mvmt Flow	34	11	25	101	11	187	19	4080	113	184	4347	15
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6391	8946	2174	6230	8848	2040	4362	0	0	4193	0	0
Stage 1	4715	4715	-	4118	4118	-	-	-	-	-	-	-
Stage 2	1676	4231	-	2112	4730	-	-	-	-	-	-	-
Critical Hdwy	6.54	6.5	7.9	6.46	6.5	7.16	5.84	-	-	5.34	-	-
Critical Hdwy Stg 1	7.44	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.84	5.5	-	6.76	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.87	4	4.3	3.83	4	3.93	3.37	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	~ 20	0	0	~ 40	~ 4	-	-	~ 9	-	-
Stage 1	0	~ 4	-	~ 1	~ 8	-	-	-	-	-	-	-
Stage 2	83	~ 7	-	~ 45	~ 3	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 20	-	0	~ 40	~ 4	-	-	~ 9	-	-
Mov Cap-2 Maneuver	0	0	-	~ 1	0	-	-	-	-	-	-	-
Stage 1	0	0	-	~ 1	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					14.8		\$ 384.8					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	~ 4	-	-	-	-	~ 9	-	-				
HCM Lane V/C Ratio	4.67	-	-	-	-	20.391	-	-				
HCM Control Delay (s)	\$ 3335	-	-	-	-	\$ 9532.9	-	-				
HCM Lane LOS	F	-	-	-	-	F	-	-				
HCM 95th %tile Q(veh)	3.7	-	-	-	-	24.6	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC

78: US 27 & Section 7 Airport Rd/Patterson Rd

03/09/2020

Intersection													
Int Delay, s/veh	364.2												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕		↑↑↑	↗	↖	↑↑↑	
Traffic Vol, veh/h	0	0	0	85	0	108	10	0	3657	273	235	3933	0
Future Vol, veh/h	0	0	0	85	0	108	10	0	3657	273	235	3933	0
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	345	-	280	405	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	3	0	0	6	3	2	4	0
Mvmt Flow	0	0	0	90	0	115	11	0	3890	290	250	4184	0
Major/Minor	Minor2		Minor1		Major1		Major2						
Conflicting Flow All	6262	8886	2092	6086	8596	1945	3054	-	0	0	4180	0	0
Stage 1	4684	4684	-	3912	3912	-	-	-	-	-	-	-	-
Stage 2	1578	4202	-	2174	4684	-	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.16	5.6	-	-	-	5.34	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	3.93	2.3	-	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	38	0	0	~ 46	31	0	-	-	~ 9	-	-
Stage 1	0	4	-	~ 1	10	-	-	0	-	-	-	-	-
Stage 2	103	7	-	~ 42	4	-	-	0	-	-	-	-	-
Platoon blocked, %									-	-		-	-
Mov Cap-1 Maneuver	-	0	38	-	0	~ 46	31	-	-	-	~ 9	-	-
Mov Cap-2 Maneuver	0	0	-	~ 1	12	-	-	-	-	-	-	-	-
Stage 1	0	0	-	~ 1	6	-	-	-	-	-	-	-	-
Stage 2	-	5	-	-	0	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB						
HCM Control Delay, s	0				0.4		\$ 724.9						
HCM LOS	A												
Minor Lane/Major Mvmt	NBU	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	31	-	-	-	-	~ 9	-	-					
HCM Lane V/C Ratio	0.343	-	-	-	-	27.778	-	-					
HCM Control Delay (s)	172.8	-	-	0	\$ 12856.6	-	-						
HCM Lane LOS	F	-	-	A	-	F	-	-					
HCM 95th %tile Q(veh)	1.1	-	-	-	-	33	-	-					
Notes													
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon							

HCM 6th TWSC
93: US 27 & W Johnson Ave

PM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	115.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	62	10	10	47	76	3878	12	112	3949	15
Future Vol, veh/h	10	10	62	10	10	47	76	3878	12	112	3949	15
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	-	-	-	-	-	-	305	-	220	300	-	290
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	33	0	8	3	6	17	2	5	0
Mvmt Flow	10	10	65	10	10	49	79	4040	13	117	4114	16
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	6127	8559	2057	6083	8562	2020	4130	0	0	4053	0	0
Stage 1	4348	4348	-	4198	4198	-	-	-	-	-	-	-
Stage 2	1779	4211	-	1885	4364	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	7.06	6.5	7.26	5.36	-	-	5.34	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.96	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	4.13	4	3.98	3.13	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	~ 40	0	0	~ 38	~ 9	-	-	~ 10	-	-
Stage 1	~ 1	~ 6	-	0	~ 7	-	-	-	-	-	-	-
Stage 2	77	~ 7	-	45	~ 6	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 40	-	0	~ 38	~ 9	-	-	~ 10	-	-
Mov Cap-2 Maneuver	~ 1	0	-	0	0	-	-	-	-	-	-	-
Stage 1	~ 1	0	-	0	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					82.7		152					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	~ 9	-	-	-	-	~ 10	-	-				
HCM Lane V/C Ratio	8.796	-	-	-	-	11.667	-	-				
HCM Control Delay (s)	\$ 4318	-	-	-	-	\$ 5530.9	-	-				
HCM Lane LOS	F	-	-	-	-	F	-	-				
HCM 95th %tile Q(veh)	11.4	-	-	-	-	16.1	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th Signalized Intersection Summary

3: US 27 & SR 544

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	987	499	310	228	390	245	342	2532	94	290	2746	951
Future Volume (veh/h)	987	499	310	228	390	245	342	2532	94	290	2746	951
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1900	1826	1870	1885	1663	1900	1796	1856	1796	1811	1796
Adj Flow Rate, veh/h	1018	514	320	235	402	253	353	2610	0	299	2831	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	0	5	2	1	16	0	7	3	7	6	7
Cap, veh/h	485	549	447	174	490	366	180	1829		160	1816	
Arrive On Green	0.09	0.29	0.29	0.06	0.26	0.26	0.10	0.37	0.00	0.09	0.37	0.00
Sat Flow, veh/h	3346	1900	1547	1781	1885	1409	1810	4904	1572	1711	4944	1522
Grp Volume(v), veh/h	1018	514	320	235	402	253	353	2610	0	299	2831	0
Grp Sat Flow(s),veh/h/ln	1673	1900	1547	1781	1885	1409	1810	1635	1572	1711	1648	1522
Q Serve(g_s), s	16.1	45.2	31.8	11.1	34.4	27.7	17.0	63.9	0.0	16.0	62.9	0.0
Cycle Q Clear(g_c), s	16.1	45.2	31.8	11.1	34.4	27.7	17.0	63.9	0.0	16.0	62.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	485	549	447	174	490	366	180	1829		160	1816	
V/C Ratio(X)	2.10	0.94	0.72	1.35	0.82	0.69	1.97	1.43		1.87	1.56	
Avail Cap(c_a), veh/h	485	599	488	174	539	403	180	1829		160	1816	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	59.4	54.6	52.3	59.7	57.2	77.1	53.7	0.0	77.6	54.2	0.0
Incr Delay (d2), s/veh	501.7	21.5	4.5	190.5	9.1	4.4	454.0	195.2	0.0	414.8	254.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	57.1	32.6	18.5	22.9	24.0	15.4	47.6	87.0	0.0	40.0	103.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	552.3	80.8	59.1	242.8	68.8	61.6	531.1	248.9	0.0	492.5	308.6	0.0
LnGrp LOS	F	F	E	F	E	E	F	F		F	F	
Approach Vol, veh/h	1852				890				2963			
Approach Delay, s/veh	336.2				112.7				282.5			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.0	70.9	23.0	51.4	25.0	71.9	18.0	56.4				
Change Period (Y+Rc), s	9.0	8.0	6.9	6.9	9.0	8.0	6.9	6.9				
Max Green Setting (Gmax), s	17.0	62.9	16.1	49.0	16.0	63.9	11.1	54.0				
Max Q Clear Time (g_c+I1), s	19.0	64.9	18.1	36.4	18.0	65.9	13.1	47.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	2.3				

Intersection Summary

HCM 6th Ctrl Delay 292.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

9: US 27 & Kokomo Rd

03/09/2020

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	T	T	T
Traffic Volume (veh/h)	155	261	2788	150	362	2673
Future Volume (veh/h)	155	261	2788	150	362	2673
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1796	1856	1856	1811
Adj Flow Rate, veh/h	160	269	2874	0	373	2756
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	7	3	3	6
Cap, veh/h	116	195	2435		312	3585
Arrive On Green	0.19	0.19	0.50	0.00	0.18	0.73
Sat Flow, veh/h	610	1026	5065	1572	1767	5107
Grp Volume(v), veh/h	430	0	2874	0	373	2756
Grp Sat Flow(s),veh/h/ln	1640	0	1635	1572	1767	1648
Q Serve(g_s), s	33.3	0.0	86.9	0.0	30.9	60.6
Cycle Q Clear(g_c), s	33.3	0.0	86.9	0.0	30.9	60.6
Prop In Lane	0.37	0.63		1.00	1.00	
Lane Grp Cap(c), veh/h	312	0	2435		312	3585
V/C Ratio(X)	1.38	0.00	1.18		1.20	0.77
Avail Cap(c_a), veh/h	312	0	2435		312	3585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	70.9	0.0	44.0	0.0	72.1	14.9
Incr Delay (d2), s/veh	188.9	0.0	85.7	0.0	114.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	45.8	0.0	72.7	0.0	34.5	27.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	259.7	0.0	129.7	0.0	187.0	16.0
LnGrp LOS	F	A	F		F	B
Approach Vol, veh/h	430		2874	A		3129
Approach Delay, s/veh	259.7		129.7			36.4
Approach LOS	F		F			D
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	40.0	96.0			136.0	39.0
Change Period (Y+Rc), s	* 9.1	* 9.1			* 9.1	5.7
Max Green Setting (Gmax), s	* 31	* 87			* 1.3E2	33.3
Max Q Clear Time (g_c+I1), s	32.9	88.9			62.6	35.3
Green Ext Time (p_c), s	0.0	0.0			44.0	0.0

Intersection Summary

HCM 6th Ctrl Delay 93.0

HCM 6th LOS F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

12: US 27 & Crump Rd/W Main St

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	31	29	25	20	18	36	2811	104	70	2753	169
Future Volume (veh/h)	73	31	29	25	20	18	36	2811	104	70	2753	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1841	1841	1841	1900	1900	1900	1796	1870	1856	1781	1856
Adj Flow Rate, veh/h	78	33	31	27	21	19	38	2990	111	74	2929	180
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	0	0	0	7	2	3	8	3
Cap, veh/h	136	66	62	121	63	57	51	2805	907	95	2905	939
Arrive On Green	0.08	0.08	0.08	0.07	0.07	0.07	0.03	0.57	0.57	0.05	0.60	0.60
Sat Flow, veh/h	1810	873	820	1753	919	831	1810	4904	1585	1767	4863	1572
Grp Volume(v), veh/h	78	0	64	27	0	40	38	2990	111	74	2929	180
Grp Sat Flow(s),veh/h/ln	1810	0	1693	1753	0	1750	1810	1635	1585	1767	1621	1572
Q Serve(g_s), s	5.5	0.0	4.8	1.9	0.0	2.9	2.8	75.8	4.3	5.5	79.1	6.9
Cycle Q Clear(g_c), s	5.5	0.0	4.8	1.9	0.0	2.9	2.8	75.8	4.3	5.5	79.1	6.9
Prop In Lane	1.00		0.48	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	0	127	121	0	121	51	2805	907	95	2905	939
V/C Ratio(X)	0.57	0.00	0.50	0.22	0.00	0.33	0.74	1.07	0.12	0.78	1.01	0.19
Avail Cap(c_a), veh/h	317	0	296	278	0	277	341	2805	907	333	2905	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	0.0	58.9	58.3	0.0	58.8	63.9	28.4	13.0	61.9	26.7	12.1
Incr Delay (d2), s/veh	3.8	0.0	3.1	0.9	0.0	1.6	18.5	37.8	0.1	12.9	18.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.8	0.0	3.9	1.6	0.0	2.4	2.7	47.7	2.6	4.9	40.5	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	0.0	62.0	59.2	0.0	60.3	82.4	66.1	13.2	74.9	45.4	12.3
LnGrp LOS	E	A	E	E	A	E	F	F	B	E	F	B
Approach Vol, veh/h	142			67			3139			3183		
Approach Delay, s/veh	62.5			59.9			64.5			44.2		
Approach LOS	E			E			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	86.3		16.9	15.3	83.0		17.3				
Change Period (Y+Rc), s	8.2	7.2		7.0	8.2	7.2		8.1				
Max Green Setting (Gmax), s	25.0	75.8		23.2	25.0	75.8		21.0				
Max Q Clear Time (g_c+I1), s	4.8	81.1		7.5	7.5	77.8		4.9				
Green Ext Time (p_c), s	0.1	0.0		0.4	0.1	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay 54.5

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

18: US 27 & SR 542/Dundee Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	388	634	551	439	733	104	739	2323	248	212	1388	546
Future Volume (veh/h)	388	634	551	439	733	104	739	2323	248	212	1388	546
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1900	1900	1841	1856	1870	1885	1781	1841	1900	1796	1826
Adj Flow Rate, veh/h	408	667	580	462	772	109	778	2445	261	223	1461	575
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	0	0	4	3	2	1	8	4	0	7	5
Cap, veh/h	313	396	336	193	414	354	330	1840	590	222	1563	493
Arrive On Green	0.09	0.21	0.21	0.11	0.22	0.22	0.18	0.38	0.38	0.12	0.32	0.32
Sat Flow, veh/h	3401	1900	1610	1753	1856	1585	1795	4863	1560	1810	4904	1547
Grp Volume(v), veh/h	408	667	580	462	772	109	778	2445	261	223	1461	575
Grp Sat Flow(s),veh/h/ln	1700	1900	1610	1753	1856	1585	1795	1621	1560	1810	1635	1547
Q Serve(g_s), s	15.0	34.0	34.0	18.0	36.4	9.4	30.0	61.7	20.4	20.0	47.1	52.0
Cycle Q Clear(g_c), s	15.0	34.0	34.0	18.0	36.4	9.4	30.0	61.7	20.4	20.0	47.1	52.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	396	336	193	414	354	330	1840	590	222	1563	493
V/C Ratio(X)	1.30	1.68	1.73	2.39	1.86	0.31	2.36	1.33	0.44	1.00	0.93	1.17
Avail Cap(c_a), veh/h	313	396	336	193	414	354	330	1840	590	222	1563	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	64.6	64.6	72.6	63.4	52.8	66.6	50.7	37.9	71.6	53.9	55.5
Incr Delay (d2), s/veh	158.3	318.6	339.8	640.2	398.1	0.5	619.5	151.9	0.4	61.7	10.7	94.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.2	78.3	70.4	66.2	97.2	6.8	109.3	73.3	12.4	18.8	27.7	46.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	232.4	383.2	404.4	712.7	461.4	53.3	686.0	202.6	38.2	133.3	64.6	150.2
LnGrp LOS	F	F	F	F	F	D	F	F	D	F	E	F
Approach Vol, veh/h	1655			1343			3484			2259		
Approach Delay, s/veh	353.4			514.8			298.2			93.2		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	59.2	22.4	43.6	28.2	68.9	24.8	41.2				
Change Period (Y+Rc), s	* 7.9	7.2	7.4	* 7.2	8.2	7.2	* 6.8	* 7.2				
Max Green Setting (Gmax), s	* 30	52.0	15.0	* 34	20.0	52.0	* 18	* 34				
Max Q Clear Time (g_c+I1), s	32.0	54.0	17.0	38.4	22.0	63.7	20.0	36.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 289.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

23: US 27 & Cypress Gardens Blvd/Waverly Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	686	222	1112	54	243	43	1232	1892	53	58	1731	652
Future Volume (veh/h)	686	222	1112	54	243	43	1232	1892	53	58	1731	652
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1841	1885	1856	1885	1885	1885	1781	1900	1841	1796	1885
Adj Flow Rate, veh/h	771	249	1249	61	273	48	1384	2126	60	65	1945	733
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	4	1	3	1	1	1	8	0	4	7	1
Cap, veh/h	656	460	399	77	168	30	656	2415	800	81	1715	559
Arrive On Green	0.19	0.25	0.25	0.04	0.11	0.11	0.19	0.50	0.50	0.05	0.35	0.35
Sat Flow, veh/h	3483	1841	1598	1767	1561	275	3483	4863	1610	1753	4904	1598
Grp Volume(v), veh/h	771	249	1249	61	0	321	1384	2126	60	65	1945	733
Grp Sat Flow(s),veh/h/ln	1742	1841	1598	1767	0	1836	1742	1621	1610	1753	1635	1598
Q Serve(g_s), s	35.0	21.8	46.4	6.4	0.0	20.0	35.0	72.7	3.6	6.8	65.0	65.0
Cycle Q Clear(g_c), s	35.0	21.8	46.4	6.4	0.0	20.0	35.0	72.7	3.6	6.8	65.0	65.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	656	460	399	77	0	198	656	2415	800	81	1715	559
V/C Ratio(X)	1.18	0.54	3.13	0.80	0.00	1.63	2.11	0.88	0.08	0.80	1.13	1.31
Avail Cap(c_a), veh/h	656	460	399	190	0	198	656	2415	800	189	1715	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.4	60.5	69.7	88.1	0.0	83.0	75.4	41.9	24.5	87.8	60.4	60.4
Incr Delay (d2), s/veh	94.4	1.3	965.2	16.7	0.0	303.4	504.9	4.1	0.0	16.4	68.3	152.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	34.7	15.4	196.7	5.9	0.0	40.4	95.4	37.4	2.5	6.2	50.9	71.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.9	61.8	1034.9	104.8	0.0	386.3	580.3	45.9	24.5	104.2	128.8	213.4
LnGrp LOS	F	E	F	F	A	F	F	D	C	F	F	F
Approach Vol, veh/h	2269				382				3570			
Approach Delay, s/veh	634.2				341.4				252.8			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.0	73.0	42.0	26.9	16.7	100.3	15.6	53.3				
Change Period (Y+Rc), s	9.0	8.0	7.0	6.9	* 8.1	8.0	7.5	6.9				
Max Green Setting (Gmax), s	35.0	65.0	35.0	20.0	* 20	65.0	20.0	20.0				
Max Q Clear Time (g_c+I1), s	37.0	67.0	37.0	22.0	8.8	74.7	8.4	48.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay 321.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

26: US 27 & Market Blvd/Star Lake Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	41	10	132	78	10	101	66	2793	32	70	3037	10
Future Volume (veh/h)	41	10	132	78	10	101	66	2793	32	70	3037	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1693	1693	1900	1900	1826	1841	1870	1811	1900
Adj Flow Rate, veh/h	43	10	138	81	10	105	69	2909	33	73	3164	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	14	14	0	0	5	4	2	6	0
Cap, veh/h	43	6	203	45	3	205	87	3325	1041	92	3301	1075
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.10	1.00	1.00	0.05	0.67	0.67
Sat Flow, veh/h	0	46	1598	0	22	1610	1810	4985	1560	1781	4944	1610
Grp Volume(v), veh/h	53	0	138	91	0	105	69	2909	33	73	3164	10
Grp Sat Flow(s),veh/h/ln	46	0	1598	22	0	1610	1810	1662	1560	1781	1648	1610
Q Serve(g_s), s	0.0	0.0	12.4	0.0	0.0	9.1	5.6	0.0	0.0	6.1	88.6	0.3
Cycle Q Clear(g_c), s	19.1	0.0	12.4	19.1	0.0	9.1	5.6	0.0	0.0	6.1	88.6	0.3
Prop In Lane	0.81		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	0	203	48	0	205	87	3325	1041	92	3301	1075
V/C Ratio(X)	1.07	0.00	0.68	1.89	0.00	0.51	0.79	0.87	0.03	0.79	0.96	0.01
Avail Cap(c_a), veh/h	49	0	203	48	0	205	226	3325	1041	156	3301	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	0.0	62.5	73.9	0.0	61.1	67.0	0.0	0.0	70.3	23.0	8.3
Incr Delay (d2), s/veh	150.3	0.0	8.7	468.4	0.0	2.1	14.5	3.6	0.1	14.2	8.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	0.0	9.5	14.7	0.0	7.0	5.0	2.0	0.0	5.5	40.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	223.1	0.0	71.2	542.3	0.0	63.2	81.5	3.6	0.1	84.5	31.6	8.3
LnGrp LOS	F	A	E	F	A	E	F	A	A	F	C	A
Approach Vol, veh/h		191			196			3011			3247	
Approach Delay, s/veh		113.4			285.7			5.3			32.7	
Approach LOS		F			F			A			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	108.5		26.0	15.6	108.4		26.0				
Change Period (Y+Rc), s	8.3	8.3		6.9	7.9	8.3		6.9				
Max Green Setting (Gmax), s	18.7	88.7		19.1	13.1	94.7		19.1				
Max Q Clear Time (g_c+I1), s	7.6	90.6		21.1	8.1	2.0		21.1				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	87.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			30.1									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

HCM 6th Signalized Intersection Summary

29: US 27 & Thompson Nursery Rd/Chalet Suzanne Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	261	416	333	378	490	372	2403	190	415	2106	230
Future Volume (veh/h)	256	261	416	333	378	490	372	2403	190	415	2106	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1900	1856	1885	1841	1900	1885	1811	1900	1900	1811	1811
Adj Flow Rate, veh/h	272	278	443	354	402	521	396	2556	202	441	2240	245
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	0	3	1	4	0	1	6	0	0	6	6
Cap, veh/h	192	281	233	207	272	238	253	2377	774	283	2047	635
Arrive On Green	0.08	0.15	0.15	0.09	0.15	0.15	0.28	0.96	0.96	0.16	0.83	0.83
Sat Flow, veh/h	1767	1900	1572	1795	1841	1610	1795	4944	1610	3510	4944	1535
Grp Volume(v), veh/h	272	278	443	354	402	521	396	2556	202	441	2240	245
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1795	1841	1610	1795	1648	1610	1755	1648	1535
Q Serve(g_s), s	12.2	21.9	22.2	13.2	22.2	17.4	21.1	72.1	0.6	12.1	62.1	6.0
Cycle Q Clear(g_c), s	12.2	21.9	22.2	13.2	22.2	17.4	21.1	72.1	0.6	12.1	62.1	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	281	233	207	272	238	253	2377	774	283	2047	635
V/C Ratio(X)	1.42	0.99	1.90	1.71	1.48	2.19	1.57	1.08	0.26	1.56	1.09	0.39
Avail Cap(c_a), veh/h	192	281	233	207	272	238	253	2377	774	283	2047	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	63.8	63.9	53.1	63.9	39.1	53.9	2.9	0.7	62.9	12.9	8.1
Incr Delay (d2), s/veh	216.1	50.4	422.3	337.6	232.9	547.4	273.9	42.6	0.8	267.5	50.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.9	20.5	56.7	33.0	42.6	67.8	41.9	16.5	0.8	24.7	21.8	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	269.9	114.2	486.2	390.7	296.8	586.5	327.8	45.5	1.5	330.4	63.8	9.8
LnGrp LOS	F	F	F	F	F	F	F	F	A	F	F	A
Approach Vol, veh/h	993			1277			3154			2926		
Approach Delay, s/veh	322.8			441.0			78.1			99.5		
Approach LOS	F			F			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	71.0	20.0	30.0	21.0	80.0	20.0	30.0				
Change Period (Y+Rc), s	* 8.9	* 8.9	7.8	7.8	8.9	* 7.9	6.8	7.8				
Max Green Setting (Gmax), s	* 21	* 62	12.2	22.2	11.1	* 72	13.2	22.2				
Max Q Clear Time (g_c+I1), s	23.1	64.1	14.2	24.2	14.1	74.1	15.2	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 170.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Eagle Ridge Mall Ent S

03/09/2020

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	134	37	42	3045	62	47	2625
Future Volume (veh/h)	134	37	42	3045	62	47	2625
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1841	1900		1811	1870	1900	1826
Adj Flow Rate, veh/h	147	41		3346	68	52	2885
Peak Hour Factor	0.91	0.91		0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	0		6	2	0	5
Cap, veh/h	201	95		3741	1199	104	4215
Arrive On Green	0.06	0.06		0.76	0.76	0.03	0.85
Sat Flow, veh/h	3401	1610		5107	1585	3510	5149
Grp Volume(v), veh/h	147	41		3346	68	52	2885
Grp Sat Flow(s),veh/h/ln	1700	1610		1648	1585	1755	1662
Q Serve(g_s), s	6.4	3.7		76.4	1.6	2.2	31.8
Cycle Q Clear(g_c), s	6.4	3.7		76.4	1.6	2.2	31.8
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	201	95		3741	1199	104	4215
V/C Ratio(X)	0.73	0.43		0.89	0.06	0.50	0.68
Avail Cap(c_a), veh/h	535	253		3741	1199	447	4215
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.4	68.1		13.7	4.6	71.7	4.3
Incr Delay (d2), s/veh	5.0	3.0		3.8	0.1	3.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	6.1		30.4	0.8	1.8	9.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	74.4	71.2		17.5	4.7	75.4	5.2
LnGrp LOS	E	E		B	A	E	A
Approach Vol, veh/h	188			3414			2937
Approach Delay, s/veh	73.7			17.3			6.4
Approach LOS	E			B			A
Timer - Assigned Phs	2			4	5	6	
Phs Duration (G+Y+Rc), s	134.7			15.3	13.3	121.4	
Change Period (Y+Rc), s	7.9			6.4	* 8.9	7.9	
Max Green Setting (Gmax), s	92.1			23.6	* 19	84.1	
Max Q Clear Time (g_c+I1), s	33.8			8.4	4.2	78.4	
Green Ext Time (p_c), s	55.9			0.5	0.1	5.7	
Intersection Summary							
HCM 6th Ctrl Delay			14.0				
HCM 6th LOS			B				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved ignoring U-Turning movement.							
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.							

HCM 6th Signalized Intersection Summary

37: US 27 & Huston Kia/E Mountain Lake Cutoff Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	10	10	108	10	383	14	2566	131	662	2223	10
Future Volume (veh/h)	16	10	10	108	10	383	14	2566	131	662	2223	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1900	1796	1856	1870	1811	1811
Adj Flow Rate, veh/h	17	11	11	117	11	416	15	2789	142	720	2416	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	3	0	7	3	2	6	6
Cap, veh/h	38	25	10	163	11	210	29	2034	652	475	3381	15
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.41	0.41	0.27	0.67	0.67
Sat Flow, veh/h	0	186	73	842	79	1572	1810	4904	1572	1781	5080	23
Grp Volume(v), veh/h	39	0	0	128	0	416	15	2789	142	720	1567	860
Grp Sat Flow(s),veh/h/ln	259	0	0	921	0	1572	1810	1635	1572	1781	1648	1807
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	18.0	1.1	56.0	7.8	36.0	40.9	41.0
Cycle Q Clear(g_c), s	18.0	0.0	0.0	18.0	0.0	18.0	1.1	56.0	7.8	36.0	40.9	41.0
Prop In Lane	0.44		0.28	0.91		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	73	0	0	174	0	210	29	2034	652	475	2194	1203
V/C Ratio(X)	0.54	0.00	0.00	0.74	0.00	1.98	0.52	1.37	0.22	1.52	0.71	0.72
Avail Cap(c_a), veh/h	73	0	0	174	0	210	67	2034	652	475	2194	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	0.0	0.0	58.9	0.0	58.5	65.9	39.5	25.4	49.5	14.4	14.4
Incr Delay (d2), s/veh	7.5	0.0	0.0	15.1	0.0	459.5	13.8	170.2	0.4	242.7	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	0.0	8.7	0.0	53.7	1.1	78.7	5.1	71.8	19.1	21.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	0.0	73.9	0.0	518.0	79.7	209.7	25.8	292.2	15.8	17.0
LnGrp LOS	E	A	A	E	A	F	E	F	C	F	B	B
Approach Vol, veh/h	39			544			2946			3147		
Approach Delay, s/veh	60.2			413.5			200.2			79.4		
Approach LOS	E			F			F			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	97.8		26.0	45.0	64.0		26.0				
Change Period (Y+Rc), s	9.0	8.0		8.0	9.0	8.0		8.0				
Max Green Setting (Gmax), s	5.0	87.0		18.0	36.0	56.0		18.0				
Max Q Clear Time (g_c+I1), s	3.1	43.0		20.0	38.0	58.0		20.0				
Green Ext Time (p_c), s	0.0	39.5		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	159.8											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

40: US 27 & Washington Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	51	31	88	59	118	182	2511	93	207	2214	31
Future Volume (veh/h)	22	51	31	88	59	118	182	2511	93	207	2214	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1663	1663	1693	1633	1633	1885	1796	1707	1885	1796	1500
Adj Flow Rate, veh/h	24	55	34	96	64	128	198	2729	0	225	2407	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	16	16	14	18	18	1	7	13	1	7	27
Cap, veh/h	100	150	93	190	76	152	233	2576		260	2694	698
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.08	0.53	0.00	0.11	0.55	0.55
Sat Flow, veh/h	1210	962	594	1184	486	972	1795	4904	1447	1795	4904	1271
Grp Volume(v), veh/h	24	0	89	96	0	192	198	2729	0	225	2407	34
Grp Sat Flow(s),veh/h/ln	1210	0	1556	1184	0	1458	1795	1635	1447	1795	1635	1271
Q Serve(g_s), s	2.2	0.0	5.6	8.7	0.0	14.1	6.9	57.8	0.0	9.5	47.8	1.4
Cycle Q Clear(g_c), s	16.2	0.0	5.6	14.3	0.0	14.1	6.9	57.8	0.0	9.5	47.8	1.4
Prop In Lane	1.00		0.38	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	0	243	190	0	228	233	2576		260	2694	698
V/C Ratio(X)	0.24	0.00	0.37	0.51	0.00	0.84	0.85	1.06		0.86	0.89	0.05
Avail Cap(c_a), veh/h	100	0	243	190	0	228	489	2576		473	2694	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	41.5	47.9	0.0	45.1	29.6	26.1	0.0	34.9	21.9	11.5
Incr Delay (d2), s/veh	1.2	0.0	0.9	2.2	0.0	23.8	8.4	36.0	0.0	8.4	4.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	0.0	4.0	4.8	0.0	10.8	5.6	38.4	0.0	10.5	23.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.2	0.0	42.5	50.1	0.0	68.9	38.0	62.1	0.0	43.2	26.5	11.5
LnGrp LOS	D	A	D	D	A	E	D	F		D	C	B
Approach Vol, veh/h		113			288			2927	A		2666	
Approach Delay, s/veh		45.0			62.6			60.5			27.7	
Approach LOS		D			E			E			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.5	68.7		23.9	20.1	66.0		23.9				
Change Period (Y+Rc), s	8.2	8.2		* 6.7	8.2	8.2		* 6.7				
Max Green Setting (Gmax), s	25.0	57.8		* 17	25.0	57.8		* 17				
Max Q Clear Time (g_c+I1), s	8.9	49.8		16.3	11.5	59.8		18.2				
Green Ext Time (p_c), s	0.4	7.8		0.1	0.5	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 45.7

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

43: US 27 & W Central Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	268	202	54	242	141	283	68	2072	171	298	2131	167
Future Volume (veh/h)	268	202	54	242	141	283	68	2072	171	298	2131	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1870	1811	1900	1856	1811	1900	1856	1796	1856
Adj Flow Rate, veh/h	285	215	57	257	150	301	72	2204	0	317	2267	178
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	1	1	2	6	0	3	6	0	3	7	3
Cap, veh/h	245	276	73	207	386	343	84	2230		307	2456	788
Arrive On Green	0.04	0.19	0.19	0.06	0.21	0.21	0.05	0.45	0.00	0.09	0.50	0.50
Sat Flow, veh/h	1753	1436	381	1781	1811	1610	1767	4944	1610	3428	4904	1572
Grp Volume(v), veh/h	285	0	272	257	150	301	72	2204	0	317	2267	178
Grp Sat Flow(s),veh/h/ln	1753	0	1817	1781	1811	1610	1767	1648	1610	1714	1635	1572
Q Serve(g_s), s	5.0	0.0	20.0	8.0	10.0	25.4	5.7	62.1	0.0	12.6	60.3	9.0
Cycle Q Clear(g_c), s	5.0	0.0	20.0	8.0	10.0	25.4	5.7	62.1	0.0	12.6	60.3	9.0
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	0	349	207	386	343	84	2230		307	2456	788
V/C Ratio(X)	1.16	0.00	0.78	1.24	0.39	0.88	0.85	0.99		1.03	0.92	0.23
Avail Cap(c_a), veh/h	245	0	530	207	567	504	84	2230		307	2456	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	0.0	54.0	54.2	47.4	53.5	66.5	38.2	0.0	64.0	32.6	19.8
Incr Delay (d2), s/veh	108.7	0.0	5.7	141.6	0.9	13.3	53.5	16.4	0.0	59.7	6.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.7	0.0	14.7	18.4	8.1	17.0	6.8	35.3	0.0	12.7	31.6	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	166.2	0.0	59.6	195.8	48.3	66.8	119.9	54.6	0.0	123.7	39.3	20.1
LnGrp LOS	F	A	E	F	D	E	F	D		F	D	C
Approach Vol, veh/h		557			708			2276	A		2762	
Approach Delay, s/veh		114.2			109.7			56.7			47.8	
Approach LOS		F			F			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	78.0	11.8	36.8	21.0	71.0	14.8	33.8				
Change Period (Y+Rc), s	* 7.3	7.6	* 6.8	* 6.8	* 8.4	* 7.6	* 6.8	* 6.8				
Max Green Setting (Gmax), s	* 6.7	70.0	* 5	* 44	* 13	* 63	* 8	* 41				
Max Q Clear Time (g_c+I1), s	7.7	62.3	7.0	27.4	14.6	64.1	10.0	22.0				
Green Ext Time (p_c), s	0.0	7.5	0.0	2.5	0.0	0.0	0.0	2.0				

Intersection Summary

HCM 6th Ctrl Delay 63.8

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

6: US 27 & Sunshine Dr/Paradise Island Dr

03/09/2020

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	10	26	10	10	18	27	2897	10	49	3097	32
Future Vol, veh/h	34	10	26	10	10	18	27	2897	10	49	3097	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	400	-	355	400	-	415
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	11	25	0	0	0	7	0	5	6	7
Mvmt Flow	36	11	28	11	11	19	29	3082	11	52	3295	34
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4695	6550	1648	4568	6573	1541	3329	0	0	3093	0	0
Stage 1	3399	3399	-	3140	3140	-	-	-	-	-	-	-
Stage 2	1296	3151	-	1428	3433	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.32	6.9	6.5	7.1	5.3	-	-	5.4	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.8	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	7.2	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.01	4.05	4	3.9	3.1	-	-	3.15	-	-
Pot Cap-1 Maneuver	~ 1	0	69	~ 1	0	91	~ 26	-	-	~ 32	-	-
Stage 1	~ 4	19	-	~ 4	27	-	-	-	-	-	-	-
Stage 2	156	26	-	103	19	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	69	-	0	91	~ 26	-	-	~ 32	-	-
Mov Cap-2 Maneuver	~ 4	0	-	~ 5	0	-	-	-	-	-	-	-
Stage 1	~ 4	0	-	~ 4	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					4		8.9					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	~ 26	-	-	-	69	-	91	~ 32	-	-		
HCM Lane V/C Ratio	1.105	-	-	-	0.401	-	0.21	1.629	-	-		
HCM Control Delay (s)	\$ 430.4	-	-	-	88.5	-	54.8	\$ 579.2	-	-		
HCM Lane LOS	F	-	-	-	F	-	F	F	-	-		
HCM 95th %tile Q(veh)	3.5	-	-	-	1.5	-	0.7	5.9	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC

15: US 27 & FairBridge Inn Express/Frederick Ave

03/09/2020

Intersection												
Int Delay, s/veh	59											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	
Traffic Vol, veh/h	10	10	10	44	10	68	22	2802	85	164	2871	10
Future Vol, veh/h	10	10	10	44	10	68	22	2802	85	164	2871	10
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	-	-	-	-	-	-	340	-	360	340	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	0	4	0	7	3	4	7	0
Mvmt Flow	11	11	11	47	11	72	23	2981	90	174	3054	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4652	6525	1533	4602	6440	1491	3065	0	0	3071	0	0
Stage 1	3408	3408	-	3027	3027	-	-	-	-	-	-	-
Stage 2	1244	3117	-	1575	3413	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.46	6.5	7.18	5.3	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.76	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.83	4	3.94	3.1	-	-	3.14	-	-
Pot Cap-1 Maneuver	~ 1	0	92	~ 1	0	95	36	-	-	~ 33	-	-
Stage 1	~ 3	19	-	~ 6	31	-	-	-	-	-	-	-
Stage 2	168	28	-	101	19	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	92	-	0	95	36	-	-	~ 33	-	-
Mov Cap-2 Maneuver	~ 1	0	-	~ 2	19	-	-	-	-	-	-	-
Stage 1	~ 1	0	-	~ 2	11	-	-	-	-	-	-	-
Stage 2	0	~ 10	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.6	116.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	36	-	-	-	~ 33	-	-
HCM Lane V/C Ratio	0.65	-	-	-	5.287	-	-
HCM Control Delay (s)	214.6	-	-	-	\$ 2169.5	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	2.3	-	-	-	20.8	-	-

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

HCM 6th TWSC
21: US 27 & Lincoln Ave

PM Peak Hour

03/09/2020

Intersection							
Int Delay, s/veh	5.5						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	30	27	0	2846	33	59	2814
Future Vol, veh/h	30	27	0	2846	33	59	2814
Conflicting Peds, #/hr	2	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	215	-	235	235	-
Veh in Median Storage, #	1	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	0	0	6
Mvmt Flow	31	28	0	2934	34	61	2901
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	4218	1467	2118	0	0	2968	0
Stage 1	2934	-	-	-	-	-	-
Stage 2	1284	-	-	-	-	-	-
Critical Hdwy	5.84	7.1	5.6	-	-	5.3	-
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-	-
Follow-up Hdwy	3.87	3.9	2.3	-	-	3.1	-
Pot Cap-1 Maneuver	~ 5	102	106	-	-	~ 41	-
Stage 1	~ 13	-	-	-	-	-	-
Stage 2	192	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	0	102	106	-	-	~ 41	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	~ 13	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, s	80	0		9.6			
HCM LOS	F						
Minor Lane/Major Mvmt	NBU	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	106	-	-	102	~ 41	-	
HCM Lane V/C Ratio	-	-	-	0.576	1.484	-	
HCM Control Delay (s)	0	-	-	80	\$ 467	-	
HCM Lane LOS	A	-	-	F	F	-	
HCM 95th %tile Q(veh)	0	-	-	2.7	6.2	-	
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

HCM 6th TWSC

34: US 27 & Vanguard School Ent/Tower Point Ent

03/09/2020

Intersection												
Int Delay, s/veh	9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	10	22	10	27	42	2846	31	60	2895	10
Future Vol, veh/h	10	10	10	22	10	27	42	2846	31	60	2895	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	280	-	525	510	-	380
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	12	0	5	7	4	5	0
Mvmt Flow	11	11	11	23	11	28	44	2996	33	63	3047	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4465	6290	1524	4434	6268	1498	3058	0	0	3029	0	0
Stage 1	3173	3173	-	3084	3084	-	-	-	-	-	-	-
Stage 2	1292	3117	-	1350	3184	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.34	5.3	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	4.02	3.1	-	-	3.14	-	-
Pot Cap-1 Maneuver	~ 2	0	93	~ 2	0	87	~ 37	-	-	~ 35	-	-
Stage 1	~ 5	26	-	~ 6	29	-	-	-	-	-	-	-
Stage 2	157	28	-	144	25	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	93	-	0	87	~ 37	-	-	~ 35	-	-
Mov Cap-2 Maneuver	~ 5	0	-	~ 7	0	-	-	-	-	-	-	-
Stage 1	~ 5	0	-	~ 6	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					5.5		12.7					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	~ 37	-	-	-	-	87	~ 35	-	-			
HCM Lane V/C Ratio	1.195	-	-	-	-	0.327	1.805	-	-			
HCM Control Delay (s)	\$ 379	-	-	-	-	65.3	\$ 629.9	-	-			
HCM Lane LOS	F	-	-	-	-	F	F	-	-			
HCM 95th %tile Q(veh)	4.5	-	-	-	-	1.2	6.9	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

2030 No-Build AM and PM Peak Hour Intersection Analysis

HCM 6th Signalized Intersection Summary

3: US 27 & Polo Park Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	17	22	66	10	174	19	2600	74	32	1389	13
Future Volume (veh/h)	91	17	22	66	10	174	19	2600	74	32	1389	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1841	1900	1796	1856	1796	1737	1900
Adj Flow Rate, veh/h	94	18	23	68	10	179	20	2680	76	33	1432	13
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	4	0	7	3	7	11	0
Cap, veh/h	114	22	120	195	29	191	33	2855	916	42	2799	950
Arrive On Green	0.07	0.07	0.07	0.12	0.12	0.12	0.02	0.58	0.58	0.02	0.59	0.59
Sat Flow, veh/h	1530	293	1610	1587	233	1560	1810	4904	1572	1711	4742	1610
Grp Volume(v), veh/h	112	0	23	78	0	179	20	2680	76	33	1432	13
Grp Sat Flow(s),veh/h/ln	1823	0	1610	1821	0	1560	1810	1635	1572	1711	1581	1610
Q Serve(g_s), s	9.6	0.0	2.1	6.2	0.0	18.1	1.7	80.1	3.4	3.1	28.2	0.5
Cycle Q Clear(g_c), s	9.6	0.0	2.1	6.2	0.0	18.1	1.7	80.1	3.4	3.1	28.2	0.5
Prop In Lane	0.84		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	0	120	223	0	191	33	2855	916	42	2799	950
V/C Ratio(X)	0.83	0.00	0.19	0.35	0.00	0.94	0.60	0.94	0.08	0.79	0.51	0.01
Avail Cap(c_a), veh/h	188	0	166	223	0	191	228	2901	930	215	2806	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	0.0	69.1	64.0	0.0	69.2	77.5	30.6	14.6	77.2	19.1	13.5
Incr Delay (d2), s/veh	18.6	0.0	0.8	0.9	0.0	47.0	16.0	6.8	0.0	26.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	0.0	1.7	5.4	0.0	14.9	1.7	39.3	2.1	2.9	14.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	0.0	69.9	64.9	0.0	116.2	93.5	37.4	14.6	103.8	19.3	13.5
LnGrp LOS	F	A	E	E	A	F	F	D	B	F	B	B
Approach Vol, veh/h		135			257			2776			1478	
Approach Delay, s/veh		87.5			100.6			37.2			21.1	
Approach LOS		F			F			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	100.5		19.4	11.2	101.8		26.6				
Change Period (Y+Rc), s	* 8.6	* 7.9		7.6	* 8.3	7.9		7.1				
Max Green Setting (Gmax), s	* 20	* 94		16.4	* 20	94.1		19.5				
Max Q Clear Time (g_c+I1), s	5.1	82.1		11.6	3.7	30.2		20.1				
Green Ext Time (p_c), s	0.0	10.5		0.2	0.0	13.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 37.0

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: US 27 & Legacy Park Blvd/Florence Villa Grove Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	92	189	258	20	93	87	1979	461	112	1453	40
Future Volume (veh/h)	173	92	189	258	20	93	87	1979	461	112	1453	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1826	1781	1841	1900	1722	1826
Adj Flow Rate, veh/h	186	99	203	277	22	100	94	2128	496	120	1562	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	5	8	4	0	12	5
Cap, veh/h	313	96	197	215	17	78	112	1951	626	139	1964	646
Arrive On Green	0.17	0.17	0.17	0.18	0.18	0.18	0.06	0.40	0.40	0.08	0.42	0.42
Sat Flow, veh/h	1810	556	1139	1222	97	441	1739	4863	1560	1810	4701	1547
Grp Volume(v), veh/h	186	0	302	399	0	0	94	2128	496	120	1562	43
Grp Sat Flow(s),veh/h/ln	1810	0	1695	1760	0	0	1739	1621	1560	1810	1567	1547
Q Serve(g_s), s	16.4	0.0	30.0	30.5	0.0	0.0	9.3	69.5	48.4	11.4	50.2	2.9
Cycle Q Clear(g_c), s	16.4	0.0	30.0	30.5	0.0	0.0	9.3	69.5	48.4	11.4	50.2	2.9
Prop In Lane	1.00		0.67	0.69		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	0	293	310	0	0	112	1951	626	139	1964	646
V/C Ratio(X)	0.59	0.00	1.03	1.29	0.00	0.00	0.84	1.09	0.79	0.86	0.80	0.07
Avail Cap(c_a), veh/h	313	0	293	310	0	0	151	1951	626	157	1964	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	0.0	71.6	71.4	0.0	0.0	80.1	51.9	45.5	79.0	44.0	30.2
Incr Delay (d2), s/veh	3.0	0.0	60.2	151.8	0.0	0.0	25.1	49.9	6.6	33.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	0.0	25.4	39.9	0.0	0.0	8.5	48.8	26.4	10.6	26.3	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	0.0	131.8	223.2	0.0	0.0	105.3	101.8	52.2	112.0	46.3	30.2
LnGrp LOS	E	A	F	F	A	A	F	F	D	F	D	C
Approach Vol, veh/h		488			399			2718			1725	
Approach Delay, s/veh		107.9			223.2			92.9			50.4	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.2	80.1		37.2	22.1	77.2		36.8				
Change Period (Y+Rc), s	8.0	7.7		* 6.7	8.7	* 7.7		6.8				
Max Green Setting (Gmax), s	15.0	70.0		* 31	15.0	* 70		30.0				
Max Q Clear Time (g_c+I1), s	11.3	52.2		32.5	13.4	71.5		32.0				
Green Ext Time (p_c), s	0.1	7.9		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 90.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

9: US 27 & Sand Mine Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	55	192	233	39	245	215	1992	382	278	1430	149
Future Volume (veh/h)	272	55	192	233	39	245	215	1992	382	278	1430	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1411	1811	1604	1856	1856	1870	1589	1826	1826	1870	1811	1129
Adj Flow Rate, veh/h	362	0	223	271	45	285	250	2316	444	323	1663	173
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	33	6	20	3	3	2	21	5	5	2	6	52
Cap, veh/h	365	0	185	281	47	292	501	2218	689	310	1822	353
Arrive On Green	0.14	0.00	0.14	0.18	0.18	0.18	0.17	0.45	0.45	0.09	0.37	0.37
Sat Flow, veh/h	2688	0	1359	1526	253	1585	2935	4985	1547	3456	4944	957
Grp Volume(v), veh/h	362	0	223	316	0	285	250	2316	444	323	1663	173
Grp Sat Flow(s),veh/h/ln	1344	0	1359	1779	0	1585	1468	1662	1547	1728	1648	957
Q Serve(g_s), s	29.1	0.0	29.4	38.1	0.0	38.7	16.7	96.3	48.3	19.4	69.3	30.2
Cycle Q Clear(g_c), s	29.1	0.0	29.4	38.1	0.0	38.7	16.7	96.3	48.3	19.4	69.3	30.2
Prop In Lane	1.00		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	0	185	328	0	292	501	2218	689	310	1822	353
V/C Ratio(X)	0.99	0.00	1.21	0.96	0.00	0.98	0.50	1.04	0.64	1.04	0.91	0.49
Avail Cap(c_a), veh/h	365	0	185	328	0	292	501	2218	689	310	1951	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	93.4	0.0	93.5	87.5	0.0	87.8	81.3	60.0	46.7	98.5	65.0	52.7
Incr Delay (d2), s/veh	44.7	0.0	133.3	39.8	0.0	45.7	0.8	31.8	2.0	62.7	6.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.2	0.0	26.2	28.9	0.0	27.0	10.4	58.7	25.7	17.1	38.4	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	138.1	0.0	226.8	127.3	0.0	133.4	82.1	91.9	48.8	161.2	71.7	53.6
LnGrp LOS	F	A	F	F	A	F	F	F	D	F	E	D
Approach Vol, veh/h	585			601			3010			2159		
Approach Delay, s/veh	171.9			130.2			84.7			83.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	28.0	105.0		36.4	45.7	87.3		47.0				
Change Period (Y+Rc), s	* 8.6	* 8.7		7.0	8.7	7.6		7.1				
Max Green Setting (Gmax), s	* 19	* 96		29.4	30.3	85.4		39.9				
Max Q Clear Time (g_c+I1), s	21.4	98.3		31.4	18.7	71.3		40.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.6	8.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay 96.7

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 27 & Highlands Reserve Blvd/Student Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	18	40	108	10	206	47	2414	66	183	1640	10
Future Volume (veh/h)	26	18	40	108	10	206	47	2414	66	183	1640	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1737	1159	1159	1870	1870	1811	1900	1841	1767	1648
Adj Flow Rate, veh/h	29	20	44	120	11	229	52	2682	73	203	1822	11
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
Percent Heavy Veh, %	0	0	11	50	50	2	2	6	0	4	9	17
Cap, veh/h	48	22	199	58	0	214	67	2670	870	222	3058	885
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.54	0.54	0.13	0.63	0.63
Sat Flow, veh/h	0	164	1472	0	0	1585	1781	4944	1610	1753	4823	1397
Grp Volume(v), veh/h	49	0	44	131	0	229	52	2682	73	203	1822	11
Grp Sat Flow(s),veh/h/ln	164	0	1472	0	0	1585	1781	1648	1610	1753	1608	1397
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	16.0	3.4	64.0	2.6	13.6	26.3	0.3
Cycle Q Clear(g_c), s	16.0	0.0	3.2	16.0	0.0	16.0	3.4	64.0	2.6	13.6	26.3	0.3
Prop In Lane	0.59		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	0	199	58	0	214	67	2670	870	222	3058	885
V/C Ratio(X)	0.70	0.00	0.22	2.25	0.00	1.07	0.77	1.00	0.08	0.91	0.60	0.01
Avail Cap(c_a), veh/h	70	0	199	58	0	214	152	2670	870	222	3058	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	0.0	45.7	59.3	0.0	51.3	56.5	27.3	13.1	51.1	12.8	8.0
Incr Delay (d2), s/veh	25.7	0.0	0.6	613.8	0.0	81.3	17.0	18.5	0.0	37.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	2.1	21.0	0.0	17.1	3.2	34.6	1.5	12.7	12.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.0	0.0	46.3	673.0	0.0	132.6	73.5	45.7	13.2	89.0	13.1	8.0
LnGrp LOS	E	A	D	F	A	F	E	F	B	F	B	A
Approach Vol, veh/h	93				360				2807			
Approach Delay, s/veh	63.0				329.2				45.4			
Approach LOS	E				F				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.5	71.5		23.5	12.4	82.6		23.5				
Change Period (Y+Rc), s	8.5	7.5		7.5	7.9	7.5		7.5				
Max Green Setting (Gmax), s	15.0	64.0		16.0	10.1	69.5		16.0				
Max Q Clear Time (g_c+I1), s	15.6	66.0		18.0	5.4	28.3		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	15.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay 55.5

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

15: US 27 & California Blvd/McFee Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	10	72	47	10	79	128	2109	31	25	1888	31
Future Volume (veh/h)	83	10	72	47	10	79	128	2109	31	25	1888	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1900	1900	1856	1885	1796	1796	1900	1781	1752
Adj Flow Rate, veh/h	89	11	77	51	11	85	138	2268	33	27	2030	33
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	3	0	0	3	1	7	7	0	8	10
Cap, veh/h	56	4	304	54	7	304	167	2878	893	44	2509	766
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.59	0.59	0.02	0.52	0.52
Sat Flow, veh/h	0	20	1572	0	35	1572	1795	4904	1522	1810	4863	1485
Grp Volume(v), veh/h	100	0	77	62	0	85	138	2268	33	27	2030	33
Grp Sat Flow(s),veh/h/ln	20	0	1572	35	0	1572	1795	1635	1522	1810	1621	1485
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	5.6	9.2	43.5	1.1	1.8	42.5	1.3
Cycle Q Clear(g_c), s	23.7	0.0	5.1	23.7	0.0	5.6	9.2	43.5	1.1	1.8	42.5	1.3
Prop In Lane	0.89		1.00	0.82		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	0	304	60	0	304	167	2878	893	44	2509	766
V/C Ratio(X)	1.68	0.00	0.25	1.03	0.00	0.28	0.83	0.79	0.04	0.61	0.81	0.04
Avail Cap(c_a), veh/h	59	0	304	60	0	304	366	3455	1073	369	3430	1047
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	0.0	41.9	58.6	0.0	42.1	54.6	19.4	10.7	59.2	24.6	14.7
Incr Delay (d2), s/veh	369.9	0.0	0.4	124.3	0.0	0.5	9.8	1.0	0.0	12.7	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.3	0.0	3.7	7.1	0.0	4.1	7.9	20.7	0.6	1.7	21.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	429.6	0.0	42.3	182.9	0.0	42.6	64.4	20.5	10.7	71.8	25.6	14.7
LnGrp LOS	F	A	D	F	A	D	E	C	B	E	C	B
Approach Vol, veh/h		177			147			2439			2090	
Approach Delay, s/veh		261.1			101.8			22.8			26.1	
Approach LOS		F			F			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	79.9		31.4	19.9	71.2		31.4				
Change Period (Y+Rc), s	8.2	8.0		7.7	8.5	* 8		7.7				
Max Green Setting (Gmax), s	25.0	86.3		23.7	25.0	* 86		23.7				
Max Q Clear Time (g_c+I1), s	3.8	45.5		25.7	11.2	44.5		25.7				
Green Ext Time (p_c), s	0.0	22.1		0.0	0.3	18.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay 35.3

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

21: US 27 & 4 Corners Blvd/Tri County Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	43	92	95	25	395	24	1992	118	348	1800	27
Future Volume (veh/h)	92	43	92	95	25	395	24	1992	118	348	1800	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1693	1693	1856	1900	1781	1856	1885	1796	1811
Adj Flow Rate, veh/h	99	46	99	102	27	425	26	2142	127	374	1935	29
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	14	14	3	0	8	3	1	7	6
Cap, veh/h	69	30	45	176	41	338	40	1897	613	396	2886	903
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.39	0.39	0.22	0.59	0.59
Sat Flow, veh/h	163	141	208	616	191	1572	1810	4863	1572	1795	4904	1535
Grp Volume(v), veh/h	244	0	0	129	0	425	26	2142	127	374	1935	29
Grp Sat Flow(s),veh/h/ln	512	0	0	807	0	1572	1810	1621	1572	1795	1635	1535
Q Serve(g_s), s	10.0	0.0	0.0	0.0	0.0	32.0	2.1	58.0	8.0	30.5	39.9	1.2
Cycle Q Clear(g_c), s	32.0	0.0	0.0	22.0	0.0	32.0	2.1	58.0	8.0	30.5	39.9	1.2
Prop In Lane	0.41		0.41	0.79		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	144	0	0	217	0	338	40	1897	613	396	2886	903
V/C Ratio(X)	1.69	0.00	0.00	0.59	0.00	1.26	0.65	1.13	0.21	0.94	0.67	0.03
Avail Cap(c_a), veh/h	144	0	0	217	0	338	195	1897	613	423	2886	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.3	0.0	0.0	54.2	0.0	58.3	72.1	45.3	30.1	57.1	20.8	12.8
Incr Delay (d2), s/veh	339.4	0.0	0.0	4.3	0.0	137.1	16.3	65.5	0.1	29.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	32.2	0.0	0.0	8.3	0.0	38.2	2.1	46.7	5.3	23.2	20.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	405.7	0.0	0.0	58.5	0.0	195.4	88.4	110.8	30.2	86.3	21.4	12.8
LnGrp LOS	F	A	A	E	A	F	F	F	C	F	C	B
Approach Vol, veh/h		244			554			2295			2338	
Approach Delay, s/veh		405.7			163.5			106.1			31.6	
Approach LOS		F			F			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	95.5		40.9	41.8	66.0		40.9				
Change Period (Y+Rc), s	9.0	8.0		* 8.9	9.0	8.0		* 8.9				
Max Green Setting (Gmax), s	16.0	77.0		* 32	35.0	58.0		* 32				
Max Q Clear Time (g_c+I1), s	4.1	41.9		34.0	32.5	60.0		34.0				
Green Ext Time (p_c), s	0.0	15.4		0.0	0.3	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 93.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

27: US 27 & Waverly Barn Rd/Dunson Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	17	24	59	132	10	120	149	1858	284	424	2143	101
Future Volume (veh/h)	17	24	59	132	10	120	149	1858	284	424	2143	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1559	1900	1900	1900	1485	1737	1885	1826	1811	1841
Adj Flow Rate, veh/h	19	26	65	145	11	132	164	2042	312	466	2355	111
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	23	0	0	0	28	11	1	5	6	4
Cap, veh/h	49	68	83	169	13	154	128	1744	588	326	2291	723
Arrive On Green	0.06	0.06	0.06	0.20	0.20	0.20	0.09	0.37	0.37	0.19	0.46	0.46
Sat Flow, veh/h	786	1075	1321	864	66	786	1414	4742	1598	1739	4944	1560
Grp Volume(v), veh/h	45	0	65	288	0	0	164	2042	312	466	2355	111
Grp Sat Flow(s),veh/h/ln	1861	0	1321	1715	0	0	1414	1581	1598	1739	1648	1560
Q Serve(g_s), s	3.9	0.0	8.1	27.2	0.0	0.0	15.2	61.6	25.7	31.4	77.6	6.9
Cycle Q Clear(g_c), s	3.9	0.0	8.1	27.2	0.0	0.0	15.2	61.6	25.7	31.4	77.6	6.9
Prop In Lane	0.42		1.00	0.50		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	0	83	335	0	0	128	1744	588	326	2291	723
V/C Ratio(X)	0.39	0.00	0.78	0.86	0.00	0.00	1.28	1.17	0.53	1.43	1.03	0.15
Avail Cap(c_a), veh/h	544	0	387	584	0	0	128	1744	588	326	2291	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.4	0.0	77.4	65.1	0.0	0.0	76.1	52.9	41.6	68.0	44.9	26.0
Incr Delay (d2), s/veh	2.1	0.0	14.7	12.6	0.0	0.0	171.8	83.3	0.7	210.0	26.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	5.6	19.1	0.0	0.0	18.6	51.9	15.1	49.2	46.2	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	0.0	92.1	77.7	0.0	0.0	247.9	136.3	42.3	278.1	71.3	26.0
LnGrp LOS	E	A	F	E	A	A	F	F	D	F	F	C
Approach Vol, veh/h	110			288			2518			2932		
Approach Delay, s/veh	86.1			77.7			131.9			102.4		
Approach LOS	F			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	40.0	69.4		17.9	24.0	85.4		40.1				
Change Period (Y+Rc), s	* 8.6	7.8		7.4	8.8	* 7.8		7.4				
Max Green Setting (Gmax), s	* 31	61.4		49.0	15.2	* 78		57.0				
Max Q Clear Time (g_c+I1), s	33.4	63.6		10.1	17.2	79.6		29.2				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	0.0		3.6				

Intersection Summary

HCM 6th Ctrl Delay 113.6

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Deen Still Rd/Ronald Reagan Pkwy

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	98	92	519	117	433	102	1696	305	459	1811	67
Future Volume (veh/h)	62	98	92	519	117	433	102	1696	305	459	1811	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1618	1648	1500	1870	1796	1781	1530	1796	1781	1811	1826	1441
Adj Flow Rate, veh/h	69	109	102	577	130	481	113	1884	339	510	2012	74
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
Percent Heavy Veh, %	19	17	27	2	7	8	25	7	8	6	5	31
Cap, veh/h	104	158	122	458	357	300	131	1946	599	565	2372	581
Arrive On Green	0.03	0.10	0.10	0.13	0.20	0.20	0.09	0.40	0.40	0.17	0.48	0.48
Sat Flow, veh/h	2990	1648	1271	3456	1796	1510	1457	4904	1510	3346	4985	1221
Grp Volume(v), veh/h	69	109	102	577	130	481	113	1884	339	510	2012	74
Grp Sat Flow(s),veh/h/ln	1495	1648	1271	1728	1796	1510	1457	1635	1510	1673	1662	1221
Q Serve(g_s), s	3.4	9.7	11.9	20.0	9.4	29.9	11.5	56.8	26.3	22.5	53.5	5.1
Cycle Q Clear(g_c), s	3.4	9.7	11.9	20.0	9.4	29.9	11.5	56.8	26.3	22.5	53.5	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	104	158	122	458	357	300	131	1946	599	565	2372	581
V/C Ratio(X)	0.66	0.69	0.83	1.26	0.36	1.60	0.86	0.97	0.57	0.90	0.85	0.13
Avail Cap(c_a), veh/h	397	273	211	458	357	300	193	1951	601	666	2372	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.9	66.0	67.0	65.4	52.2	60.4	67.7	44.6	35.4	61.4	34.7	22.1
Incr Delay (d2), s/veh	7.0	5.2	13.6	133.2	0.6	287.1	22.3	13.6	1.0	14.1	3.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	7.6	7.6	26.3	7.7	54.6	8.7	32.2	14.8	15.7	28.3	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.9	71.2	80.5	198.6	52.8	347.5	90.1	58.2	36.4	75.6	37.8	22.1
LnGrp LOS	E	E	F	F	D	F	F	E	D	E	D	C
Approach Vol, veh/h	280			1188			2336			2596		
Approach Delay, s/veh	76.5			242.9			56.6			44.7		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.1	67.4	27.8	21.5	22.1	79.3	12.4	36.9				
Change Period (Y+Rc), s	* 8.6	7.6	* 7.8	* 7	* 8.6	7.6	7.1	7.0				
Max Green Setting (Gmax), s	* 30	60.0	* 20	* 25	* 20	60.0	20.0	25.0				
Max Q Clear Time (g_c+I1), s	24.5	58.8	22.0	13.9	13.5	55.5	5.4	31.9				
Green Ext Time (p_c), s	0.9	1.1	0.0	0.6	0.1	3.6	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay 87.2

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

35: US 27 & Access Rd/Ritchie Bros Driveway

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	10	121	10	10	10	298	2497	10	52	2243	104
Future Volume (veh/h)	68	10	121	10	10	10	298	2497	10	52	2243	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1693	1900	1900	1900	1856	1796	1900	1856	1796	1767
Adj Flow Rate, veh/h	71	10	126	10	10	10	310	2601	0	54	2336	108
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	14	0	0	0	3	7	0	3	7	9
Cap, veh/h	59	5	305	47	33	343	390	2698		71	2327	710
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.55	0.00	0.04	0.47	0.47
Sat Flow, veh/h	0	22	1434	0	156	1610	3428	4904	1610	1767	4904	1497
Grp Volume(v), veh/h	81	0	126	20	0	10	310	2601	0	54	2336	108
Grp Sat Flow(s),veh/h/ln	22	0	1434	156	0	1610	1714	1635	1610	1767	1635	1497
Q Serve(g_s), s	0.0	0.0	8.7	0.0	0.0	0.6	10.1	58.3	0.0	3.5	54.4	4.7
Cycle Q Clear(g_c), s	24.4	0.0	8.7	24.4	0.0	0.6	10.1	58.3	0.0	3.5	54.4	4.7
Prop In Lane	0.88		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	305	80	0	343	390	2698		71	2327	710
V/C Ratio(X)	1.27	0.00	0.41	0.25	0.00	0.03	0.79	0.96		0.77	1.00	0.15
Avail Cap(c_a), veh/h	64	0	305	80	0	343	933	2698		484	2327	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	0.0	38.9	38.1	0.0	35.7	49.5	24.7	0.0	54.5	30.1	17.1
Incr Delay (d2), s/veh	203.1	0.0	1.9	3.4	0.0	0.1	3.7	10.4	0.0	15.7	19.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.7	0.0	5.8	0.9	0.0	0.4	7.8	30.3	0.0	3.3	31.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	258.7	0.0	40.9	41.5	0.0	35.8	53.2	35.1	0.0	70.2	49.8	17.3
LnGrp LOS	F	A	D	D	A	D	D	D		E	F	B
Approach Vol, veh/h	207				30				2911			
Approach Delay, s/veh	126.1				39.6				37.1			
Approach LOS	F				D				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.9	62.0		31.8	12.2	70.7		31.8				
Change Period (Y+Rc), s	* 7.8	7.6		7.4	7.6	7.6		7.4				
Max Green Setting (Gmax), s	* 31	54.4		24.4	31.4	45.0		24.4				
Max Q Clear Time (g_c+I1), s	12.1	56.4		26.4	5.5	60.3		26.4				
Green Ext Time (p_c), s	1.0	0.0		0.0	0.1	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

47: US 27 & Heller Bros Blvd/Deer Creek Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	13	117	38	10	91	16	3959	37	10	1764	10
Future Volume (veh/h)	27	13	117	38	10	91	16	3959	37	10	1764	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1811	1811	1900	1900	1900	1841	1900	1900	1781	1900
Adj Flow Rate, veh/h	29	14	127	41	11	99	17	4303	40	11	1917	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	6	6	0	0	0	4	0	0	8	0
Cap, veh/h	47	357	152	54	17	153	257	2968	951	23	2245	743
Arrive On Green	0.03	0.10	0.10	0.03	0.10	0.10	0.28	1.00	1.00	0.01	0.46	0.46
Sat Flow, veh/h	1810	3610	1535	1725	164	1472	1810	5025	1610	1810	4863	1610
Grp Volume(v), veh/h	29	14	127	41	0	110	17	4303	40	11	1917	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1535	1725	0	1635	1810	1675	1610	1810	1621	1610
Q Serve(g_s), s	1.9	0.4	9.8	2.8	0.0	7.8	0.8	0.0	0.0	0.7	42.0	0.3
Cycle Q Clear(g_c), s	1.9	0.4	9.8	2.8	0.0	7.8	0.8	0.0	0.0	0.7	42.0	0.3
Prop In Lane	1.00		1.00	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	357	152	54	0	170	257	2968	951	23	2245	743
V/C Ratio(X)	0.62	0.04	0.84	0.77	0.00	0.65	0.07	1.45	0.04	0.48	0.85	0.01
Avail Cap(c_a), veh/h	115	439	187	152	0	240	257	2968	951	172	2245	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	48.9	53.1	57.7	0.0	51.6	37.2	0.0	0.0	58.8	28.7	8.7
Incr Delay (d2), s/veh	12.7	0.0	23.1	20.0	0.0	4.1	0.1	204.3	0.1	14.3	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.3	8.3	2.8	0.0	6.1	0.6	87.4	0.0	0.8	22.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.6	49.0	76.2	77.7	0.0	55.7	37.3	204.3	0.1	73.2	33.1	8.7
LnGrp LOS	E	D	E	E	A	E	D	F	A	E	C	A
Approach Vol, veh/h	170			151			4360			1939		
Approach Delay, s/veh	73.0			61.7			201.8			33.2		
Approach LOS	E			E			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.6	64.0	10.5	19.9	10.1	79.5	11.1	19.3				
Change Period (Y+Rc), s	* 8.6	* 8.6	7.4	7.4	* 8.6	* 8.6	7.4	7.4				
Max Green Setting (Gmax), s	* 7.4	* 55	7.6	17.6	* 11	* 51	10.6	14.6				
Max Q Clear Time (g_c+I1), s	2.8	44.0	3.9	9.8	2.7	2.0	4.8	11.8				
Green Ext Time (p_c), s	0.0	10.5	0.0	0.3	0.0	49.2	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 145.9

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

51: US 27 & Minute Maid Ramp Rd 2/Citrus Ridge Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	121	10	74	68	10	232	31	3445	28	78	1943	27
Future Volume (veh/h)	121	10	74	68	10	232	31	3445	28	78	1943	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1885	1826	1826	1544	1781	1752	1737
Adj Flow Rate, veh/h	125	10	76	70	10	239	32	3552	29	80	2003	28
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	1	5	5	24	8	10	11
Cap, veh/h	58	3	374	56	5	371	48	2222	583	145	2371	730
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.45	0.45	0.17	0.99	0.99
Sat Flow, veh/h	0	11	1610	0	19	1598	1739	4985	1309	1697	4782	1472
Grp Volume(v), veh/h	135	0	76	80	0	239	32	3552	29	80	2003	28
Grp Sat Flow(s),veh/h/ln	11	0	1610	19	0	1598	1739	1662	1309	1697	1594	1472
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	16.2	2.2	53.5	1.5	5.2	2.6	0.0
Cycle Q Clear(g_c), s	27.9	0.0	4.6	27.9	0.0	16.2	2.2	53.5	1.5	5.2	2.6	0.0
Prop In Lane	0.93		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	0	374	61	0	371	48	2222	583	145	2371	730
V/C Ratio(X)	2.24	0.00	0.20	1.32	0.00	0.64	0.67	1.60	0.05	0.55	0.84	0.04
Avail Cap(c_a), veh/h	60	0	374	61	0	371	138	2222	583	219	2371	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	0.0	37.1	57.9	0.0	41.6	57.8	33.3	18.8	47.6	0.3	0.3
Incr Delay (d2), s/veh	606.8	0.0	0.3	221.5	0.0	3.8	15.3	271.4	0.2	3.2	3.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.6	0.0	3.2	10.0	0.0	10.9	2.0	116.5	0.8	3.8	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	665.6	0.0	37.4	279.5	0.0	45.3	73.1	304.6	19.0	50.8	4.2	0.4
LnGrp LOS	F	A	D	F	A	D	E	F	B	D	A	A
Approach Vol, veh/h		211			319			3613			2111	
Approach Delay, s/veh		439.3			104.1			300.3			5.9	
Approach LOS		F			F			F			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	68.0		35.0	18.8	61.0		35.0				
Change Period (Y+Rc), s	8.5	* 8.5		* 7.1	8.5	7.5		* 7.1				
Max Green Setting (Gmax), s	9.5	* 60		* 28	15.5	53.5		* 28				
Max Q Clear Time (g_c+I1), s	4.2	4.6		29.9	7.2	55.5		29.9				
Green Ext Time (p_c), s	0.0	16.9		0.0	0.1	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 195.6

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	140	0	199	10	0	3273	50	60	2293
Future Volume (veh/h)	0	0	0	140	0	199	10	0	3273	50	60	2293
Initial Q (Qb), veh				0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No				No
Adj Sat Flow, veh/h/ln				1841	0	1870		0	1826	1856	1826	1781
Adj Flow Rate, veh/h				144	0	205		0	3374	52	62	2364
Peak Hour Factor				0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				4	0	2		0	5	3	5	8
Cap, veh/h				221	0	200		0	3388	1069	61	3749
Arrive On Green				0.13	0.00	0.13		0.00	0.68	0.68	0.04	0.77
Sat Flow, veh/h				1753	0	1585		0	5149	1572	1739	5024
Grp Volume(v), veh/h				144	0	205		0	3374	52	62	2364
Grp Sat Flow(s),veh/h/ln				1753	0	1585		0	1662	1572	1739	1621
Q Serve(g_s), s				11.2	0.0	18.0		0.0	95.7	1.6	5.0	30.9
Cycle Q Clear(g_c), s				11.2	0.0	18.0		0.0	95.7	1.6	5.0	30.9
Prop In Lane				1.00		1.00		0.00		1.00	1.00	
Lane Grp Cap(c), veh/h				221	0	200		0	3388	1069	61	3749
V/C Ratio(X)				0.65	0.00	1.03		0.00	1.00	0.05	1.02	0.63
Avail Cap(c_a), veh/h				221	0	200		0	3388	1069	61	3749
HCM Platoon Ratio				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				59.4	0.0	62.3		0.0	22.6	7.6	68.8	7.3
Incr Delay (d2), s/veh				6.6	0.0	70.4		0.0	14.4	0.0	120.3	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				9.2	0.0	26.2		0.0	44.4	0.8	7.6	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				66.0	0.0	132.8		0.0	37.1	7.6	189.2	7.6
LnGrp LOS				E	A	F		A	D	A	F	A
Approach Vol, veh/h					349				3426			2426
Approach Delay, s/veh					105.2				36.6			12.2
Approach LOS					F				D			B
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.0	105.0		24.7		118.0						
Change Period (Y+Rc), s	8.0	8.0		* 6.7		8.0						
Max Green Setting (Gmax), s	5.0	97.0		* 18		97.0						
Max Q Clear Time (g_c+I1), s	7.0	97.7		20.0		32.9						
Green Ext Time (p_c), s	0.0	0.0		0.0		20.1						

Intersection Summary

HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1781
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.97
Percent Heavy Veh, %	8
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

64: US 27 & Massee Rd/Holly Hill Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	10	80	10	26	261	55	3198	18	172	1736	98
Future Volume (veh/h)	52	10	80	10	26	261	55	3198	18	172	1736	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1826	1767	1856	1752	1870
Adj Flow Rate, veh/h	56	11	86	11	28	281	59	3439	19	185	1867	105
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	5	9	3	10	2
Cap, veh/h	152	43	335	320	32	318	76	2254	677	118	2277	755
Arrive On Green	0.03	0.23	0.23	0.01	0.21	0.21	0.04	0.45	0.45	0.07	0.48	0.48
Sat Flow, veh/h	1810	186	1453	1810	148	1485	1810	4985	1497	1767	4782	1585
Grp Volume(v), veh/h	56	0	97	11	0	309	59	3439	19	185	1867	105
Grp Sat Flow(s),veh/h/ln	1810	0	1639	1810	0	1633	1810	1662	1497	1767	1594	1585
Q Serve(g_s), s	3.0	0.0	6.1	0.6	0.0	23.3	4.1	57.4	0.9	8.5	42.6	4.7
Cycle Q Clear(g_c), s	3.0	0.0	6.1	0.6	0.0	23.3	4.1	57.4	0.9	8.5	42.6	4.7
Prop In Lane	1.00		0.89	1.00		0.91	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	378	320	0	350	76	2254	677	118	2277	755
V/C Ratio(X)	0.37	0.00	0.26	0.03	0.00	0.88	0.78	1.53	0.03	1.56	0.82	0.14
Avail Cap(c_a), veh/h	163	0	658	368	0	664	80	2254	677	118	2277	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	40.0	38.2	0.0	48.3	60.2	34.8	19.3	59.2	28.6	18.7
Incr Delay (d2), s/veh	1.5	0.0	0.4	0.0	0.0	7.3	35.7	239.0	0.0	290.5	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.0	4.6	0.5	0.0	15.2	4.6	108.6	0.6	21.6	21.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	0.0	40.3	38.3	0.0	55.7	95.9	273.8	19.3	349.8	31.4	18.8
LnGrp LOS	D	A	D	D	A	E	F	F	B	F	C	B
Approach Vol, veh/h	153			320			3517			2157		
Approach Delay, s/veh	40.5			55.1			269.4			58.1		
Approach LOS	D			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	68.3	8.0	36.8	17.0	65.2	10.0	34.7				
Change Period (Y+Rc), s	* 8.6	7.8	6.4	* 7.5	* 8.5	* 7.8	* 5.7	* 7.5				
Max Green Setting (Gmax), s	* 5.6	60.0	5.0	* 51	* 8.5	* 57	* 5.1	* 52				
Max Q Clear Time (g_c+I1), s	6.1	44.6	2.6	8.1	10.5	59.4	5.0	25.3				
Green Ext Time (p_c), s	0.0	13.8	0.0	0.6	0.0	0.0	0.0	1.9				

Intersection Summary

HCM 6th Ctrl Delay 178.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

69: US 27 & Holly Hill Cutoff Rd/North Blvd W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	81	16	27	41	10	78	22	3051	174	101	1855	26
Future Volume (veh/h)	81	16	27	41	10	78	22	3051	174	101	1855	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1826	1900	1900	1900	1693	1826	1841	1856	1767	1544
Adj Flow Rate, veh/h	90	18	30	46	11	87	24	3390	193	112	2061	29
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
Percent Heavy Veh, %	0	0	5	0	0	0	14	5	4	3	9	24
Cap, veh/h	123	16	186	32	13	20	34	3257	1019	114	3361	912
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.65	0.65	0.06	0.70	0.70
Sat Flow, veh/h	661	132	1547	0	110	169	1612	4985	1560	1767	4823	1309
Grp Volume(v), veh/h	108	0	30	144	0	0	24	3390	193	112	2061	29
Grp Sat Flow(s),veh/h/ln	793	0	1547	279	0	0	1612	1662	1560	1767	1608	1309
Q Serve(g_s), s	0.0	0.0	2.6	0.0	0.0	0.0	2.2	98.0	7.3	9.5	33.9	1.0
Cycle Q Clear(g_c), s	18.0	0.0	2.6	18.0	0.0	0.0	2.2	98.0	7.3	9.5	33.9	1.0
Prop In Lane	0.83		1.00	0.32		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	0	186	65	0	0	34	3257	1019	114	3361	912
V/C Ratio(X)	0.78	0.00	0.16	2.21	0.00	0.00	0.71	1.04	0.19	0.98	0.61	0.03
Avail Cap(c_a), veh/h	139	0	186	65	0	0	74	3257	1019	114	3361	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.1	0.0	59.2	66.5	0.0	0.0	73.0	26.0	10.3	70.1	12.0	7.0
Incr Delay (d2), s/veh	23.5	0.0	0.4	591.1	0.0	0.0	23.4	27.8	0.1	77.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	1.9	23.2	0.0	0.0	2.0	53.5	4.2	10.9	15.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.6	0.0	59.6	657.6	0.0	0.0	96.4	53.8	10.4	147.7	12.4	7.1
LnGrp LOS	F	A	E	F	A	A	F	F	B	F	B	A
Approach Vol, veh/h	138			144			3607			2202		
Approach Delay, s/veh	83.9			657.6			51.7			19.2		
Approach LOS	F			F			D			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	107.3		23.7	12.5	113.8		23.7				
Change Period (Y+Rc), s	9.3	9.3		* 5.7	9.3	9.3		* 5.7				
Max Green Setting (Gmax), s	9.7	98.0		* 18	6.9	100.8		* 18				
Max Q Clear Time (g_c+I1), s	11.5	100.0		20.0	4.2	35.9		20.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	26.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	55.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

72: US 27 & Sanders Rd/Davenport Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	43	48	288	18	493	19	2908	207	159	1606	14
Future Volume (veh/h)	60	43	48	288	18	493	19	2908	207	159	1606	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1841	1900	1900	1574	1811	1841	1826	1752	1678
Adj Flow Rate, veh/h	67	48	53	320	20	548	21	3231	230	177	1784	16
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
Percent Heavy Veh, %	2	3	3	4	0	0	22	6	4	5	10	15
Cap, veh/h	54	158	174	238	11	305	30	2491	786	204	2873	854
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.50	0.50	0.12	0.60	0.60
Sat Flow, veh/h	843	806	890	1273	57	1562	1499	4944	1560	1739	4782	1422
Grp Volume(v), veh/h	67	0	101	320	0	568	21	3231	230	177	1784	16
Grp Sat Flow(s),veh/h/ln	843	0	1695	1273	0	1619	1499	1648	1560	1739	1594	1422
Q Serve(g_s), s	0.0	0.0	6.8	19.2	0.0	26.0	1.9	67.0	11.4	13.3	31.6	0.6
Cycle Q Clear(g_c), s	26.0	0.0	6.8	26.0	0.0	26.0	1.9	67.0	11.4	13.3	31.6	0.6
Prop In Lane	1.00		0.52	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	54	0	332	238	0	317	30	2491	786	204	2873	854
V/C Ratio(X)	1.24	0.00	0.30	1.34	0.00	1.79	0.69	1.30	0.29	0.87	0.62	0.02
Avail Cap(c_a), veh/h	54	0	332	238	0	317	169	2491	786	327	2873	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	0.0	45.8	59.1	0.0	53.5	64.7	33.0	19.2	57.7	16.9	10.7
Incr Delay (d2), s/veh	199.6	0.0	0.5	179.9	0.0	369.9	24.3	136.7	0.4	13.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	0.0	5.3	31.0	0.0	67.0	1.6	81.1	7.1	10.5	15.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	266.1	0.0	46.3	238.9	0.0	423.4	89.0	169.7	19.6	71.1	17.5	10.7
LnGrp LOS	F	A	D	F	A	F	F	F	B	E	B	B
Approach Vol, veh/h		168			888			3482			1977	
Approach Delay, s/veh		133.9			356.9			159.3			22.3	
Approach LOS		F			F			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	87.5		34.2	24.2	74.6		34.2				
Change Period (Y+Rc), s	* 8.6	7.6		* 8.2	* 8.6	7.6		* 8.2				
Max Green Setting (Gmax), s	* 15	77.0		* 26	* 25	67.0		* 26				
Max Q Clear Time (g_c+I1), s	3.9	33.6		28.0	15.3	69.0		28.0				
Green Ext Time (p_c), s	0.0	31.3		0.0	0.3	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 144.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

81: US 27 & Miracle Toyota/Bates Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	10	18	412	11	304	18	2686	248	196	2248	25
Future Volume (veh/h)	13	10	18	412	11	304	18	2686	248	196	2248	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1841	1900	1900	1900	1752	1841	1856	1767	1811
Adj Flow Rate, veh/h	13	10	18	420	11	310	18	2741	253	200	2294	26
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	4	0	0	0	10	4	3	9	6
Cap, veh/h	49	28	51	318	12	344	32	2492	813	91	2679	853
Arrive On Green	0.01	0.05	0.05	0.18	0.22	0.22	0.02	0.52	0.52	0.05	0.56	0.56
Sat Flow, veh/h	3510	608	1095	1753	55	1563	1810	4782	1560	1767	4823	1535
Grp Volume(v), veh/h	13	0	28	420	0	321	18	2741	253	200	2294	26
Grp Sat Flow(s),veh/h/ln	1755	0	1703	1753	0	1619	1810	1594	1560	1767	1608	1535
Q Serve(g_s), s	0.5	0.0	2.4	27.2	0.0	28.9	1.5	78.2	5.8	7.7	60.5	1.1
Cycle Q Clear(g_c), s	0.5	0.0	2.4	27.2	0.0	28.9	1.5	78.2	5.8	7.7	60.5	1.1
Prop In Lane	1.00		0.64	1.00		0.97	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	0	79	318	0	356	32	2492	813	91	2679	853
V/C Ratio(X)	0.27	0.00	0.35	1.32	0.00	0.90	0.57	1.10	0.31	2.20	0.86	0.03
Avail Cap(c_a), veh/h	117	0	602	318	0	659	60	2492	813	91	2679	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.2	0.0	69.3	61.4	0.0	56.9	73.1	35.9	3.6	71.2	28.3	15.1
Incr Delay (d2), s/veh	2.9	0.0	2.6	164.4	0.0	8.3	14.8	51.8	1.0	576.3	3.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	0.0	2.0	39.7	0.0	18.3	1.4	53.8	8.4	29.0	29.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	0.0	71.9	225.8	0.0	65.2	87.9	87.7	4.6	647.4	32.0	15.1
LnGrp LOS	E	A	E	F	A	E	F	F	A	F	C	B
Approach Vol, veh/h	41			741			3012			2520		
Approach Delay, s/veh	73.2			156.2			80.7			80.7		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	90.9	8.3	39.9	16.0	85.8	34.1	14.1				
Change Period (Y+Rc), s	8.2	7.6	* 6.2	* 6.9	* 8.3	7.6	* 6.9	7.1				
Max Green Setting (Gmax), s	5.0	50.1	* 5	* 61	* 7.7	47.3	* 12	53.0				
Max Q Clear Time (g_c+I1), s	3.5	62.5	2.5	30.9	9.7	80.2	29.2	4.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 89.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

84: US 27 & Glen Este Blvd/Southern Dunes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	26	32	150	24	108	55	2885	122	84	2286	29
Future Volume (veh/h)	108	26	32	150	24	108	55	2885	122	84	2286	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1900	1811	1811	1885	1870	1796	1856	1856	1781	1900
Adj Flow Rate, veh/h	112	27	33	156	25	112	57	3005	127	88	2381	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	6	6	1	2	7	3	3	8	0
Cap, veh/h	135	37	46	205	93	82	308	3002	963	108	2435	806
Arrive On Green	0.08	0.05	0.05	0.06	0.05	0.05	0.17	0.61	0.61	0.06	0.50	0.50
Sat Flow, veh/h	1781	778	951	3346	1811	1598	1781	4904	1572	1767	4863	1610
Grp Volume(v), veh/h	112	0	60	156	25	112	57	3005	127	88	2381	30
Grp Sat Flow(s),veh/h/ln	1781	0	1729	1673	1811	1598	1781	1635	1572	1767	1621	1610
Q Serve(g_s), s	9.3	0.0	5.1	6.9	2.0	7.7	4.1	91.8	5.1	7.4	71.8	0.9
Cycle Q Clear(g_c), s	9.3	0.0	5.1	6.9	2.0	7.7	4.1	91.8	5.1	7.4	71.8	0.9
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	0	83	205	93	82	308	3002	963	108	2435	806
V/C Ratio(X)	0.83	0.00	0.72	0.76	0.27	1.36	0.19	1.00	0.13	0.81	0.98	0.04
Avail Cap(c_a), veh/h	253	0	115	415	93	82	308	3002	963	166	2435	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.4	0.0	70.4	69.3	68.4	71.1	53.0	29.1	12.3	69.5	36.6	8.5
Incr Delay (d2), s/veh	12.1	0.0	12.9	5.7	1.5	224.0	1.3	16.7	0.3	15.9	13.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	4.7	5.7	1.8	14.1	3.4	45.9	3.5	6.7	38.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.5	0.0	83.3	75.0	70.0	295.2	54.3	45.8	12.6	85.4	50.4	8.6
LnGrp LOS	F	A	F	E	E	F	D	F	B	F	D	A
Approach Vol, veh/h		172			293			3189			2499	
Approach Delay, s/veh		81.5			158.8			44.6			51.1	
Approach LOS		F			F			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.8	82.0	18.1	17.1	16.1	98.7	18.6	16.6				
Change Period (Y+Rc), s	6.9	6.9	* 6.7	* 9.4	6.9	6.9	* 9.4	* 9.4				
Max Green Setting (Gmax), s	16.1	75.1	* 21	* 7.6	14.1	77.1	* 19	* 10				
Max Q Clear Time (g_c+I1), s	6.1	73.8	11.3	9.7	9.4	93.8	8.9	7.1				
Green Ext Time (p_c), s	0.1	1.2	0.2	0.0	0.1	0.0	0.3	0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.7
 HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

87: US 27 & Old Polk City Rd/Main St W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	247	108	189	104	100	100	324	2604	31	106	2484	152
Future Volume (veh/h)	247	108	189	104	100	100	324	2604	31	106	2484	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1885	1574	1826	1870	1841	1648	1737	1856	1885	1767	1856
Adj Flow Rate, veh/h	252	110	193	106	102	102	331	2657	32	108	2535	155
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	1	22	5	2	4	17	11	3	1	9	3
Cap, veh/h	236	307	217	223	305	254	179	2702	896	79	2394	781
Arrive On Green	0.03	0.16	0.16	0.03	0.16	0.16	0.23	1.00	1.00	0.06	0.66	0.66
Sat Flow, veh/h	1725	1885	1334	1739	1870	1560	1570	4742	1572	1795	4823	1572
Grp Volume(v), veh/h	252	110	193	106	102	102	331	2657	32	108	2535	155
Grp Sat Flow(s),veh/h/ln	1725	1885	1334	1739	1870	1560	1570	1581	1572	1795	1608	1572
Q Serve(g_s), s	5.0	7.8	21.2	5.0	7.2	8.8	17.1	0.0	0.0	6.6	74.5	5.8
Cycle Q Clear(g_c), s	5.0	7.8	21.2	5.0	7.2	8.8	17.1	0.0	0.0	6.6	74.5	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	307	217	223	305	254	179	2702	896	79	2394	781
V/C Ratio(X)	1.07	0.36	0.89	0.48	0.33	0.40	1.85	0.98	0.04	1.37	1.06	0.20
Avail Cap(c_a), veh/h	236	578	409	223	574	478	179	2702	896	79	2394	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.7	55.8	61.4	54.6	55.6	56.2	57.9	0.0	0.0	70.6	25.5	13.8
Incr Delay (d2), s/veh	77.2	0.7	11.5	1.6	0.6	1.0	403.2	13.9	0.1	227.0	36.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.7	6.8	12.5	2.6	6.3	6.4	41.1	6.2	0.0	13.5	41.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	140.9	56.5	73.0	56.2	56.2	57.2	461.1	13.9	0.1	297.6	61.9	14.4
LnGrp LOS	F	E	E	E	E	E	F	B	A	F	F	B
Approach Vol, veh/h	555				310				3020			
Approach Delay, s/veh	100.5				56.6				62.7			
Approach LOS	F				E				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	81.4	12.1	31.5	14.0	92.4	12.1	31.5				
Change Period (Y+Rc), s	7.9	6.9	7.1	7.1	7.4	6.9	7.1	7.1				
Max Green Setting (Gmax), s	17.1	52.9	5.0	46.0	6.6	63.9	5.0	46.0				
Max Q Clear Time (g_c+I1), s	19.1	76.5	7.0	10.8	8.6	2.0	7.0	23.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	58.1	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 67.9

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

90: US 27 & Commerce Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	11	21	63	10	23	25	2805	116	41	2454	34
Future Volume (veh/h)	41	11	21	63	10	23	25	2805	116	41	2454	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1337	1900	1900	1781	1796	1559	1515	1767	1856
Adj Flow Rate, veh/h	45	12	23	68	11	25	27	3049	126	45	2667	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	38	0	0	8	7	23	26	9	3
Cap, veh/h	160	58	112	128	52	117	38	1899	512	270	2644	862
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.02	0.39	0.39	0.37	1.00	1.00
Sat Flow, veh/h	1394	583	1117	982	516	1173	1697	4904	1321	1443	4823	1572
Grp Volume(v), veh/h	45	0	35	68	0	36	27	3049	126	45	2667	37
Grp Sat Flow(s),veh/h/ln	1394	0	1699	982	0	1689	1697	1635	1321	1443	1608	1572
Q Serve(g_s), s	4.6	0.0	2.8	10.3	0.0	2.9	2.4	58.1	9.7	3.1	0.0	0.0
Cycle Q Clear(g_c), s	7.5	0.0	2.8	13.1	0.0	2.9	2.4	58.1	9.7	3.1	0.0	0.0
Prop In Lane	1.00		0.66	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	170	128	0	169	38	1899	512	270	2644	862
V/C Ratio(X)	0.28	0.00	0.21	0.53	0.00	0.21	0.71	1.61	0.25	0.17	1.01	0.04
Avail Cap(c_a), veh/h	183	0	198	147	0	202	141	1899	512	270	2644	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.5	0.0	62.0	68.0	0.0	62.1	72.8	45.9	31.1	39.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.6	3.4	0.0	0.6	21.2	274.8	1.1	1.3	19.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	0.0	2.3	4.9	0.0	2.4	2.2	109.5	5.8	2.1	8.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.5	0.0	62.6	71.5	0.0	62.7	94.0	320.8	32.3	40.4	19.7	0.1
LnGrp LOS	E	A	E	E	A	E	F	F	C	D	F	A
Approach Vol, veh/h	80			104			3202			2749		
Approach Delay, s/veh	64.8			68.4			307.5			19.8		
Approach LOS	E			E			F			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	89.1		22.5	35.0	65.0		22.5				
Change Period (Y+Rc), s	7.5	6.9		7.5	6.9	6.9		* 7.5				
Max Green Setting (Gmax), s	12.5	73.1		17.5	28.1	58.1		* 18				
Max Q Clear Time (g_c+I1), s	4.4	2.0		9.5	5.1	60.1		15.1				
Green Ext Time (p_c), s	0.0	66.2		0.1	0.1	0.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay 171.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

18: US 27 & Central Grove Rd/Terra del Sol Blvd

03/09/2020

Intersection												
Int Delay, s/veh	120.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑↑↑	↔	↔	↑↑↑	↔
Traffic Vol, veh/h	133	10	34	11	10	42	11	2360	10	10	1914	44
Future Vol, veh/h	133	10	34	11	10	42	11	2360	10	10	1914	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	605	-	460	550	-	420
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	0	20	0	0	5	0	6	17	0	6	11
Mvmt Flow	143	11	37	12	11	45	12	2538	11	11	2058	47

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3125	4653	1029	3413	4689	1269	2105	0	0	2549	0	0
Stage 1	2080	2080	-	2562	2562	-	-	-	-	-	-	-
Stage 2	1045	2573	-	851	2127	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.5	7.5	6.4	6.5	7.2	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.34	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4	4.1	3.8	4	3.95	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 12	~ 1	175	~ 8	~ 1	133	113	-	-	67	-	-
Stage 1	~ 34	96	-	15	54	-	-	-	-	-	-	-
Stage 2	220	54	-	295	91	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 4	~ 1	175	~ 3	~ 1	133	113	-	-	67	-	-
Mov Cap-2 Maneuver	~ 22	23	-	~ 11	25	-	-	-	-	-	-	-
Stage 1	~ 30	80	-	13	48	-	-	-	-	-	-	-
Stage 2	~ 101	48	-	169	76	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, \$ 3007.8		289.5	0.2	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	113	-	-	27 15 133	67	-	-
HCM Lane V/C Ratio	0.105	-	-	7.049 1.505 0.34	0.16	-	-
HCM Control Delay (s)	40.5	-	-	\$ 3007.8 \$ 777.6 45.4	68.7	-	-
HCM Lane LOS	E	-	-	F F E	F	-	-
HCM 95th %tile Q(veh)	0.3	-	-	23.5 3.4 1.4	0.5	-	-

Notes

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

HCM 6th TWSC

24: US 27 & Cardiff Ave/Tri County 1 Rd

03/09/2020

Intersection												
Int Delay, s/veh	30											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	41	10	64	21	10	24	15	2045	10	24	2151	19
Future Vol, veh/h	41	10	64	21	10	24	15	2045	10	24	2151	19
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	-	-	100	-	-	-	580	-	430	515	-	435
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	0	5	0	0	9	7	7	14	0	7	17
Mvmt Flow	44	11	68	22	11	26	16	2176	11	26	2288	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3248	4559	1144	3181	4568	1088	2308	0	0	2187	0	0
Stage 1	2340	2340	-	2208	2208	-	-	-	-	-	-	-
Stage 2	908	2219	-	973	2360	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.5	7.2	6.4	6.5	7.28	5.44	-	-	5.3	-	-
Critical Hdwy Stg 1	7.36	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4	3.95	3.8	4	3.99	3.17	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 10	~ 1	162	~ 12	~ 1	172	81	-	-	103	-	-
Stage 1	~ 21	71	-	28	83	-	-	-	-	-	-	-
Stage 2	266	82	-	248	69	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 4	~ 1	162	~ 3	~ 1	172	81	-	-	103	-	-
Mov Cap-2 Maneuver	~ 14	21	-	~ 16	22	-	-	-	-	-	-	-
Stage 1	~ 17	53	-	~ 22	67	-	-	-	-	-	-	-
Stage 2	153	66	-	86	52	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	774.2	764.5	0.4	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	81	-	-	15	162	29	103	-	-
HCM Lane V/C Ratio	0.197	-	-	3.617	0.42	2.018	0.248	-	-
HCM Control Delay (s)	60	-	-	1692.5	42.4	764.5	51.1	-	-
HCM Lane LOS	F	-	-	F	E	F	F	-	-
HCM 95th %tile Q(veh)	0.7	-	-	7.6	1.9	6.9	0.9	-	-

Notes

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

HCM 6th TWSC

30: US 27 & Laurel Estates Entrance

03/09/2020

Intersection							
Int Delay, s/veh	21						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↑↑↑	↰	↑↑↑	↱
Traffic Vol, veh/h	44	56	30	1949	57	2237	23
Future Vol, veh/h	44	56	30	1949	57	2237	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	550	-	495	-	325
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	3	5	17	7	0	6	7
Mvmt Flow	47	60	32	2073	61	2380	24
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	3395	1190	2404	0	1514	-	0
Stage 1	2502	-	-	-	-	-	-
Stage 2	893	-	-	-	-	-	-
Critical Hdwy	5.76	7.2	5.64	-	5.6	-	-
Critical Hdwy Stg 1	6.66	-	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-	-
Follow-up Hdwy	3.83	3.95	3.27	-	2.3	-	-
Pot Cap-1 Maneuver	~ 15	151	63	-	232	-	-
Stage 1	~ 26	-	-	-	-	-	-
Stage 2	324	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	~ 5	151	63	-	232	-	-
Mov Cap-2 Maneuver	~ 12	-	-	-	-	-	-
Stage 1	~ 13	-	-	-	-	-	-
Stage 2	239	-	-	-	-	-	-
Approach	EB		NB		SB		
HCM Control Delay, s	875.2		1.7		0.6		
HCM LOS	F						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	63	-	12	151	232	-	-
HCM Lane V/C Ratio	0.507	-	3.901	0.395	0.261	-	-
HCM Control Delay (s)	110.3	\$	1933.7	43.6	25.9	-	-
HCM Lane LOS	F	-	F	E	D	-	-
HCM 95th %tile Q(veh)	2	-	6.9	1.7	1	-	-
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

HCM 6th TWSC

55: US 27 & Holly Hill Grove Rd 2/Cottonwood Rd

03/09/2020

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	19	24	10	101	55	3399	16	33	2331	19
Future Vol, veh/h	10	10	19	24	10	101	55	3399	16	33	2331	19
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	-	-	-	-	-	-	505	-	485	515	-	450
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	4	3	5	7	3	8	17
Mvmt Flow	11	11	20	26	11	109	59	3655	17	35	2506	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4162	6366	1253	4851	6369	1828	2526	0	0	3672	0	0
Stage 1	2576	2576	-	3773	3773	-	-	-	-	-	-	-
Stage 2	1586	3790	-	1078	2596	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.18	5.36	-	-	5.36	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	3.94	3.13	-	-	3.13	-	-
Pot Cap-1 Maneuver	~ 3	0	143	~ 1	0	~ 55	66	-	-	~ 16	-	-
Stage 1	15	53	-	~ 2	12	-	-	-	-	-	-	-
Stage 2	102	12	-	213	52	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	143	-	0	~ 55	66	-	-	~ 16	-	-
Mov Cap-2 Maneuver	~ 2	0	-	0	~ 1	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	0	~ 1	-	-	-	-	-	-	-
Stage 2	103	~ 1	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			3	14.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	66	-	-	-	~ 16	-	-
HCM Lane V/C Ratio	0.896	-	-	-	2.218	-	-
HCM Control Delay (s)	186.3	-	-	-	\$ 1051.4	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	4.3	-	-	-	5.1	-	-

Notes

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

HCM 6th TWSC

61: US 27 & Holly Hill Tank Rd/Florida Development Rd

03/09/2020

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	10	10	10	25	10	61	13	3233	30	35	2381	10
Future Vol, veh/h	10	10	10	25	10	61	13	3233	30	35	2381	10
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	-	-	-	-	-	-	495	-	380	490	-	430
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	33	0	17	0	0	8	0	5	11	0	8	0
Mvmt Flow	11	11	11	26	11	64	14	3403	32	37	2506	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3975	6043	1253	4513	6022	1702	2517	0	0	3435	0	0
Stage 1	2580	2580	-	3431	3431	-	-	-	-	-	-	-
Stage 2	1395	3463	-	1082	2591	-	-	-	-	-	-	-
Critical Hdwy	7.06	6.5	7.44	6.4	6.5	7.26	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.96	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.36	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.13	4	4.07	3.8	4	3.98	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 2	0	124	~ 1	0	65	70	-	-	~ 23	-	-
Stage 1	~ 9	53	-	~ 3	19	-	-	-	-	-	-	-
Stage 2	101	18	-	212	52	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	124	-	0	65	70	-	-	~ 23	-	-
Mov Cap-2 Maneuver	~ 8	0	-	~ 3	~ 192	-	-	-	-	-	-	-
Stage 1	~ 7	0	-	~ 2	15	-	-	-	-	-	-	-
Stage 2	0	14	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	9.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	70	-	-	-	~ 23	-	-
HCM Lane V/C Ratio	0.195	-	-	-	1.602	-	-
HCM Control Delay (s)	68.5	-	-	-	\$ 659.1	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	4.7	-	-

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

HCM 6th TWSC

67: US 27 & La Casa Del Sol Blvd

03/09/2020

Intersection							
Int Delay, s/veh	0.6						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↰↰↰	↱	↰↰↰	↱
Traffic Vol, veh/h	11	11	10	3265	10	2047	10
Future Vol, veh/h	11	11	10	3265	10	2047	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	510	-	510	-	400
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	5	0	9	14
Mvmt Flow	11	11	10	3401	10	2132	10
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	3532	1066	2142	0	2483	-	0
Stage 1	2152	-	-	-	-	-	-
Stage 2	1380	-	-	-	-	-	-
Critical Hdwy	5.7	7.1	5.3	-	5.6	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	3.9	3.1	-	2.3	-	-
Pot Cap-1 Maneuver	13	190	109	-	66	-	-
Stage 1	46	-	-	-	-	-	-
Stage 2	180	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	~ 10	190	109	-	66	-	-
Mov Cap-2 Maneuver	33	-	-	-	-	-	-
Stage 1	42	-	-	-	-	-	-
Stage 2	153	-	-	-	-	-	-
Approach	EB	NB		SB			
HCM Control Delay, s	94.5	0.1		0.3			
HCM LOS	F						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	109	-	33	190	66	-	-
HCM Lane V/C Ratio	0.096	-	0.347	0.06	0.158	-	-
HCM Control Delay (s)	41.5	-	163.7	25.2	69.5	-	-
HCM Lane LOS	E	-	F	D	F	-	-
HCM 95th %tile Q(veh)	0.3	-	1.1	0.2	0.5	-	-
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

HCM 6th TWSC
75: US 27 & South Blvd

AM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	44											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	15	10	10	43	10	127	14	2994	145	98	2189	15
Future Vol, veh/h	15	10	10	43	10	127	14	2994	145	98	2189	15
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	-	-	-	-	-	-	400	-	300	510	-	260
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	73	0	20	4	33	1	23	6	3	7	8	29
Mvmt Flow	17	11	11	48	11	141	16	3327	161	109	2432	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4018	6170	1216	4555	6026	1664	2449	0	0	3488	0	0
Stage 1	2650	2650	-	3359	3359	-	-	-	-	-	-	-
Stage 2	1368	3520	-	1196	2667	-	-	-	-	-	-	-
Critical Hdwy	7.86	6.5	7.5	6.48	7.16	7.12	5.76	-	-	5.44	-	-
Critical Hdwy Stg 1	8.76	5.5	-	7.38	6.16	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.16	5.5	-	6.78	6.16	-	-	-	-	-	-	-
Follow-up Hdwy	4.53	4	4.1	3.84	4.33	3.91	3.33	-	-	3.17	-	-
Pot Cap-1 Maneuver	~ 1	0	129	~ 1	0	~ 74	54	-	-	~ 19	-	-
Stage 1	~ 4	49	-	~ 4	~ 11	-	-	-	-	-	-	-
Stage 2	75	17	-	174	29	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	129	-	0	~ 74	54	-	-	~ 19	-	-
Mov Cap-2 Maneuver	~ 3	0	-	~ 4	15	-	-	-	-	-	-	-
Stage 1	~ 3	0	-	~ 3	~ 8	-	-	-	-	-	-	-
Stage 2	19	12	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.4	107.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	54	-	-	-	~ 19	-	-
HCM Lane V/C Ratio	0.288	-	-	-	5.731	-	-
HCM Control Delay (s)	96.7	-	-	-	\$ 2532.4	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	1	-	-	-	14.1	-	-

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

HCM 6th TWSC

78: US 27 & Section 7 Airport Rd/Patterson Rd

03/09/2020

Intersection													
Int Delay, s/veh	29.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕		↑↑↑	↗	↖	↑↑↑	
Traffic Vol, veh/h	0	0	0	51	0	129	10	0	2918	94	96	2177	0
Future Vol, veh/h	0	0	0	51	0	129	10	0	2918	94	96	2177	0
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	345	-	280	405	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	2	0	2	0	0	6	4	2	8	0
Mvmt Flow	0	0	0	56	0	142	11	0	3207	103	105	2392	0
Major/Minor	Minor2		Minor1		Major1		Major2						
Conflicting Flow All	3907	5934	1196	4396	5831	1604	1746	-	0	0	3310	0	0
Stage 1	2602	2602	-	3229	3229	-	-	-	-	-	-	-	-
Stage 2	1305	3332	-	1167	2602	-	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.44	6.5	7.14	5.6	-	-	-	5.34	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.34	5.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.74	5.5	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.82	4	3.92	2.3	-	-	-	3.12	-	-
Pot Cap-1 Maneuver	4	0	156	~ 2	0	~ 81	172	0	-	-	~ 26	-	-
Stage 1	14	52	-	~ 5	24	-	-	0	-	-	-	-	-
Stage 2	154	21	-	185	52	-	-	0	-	-	-	-	-
Platoon blocked, %									-	-		-	-
Mov Cap-1 Maneuver	-	0	156	-	0	~ 81	172	-	-	-	~ 26	-	-
Mov Cap-2 Maneuver	14	0	-	~ 11	~ -20	-	-	-	-	-	-	-	-
Stage 1	13	0	-	~ 5	22	-	-	-	-	-	-	-	-
Stage 2	-	20	-	-	0	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB						
HCM Control Delay, s	0				0.1		71.1						
HCM LOS	A		-										
Minor Lane/Major Mvmt	NBU	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR						
Capacity (veh/h)	172	-	-	-	-	~ 26	-	-					
HCM Lane V/C Ratio	0.064	-	-	-	-	4.057	-	-					
HCM Control Delay (s)	27.4	-	-	0	\$	1683.5	-	-					
HCM Lane LOS	D	-	-	A	-	F	-	-					
HCM 95th %tile Q(veh)	0.2	-	-	-	-	13	-	-					
Notes													
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon							

HCM 6th TWSC
93: US 27 & W Johnson Ave

AM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	10.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↑↑↑	↔	↔	↑↑↑	↔
Traffic Vol, veh/h	10	10	25	10	10	38	88	2905	10	43	2227	10
Future Vol, veh/h	10	10	25	10	10	38	88	2905	10	43	2227	10
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	-	-	-	-	-	-	305	-	220	300	-	290
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	100	0	6	0	0	12	0	8	17	8	10	0
Mvmt Flow	11	11	27	11	11	42	97	3192	11	47	2447	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4017	5938	1224	4464	5938	1596	2458	0	0	3203	0	0
Stage 1	2541	2541	-	3386	3386	-	-	-	-	-	-	-
Stage 2	1476	3397	-	1078	2552	-	-	-	-	-	-	-
Critical Hdwy	8.4	6.5	7.22	6.4	6.5	7.34	5.3	-	-	5.46	-	-
Critical Hdwy Stg 1	9.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.8	4	3.96	3.8	4	4.02	3.1	-	-	3.18	-	-
Pot Cap-1 Maneuver	0	0	142	~ 2	0	74	~ 75	-	-	~ 26	-	-
Stage 1	~ 4	56	-	~ 4	20	-	-	-	-	-	-	-
Stage 2	48	19	-	213	55	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	142	-	0	74	~ 75	-	-	~ 26	-	-
Mov Cap-2 Maneuver	~ 4	0	-	~ 4	0	-	-	-	-	-	-	-
Stage 1	~ 4	0	-	~ 4	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			8.7	13.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 75	-	-	-	~ 26	-	-
HCM Lane V/C Ratio	1.289	-	-	-	1.817	-	-
HCM Control Delay (s)	297.2	-	-	-	710.9	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	7.5	-	-	-	5.7	-	-

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

HCM 6th Signalized Intersection Summary

3: US 27 & SR 544

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	612	232	223	162	425	182	325	1850	40	160	1453	680
Future Volume (veh/h)	612	232	223	162	425	182	325	1850	40	160	1453	680
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1796	1841	1841	1885	1841	1722	1737	1796	1841	1752	1722	1811
Adj Flow Rate, veh/h	644	244	235	171	447	192	342	1947	0	168	1529	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	4	4	1	4	12	11	7	4	10	12	6
Cap, veh/h	484	567	481	339	485	384	265	1764		145	1366	
Arrive On Green	0.11	0.31	0.31	0.06	0.26	0.26	0.16	0.36	0.00	0.09	0.29	0.00
Sat Flow, veh/h	3319	1841	1560	1795	1841	1459	1654	4904	1560	1668	4701	1535
Grp Volume(v), veh/h	644	244	235	171	447	192	342	1947	0	168	1529	0
Grp Sat Flow(s),veh/h/ln	1659	1841	1560	1795	1841	1459	1654	1635	1560	1668	1567	1535
Q Serve(g_s), s	18.9	18.3	21.3	10.7	41.0	19.4	27.8	62.4	0.0	15.1	50.4	0.0
Cycle Q Clear(g_c), s	18.9	18.3	21.3	10.7	41.0	19.4	27.8	62.4	0.0	15.1	50.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	484	567	481	339	485	384	265	1764		145	1366	
V/C Ratio(X)	1.33	0.43	0.49	0.50	0.92	0.50	1.29	1.10		1.16	1.12	
Avail Cap(c_a), veh/h	484	603	511	339	520	412	265	1764		145	1366	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	47.8	48.9	45.3	62.2	54.2	72.8	55.5	0.0	79.2	61.5	0.0
Incr Delay (d2), s/veh	162.0	1.1	1.6	1.7	22.7	2.1	155.8	55.8	0.0	123.0	64.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	28.5	13.3	13.1	1.5	29.3	11.6	34.6	46.3	0.0	17.8	38.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	209.6	48.9	50.5	47.0	84.9	56.3	228.7	111.3	0.0	202.2	125.6	0.0
LnGrp LOS	F	D	D	D	F	E	F	F		F	F	
Approach Vol, veh/h	1123				810				2289		1697	
Approach Delay, s/veh	141.4				70.1				128.9		133.2	
Approach LOS	F				E				F		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.0	58.3	26.0	53.2	24.0	70.3	18.2	61.0				
Change Period (Y+Rc), s	* 8.2	7.9	* 7.1	7.5	* 8.9	7.9	7.5	7.5				
Max Green Setting (Gmax), s	* 28	50.4	* 19	49.0	* 15	62.4	10.7	56.8				
Max Q Clear Time (g_c+I1), s	29.8	52.4	20.9	43.0	17.1	64.4	12.7	23.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	4.7				

Intersection Summary

HCM 6th Ctrl Delay 124.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

9: US 27 & Kokomo Rd

03/10/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	149	319	1974	86	182	1616
Future Volume (veh/h)	149	319	1974	86	182	1616
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1811	1811	1781	1752
Adj Flow Rate, veh/h	154	329	2035	0	188	1666
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	6	6	8	10
Cap, veh/h	150	321	2216		207	2982
Arrive On Green	0.29	0.29	0.45	0.00	0.12	0.62
Sat Flow, veh/h	519	1108	5107	1535	1697	4940
Grp Volume(v), veh/h	484	0	2035	0	188	1666
Grp Sat Flow(s),veh/h/ln	1630	0	1648	1535	1697	1594
Q Serve(g_s), s	49.3	0.0	65.7	0.0	18.6	34.3
Cycle Q Clear(g_c), s	49.3	0.0	65.7	0.0	18.6	34.3
Prop In Lane	0.32	0.68		1.00	1.00	
Lane Grp Cap(c), veh/h	472	0	2216		207	2982
V/C Ratio(X)	1.03	0.00	0.92		0.91	0.56
Avail Cap(c_a), veh/h	472	0	2291		228	3115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	0.0	44.0	0.0	73.8	18.5
Incr Delay (d2), s/veh	48.0	0.0	6.4	0.0	34.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	35.8	0.0	35.3	0.0	15.1	17.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	108.5	0.0	50.4	0.0	108.3	18.7
LnGrp LOS	F	A	D		F	B
Approach Vol, veh/h	484		2035	A		1854
Approach Delay, s/veh	108.5		50.4			27.8
Approach LOS	F		D			C
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	29.8	85.4			115.3	55.0
Change Period (Y+Rc), s	* 9.1	* 9.1			* 9.1	5.7
Max Green Setting (Gmax), s	* 23	* 79			* 1.1E2	49.3
Max Q Clear Time (g_c+I1), s	20.6	67.7			36.3	51.3
Green Ext Time (p_c), s	0.1	8.6			17.2	0.0

Intersection Summary

HCM 6th Ctrl Delay 47.3

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

12: US 27 & Crump Rd/W Main St

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	20	17	39	45	29	45	1776	43	31	1708	102
Future Volume (veh/h)	66	20	17	39	45	29	45	1776	43	31	1708	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1900	1900	1856	1900	1900	1781	1767	1767	1900	1737	1900
Adj Flow Rate, veh/h	69	21	18	41	47	31	47	1869	45	33	1798	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	0	3	0	0	8	9	9	0	11	0
Cap, veh/h	152	81	69	153	92	61	60	2554	793	52	2479	842
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.53	0.53	0.03	0.52	0.52
Sat Flow, veh/h	1781	945	810	1767	1068	705	1697	4823	1497	1810	4742	1610
Grp Volume(v), veh/h	69	0	39	41	0	78	47	1869	45	33	1798	107
Grp Sat Flow(s),veh/h/ln	1781	0	1754	1767	0	1773	1697	1608	1497	1810	1581	1610
Q Serve(g_s), s	4.2	0.0	2.3	2.5	0.0	4.7	3.1	33.6	1.6	2.0	32.9	3.8
Cycle Q Clear(g_c), s	4.2	0.0	2.3	2.5	0.0	4.7	3.1	33.6	1.6	2.0	32.9	3.8
Prop In Lane	1.00		0.46	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	150	153	0	153	60	2554	793	52	2479	842
V/C Ratio(X)	0.45	0.00	0.26	0.27	0.00	0.51	0.78	0.73	0.06	0.64	0.73	0.13
Avail Cap(c_a), veh/h	397	0	391	469	0	471	375	2767	859	400	2720	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	0.0	48.3	48.3	0.0	49.3	54.1	20.4	12.9	54.3	20.7	13.8
Incr Delay (d2), s/veh	2.1	0.0	0.9	0.9	0.0	2.6	19.6	1.2	0.1	12.4	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	1.9	2.0	0.0	4.0	2.9	16.7	0.9	1.9	16.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	0.0	49.2	49.2	0.0	51.9	73.7	21.7	13.0	66.7	21.9	13.9
LnGrp LOS	D	A	D	D	A	D	E	C	B	E	C	B
Approach Vol, veh/h	108			119			1961			1938		
Approach Delay, s/veh	50.5			51.0			22.7			22.3		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	66.2		16.7	11.4	67.0		17.9				
Change Period (Y+Rc), s	8.2	7.2		7.0	8.2	7.2		8.1				
Max Green Setting (Gmax), s	25.0	64.8		25.2	25.0	64.8		30.0				
Max Q Clear Time (g_c+I1), s	5.1	34.9		6.2	4.0	35.6		6.7				
Green Ext Time (p_c), s	0.1	24.1		0.3	0.0	23.9		0.5				

Intersection Summary

HCM 6th Ctrl Delay 24.0

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

18: US 27 & SR 542/Dundee Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	408	336	427	280	583	85	451	1432	88	93	1237	316
Future Volume (veh/h)	408	336	427	280	583	85	451	1432	88	93	1237	316
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1841	1796	1870	1781	1856	1796	1767	1900	1737	1870
Adj Flow Rate, veh/h	425	350	445	292	607	89	470	1492	92	97	1289	329
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	7	2	8	3	7	9	0	11	2
Cap, veh/h	325	399	333	193	427	345	332	2080	635	118	1438	481
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.19	0.42	0.42	0.07	0.30	0.30
Sat Flow, veh/h	3456	1870	1560	1711	1870	1510	1767	4904	1497	1810	4742	1585
Grp Volume(v), veh/h	425	350	445	292	607	89	470	1492	92	97	1289	329
Grp Sat Flow(s),veh/h/ln	1728	1870	1560	1711	1870	1510	1767	1635	1497	1810	1581	1585
Q Serve(g_s), s	15.0	28.9	34.0	18.0	36.4	7.7	30.0	40.2	6.0	8.4	41.5	29.1
Cycle Q Clear(g_c), s	15.0	28.9	34.0	18.0	36.4	7.7	30.0	40.2	6.0	8.4	41.5	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	399	333	193	427	345	332	2080	635	118	1438	481
V/C Ratio(X)	1.31	0.88	1.34	1.51	1.42	0.26	1.41	0.72	0.14	0.82	0.90	0.68
Avail Cap(c_a), veh/h	325	399	333	193	427	345	332	2080	635	227	1546	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.2	60.7	62.7	70.7	61.5	50.5	64.7	38.0	28.2	73.6	53.2	48.8
Incr Delay (d2), s/veh	158.8	19.3	171.1	255.2	203.0	0.4	203.1	1.1	0.1	12.9	6.8	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.8	22.1	43.7	33.7	61.6	5.3	48.2	22.3	3.9	7.7	23.6	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	231.0	80.1	233.8	326.0	264.5	50.8	267.8	39.1	28.2	86.5	60.0	51.9
LnGrp LOS	F	F	F	F	F	D	F	D	C	F	E	D
Approach Vol, veh/h	1220			988			2054			1715		
Approach Delay, s/veh	188.7			263.4			91.0			59.9		
Approach LOS	F			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	55.5	22.4	43.6	18.6	74.8	24.8	41.2				
Change Period (Y+Rc), s	* 7.9	7.2	7.4	* 7.2	8.2	7.2	* 6.8	* 7.2				
Max Green Setting (Gmax), s	* 30	52.0	15.0	* 34	20.0	52.0	* 18	* 34				
Max Q Clear Time (g_c+I1), s	32.0	43.5	17.0	38.4	10.4	42.2	20.0	36.0				
Green Ext Time (p_c), s	0.0	4.9	0.0	0.0	0.1	5.7	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 130.5

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

23: US 27 & Cypress Gardens Blvd/Waverly Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	89	658	36	189	56	662	1508	44	34	1244	532
Future Volume (veh/h)	450	89	658	36	189	56	662	1508	44	34	1244	532
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1841	1870	1900	1811	1811	1870	1767	1796	1900	1707	1885
Adj Flow Rate, veh/h	484	96	708	39	203	60	712	1622	47	37	1338	572
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	4	2	0	6	6	2	9	7	0	13	1
Cap, veh/h	535	436	376	51	150	44	676	2593	818	48	1694	581
Arrive On Green	0.16	0.24	0.24	0.03	0.11	0.11	0.20	0.54	0.54	0.03	0.36	0.36
Sat Flow, veh/h	3428	1841	1585	1810	1343	397	3456	4823	1522	1810	4661	1598
Grp Volume(v), veh/h	484	96	708	39	0	263	712	1622	47	37	1338	572
Grp Sat Flow(s),veh/h/ln	1714	1841	1585	1810	0	1740	1728	1608	1522	1810	1554	1598
Q Serve(g_s), s	24.8	7.5	42.4	3.8	0.0	20.0	35.0	41.9	2.6	3.6	45.8	63.5
Cycle Q Clear(g_c), s	24.8	7.5	42.4	3.8	0.0	20.0	35.0	41.9	2.6	3.6	45.8	63.5
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	535	436	376	51	0	195	676	2593	818	48	1694	581
V/C Ratio(X)	0.90	0.22	1.88	0.77	0.00	1.35	1.05	0.63	0.06	0.77	0.79	0.98
Avail Cap(c_a), veh/h	671	436	376	202	0	195	676	2593	818	202	1694	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	54.9	68.2	86.3	0.0	79.4	71.9	28.8	19.7	86.5	50.8	56.4
Incr Delay (d2), s/veh	13.6	0.3	407.8	21.0	0.0	188.2	49.3	0.4	0.0	21.9	2.5	33.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.3	6.2	92.5	3.7	0.0	29.4	27.8	22.0	1.7	3.5	24.6	39.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.7	55.2	476.0	107.3	0.0	267.6	121.2	29.2	19.8	108.4	53.3	89.8
LnGrp LOS	F	E	F	F	A	F	F	C	B	F	D	F
Approach Vol, veh/h	1288				302				2381			
Approach Delay, s/veh	298.7				246.9				56.6			
Approach LOS	F				F				E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.0	73.0	34.9	26.9	12.9	104.1	12.5	49.3				
Change Period (Y+Rc), s	9.0	8.0	7.0	6.9	* 8.1	8.0	7.5	6.9				
Max Green Setting (Gmax), s	35.0	65.0	35.0	20.0	* 20	65.0	20.0	20.0				
Max Q Clear Time (g_c+I1), s	37.0	65.5	26.8	22.0	5.6	43.9	5.8	44.4				
Green Ext Time (p_c), s	0.0	0.0	1.1	0.0	0.0	9.7	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 121.8

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

26: US 27 & Market Blvd/Star Lake Dr

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	50	10	115	36	12	44	83	1943	10	42	1995	10
Future Volume (veh/h)	50	10	115	36	12	44	83	1943	10	42	1995	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1796	1900	1900	1826	1841	1796	1737	1856	1767	1530
Adj Flow Rate, veh/h	55	11	126	40	13	48	91	2135	11	46	2192	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	7	0	0	5	4	7	11	3	9	25
Cap, veh/h	51	6	270	49	10	275	113	2996	899	60	2783	748
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.13	1.00	1.00	0.03	0.58	0.58
Sat Flow, veh/h	0	33	1522	0	53	1547	1753	4904	1472	1767	4823	1296
Grp Volume(v), veh/h	66	0	126	53	0	48	91	2135	11	46	2192	11
Grp Sat Flow(s),veh/h/ln	33	0	1522	53	0	1547	1753	1635	1472	1767	1608	1296
Q Serve(g_s), s	0.0	0.0	9.6	0.0	0.0	3.4	6.6	0.0	0.0	3.4	45.8	0.5
Cycle Q Clear(g_c), s	23.1	0.0	9.6	23.1	0.0	3.4	6.6	0.0	0.0	3.4	45.8	0.5
Prop In Lane	0.83		1.00	0.75		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	0	270	58	0	275	113	2996	899	60	2783	748
V/C Ratio(X)	1.17	0.00	0.47	0.91	0.00	0.17	0.81	0.71	0.01	0.77	0.79	0.01
Avail Cap(c_a), veh/h	57	0	270	58	0	275	293	2996	899	232	2783	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	0.0	47.9	60.9	0.0	45.4	55.8	0.0	0.0	62.3	21.3	11.7
Incr Delay (d2), s/veh	171.7	0.0	1.2	86.9	0.0	0.3	12.5	1.5	0.0	18.8	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	6.8	5.7	0.0	2.5	5.5	0.7	0.0	3.2	22.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	234.4	0.0	49.2	147.8	0.0	45.7	68.3	1.5	0.0	81.1	23.6	11.8
LnGrp LOS	F	A	D	F	A	D	E	A	A	F	C	B
Approach Vol, veh/h		192			101			2237			2249	
Approach Delay, s/veh		112.8			99.2			4.2			24.8	
Approach LOS		F			F			A			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	83.3		30.0	12.3	87.7		30.0				
Change Period (Y+Rc), s	8.3	8.3		6.9	7.9	8.3		6.9				
Max Green Setting (Gmax), s	21.7	61.7		23.1	17.1	66.7		23.1				
Max Q Clear Time (g_c+I1), s	8.6	47.8		25.1	5.4	2.0		25.1				
Green Ext Time (p_c), s	0.1	13.1		0.0	0.0	50.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			20.2									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

HCM 6th Signalized Intersection Summary

29: US 27 & Thompson Nursery Rd/Chalet Suzanne Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	104	344	287	207	444	185	1574	31	135	1641	143
Future Volume (veh/h)	281	104	344	287	207	444	185	1574	31	135	1641	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1856	1811	1856	1796	1841	1767	1781	1826	1885	1752	1767
Adj Flow Rate, veh/h	312	116	382	319	230	493	206	1749	34	150	1823	159
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
Percent Heavy Veh, %	4	3	6	3	7	4	9	8	5	1	10	9
Cap, veh/h	264	231	191	348	238	206	208	1949	620	378	1806	565
Arrive On Green	0.12	0.12	0.12	0.13	0.13	0.13	0.16	0.53	0.53	0.22	0.76	0.76
Sat Flow, veh/h	1753	1856	1535	1767	1796	1560	1682	4863	1547	3483	4782	1497
Grp Volume(v), veh/h	312	116	382	319	230	493	206	1749	34	150	1823	159
Grp Sat Flow(s),veh/h/ln	1753	1856	1535	1767	1796	1560	1682	1621	1547	1742	1594	1497
Q Serve(g_s), s	15.2	7.6	16.2	17.2	16.6	12.7	15.9	41.8	0.8	4.8	49.1	4.3
Cycle Q Clear(g_c), s	15.2	7.6	16.2	17.2	16.6	12.7	15.9	41.8	0.8	4.8	49.1	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	231	191	348	238	206	208	1949	620	378	1806	565
V/C Ratio(X)	1.18	0.50	2.00	0.92	0.97	2.39	0.99	0.90	0.05	0.40	1.01	0.28
Avail Cap(c_a), veh/h	264	231	191	348	238	206	208	1949	620	378	1806	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	53.1	56.9	46.0	56.1	30.5	54.2	28.0	6.7	47.3	15.9	10.4
Incr Delay (d2), s/veh	113.9	1.7	466.9	28.4	49.2	639.6	58.9	7.0	0.2	3.1	23.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.6	6.4	49.1	8.1	15.9	65.3	14.6	20.3	0.9	3.8	14.1	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	160.4	54.8	523.8	74.4	105.3	670.1	113.1	35.0	6.9	50.4	39.4	11.7
LnGrp LOS	F	D	F	E	F	F	F	C	A	D	F	B
Approach Vol, veh/h	810			1042			1989			2132		
Approach Delay, s/veh	316.7			363.1			42.6			38.1		
Approach LOS	F			F			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	58.0	23.0	25.0	23.0	60.0	24.0	24.0				
Change Period (Y+Rc), s	* 8.9	* 8.9	7.8	7.8	8.9	* 7.9	6.8	7.8				
Max Green Setting (Gmax), s	* 16	* 49	15.2	17.2	13.1	* 52	17.2	16.2				
Max Q Clear Time (g_c+I1), s	17.9	51.1	17.2	18.6	6.8	43.8	19.2	18.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	7.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 134.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Eagle Ridge Mall Ent S

03/10/2020

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	75	51	27	2080	67	71	1782
Future Volume (veh/h)	75	51	27	2080	67	71	1782
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1870	1870		1767	1826	1811	1722
Adj Flow Rate, veh/h	76	52		2101	68	72	1800
Peak Hour Factor	0.99	0.99		0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2		9	5	6	12
Cap, veh/h	184	85		3533	1134	119	3934
Arrive On Green	0.05	0.05		0.73	0.73	0.04	0.84
Sat Flow, veh/h	3456	1585		4982	1547	3346	4856
Grp Volume(v), veh/h	76	52		2101	68	72	1800
Grp Sat Flow(s),veh/h/ln	1728	1585		1608	1547	1673	1567
Q Serve(g_s), s	2.8	4.2		26.8	1.6	2.8	13.2
Cycle Q Clear(g_c), s	2.8	4.2		26.8	1.6	2.8	13.2
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	184	85		3533	1134	119	3934
V/C Ratio(X)	0.41	0.62		0.59	0.06	0.60	0.46
Avail Cap(c_a), veh/h	494	227		3533	1134	414	3934
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	60.2		8.2	4.9	61.8	2.8
Incr Delay (d2), s/veh	1.5	7.1		0.7	0.1	4.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	6.9		11.7	0.8	2.2	3.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	61.0	67.3		9.0	5.0	66.6	3.2
LnGrp LOS	E	E		A	A	E	A
Approach Vol, veh/h	128			2169			1872
Approach Delay, s/veh	63.6			8.9			5.6
Approach LOS	E			A			A
Timer - Assigned Phs	2			4	5	6	
Phs Duration (G+Y+Rc), s	116.7			13.3	13.5	103.1	
Change Period (Y+Rc), s	7.9			6.4	* 8.9	7.9	
Max Green Setting (Gmax), s	77.1			18.6	* 16	72.1	
Max Q Clear Time (g_c+I1), s	15.2			6.2	4.8	28.8	
Green Ext Time (p_c), s	40.1			0.3	0.1	36.4	
Intersection Summary							
HCM 6th Ctrl Delay			9.1				
HCM 6th LOS			A				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved ignoring U-Turning movement.							
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.							

HCM 6th Signalized Intersection Summary

37: US 27 & Huston Kia/E Mountain Lake Cutoff Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	103	10	377	10	1509	61	430	1623	10
Future Volume (veh/h)	10	10	10	103	10	377	10	1509	61	430	1623	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1900	1752	1618	1870	1767	1767
Adj Flow Rate, veh/h	11	11	11	116	11	424	11	1696	69	483	1824	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	3	0	10	19	2	9	9
Cap, veh/h	64	64	46	238	20	350	23	1770	508	396	2868	17
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.37	0.37	0.22	0.58	0.58
Sat Flow, veh/h	129	288	209	842	92	1572	1810	4782	1372	1781	4947	30
Grp Volume(v), veh/h	33	0	0	127	0	424	11	1696	69	483	1185	650
Grp Sat Flow(s),veh/h/ln	627	0	0	934	0	1572	1810	1594	1372	1781	1608	1761
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	30.0	0.8	46.7	4.5	30.0	33.1	33.1
Cycle Q Clear(g_c), s	22.0	0.0	0.0	21.6	0.0	30.0	0.8	46.7	4.5	30.0	33.1	33.1
Prop In Lane	0.33		0.33	0.91		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	175	0	0	259	0	350	23	1770	508	396	1864	1021
V/C Ratio(X)	0.19	0.00	0.00	0.49	0.00	1.21	0.49	0.96	0.14	1.22	0.64	0.64
Avail Cap(c_a), veh/h	175	0	0	259	0	350	402	1772	508	396	1864	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	0.0	0.0	49.1	0.0	52.5	66.2	41.5	28.2	52.5	18.9	18.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.4	0.0	119.3	15.2	13.1	0.3	119.6	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.0	7.2	0.0	34.8	0.8	26.5	2.6	38.1	16.8	18.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	0.0	0.0	50.5	0.0	171.7	81.4	54.6	28.4	172.1	19.9	20.7
LnGrp LOS	D	A	A	D	A	F	F	D	C	F	B	C
Approach Vol, veh/h	33			551			1776			2318		
Approach Delay, s/veh	43.3			143.8			53.8			51.8		
Approach LOS	D			F			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	86.2		38.0	39.0	57.9		38.0				
Change Period (Y+Rc), s	9.0	8.0		8.0	9.0	8.0		8.0				
Max Green Setting (Gmax), s	30.0	50.0		30.0	30.0	50.0		30.0				
Max Q Clear Time (g_c+I1), s	2.8	35.1		32.0	32.0	48.7		24.0				
Green Ext Time (p_c), s	0.0	12.9		0.0	0.0	1.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	63.3											
HCM 6th LOS	E											

HCM 6th Signalized Intersection Summary

40: US 27 & Washington Ave

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	46	29	57	22	89	44	1463	77	147	1657	22
Future Volume (veh/h)	17	46	29	57	22	89	44	1463	77	147	1657	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1500	1159	1159	1559	1411	1411	1070	1767	1693	1633	1767	1100
Adj Flow Rate, veh/h	20	54	34	67	26	105	52	1721	0	173	1949	26
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	27	50	50	23	33	33	56	9	14	18	9	54
Cap, veh/h	144	109	68	177	40	162	150	2427		257	2608	504
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.50	0.00	0.08	0.54	0.54
Sat Flow, veh/h	1010	665	419	1091	245	988	1019	4823	1434	1555	4823	932
Grp Volume(v), veh/h	20	0	88	67	0	131	52	1721	0	173	1949	26
Grp Sat Flow(s),veh/h/ln	1010	0	1084	1091	0	1233	1019	1608	1434	1555	1608	932
Q Serve(g_s), s	1.7	0.0	6.7	5.4	0.0	9.0	2.2	24.9	0.0	4.7	28.2	1.2
Cycle Q Clear(g_c), s	10.7	0.0	6.7	12.1	0.0	9.0	2.2	24.9	0.0	4.7	28.2	1.2
Prop In Lane	1.00		0.39	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	144	0	177	177	0	202	150	2427		257	2608	504
V/C Ratio(X)	0.14	0.00	0.50	0.38	0.00	0.65	0.35	0.71		0.67	0.75	0.05
Avail Cap(c_a), veh/h	258	0	299	300	0	341	390	2665		565	2665	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	34.5	39.9	0.0	35.4	15.7	17.4	0.0	17.0	16.0	9.8
Incr Delay (d2), s/veh	0.4	0.0	2.1	1.3	0.0	3.5	1.4	1.1	0.0	3.1	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	0.0	3.3	2.7	0.0	5.1	0.9	12.7	0.0	3.2	13.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	36.6	41.3	0.0	38.9	17.1	18.5	0.0	20.1	17.4	9.9
LnGrp LOS	D	A	D	D	A	D	B	B		C	B	A
Approach Vol, veh/h	108			198			1773			2148		
Approach Delay, s/veh	37.4			39.7			18.4			17.6		
Approach LOS	D			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	57.1		21.5	15.3	53.7		21.5				
Change Period (Y+Rc), s	8.2	8.2		* 6.7	8.2	8.2		* 6.7				
Max Green Setting (Gmax), s	25.0	50.0		* 25	25.0	50.0		* 25				
Max Q Clear Time (g_c+I1), s	4.2	30.2		14.1	6.7	26.9		12.7				
Green Ext Time (p_c), s	0.1	17.6		0.7	0.4	18.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay 19.5

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

43: US 27 & W Central Ave

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	115	10	170	119	159	60	1402	228	198	1411	163
Future Volume (veh/h)	173	115	10	170	119	159	60	1402	228	198	1411	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1693	1870	1870	1841	1856	1870	1900	1767	1885	1870	1722	1856
Adj Flow Rate, veh/h	188	125	11	185	129	173	65	1524	0	215	1534	177
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	14	2	2	4	3	2	0	9	1	2	12	3
Cap, veh/h	252	208	18	284	260	222	84	2167		278	2316	775
Arrive On Green	0.07	0.12	0.12	0.09	0.14	0.14	0.05	0.45	0.00	0.08	0.49	0.49
Sat Flow, veh/h	1612	1694	149	1753	1856	1585	1810	4823	1598	3456	4701	1572
Grp Volume(v), veh/h	188	0	136	185	129	173	65	1524	0	215	1534	177
Grp Sat Flow(s),veh/h/ln	1612	0	1844	1753	1856	1585	1810	1608	1598	1728	1567	1572
Q Serve(g_s), s	8.2	0.0	8.0	10.2	7.4	12.1	4.1	29.1	0.0	7.0	28.1	7.4
Cycle Q Clear(g_c), s	8.2	0.0	8.0	10.2	7.4	12.1	4.1	29.1	0.0	7.0	28.1	7.4
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	0	226	284	260	222	84	2167		278	2316	775
V/C Ratio(X)	0.74	0.00	0.60	0.65	0.50	0.78	0.77	0.70		0.77	0.66	0.23
Avail Cap(c_a), veh/h	252	0	677	284	713	609	138	2537		380	2662	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	0.0	47.5	40.4	45.5	47.5	54.0	25.4	0.0	51.6	21.9	16.6
Incr Delay (d2), s/veh	11.4	0.0	3.6	5.2	2.1	8.1	13.9	1.1	0.0	6.7	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	7.0	8.6	6.3	8.9	3.8	15.7	0.0	5.7	14.6	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	0.0	51.2	45.5	47.5	55.6	67.8	26.5	0.0	58.3	22.7	16.9
LnGrp LOS	E	A	D	D	D	E	E	C		E	C	B
Approach Vol, veh/h		324			487			1589	A		1926	
Approach Delay, s/veh		53.8			49.7			28.2			26.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.6	64.0	15.0	22.8	17.6	59.0	17.0	20.8				
Change Period (Y+Rc), s	* 7.3	7.6	* 6.8	* 6.8	* 8.4	* 7.6	* 6.8	* 6.8				
Max Green Setting (Gmax), s	* 8.7	64.8	* 8.2	* 44	* 13	* 60	* 10	* 42				
Max Q Clear Time (g_c+I1), s	6.1	30.1	10.2	14.1	9.0	31.1	12.2	10.0				
Green Ext Time (p_c), s	0.0	24.7	0.0	2.0	0.2	20.3	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay 31.6

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

6: US 27 & Sunshine Dr/Paradise Island Dr

03/09/2020

Intersection												
Int Delay, s/veh	14.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↑↑↑	↗	↖	↑↑↑	↗
Traffic Vol, veh/h	25	10	14	17	10	22	20	2186	10	15	1849	10
Future Vol, veh/h	25	10	14	17	10	22	20	2186	10	15	1849	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	400	-	355	400	-	415
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	13	7	0	22	0	6	29	21	10	13
Mvmt Flow	28	11	16	19	11	24	22	2429	11	17	2054	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3109	4572	1027	3334	4572	1215	2065	0	0	2440	0	0
Stage 1	2088	2088	-	2473	2473	-	-	-	-	-	-	-
Stage 2	1021	2484	-	861	2099	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.36	6.54	6.5	7.54	5.3	-	-	5.72	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.44	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.03	3.87	4	4.12	3.1	-	-	3.31	-	-
Pot Cap-1 Maneuver	~ 13	~ 1	184	~ 8	~ 1	127	119	-	-	57	-	-
Stage 1	34	95	-	~ 16	60	-	-	-	-	-	-	-
Stage 2	231	60	-	278	94	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 4	~ 1	184	~ 3	~ 1	127	119	-	-	57	-	-
Mov Cap-2 Maneuver	~ 21	20	-	~ 11	22	-	-	-	-	-	-	-
Stage 1	28	67	-	~ 13	49	-	-	-	-	-	-	-
Stage 2	118	49	-	149	66	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	573.2	612.9	0.4	0.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	119	-	-	21	184	14	127	57	-	-
HCM Lane V/C Ratio	0.187	-	-	1.852	0.085	2.143	0.192	0.292	-	-
HCM Control Delay (s)	42.1	-	-	791.9	26.4	1079.7	40	92.4	-	-
HCM Lane LOS	E	-	-	F	D	F	E	F	-	-
HCM 95th %tile Q(veh)	0.7	-	-	5.1	0.3	4.5	0.7	1	-	-

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

HCM 6th TWSC

15: US 27 & FairBridge Inn Express/Frederick Ave

03/09/2020

Intersection												
Int Delay, s/veh	14.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	
Traffic Vol, veh/h	10	10	10	53	10	117	11	1963	92	136	1669	10
Future Vol, veh/h	10	10	10	53	10	117	11	1963	92	136	1669	10
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	-	-	-	-	-	-	340	-	360	340	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	50	4	0	3	9	8	2	4	10	0
Mvmt Flow	11	11	11	58	11	129	12	2157	101	149	1834	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3030	4420	923	3218	4324	1079	1845	0	0	2258	0	0
Stage 1	2138	2138	-	2181	2181	-	-	-	-	-	-	-
Stage 2	892	2282	-	1037	2143	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	8.1	6.48	6.5	7.16	5.48	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.38	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.78	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.4	3.84	4	3.93	3.19	-	-	3.14	-	-
Pot Cap-1 Maneuver	14	~ 2	171	~ 10	~ 2	182	138	-	-	~ 90	-	-
Stage 1	31	90	-	~ 28	85	-	-	-	-	-	-	-
Stage 2	278	76	-	220	89	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	0	171	-	0	182	138	-	-	~ 90	-	-
Mov Cap-2 Maneuver	40	0	-	~ -21	~ -13	-	-	-	-	-	-	-
Stage 1	28	0	-	~ 26	78	-	-	-	-	-	-	-
Stage 2	64	69	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.2	31.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	138	-	-	-	~ 90	-	-
HCM Lane V/C Ratio	0.088	-	-	-	1.661	-	-
HCM Control Delay (s)	33.6	-	-	-	\$ 421.6	-	-
HCM Lane LOS	D	-	-	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	12.1	-	-

Notes

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

HCM 6th TWSC
21: US 27 & Lincoln Ave

AM Peak Hour

03/09/2020

Intersection							
Int Delay, s/veh	2.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	31	19	0	1828	15	29	2080
Future Vol, veh/h	31	19	0	1828	15	29	2080
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	215	-	235	235	-
Veh in Median Storage, #	1	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	13	13	0	8	0	6	9
Mvmt Flow	32	20	0	1904	16	30	2167
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	2831	952	1582	0	0	1920	0
Stage 1	1904	-	-	-	-	-	-
Stage 2	927	-	-	-	-	-	-
Critical Hdwy	5.96	7.36	5.6	-	-	5.42	-
Critical Hdwy Stg 1	6.86	-	-	-	-	-	-
Critical Hdwy Stg 2	6.26	-	-	-	-	-	-
Follow-up Hdwy	3.93	4.03	2.3	-	-	3.16	-
Pot Cap-1 Maneuver	~ 27	207	212	-	-	131	-
Stage 1	58	-	-	-	-	-	-
Stage 2	291	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 21	207	212	-	-	131	-
Mov Cap-2 Maneuver	48	-	-	-	-	-	-
Stage 1	58	-	-	-	-	-	-
Stage 2	224	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, s	150.3	0		0.6			
HCM LOS	F						
Minor Lane/Major Mvmt	NBU	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	212	-	-	68	131	-	
HCM Lane V/C Ratio	-	-	-	0.766	0.231	-	
HCM Control Delay (s)	0	-	-	150.3	40.5	-	
HCM Lane LOS	A	-	-	F	E	-	
HCM 95th %tile Q(veh)	0	-	-	3.5	0.8	-	
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

HCM 6th TWSC

34: US 27 & Vanguard School Ent/Tower Point Ent

03/09/2020

Intersection												
Int Delay, s/veh	87.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	10	10	10	47	10	29	49	1850	25	16	2082	19
Future Vol, veh/h	10	10	10	47	10	29	49	1850	25	16	2082	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	280	-	525	510	-	380
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	12	0	4	0	8	17	13	8	0
Mvmt Flow	11	11	11	52	11	32	54	2056	28	18	2313	21

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3285	4541	1157	3131	4534	1028	2334	0	0	2084	0	0
Stage 1	2349	2349	-	2164	2164	-	-	-	-	-	-	-
Stage 2	936	2192	-	967	2370	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.64	6.5	7.18	5.3	-	-	5.56	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.54	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.94	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.92	4	3.94	3.1	-	-	3.23	-	-
Pot Cap-1 Maneuver	~ 10	~ 1	165	~ 10	~ 1	196	87	-	-	99	-	-
Stage 1	22	70	-	~ 26	87	-	-	-	-	-	-	-
Stage 2	261	84	-	230	68	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 4	0	165	~ 4	0	196	87	-	-	99	-	-
Mov Cap-2 Maneuver	~ 7	~ 10	-	~ 9	~ 2	-	-	-	-	-	-	-
Stage 1	~ 8	57	-	~ 10	33	-	-	-	-	-	-	-
Stage 2	55	32	-	141	56	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, \$	1436.4	3646.9	2.5	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	87	-	-	12 6 196	99	-	-
HCM Lane V/C Ratio	0.626	-	-	2.778 10.556 0.164	0.18	-	-
HCM Control Delay (s)	99.1	-	-	\$ 1436.4 5488.6 26.9	49.2	-	-
HCM Lane LOS	F	-	-	F F D	E	-	-
HCM 95th %tile Q(veh)	2.9	-	-	5.1 9.6 0.6	0.6	-	-

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

HCM 6th Signalized Intersection Summary

3: US 27 & Polo Park Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	72	12	31	82	10	117	61	1790	94	112	2665	64
Future Volume (veh/h)	72	12	31	82	10	117	61	1790	94	112	2665	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1900	1885	1900	1856	1900	1885	1856	1900
Adj Flow Rate, veh/h	75	12	32	85	10	122	64	1865	98	117	2776	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	4	0	0	1	0	3	0	1	3	0
Cap, veh/h	97	16	96	149	18	146	82	2851	906	140	3025	962
Arrive On Green	0.06	0.06	0.06	0.09	0.09	0.09	0.05	0.56	0.56	0.08	0.60	0.60
Sat Flow, veh/h	1570	251	1560	1627	191	1598	1810	5066	1610	1795	5066	1610
Grp Volume(v), veh/h	87	0	32	95	0	122	64	1865	98	117	2776	67
Grp Sat Flow(s),veh/h/ln	1821	0	1560	1819	0	1598	1810	1689	1610	1795	1689	1610
Q Serve(g_s), s	7.1	0.0	3.0	7.6	0.0	11.4	5.3	38.6	4.3	9.7	74.0	2.6
Cycle Q Clear(g_c), s	7.1	0.0	3.0	7.6	0.0	11.4	5.3	38.6	4.3	9.7	74.0	2.6
Prop In Lane	0.86		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	0	96	167	0	146	82	2851	906	140	3025	962
V/C Ratio(X)	0.77	0.00	0.33	0.57	0.00	0.83	0.78	0.65	0.11	0.84	0.92	0.07
Avail Cap(c_a), veh/h	209	0	179	246	0	216	239	3081	979	237	3081	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.0	0.0	68.0	65.9	0.0	67.6	71.5	22.9	15.4	68.9	27.2	12.8
Incr Delay (d2), s/veh	10.7	0.0	2.0	3.1	0.0	16.1	14.5	0.4	0.0	12.2	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	0.0	2.3	6.7	0.0	9.1	4.9	20.5	2.7	8.4	36.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.7	0.0	70.0	69.0	0.0	83.7	86.0	23.3	15.5	81.1	32.1	12.8
LnGrp LOS	F	A	E	E	A	F	F	C	B	F	C	B
Approach Vol, veh/h		119			217			2027			2960	
Approach Delay, s/veh		77.8			77.3			24.9			33.6	
Approach LOS		E			E			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.4	93.1		16.9	15.2	98.3		21.0				
Change Period (Y+Rc), s	* 8.6	* 7.9		7.6	* 8.3	7.9		7.1				
Max Green Setting (Gmax), s	* 20	* 92		17.4	* 20	92.1		20.5				
Max Q Clear Time (g_c+I1), s	11.7	40.6		9.1	7.3	76.0		13.4				
Green Ext Time (p_c), s	0.1	17.5		0.3	0.1	14.5		0.5				

Intersection Summary

HCM 6th Ctrl Delay 33.1

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: US 27 & Legacy Park Blvd/Florence Villa Grove Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	42	105	485	102	141	132	1509	249	132	2383	181
Future Volume (veh/h)	131	42	105	485	102	141	132	1509	249	132	2383	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1870	1856	1900	1870	1856	1885
Adj Flow Rate, veh/h	134	43	107	495	104	144	135	1540	254	135	2432	185
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	2	3	0	2	3	1
Cap, veh/h	188	50	125	250	52	73	155	2127	676	155	2148	677
Arrive On Green	0.10	0.10	0.10	0.21	0.21	0.21	0.09	0.42	0.42	0.09	0.42	0.42
Sat Flow, veh/h	1810	483	1201	1185	249	345	1781	5066	1610	1781	5066	1598
Grp Volume(v), veh/h	134	0	150	743	0	0	135	1540	254	135	2432	185
Grp Sat Flow(s),veh/h/ln	1810	0	1684	1779	0	0	1781	1689	1610	1781	1689	1598
Q Serve(g_s), s	12.0	0.0	14.7	35.3	0.0	0.0	12.5	42.4	18.2	12.5	71.0	12.6
Cycle Q Clear(g_c), s	12.0	0.0	14.7	35.3	0.0	0.0	12.5	42.4	18.2	12.5	71.0	12.6
Prop In Lane	1.00		0.71	0.67		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	175	375	0	0	155	2127	676	155	2148	677
V/C Ratio(X)	0.71	0.00	0.86	1.98	0.00	0.00	0.87	0.72	0.38	0.87	1.13	0.27
Avail Cap(c_a), veh/h	262	0	243	375	0	0	160	2133	678	160	2148	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	0.0	73.8	66.1	0.0	0.0	75.5	40.5	33.5	75.5	48.2	31.4
Incr Delay (d2), s/veh	5.4	0.0	19.0	451.1	0.0	0.0	37.0	1.2	0.2	37.0	65.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.9	0.0	11.7	98.0	0.0	0.0	11.6	24.0	11.3	11.6	56.9	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.9	0.0	92.7	517.1	0.0	0.0	112.5	41.6	33.7	112.5	114.2	31.6
LnGrp LOS	E	A	F	F	A	A	F	D	C	F	F	C
Approach Vol, veh/h	284			743			1929			2752		
Approach Delay, s/veh	85.8			517.1			45.6			108.5		
Approach LOS	F			F			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.5	78.7		42.0	23.2	78.0		24.2				
Change Period (Y+Rc), s	8.0	7.7		* 6.7	8.7	* 7.7		6.8				
Max Green Setting (Gmax), s	15.0	71.0		* 35	15.0	* 71		24.2				
Max Q Clear Time (g_c+I1), s	14.5	73.0		37.3	14.5	44.4		16.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.7		0.7				

Intersection Summary

HCM 6th Ctrl Delay 139.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

9: US 27 & Sand Mine Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	23	299	77	30	60	238	1678	106	165	2444	175
Future Volume (veh/h)	230	23	299	77	30	60	238	1678	106	165	2444	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1900	1870	1900	1900	1870	1856	1856	1826	1856	1856	1870
Adj Flow Rate, veh/h	257	0	311	80	31	62	248	1748	110	172	2546	182
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	2	0	0	2	3	3	5	3	3	2
Cap, veh/h	523	0	233	101	39	121	295	2678	818	219	2597	813
Arrive On Green	0.15	0.00	0.15	0.08	0.08	0.08	0.09	0.53	0.53	0.06	0.51	0.51
Sat Flow, veh/h	3563	0	1585	1322	512	1585	3428	5066	1547	3428	5066	1585
Grp Volume(v), veh/h	257	0	311	111	0	62	248	1748	110	172	2546	182
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1834	0	1585	1714	1689	1547	1714	1689	1585
Q Serve(g_s), s	11.3	0.0	25.0	10.1	0.0	6.4	12.1	42.3	6.1	8.4	83.9	10.8
Cycle Q Clear(g_c), s	11.3	0.0	25.0	10.1	0.0	6.4	12.1	42.3	6.1	8.4	83.9	10.8
Prop In Lane	1.00		1.00	0.72		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	523	0	233	140	0	121	295	2678	818	219	2597	813
V/C Ratio(X)	0.49	0.00	1.34	0.79	0.00	0.51	0.84	0.65	0.13	0.78	0.98	0.22
Avail Cap(c_a), veh/h	523	0	233	538	0	465	455	2678	818	604	2599	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.8	0.0	72.7	77.4	0.0	75.6	76.7	28.9	20.4	78.6	40.7	22.9
Incr Delay (d2), s/veh	0.7	0.0	177.8	9.7	0.0	3.3	8.4	0.6	0.1	6.1	13.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	0.0	33.2	8.9	0.0	4.9	9.5	23.0	3.9	6.9	45.5	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	0.0	250.5	87.1	0.0	79.0	85.1	29.4	20.4	84.7	54.0	23.0
LnGrp LOS	E	A	F	F	A	E	F	C	C	F	D	C
Approach Vol, veh/h	568			173			2106			2900		
Approach Delay, s/veh	167.7			84.2			35.5			53.9		
Approach LOS	F			F			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.5	98.8		32.0	23.3	94.9		20.1				
Change Period (Y+Rc), s	* 8.6	* 8.7		7.0	8.7	7.6		7.1				
Max Green Setting (Gmax), s	* 30	* 80		25.0	22.6	87.4		50.0				
Max Q Clear Time (g_c+I1), s	10.4	44.3		27.0	14.1	85.9		12.1				
Green Ext Time (p_c), s	0.5	15.5		0.0	0.5	1.4		0.9				

Intersection Summary

HCM 6th Ctrl Delay 59.3

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: US 27 & Highlands Reserve Blvd/Student Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	34	10	38	58	10	73	55	1921	10	79	2676	28
Future Volume (veh/h)	34	10	38	58	10	73	55	1921	10	79	2676	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1856	1900	1870	1856	1841
Adj Flow Rate, veh/h	35	10	40	60	10	76	57	2001	10	82	2788	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	3	0	2	3	4
Cap, veh/h	59	10	208	62	6	208	74	3017	959	105	3135	965
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.04	0.60	0.60	0.06	0.62	0.62
Sat Flow, veh/h	0	78	1610	0	45	1610	1810	5066	1610	1781	5066	1560
Grp Volume(v), veh/h	45	0	40	70	0	76	57	2001	10	82	2788	29
Grp Sat Flow(s),veh/h/ln	78	0	1610	45	0	1610	1810	1689	1610	1781	1689	1560
Q Serve(g_s), s	0.0	0.0	2.4	0.0	0.0	4.7	3.4	28.7	0.3	4.9	50.6	0.8
Cycle Q Clear(g_c), s	14.0	0.0	2.4	14.0	0.0	4.7	3.4	28.7	0.3	4.9	50.6	0.8
Prop In Lane	0.78		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	0	208	67	0	208	74	3017	959	105	3135	965
V/C Ratio(X)	0.65	0.00	0.19	1.04	0.00	0.37	0.77	0.66	0.01	0.78	0.89	0.03
Avail Cap(c_a), veh/h	69	0	208	67	0	208	202	3292	1046	172	3245	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	42.2	53.0	0.0	43.2	51.5	14.7	8.9	50.4	17.5	8.0
Incr Delay (d2), s/veh	19.8	0.0	0.4	120.4	0.0	1.1	15.1	0.4	0.0	11.9	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	0.0	1.8	7.4	0.0	3.5	3.2	14.1	0.1	4.4	23.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.9	0.0	42.6	173.5	0.0	44.3	66.6	15.1	8.9	62.3	20.9	8.0
LnGrp LOS	E	A	D	F	A	D	E	B	A	E	C	A
Approach Vol, veh/h	85		146				2068		2899			
Approach Delay, s/veh	57.6		106.2				16.5		21.9			
Approach LOS	E		F				B		C			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	14.9	72.1	21.5		12.4	74.6	21.5					
Change Period (Y+Rc), s	8.5	7.5	7.5		7.9	7.5	7.5					
Max Green Setting (Gmax), s	10.5	70.5	14.0		12.1	69.5	14.0					
Max Q Clear Time (g_c+I1), s	6.9	30.7	16.0		5.4	52.6	16.0					
Green Ext Time (p_c), s	0.0	17.6	0.0		0.0	14.5	0.0					
Intersection Summary												
HCM 6th Ctrl Delay			22.7									
HCM 6th LOS			C									
Notes												

HCM 6th Signalized Intersection Summary

15: US 27 & California Blvd/McFee Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	10	56	24	10	47	107	1954	31	51	2438	115
Future Volume (veh/h)	56	10	56	24	10	47	107	1954	31	51	2438	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1841	1900	1900	1856	1885	1856	1856	1870	1856	1900
Adj Flow Rate, veh/h	58	10	58	25	10	48	110	2014	32	53	2513	119
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	4	0	0	3	1	3	3	2	3	0
Cap, veh/h	50	5	231	46	11	233	136	3208	996	69	3010	957
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.08	0.63	0.63	0.04	0.59	0.59
Sat Flow, veh/h	0	33	1560	0	77	1572	1795	5066	1572	1781	5066	1610
Grp Volume(v), veh/h	68	0	58	35	0	48	110	2014	32	53	2513	119
Grp Sat Flow(s),veh/h/ln	33	0	1560	77	0	1572	1795	1689	1572	1781	1689	1610
Q Serve(g_s), s	0.0	0.0	4.4	0.0	0.0	3.6	8.0	32.2	1.0	3.9	53.1	4.3
Cycle Q Clear(g_c), s	19.7	0.0	4.4	19.7	0.0	3.6	8.0	32.2	1.0	3.9	53.1	4.3
Prop In Lane	0.85		1.00	0.71		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	0	231	58	0	233	136	3208	996	69	3010	957
V/C Ratio(X)	1.23	0.00	0.25	0.61	0.00	0.21	0.81	0.63	0.03	0.77	0.83	0.12
Avail Cap(c_a), veh/h	55	0	231	58	0	233	338	3440	1068	335	3444	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.7	0.0	50.1	60.2	0.0	49.8	60.5	14.8	9.1	63.3	21.7	11.8
Incr Delay (d2), s/veh	197.3	0.0	0.6	16.6	0.0	0.4	10.9	0.3	0.0	16.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	3.2	2.6	0.0	2.6	7.1	16.1	0.6	3.7	25.8	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	262.0	0.0	50.7	76.8	0.0	50.2	71.4	15.1	9.1	79.4	23.4	11.9
LnGrp LOS	F	A	D	E	A	D	E	B	A	E	C	B
Approach Vol, veh/h	126			83			2156			2685		
Approach Delay, s/veh	164.7			61.4			17.9			24.0		
Approach LOS	F			E			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	92.2		27.4	18.5	87.0		27.4				
Change Period (Y+Rc), s	8.2	8.0		7.7	8.5	* 8		7.7				
Max Green Setting (Gmax), s	25.0	90.3		19.7	25.0	* 90		19.7				
Max Q Clear Time (g_c+I1), s	5.9	34.2		21.7	10.0	55.1		21.7				
Green Ext Time (p_c), s	0.1	20.2		0.0	0.2	23.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay 25.5

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

21: US 27 & 4 Corners Blvd/Tri County Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	29	61	164	42	399	71	1865	86	292	2118	73
Future Volume (veh/h)	53	29	61	164	42	399	71	1865	86	292	2118	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1885	1841	1856	1900	1885	1856	1841
Adj Flow Rate, veh/h	56	31	64	173	44	420	75	1963	91	307	2229	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	1	4	3	0	1	3	4
Cap, veh/h	35	25	18	182	35	331	95	2137	679	335	2807	864
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.05	0.42	0.42	0.19	0.55	0.55
Sat Flow, veh/h	0	119	87	658	167	1598	1753	5066	1610	1795	5066	1560
Grp Volume(v), veh/h	151	0	0	217	0	420	75	1963	91	307	2229	77
Grp Sat Flow(s),veh/h/ln	206	0	0	826	0	1598	1753	1689	1610	1795	1689	1560
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	29.0	5.9	51.3	4.9	23.5	49.1	3.2
Cycle Q Clear(g_c), s	29.0	0.0	0.0	29.0	0.0	29.0	5.9	51.3	4.9	23.5	49.1	3.2
Prop In Lane	0.37		0.42	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	0	217	0	331	95	2137	679	335	2807	864
V/C Ratio(X)	1.94	0.00	0.00	1.00	0.00	1.27	0.79	0.92	0.13	0.92	0.79	0.09
Avail Cap(c_a), veh/h	78	0	0	217	0	331	238	2205	701	449	2807	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	0.0	0.0	58.6	0.0	55.6	65.5	38.2	24.8	55.9	24.9	14.7
Incr Delay (d2), s/veh	465.3	0.0	0.0	61.0	0.0	143.3	13.5	6.6	0.1	19.8	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.2	0.0	0.0	16.9	0.0	37.3	5.3	28.6	3.2	17.8	25.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	520.4	0.0	0.0	119.6	0.0	198.8	79.0	44.8	24.9	75.7	26.5	14.7
LnGrp LOS	F	A	A	F	A	F	E	D	C	E	C	B
Approach Vol, veh/h	151			637			2129			2613		
Approach Delay, s/veh	520.4			171.8			45.2			31.9		
Approach LOS	F			F			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	85.6		37.9	35.1	67.1		37.9				
Change Period (Y+Rc), s	9.0	8.0		* 8.9	9.0	8.0		* 8.9				
Max Green Setting (Gmax), s	19.0	77.0		* 29	35.0	61.0		* 29				
Max Q Clear Time (g_c+l1), s	7.9	51.1		31.0	25.5	53.3		31.0				
Green Ext Time (p_c), s	0.1	16.1		0.0	0.6	5.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay 66.5

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

27: US 27 & Waverly Barn Rd/Dunson Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	67	10	149	71	10	63	209	2136	121	116	2025	132
Future Volume (veh/h)	67	10	149	71	10	63	209	2136	121	116	2025	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1159	1159	1752	1900	1900	1900	1633	1826	1856	1870	1826	1781
Adj Flow Rate, veh/h	72	11	160	76	11	68	225	2297	130	125	2177	142
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	50	50	10	0	0	0	18	5	3	2	5	8
Cap, veh/h	120	18	184	94	14	84	200	2523	796	123	2221	673
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.13	0.51	0.51	0.07	0.45	0.45
Sat Flow, veh/h	964	147	1485	844	122	755	1555	4985	1572	1781	4985	1510
Grp Volume(v), veh/h	83	0	160	155	0	0	225	2297	130	125	2177	142
Grp Sat Flow(s),veh/h/ln	1111	0	1485	1722	0	0	1555	1662	1572	1781	1662	1510
Q Serve(g_s), s	11.7	0.0	17.5	14.5	0.0	0.0	21.2	69.6	7.3	11.4	70.9	9.5
Cycle Q Clear(g_c), s	11.7	0.0	17.5	14.5	0.0	0.0	21.2	69.6	7.3	11.4	70.9	9.5
Prop In Lane	0.87		1.00	0.49		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	184	192	0	0	200	2523	796	123	2221	673
V/C Ratio(X)	0.60	0.00	0.87	0.81	0.00	0.00	1.13	0.91	0.16	1.02	0.98	0.21
Avail Cap(c_a), veh/h	323	0	432	584	0	0	200	2523	796	123	2223	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.4	0.0	70.9	71.6	0.0	0.0	71.9	37.3	21.9	76.8	45.0	28.0
Incr Delay (d2), s/veh	4.2	0.0	11.6	15.4	0.0	0.0	101.6	5.4	0.1	85.4	14.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	0.0	11.7	11.7	0.0	0.0	21.0	36.3	4.8	12.7	39.6	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	0.0	82.5	87.0	0.0	0.0	173.5	42.7	22.0	162.2	59.7	28.1
LnGrp LOS	E	A	F	F	A	A	F	D	C	F	E	C
Approach Vol, veh/h	243				155				2652			
Approach Delay, s/veh	79.1				87.0				52.8			
Approach LOS	E				F				D			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	20.0	91.3	27.9		30.0	81.3	25.8					
Change Period (Y+Rc), s	* 8.6	7.8	7.4		8.8	* 7.8	7.4					
Max Green Setting (Gmax), s	* 11	83.4	48.0		21.2	* 74	56.0					
Max Q Clear Time (g_c+I1), s	13.4	71.6	19.5		23.2	72.9	16.5					
Green Ext Time (p_c), s	0.0	8.9	1.0		0.0	0.6	1.9					

Intersection Summary

HCM 6th Ctrl Delay 59.5

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Deen Still Rd/Ronald Reagan Pkwy

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	120	71	500	256	375	103	1819	395	584	1678	188
Future Volume (veh/h)	98	120	71	500	256	375	103	1819	395	584	1678	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1707	1856	1856	1885	1530	1841	1870	1870	1856	1781
Adj Flow Rate, veh/h	105	129	76	538	275	403	111	1956	425	628	1804	202
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	13	3	3	1	25	4	2	2	3	8
Cap, veh/h	152	159	122	446	326	281	128	1962	619	667	2509	748
Arrive On Green	0.04	0.08	0.08	0.13	0.18	0.18	0.09	0.39	0.39	0.19	0.50	0.50
Sat Flow, veh/h	3483	1885	1447	3428	1856	1598	1457	5025	1585	3456	5066	1510
Grp Volume(v), veh/h	105	129	76	538	275	403	111	1956	425	628	1804	202
Grp Sat Flow(s),veh/h/ln	1742	1885	1447	1714	1856	1598	1457	1675	1585	1728	1689	1510
Q Serve(g_s), s	4.6	10.3	7.8	20.0	22.0	27.0	11.6	59.7	34.3	27.5	42.9	12.0
Cycle Q Clear(g_c), s	4.6	10.3	7.8	20.0	22.0	27.0	11.6	59.7	34.3	27.5	42.9	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	159	122	446	326	281	128	1962	619	667	2509	748
V/C Ratio(X)	0.69	0.81	0.62	1.21	0.84	1.44	0.86	1.00	0.69	0.94	0.72	0.27
Avail Cap(c_a), veh/h	453	307	235	446	326	281	190	1962	619	675	2509	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.5	69.1	68.0	66.8	61.3	63.3	69.1	46.7	39.0	61.1	30.4	22.6
Incr Delay (d2), s/veh	5.5	9.4	5.1	112.1	18.0	215.7	22.7	19.5	2.9	21.3	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	9.2	5.4	23.8	17.5	42.3	8.7	35.6	19.6	19.7	23.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.0	78.5	73.0	178.9	79.3	279.1	91.9	66.3	41.9	82.4	31.3	22.7
LnGrp LOS	E	E	E	F	E	F	F	E	D	F	C	C
Approach Vol, veh/h		310			1216			2492			2634	
Approach Delay, s/veh		77.0			189.6			63.2			42.9	
Approach LOS		E			F			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.3	67.6	27.8	20.0	22.2	83.7	13.8	34.0				
Change Period (Y+Rc), s	* 8.6	7.6	* 7.8	* 7	* 8.6	7.6	7.1	7.0				
Max Green Setting (Gmax), s	* 30	60.0	* 20	* 25	* 20	60.0	20.0	25.0				
Max Q Clear Time (g_c+I1), s	29.5	61.7	22.0	12.3	13.6	44.9	6.6	29.0				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.7	0.1	8.7	0.2	0.0				

Intersection Summary

HCM 6th Ctrl Delay 78.9

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

35: US 27 & Access Rd/Ritchie Bros Driveway

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	10	322	66	10	18	273	2150	11	10	2362	79
Future Volume (veh/h)	87	10	322	66	10	18	273	2150	11	10	2362	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1811	1900	1900	1900	1707	1767	1900	1900	1811	1826
Adj Flow Rate, veh/h	93	11	343	70	11	19	290	2287	0	11	2513	84
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	6	0	0	0	13	9	0	0	6	5
Cap, veh/h	59	4	286	58	5	300	362	2912		23	2472	774
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.11	0.60	0.00	0.01	0.50	0.50
Sat Flow, veh/h	0	21	1535	0	28	1610	3155	4823	1610	1810	4944	1547
Grp Volume(v), veh/h	104	0	343	81	0	19	290	2287	0	11	2513	84
Grp Sat Flow(s),veh/h/ln	21	0	1535	28	0	1610	1577	1608	1610	1810	1648	1547
Q Serve(g_s), s	0.0	0.0	21.4	0.0	0.0	1.1	10.3	41.0	0.0	0.7	57.4	3.3
Cycle Q Clear(g_c), s	21.4	0.0	21.4	21.4	0.0	1.1	10.3	41.0	0.0	0.7	57.4	3.3
Prop In Lane	0.89		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	0	286	64	0	300	362	2912		23	2472	774
V/C Ratio(X)	1.64	0.00	1.20	1.27	0.00	0.06	0.80	0.79		0.47	1.02	0.11
Avail Cap(c_a), veh/h	63	0	286	64	0	300	857	2912		495	2472	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	46.7	55.7	0.0	38.4	49.5	17.1	0.0	56.3	28.7	15.2
Incr Delay (d2), s/veh	349.2	0.0	118.1	202.4	0.0	0.2	4.1	1.7	0.0	14.1	22.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.3	0.0	26.5	9.8	0.0	0.8	7.5	19.7	0.0	0.7	34.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	405.3	0.0	164.8	258.1	0.0	38.6	53.6	18.8	0.0	70.3	51.0	15.3
LnGrp LOS	F	A	F	F	A	D	D	B		E	F	B
Approach Vol, veh/h	447			100			2577			A		
Approach Delay, s/veh	220.8			216.4			22.8			49.9		
Approach LOS	F			F			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.0	65.0		28.8	9.1	76.9		28.8				
Change Period (Y+Rc), s	* 7.8	7.6		7.4	7.6	7.6		7.4				
Max Green Setting (Gmax), s	* 31	57.4		21.4	31.4	57.4		21.4				
Max Q Clear Time (g_c+l1), s	12.3	59.4		23.4	2.7	43.0		23.4				
Green Ext Time (p_c), s	0.9	0.0		0.0	0.0	13.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.9

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

47: US 27 & Heller Bros Blvd/Deer Creek Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	17	98	142	14	89	30	2904	41	37	2674	16
Future Volume (veh/h)	28	17	98	142	14	89	30	2904	41	37	2674	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1870	1900	1900	1900	1900	1796	1856	1900	1841	1900
Adj Flow Rate, veh/h	29	18	102	148	15	93	31	3025	43	39	2785	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	2	0	0	0	0	7	3	0	4	0
Cap, veh/h	38	268	118	166	33	205	230	3128	1003	51	2708	868
Arrive On Green	0.02	0.07	0.07	0.09	0.14	0.14	0.25	1.00	1.00	0.03	0.54	0.54
Sat Flow, veh/h	1810	3610	1585	1810	228	1417	1810	4904	1572	1810	5025	1610
Grp Volume(v), veh/h	29	18	102	148	0	108	31	3025	43	39	2785	17
Grp Sat Flow(s),veh/h/ln	1810	1805	1585	1810	0	1645	1810	1635	1572	1810	1675	1610
Q Serve(g_s), s	3.0	0.9	12.1	15.4	0.0	11.4	2.5	0.0	0.0	4.1	102.4	0.7
Cycle Q Clear(g_c), s	3.0	0.9	12.1	15.4	0.0	11.4	2.5	0.0	0.0	4.1	102.4	0.7
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	268	118	166	0	238	230	3128	1003	51	2708	868
V/C Ratio(X)	0.77	0.07	0.87	0.89	0.00	0.45	0.14	0.97	0.04	0.77	1.03	0.02
Avail Cap(c_a), veh/h	168	277	122	168	0	238	230	3128	1003	147	2708	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	92.6	81.8	87.0	85.4	0.0	74.3	62.8	0.0	0.0	91.7	43.8	12.2
Incr Delay (d2), s/veh	27.2	0.1	43.0	40.5	0.0	1.3	0.3	10.1	0.1	21.3	25.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	0.8	10.6	14.1	0.0	8.6	2.1	5.3	0.0	4.0	59.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.7	81.9	130.0	125.9	0.0	75.7	63.1	10.1	0.1	113.0	68.8	12.2
LnGrp LOS	F	F	F	F	A	E	E	B	A	F	F	B
Approach Vol, veh/h	149			256			3099			2841		
Approach Delay, s/veh	122.2			104.7			10.5			69.1		
Approach LOS	F			F			B			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.7	111.0	11.4	34.9	13.9	129.8	24.8	21.5				
Change Period (Y+Rc), s	* 8.6	* 8.6	7.4	7.4	* 8.6	* 8.6	7.4	7.4				
Max Green Setting (Gmax), s	* 14	* 1E2	17.6	23.6	* 15	* 1E2	17.6	14.6				
Max Q Clear Time (g_c+I1), s	4.5	104.4	5.0	13.4	6.1	2.0	17.4	14.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	95.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 43.1

HCM 6th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

51: US 27 & Minute Maid Ramp Rd 2/Citrus Ridge Dr

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	63	27	72	51	10	114	48	2580	50	205	3117	72
Future Volume (veh/h)	63	27	72	51	10	114	48	2580	50	205	3117	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1826	1900	1900	1856	1900	1811	1811	1900	1841	1870
Adj Flow Rate, veh/h	64	28	73	52	10	116	49	2633	51	209	3181	73
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	5	0	0	3	0	6	6	0	4	2
Cap, veh/h	32	8	375	35	4	381	53	2587	803	214	3049	962
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.52	0.52	0.24	1.00	1.00
Sat Flow, veh/h	0	34	1547	0	16	1572	1810	4944	1535	1810	5025	1585
Grp Volume(v), veh/h	92	0	73	62	0	116	49	2633	51	209	3181	73
Grp Sat Flow(s),veh/h/ln	35	0	1547	16	0	1572	1810	1648	1535	1810	1675	1585
Q Serve(g_s), s	0.0	0.0	7.1	0.0	0.0	11.5	5.1	99.4	3.1	21.8	115.3	0.0
Cycle Q Clear(g_c), s	46.0	0.0	7.1	46.0	0.0	11.5	5.1	99.4	3.1	21.8	115.3	0.0
Prop In Lane	0.70		1.00	0.84		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	0	375	39	0	381	53	2587	803	214	3049	962
V/C Ratio(X)	2.27	0.00	0.19	1.60	0.00	0.30	0.92	1.02	0.06	0.98	1.04	0.08
Avail Cap(c_a), veh/h	41	0	375	39	0	381	53	2587	803	214	3049	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.6	0.0	57.3	90.4	0.0	58.9	92.0	45.3	22.3	72.2	0.0	0.0
Incr Delay (d2), s/veh	643.0	0.0	0.3	363.0	0.0	0.4	93.6	22.3	0.2	54.2	29.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.6	0.0	5.1	10.5	0.0	8.2	6.8	55.3	2.1	17.7	13.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	728.6	0.0	57.5	453.5	0.0	59.4	185.5	67.6	22.5	126.5	29.0	0.2
LnGrp LOS	F	A	E	F	A	E	F	F	C	F	F	A
Approach Vol, veh/h	165			178			2733			3463		
Approach Delay, s/veh	431.7			196.6			68.9			34.2		
Approach LOS	F			F			E			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.1	123.8		53.1	31.0	106.9		53.1				
Change Period (Y+Rc), s	8.5	* 8.5		* 7.1	8.5	7.5		* 7.1				
Max Green Setting (Gmax), s	5.6	* 1.2E2		* 46	21.5	99.4		* 46				
Max Q Clear Time (g_c+I1), s	7.1	117.3		48.0	23.8	101.4		48.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 63.2

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	94	0	108	10	0	2857	119	155	3144
Future Volume (veh/h)	0	0	0	94	0	108	10	0	2857	119	155	3144
Initial Q (Qb), veh				0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No				No
Adj Sat Flow, veh/h/ln				1856	0	1856		0	1811	1900	1900	1856
Adj Flow Rate, veh/h				97	0	111		0	2945	123	160	3241
Peak Hour Factor				0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	0	3		0	6	0	0	3
Cap, veh/h				153	0	137		0	3168	1032	185	4066
Arrive On Green				0.09	0.00	0.09		0.00	0.64	0.64	0.10	0.80
Sat Flow, veh/h				1767	0	1572		0	5107	1610	1810	5233
Grp Volume(v), veh/h				97	0	111		0	2945	123	160	3241
Grp Sat Flow(s), veh/h/ln				1767	0	1572		0	1648	1610	1810	1689
Q Serve(g_s), s				7.1	0.0	9.2		0.0	70.5	4.0	11.6	46.7
Cycle Q Clear(g_c), s				7.1	0.0	9.2		0.0	70.5	4.0	11.6	46.7
Prop In Lane				1.00		1.00		0.00		1.00	1.00	
Lane Grp Cap(c), veh/h				153	0	137		0	3168	1032	185	4066
V/C Ratio(X)				0.63	0.00	0.81		0.00	0.93	0.12	0.87	0.80
Avail Cap(c_a), veh/h				239	0	213		0	3268	1064	190	4066
HCM Platoon Ratio				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh				58.7	0.0	59.7		0.0	21.3	9.3	58.9	7.2
Incr Delay (d2), s/veh				4.2	0.0	12.5		0.0	5.3	0.0	31.4	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				6.1	0.0	0.9		0.0	32.2	2.2	11.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				63.0	0.0	72.2		0.0	26.5	9.3	90.2	8.3
LnGrp LOS				E	A	E		A	C	A	F	A
Approach Vol, veh/h					208				3068			3401
Approach Delay, s/veh					67.9				25.9			12.1
Approach LOS					E				C			B
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	21.6	93.3		18.3		114.9						
Change Period (Y+Rc), s	8.0	8.0		* 6.7		8.0						
Max Green Setting (Gmax), s	14.0	88.0		* 18		97.0						
Max Q Clear Time (g_c+I1), s	13.6	72.5		11.2		48.7						
Green Ext Time (p_c), s	0.0	12.8		0.3		34.3						
Intersection Summary												
HCM 6th Ctrl Delay				20.2								
HCM 6th LOS				C								
Notes												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

58: US 27 & Hotel Driveway/Ridgewood Lakes Blvd

03/09/2020

Movement	SBR
Left	
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1856
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.97
Percent Heavy Veh, %	3
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

64: US 27 & Massee Rd/Holly Hill Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	29	100	118	19	242	57	2342	26	318	2822	72
Future Volume (veh/h)	100	29	100	118	19	242	57	2342	26	318	2822	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1811	1811	1900	1900	1900	1900	1796	1900	1885	1841	1870
Adj Flow Rate, veh/h	103	30	103	122	20	249	59	2414	27	328	2909	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	6	6	0	0	0	0	7	0	1	4	2
Cap, veh/h	172	68	234	278	23	286	73	1981	650	223	2448	772
Arrive On Green	0.05	0.19	0.19	0.04	0.19	0.19	0.04	0.40	0.40	0.12	0.49	0.49
Sat Flow, veh/h	1781	359	1231	1810	121	1508	1810	4904	1610	1795	5025	1585
Grp Volume(v), veh/h	103	0	133	122	0	269	59	2414	27	328	2909	74
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1810	0	1629	1810	1635	1610	1795	1675	1585
Q Serve(g_s), s	5.7	0.0	9.2	5.0	0.0	20.0	4.0	50.4	1.3	15.5	60.8	3.1
Cycle Q Clear(g_c), s	5.7	0.0	9.2	5.0	0.0	20.0	4.0	50.4	1.3	15.5	60.8	3.1
Prop In Lane	1.00		0.77	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	0	302	278	0	309	73	1981	650	223	2448	772
V/C Ratio(X)	0.60	0.00	0.44	0.44	0.00	0.87	0.81	1.22	0.04	1.47	1.19	0.10
Avail Cap(c_a), veh/h	172	0	650	278	0	666	73	1981	650	223	2448	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	44.7	42.4	0.0	49.1	59.4	37.2	22.5	54.6	32.0	17.2
Incr Delay (d2), s/veh	5.7	0.0	1.0	1.1	0.0	7.5	48.6	103.3	0.1	234.6	89.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.0	6.7	1.8	0.0	13.4	5.0	54.0	0.9	33.2	59.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	0.0	45.7	43.4	0.0	56.5	108.0	140.5	22.6	289.3	121.1	17.3
LnGrp LOS	D	A	D	D	A	E	F	F	C	F	F	B
Approach Vol, veh/h	236			391			2500			3311		
Approach Delay, s/veh	46.1			52.5			138.4			135.4		
Approach LOS	D			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.6	68.6	11.4	31.2	24.0	58.2	11.4	31.2				
Change Period (Y+Rc), s	* 8.6	7.8	6.4	* 7.5	* 8.5	* 7.8	* 5.7	* 7.5				
Max Green Setting (Gmax), s	* 5	60.6	5.0	* 51	* 16	* 50	* 5.7	* 51				
Max Q Clear Time (g_c+I1), s	6.0	62.8	7.0	11.2	17.5	52.4	7.7	22.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay 128.3

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary69: US 27 & Holly Hill Cutoff Rd/North Blvd W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (veh/h)	39	10	22	35	10	95	56	2626	36	75	2908	87
Future Volume (veh/h)	39	10	22	35	10	95	56	2626	36	75	2908	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1900	1841	1841	1826
Adj Flow Rate, veh/h	41	11	23	37	11	100	59	2764	38	79	3061	92
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	0	4	4	5
Cap, veh/h	113	25	198	55	22	97	76	3241	1055	98	3365	1036
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.66	0.66	0.06	0.67	0.67
Sat Flow, veh/h	562	208	1610	199	179	786	1810	4944	1610	1753	5025	1547
Grp Volume(v), veh/h	52	0	23	148	0	0	59	2764	38	79	3061	92
Grp Sat Flow(s),veh/h/ln	770	0	1610	1164	0	0	1810	1648	1610	1753	1675	1547
Q Serve(g_s), s	0.0	0.0	1.9	9.1	0.0	0.0	4.7	64.0	1.2	6.5	75.5	3.1
Cycle Q Clear(g_c), s	8.9	0.0	1.9	18.0	0.0	0.0	4.7	64.0	1.2	6.5	75.5	3.1
Prop In Lane	0.79		1.00	0.25		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	198	174	0	0	76	3241	1055	98	3365	1036
V/C Ratio(X)	0.38	0.00	0.12	0.85	0.00	0.00	0.78	0.85	0.04	0.81	0.91	0.09
Avail Cap(c_a), veh/h	138	0	198	174	0	0	95	3299	1074	118	3428	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.9	0.0	57.2	65.4	0.0	0.0	69.6	19.7	8.9	68.4	20.5	8.5
Incr Delay (d2), s/veh	1.7	0.0	0.3	31.3	0.0	0.0	26.8	2.3	0.0	27.6	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.0	1.4	11.4	0.0	0.0	4.9	29.3	0.7	6.5	34.3	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	57.5	96.7	0.0	0.0	96.4	22.1	8.9	96.0	24.5	8.5
LnGrp LOS	E	A	E	F	A	A	F	C	A	F	C	A
Approach Vol, veh/h	75			148			2861			3232		
Approach Delay, s/veh	60.4			96.7			23.4			25.8		
Approach LOS	E			F			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.5	105.4		23.7	15.4	107.5		23.7				
Change Period (Y+Rc), s	9.3	9.3		* 5.7	9.3	9.3		* 5.7				
Max Green Setting (Gmax), s	9.9	97.8		* 18	7.7	100.0		* 18				
Max Q Clear Time (g_c+I1), s	8.5	66.0		10.9	6.7	77.5		20.0				
Green Ext Time (p_c), s	0.0	26.1		0.1	0.0	20.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	26.8											
HCM 6th LOS	C											
Notes												

HCM 6th Signalized Intersection Summary

72: US 27 & Sanders Rd/Davenport Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	24	36	278	19	297	28	2279	227	350	2604	50
Future Volume (veh/h)	34	24	36	278	19	297	28	2279	227	350	2604	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1752	1752	1870	1781	1781	1900	1811	1870	1841	1826	1900
Adj Flow Rate, veh/h	35	24	37	284	19	303	29	2326	232	357	2657	51
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	10	10	2	8	8	0	6	2	4	5	0
Cap, veh/h	51	113	175	251	16	262	43	2326	746	308	3101	1002
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.02	0.47	0.47	0.18	0.62	0.62
Sat Flow, veh/h	1075	621	958	1341	90	1434	1810	4944	1585	1753	4985	1610
Grp Volume(v), veh/h	35	0	61	284	0	322	29	2326	232	357	2657	51
Grp Sat Flow(s),veh/h/ln	1075	0	1579	1341	0	1523	1810	1648	1585	1753	1662	1610
Q Serve(g_s), s	0.0	0.0	4.7	21.3	0.0	26.0	2.3	67.0	12.9	25.0	61.4	1.8
Cycle Q Clear(g_c), s	26.0	0.0	4.7	26.0	0.0	26.0	2.3	67.0	12.9	25.0	61.4	1.8
Prop In Lane	1.00		0.61	1.00		0.94	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	0	288	251	0	278	43	2326	746	308	3101	1002
V/C Ratio(X)	0.69	0.00	0.21	1.13	0.00	1.16	0.67	1.00	0.31	1.16	0.86	0.05
Avail Cap(c_a), veh/h	51	0	288	251	0	278	191	2326	746	308	3101	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.2	0.0	49.5	62.7	0.0	58.2	68.9	37.7	23.4	58.7	21.8	10.5
Incr Delay (d2), s/veh	33.4	0.0	0.4	96.1	0.0	103.5	16.3	18.6	0.5	101.9	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	0.0	3.4	23.7	0.0	26.6	2.2	37.6	8.3	28.6	29.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.6	0.0	49.8	158.8	0.0	161.7	85.3	56.3	23.9	160.6	24.6	10.5
LnGrp LOS	F	A	D	F	A	F	F	E	C	F	C	B
Approach Vol, veh/h	96			606			2587			3065		
Approach Delay, s/veh	69.8			160.3			53.7			40.2		
Approach LOS	E			F			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	96.2		34.2	33.6	74.6		34.2				
Change Period (Y+Rc), s	* 8.6	7.6		* 8.2	* 8.6	7.6		* 8.2				
Max Green Setting (Gmax), s	* 15	77.0		* 26	* 25	67.0		* 26				
Max Q Clear Time (g_c+I1), s	4.3	63.4		28.0	27.0	69.0		28.0				
Green Ext Time (p_c), s	0.0	13.3		0.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 57.6

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

81: US 27 & Miracle Toyota/Bates Rd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	10	18	354	10	218	14	2589	263	389	2490	10
Future Volume (veh/h)	18	10	18	354	10	218	14	2589	263	389	2490	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1900	1900	1796	1870	1885	1826	1900
Adj Flow Rate, veh/h	19	10	19	369	10	227	15	2697	274	405	2594	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	0	0	0	7	2	1	5	0
Cap, veh/h	64	27	52	237	11	258	28	2669	863	140	3028	978
Arrive On Green	0.02	0.05	0.05	0.13	0.17	0.17	0.02	0.54	0.54	0.08	0.61	0.61
Sat Flow, veh/h	3510	586	1114	1795	68	1552	1810	4904	1585	1795	4985	1610
Grp Volume(v), veh/h	19	0	29	369	0	237	15	2697	274	405	2594	10
Grp Sat Flow(s),veh/h/ln	1755	0	1700	1795	0	1621	1810	1635	1585	1795	1662	1610
Q Serve(g_s), s	0.8	0.0	2.5	19.8	0.0	21.4	1.2	81.6	7.1	11.7	63.9	0.4
Cycle Q Clear(g_c), s	0.8	0.0	2.5	19.8	0.0	21.4	1.2	81.6	7.1	11.7	63.9	0.4
Prop In Lane	1.00		0.66	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	79	237	0	269	28	2669	863	140	3028	978
V/C Ratio(X)	0.30	0.00	0.37	1.56	0.00	0.88	0.54	1.01	0.32	2.89	0.86	0.01
Avail Cap(c_a), veh/h	164	0	612	237	0	639	72	2669	863	140	3028	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	0.0	69.3	65.1	0.0	61.1	73.3	34.2	4.7	69.2	24.1	11.6
Incr Delay (d2), s/veh	2.5	0.0	2.8	271.3	0.0	9.0	14.9	20.1	1.0	870.6	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	2.1	41.5	0.0	14.4	1.2	44.2	8.7	60.5	31.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.2	0.0	72.1	336.4	0.0	70.1	88.2	54.3	5.7	939.8	27.5	11.7
LnGrp LOS	E	A	E	F	A	E	F	F	A	F	C	B
Approach Vol, veh/h		48			606			2986			3009	
Approach Delay, s/veh		73.4			232.3			50.0			150.2	
Approach LOS		E			F			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	98.7	8.9	31.8	20.0	89.2	26.7	14.1				
Change Period (Y+Rc), s	8.2	7.6	* 6.2	* 6.9	* 8.3	7.6	* 6.9	7.1				
Max Green Setting (Gmax), s	6.0	49.1	* 7	* 59	* 12	43.3	* 11	54.0				
Max Q Clear Time (g_c+I1), s	3.2	65.9	2.8	23.4	13.7	83.6	21.8	4.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 112.1

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary84: US 27 & Glen Este Blvd/Southern Dunes Blvd

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	63	63	249	50	102	95	2516	267	110	2767	56
Future Volume (veh/h)	141	63	63	249	50	102	95	2516	267	110	2767	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1885	1900	1870	1885	1796	1870	1870	1826	1841
Adj Flow Rate, veh/h	147	66	66	259	52	106	99	2621	278	115	2882	58
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	1	0	2	1	7	2	2	5	4
Cap, veh/h	172	78	78	314	198	165	278	2571	831	138	2230	698
Arrive On Green	0.09	0.09	0.09	0.09	0.10	0.10	0.15	0.52	0.52	0.08	0.45	0.45
Sat Flow, veh/h	1810	858	858	3483	1900	1585	1795	4904	1585	1781	4985	1560
Grp Volume(v), veh/h	147	0	132	259	52	106	99	2621	278	115	2882	58
Grp Sat Flow(s),veh/h/ln	1810	0	1716	1742	1900	1585	1795	1635	1585	1781	1662	1560
Q Serve(g_s), s	12.0	0.0	11.4	11.0	3.8	9.6	7.4	78.7	15.2	9.5	67.1	2.1
Cycle Q Clear(g_c), s	12.0	0.0	11.4	11.0	3.8	9.6	7.4	78.7	15.2	9.5	67.1	2.1
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	0	156	314	198	165	278	2571	831	138	2230	698
V/C Ratio(X)	0.86	0.00	0.85	0.83	0.26	0.64	0.36	1.02	0.33	0.83	1.29	0.08
Avail Cap(c_a), veh/h	281	0	206	478	198	165	278	2571	831	274	2230	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.9	0.0	67.2	67.1	61.9	64.5	56.7	35.7	20.6	68.2	41.5	10.5
Incr Delay (d2), s/veh	13.2	0.0	21.4	7.0	0.7	8.3	3.6	22.8	1.1	12.1	135.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	0.0	10.0	9.0	3.4	7.7	6.4	44.2	10.1	8.2	77.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.1	0.0	88.6	74.1	62.6	72.8	60.3	58.4	21.7	80.3	176.5	10.7
LnGrp LOS	F	A	F	E	E	E	E	F	C	F	F	B
Approach Vol, veh/h		279			417			2998			3055	
Approach Delay, s/veh		84.1			72.4			55.1			169.8	
Approach LOS		F			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.1	74.0	20.9	25.0	18.5	85.6	22.9	23.0				
Change Period (Y+Rc), s	6.9	6.9	* 6.7	* 9.4	6.9	6.9	* 9.4	* 9.4				
Max Green Setting (Gmax), s	14.1	67.1	* 23	* 16	23.1	58.1	* 21	* 18				
Max Q Clear Time (g_c+I1), s	9.4	69.1	14.0	11.6	11.5	80.7	13.0	13.4				
Green Ext Time (p_c), s	0.1	0.0	0.2	0.2	0.2	0.0	0.5	0.2				

Intersection Summary

HCM 6th Ctrl Delay 109.3

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

87: US 27 & Old Polk City Rd/Main St W

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	160	239	108	118	99	380	2513	54	132	2559	221
Future Volume (veh/h)	225	160	239	108	118	99	380	2513	54	132	2559	221
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1796	1885	1870	1870	1752	1811	1841	1856	1811	1856
Adj Flow Rate, veh/h	234	167	249	112	123	103	396	2618	56	138	2666	230
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	7	1	2	2	10	6	4	3	6	3
Cap, veh/h	254	344	280	210	344	292	201	2679	845	90	2317	737
Arrive On Green	0.03	0.18	0.18	0.03	0.18	0.18	0.04	0.18	0.18	0.05	0.47	0.47
Sat Flow, veh/h	1781	1870	1522	1795	1870	1585	1668	4944	1560	1767	4944	1572
Grp Volume(v), veh/h	234	167	249	112	123	103	396	2618	56	138	2666	230
Grp Sat Flow(s),veh/h/ln	1781	1870	1522	1795	1870	1585	1668	1648	1560	1767	1648	1572
Q Serve(g_s), s	5.0	12.0	23.9	5.0	8.6	8.5	18.1	79.0	4.5	7.6	70.3	13.7
Cycle Q Clear(g_c), s	5.0	12.0	23.9	5.0	8.6	8.5	18.1	79.0	4.5	7.6	70.3	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	344	280	210	344	292	201	2679	845	90	2317	737
V/C Ratio(X)	0.92	0.48	0.89	0.53	0.36	0.35	1.97	0.98	0.07	1.54	1.15	0.31
Avail Cap(c_a), veh/h	254	574	467	210	574	486	201	2679	845	90	2317	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	54.8	59.7	53.7	53.4	53.4	72.0	60.7	30.1	71.2	39.9	24.8
Incr Delay (d2), s/veh	36.3	1.1	11.2	2.6	0.6	0.7	452.7	12.8	0.2	291.4	73.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.1	9.7	15.3	3.0	7.5	6.2	52.6	48.3	3.1	17.8	59.3	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.8	55.9	70.9	56.3	54.1	54.1	524.7	73.5	30.2	362.6	113.2	25.9
LnGrp LOS	F	E	E	E	D	D	F	E	C	F	F	C
Approach Vol, veh/h	650			338			3070			3034		
Approach Delay, s/veh	76.7			54.8			130.9			117.9		
Approach LOS	E			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.0	77.2	12.1	34.7	15.0	88.2	12.1	34.7				
Change Period (Y+Rc), s	7.9	6.9	7.1	7.1	7.4	6.9	7.1	7.1				
Max Green Setting (Gmax), s	18.1	51.9	5.0	46.0	7.6	62.9	5.0	46.0				
Max Q Clear Time (g_c+I1), s	20.1	72.3	7.0	10.6	9.6	81.0	7.0	25.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay 116.7

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

90: US 27 & Commerce Ave

03/09/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	10	36	82	10	62	63	2670	155	99	2962	80
Future Volume (veh/h)	89	10	36	82	10	62	63	2670	155	99	2962	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1900	1900	1707	1900	1900	1900	1811	1693	1693	1826	1885
Adj Flow Rate, veh/h	93	10	38	85	10	65	66	2781	161	103	3085	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	13	0	0	0	6	14	14	5	1
Cap, veh/h	157	44	166	172	28	180	84	1651	479	334	2447	784
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.05	0.33	0.33	0.28	0.65	0.65
Sat Flow, veh/h	1293	346	1317	1239	219	1424	1810	4944	1434	1612	4985	1598
Grp Volume(v), veh/h	93	0	48	85	0	75	66	2781	161	103	3085	83
Grp Sat Flow(s),veh/h/ln	1293	0	1663	1239	0	1644	1810	1648	1434	1612	1662	1598
Q Serve(g_s), s	10.6	0.0	3.9	9.9	0.0	6.3	5.4	50.1	12.6	7.6	73.6	2.9
Cycle Q Clear(g_c), s	16.9	0.0	3.9	13.8	0.0	6.3	5.4	50.1	12.6	7.6	73.6	2.9
Prop In Lane	1.00		0.79	1.00		0.87	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	210	172	0	208	84	1651	479	334	2447	784
V/C Ratio(X)	0.59	0.00	0.23	0.49	0.00	0.36	0.78	1.68	0.34	0.31	1.26	0.11
Avail Cap(c_a), veh/h	179	0	238	172	0	208	151	1651	479	334	2447	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	0.0	58.9	65.2	0.0	60.0	70.8	50.0	37.5	45.8	26.0	13.8
Incr Delay (d2), s/veh	4.0	0.0	0.5	2.2	0.0	1.1	14.6	310.5	1.9	2.4	120.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	0.0	3.1	5.9	0.0	4.9	5.1	104.6	8.2	5.7	72.8	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	0.0	59.5	67.3	0.0	61.0	85.3	360.4	39.4	48.2	146.9	14.0
LnGrp LOS	E	A	E	E	A	E	F	F	D	D	F	B
Approach Vol, veh/h	141			160			3008			3271		
Approach Delay, s/veh	67.5			64.4			337.2			140.5		
Approach LOS	E			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	80.5		26.5	38.0	57.0		26.5				
Change Period (Y+Rc), s	7.5	6.9		7.5	6.9	6.9		* 7.5				
Max Green Setting (Gmax), s	12.5	68.1		21.5	31.1	50.1		* 19				
Max Q Clear Time (g_c+I1), s	7.4	75.6		18.9	9.6	52.1		15.8				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.2	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay 227.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC

18: US 27 & Central Grove Rd/Terra del Sol Blvd

03/09/2020

Intersection												
Int Delay, s/veh	225											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	73	10	23	10	10	18	31	2020	17	24	2414	109
Future Vol, veh/h	73	10	23	10	10	18	31	2020	17	24	2414	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	605	-	460	550	-	420
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	6	0	0	0	5	3	9	0	3	0
Mvmt Flow	77	11	24	11	11	19	33	2126	18	25	2541	115

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3513	4801	1271	3264	4898	1063	2656	0	0	2144	0	0
Stage 1	2591	2591	-	2192	2192	-	-	-	-	-	-	-
Stage 2	922	2210	-	1072	2706	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.22	6.4	6.5	7.1	5.4	-	-	5.3	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.96	3.8	4	3.9	3.15	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 7	~ 1	132	~ 10	~ 1	191	55	-	-	108	-	-
Stage 1	~ 14	52	-	29	84	-	-	-	-	-	-	-
Stage 2	266	83	-	215	46	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 3	0	132	~ 4	0	191	55	-	-	108	-	-
Mov Cap-2 Maneuver	~ 5	~ 6	-	~ 10	~ 2	-	-	-	-	-	-	-
Stage 1	~ 6	40	-	12	34	-	-	-	-	-	-	-
Stage 2	~ 66	33	-	99	35	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, \$	9113.5	2607.1	2.1	0.5
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	55	-	-	6 3 191	108	-	-
HCM Lane V/C Ratio	0.593	-	-	18.596 7.018 0.099	0.234	-	-
HCM Control Delay (s)	139.7	-	-	\$ 9113 \$ 4930.2	25.9 48.2	-	-
HCM Lane LOS	F	-	-	F F D	E	-	-
HCM 95th %tile Q(veh)	2.4	-	-	15.8 4.2 0.3	0.8	-	-

Notes

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

HCM 6th TWSC

24: US 27 & Cardiff Ave/Tri County 1 Rd

03/09/2020

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔↔↔	↔	↔	↔↔↔	↔
Traffic Vol, veh/h	27	10	35	12	10	15	64	1978	21	28	2397	39
Future Vol, veh/h	27	10	35	12	10	15	64	1978	21	28	2397	39
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	-	-	100	-	-	-	580	-	430	515	-	435
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	6	0	0	0	0	3	0	0	3	3
Mvmt Flow	28	11	37	13	11	16	67	2082	22	29	2523	41

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3553	4819	1262	3289	4838	1041	2564	0	0	2104	0	0
Stage 1	2581	2581	-	2216	2216	-	-	-	-	-	-	-
Stage 2	972	2238	-	1073	2622	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.22	6.4	6.5	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.96	3.8	4	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 7	~ 1	134	~ 10	~ 1	198	~ 66	-	-	114	-	-
Stage 1	~ 15	53	-	27	82	-	-	-	-	-	-	-
Stage 2	248	80	-	215	50	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	134	-	0	198	~ 66	-	-	114	-	-
Mov Cap-2 Maneuver	32	~ 96	-	~ 10	0	-	-	-	-	-	-	-
Stage 1	~ 15	40	-	27	0	-	-	-	-	-	-	-
Stage 2	-	0	-	86	37	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			6.9	0.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 66	-	-	-	134	-	114	-	-
HCM Lane V/C Ratio	1.021	-	-	-	0.275	-	0.259	-	-
HCM Control Delay (s)	222.6	-	-	-	41.8	-	47.2	-	-
HCM Lane LOS	F	-	-	-	E	-	E	-	-
HCM 95th %tile Q(veh)	5.1	-	-	-	1	-	1	-	-

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

HCM 6th TWSC

30: US 27 & Laurel Estates Entrance

03/09/2020

Intersection							
Int Delay, s/veh	6.7						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↑↑↑	↰	↑↑↑	↱
Traffic Vol, veh/h	27	36	85	2014	28	2370	48
Future Vol, veh/h	27	36	85	2014	28	2370	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	550	-	495	-	325
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	3	0	3	0
Mvmt Flow	29	38	90	2143	30	2521	51

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	3618	1261	2572	0	1564	-	0
Stage 1	2581	-	-	-	-	-	-
Stage 2	1037	-	-	-	-	-	-
Critical Hdwy	5.7	7.16	5.3	-	5.6	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	3.93	3.1	-	2.3	-	-
Pot Cap-1 Maneuver	~ 12	137	~ 65	-	217	-	-
Stage 1	~ 24	-	-	-	-	-	-
Stage 2	277	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	0	137	~ 65	-	217	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	239	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s		14.3	0.3
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	~ 65	-	-	137	217	-	-
HCM Lane V/C Ratio	1.391	-	-	0.28	0.137	-	-
HCM Control Delay (s)	\$ 354.4	-	-	41.2	24.2	-	-
HCM Lane LOS	F	-	-	E	C	-	-
HCM 95th %tile Q(veh)	7.6	-	-	1.1	0.5	-	-

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

HCM 6th TWSC

55: US 27 & Holly Hill Grove Rd 2/Cottonwood Rd

03/09/2020

Intersection												
Int Delay, s/veh	14.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	14	24	10	65	30	2783	58	87	3298	20
Future Vol, veh/h	10	10	14	24	10	65	30	2783	58	87	3298	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	505	-	485	515	-	450
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	8	0	3	0	4	2	6	3	0
Mvmt Flow	10	10	15	25	10	68	31	2899	60	91	3435	21

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4844	6638	1718	4522	6599	1450	3456	0	0	2959	0	0
Stage 1	3617	3617	-	2961	2961	-	-	-	-	-	-	-
Stage 2	1227	3021	-	1561	3638	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.56	6.5	7.16	5.3	-	-	5.42	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.46	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.88	4	3.93	3.1	-	-	3.16	-	-
Pot Cap-1 Maneuver	~ 1	0	69	~ 1	0	102	~ 22	-	-	~ 37	-	-
Stage 1	~ 2	15	-	~ 7	33	-	-	-	-	-	-	-
Stage 2	172	31	-	98	14	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	69	-	0	102	~ 22	-	-	~ 37	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 9	0	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	~ 7	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			6.3	22.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~ 22	-	-	-	~ 37	-	-
HCM Lane V/C Ratio	1.42	-	-	-	2.449	-	-
HCM Control Delay (s)	\$ 600.2	-	-	-	\$ 890.5	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	4	-	-	-	10.1	-	-

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

HCM 6th TWSC

61: US 27 & Holly Hill Tank Rd/Florida Development Rd

03/09/2020

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	10	27	10	30	15	2958	51	52	3159	10
Future Vol, veh/h	10	10	10	27	10	30	15	2958	51	52	3159	10
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	-	-	-	-	-	-	495	-	380	490	-	430
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	8	0	4	0	6	5	5	4	20
Mvmt Flow	10	10	10	28	10	31	15	3049	53	54	3257	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4620	6497	1629	4495	6454	1525	3267	0	0	3102	0	0
Stage 1	3365	3365	-	3079	3079	-	-	-	-	-	-	-
Stage 2	1255	3132	-	1416	3375	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.56	6.5	7.18	5.3	-	-	5.4	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.46	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.86	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.88	4	3.94	3.1	-	-	3.15	-	-
Pot Cap-1 Maneuver	~ 1	0	79	~ 1	0	90	28	-	-	~ 32	-	-
Stage 1	~ 4	20	-	~ 5	29	-	-	-	-	-	-	-
Stage 2	165	27	-	122	20	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	79	-	0	90	28	-	-	~ 32	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 3	89	-	-	-	-	-	-	-
Stage 1	~ 2	0	-	~ 2	13	-	-	-	-	-	-	-
Stage 2	~ 10	13	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.2	9.7
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	28	-	-	-	~ 32	-	-
HCM Lane V/C Ratio	0.552	-	-	-	1.675	-	-
HCM Control Delay (s)	238	-	-	-	\$ 597.9	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-	6	-	-

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

HCM 6th TWSC
67: US 27 & La Casa Del Sol Blvd

PM Peak Hour

03/09/2020

Intersection							
Int Delay, s/veh	3.6						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↑↑↑	↰	↑↑↑	↱
Traffic Vol, veh/h	10	10	10	2679	10	3068	17
Future Vol, veh/h	10	10	10	2679	10	3068	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	510	-	510	-	400
Veh in Median Storage, #	1	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	6	0	4	0
Mvmt Flow	10	10	10	2791	10	3196	18
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	4352	1598	3214	0	2037	-	0
Stage 1	3216	-	-	-	-	-	-
Stage 2	1136	-	-	-	-	-	-
Critical Hdwy	5.7	7.1	5.3	-	5.6	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	3.9	3.1	-	2.3	-	-
Pot Cap-1 Maneuver	~ 4	83	30	-	118	-	-
Stage 1	~ 9	-	-	-	-	-	-
Stage 2	245	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	~ 2	83	30	-	118	-	-
Mov Cap-2 Maneuver	~ 5	-	-	-	-	-	-
Stage 1	~ 6	-	-	-	-	-	-
Stage 2	224	-	-	-	-	-	-
Approach	EB		NB		SB		
HCM Control Delay, s	940.1		0.7		0.1		
HCM LOS	F						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	30	-	5	83	118	-	-
HCM Lane V/C Ratio	0.347	-	2.083	0.126	0.088	-	-
HCM Control Delay (s)	178.9	\$	1825.7	54.5	38.4	-	-
HCM Lane LOS	F	-	F	F	E	-	-
HCM 95th %tile Q(veh)	1.1	-	2.3	0.4	0.3	-	-
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

HCM 6th TWSC
75: US 27 & South Blvd

PM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	32											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	29	10	21	63	10	116	16	2704	75	123	2901	13
Future Vol, veh/h	29	10	21	63	10	116	16	2704	75	123	2901	13
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	-	-	-	-	-	-	400	-	300	510	-	260
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	7	0	40	3	0	3	27	6	0	2	4	58
Mvmt Flow	32	11	23	69	11	127	18	2971	82	135	3188	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4688	6547	1594	4558	6479	1486	3202	0	0	3053	0	0
Stage 1	3458	3458	-	3007	3007	-	-	-	-	-	-	-
Stage 2	1230	3089	-	1551	3472	-	-	-	-	-	-	-
Critical Hdwy	6.54	6.5	7.9	6.46	6.5	7.16	5.84	-	-	5.34	-	-
Critical Hdwy Stg 1	7.44	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.84	5.5	-	6.76	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.87	4	4.3	3.83	4	3.93	3.37	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 1	0	57	~ 1	0	~ 96	19	-	-	~ 35	-	-
Stage 1	~ 3	18	-	~ 7	32	-	-	-	-	-	-	-
Stage 2	162	28	-	104	18	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	57	-	0	~ 96	19	-	-	~ 35	-	-
Mov Cap-2 Maneuver	0	0	-	0	~ 2	-	-	-	-	-	-	-
Stage 1	0	0	-	0	~ 2	-	-	-	-	-	-	-
Stage 2	~ 13	~ 1	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2.6	61.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	-	~ 35	-	-
HCM Lane V/C Ratio	0.925	-	-	-	3.862	-	-
HCM Control Delay (s)	\$ 459.1	-	-	-	\$ 1522.1	-	-
HCM Lane LOS	F	-	-	-	F	-	-
HCM 95th %tile Q(veh)	2.5	-	-	-	15.7	-	-

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

HCM 6th TWSC

78: US 27 & Section 7 Airport Rd/Patterson Rd

03/09/2020

Intersection													
Int Delay, s/veh	60.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔		↑↑↑	↔	↔	↑↑↑	
Traffic Vol, veh/h	0	0	0	68	0	87	10	0	2683	200	172	2884	0
Future Vol, veh/h	0	0	0	68	0	87	10	0	2683	200	172	2884	0
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	345	-	280	405	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	3	0	0	6	3	2	4	0
Mvmt Flow	0	0	0	72	0	93	11	0	2854	213	183	3068	0

Major/Minor	Minor2		Minor1		Major1		Major2							
Conflicting Flow All	4598	6523	1534	4469	6310	1427	2240	-	0	0	3067	0	0	0
Stage 1	3434	3434	-	2876	2876	-	-	-	-	-	-	-	-	-
Stage 2	1164	3089	-	1593	3434	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.16	5.6	-	-	-	5.34	-	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	3.93	2.3	-	-	-	3.12	-	-	-
Pot Cap-1 Maneuver	1	0	92	~2	0	106	90	0	-	-	~35	-	-	-
Stage 1	3	18	-	~9	37	-	-	0	-	-	-	-	-	-
Stage 2	189	28	-	101	18	-	-	0	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	0	92	-	0	106	90	-	-	-	~35	-	-	-
Mov Cap-2 Maneuver	3	0	-	~44	~-15	-	-	-	-	-	-	-	-	-
Stage 1	3	0	-	~8	32	-	-	-	-	-	-	-	-	-
Stage 2	21	25	-	-	0	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0		0.2	119.9
HCM LOS	A	-		

Minor Lane/Major Mvmt	NBU	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	90	-	-	-	~35	-	-
HCM Lane V/C Ratio	0.118	-	-	-	5.228	-	-
HCM Control Delay (s)	50.3	-	-	0	\$2130.1	-	-
HCM Lane LOS	F	-	-	A	F	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-	21.7	-	-

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

HCM 6th TWSC
93: US 27 & W Johnson Ave

PM Peak Hour

03/09/2020

Intersection												
Int Delay, s/veh	15											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑↑	↕	↕	↑↑↑	↕
Traffic Vol, veh/h	10	10	47	10	10	41	55	2832	10	82	2891	11
Future Vol, veh/h	10	10	47	10	10	41	55	2832	10	82	2891	11
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	-	-	-	-	-	-	305	-	220	300	-	290
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	33	0	8	3	6	17	2	5	0
Mvmt Flow	10	10	49	10	10	43	57	2950	10	85	3011	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	4480	6255	1506	4443	6256	1475	3022	0	0	2960	0	0
Stage 1	3181	3181	-	3064	3064	-	-	-	-	-	-	-
Stage 2	1299	3074	-	1379	3192	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	7.06	6.5	7.26	5.36	-	-	5.34	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.96	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	4.13	4	3.98	3.13	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 2	0	96	~ 1	0	94	~ 36	-	-	~ 40	-	-
Stage 1	~ 5	25	-	~ 4	29	-	-	-	-	-	-	-
Stage 2	155	29	-	104	25	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	96	-	0	94	~ 36	-	-	~ 40	-	-
Mov Cap-2 Maneuver	~ 5	0	-	~ 4	0	-	-	-	-	-	-	-
Stage 1	~ 5	0	-	~ 4	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					10.2		20.3					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	~ 36	-	-	-	-	~ 40	-	-				
HCM Lane V/C Ratio	1.591	-	-	-	-	2.135	-	-				
HCM Control Delay (s)	\$ 536.9	-	-	-	-	\$ 740	-	-				
HCM Lane LOS	F	-	-	-	-	F	-	-				
HCM 95th %tile Q(veh)	6.2	-	-	-	-	9.2	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th Signalized Intersection Summary

3: US 27 & SR 544

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 		 	 	  	 	  	  	 
Traffic Volume (veh/h)	648	327	203	147	252	158	233	1726	64	199	1889	654
Future Volume (veh/h)	648	327	203	147	252	158	233	1726	64	199	1889	654
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1826	1870	1885	1663	1900	1796	1856	1796	1811	1796
Adj Flow Rate, veh/h	668	337	209	152	260	163	240	1779	0	205	1947	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	0	5	2	1	16	0	7	3	7	6	7
Cap, veh/h	466	380	310	195	365	273	230	1992		218	2008	
Arrive On Green	0.08	0.20	0.20	0.07	0.19	0.19	0.13	0.41	0.00	0.13	0.41	0.00
Sat Flow, veh/h	3346	1900	1547	1781	1885	1409	1810	4904	1572	1711	4944	1522
Grp Volume(v), veh/h	668	337	209	152	260	163	240	1779	0	205	1947	0
Grp Sat Flow(s),veh/h/ln	1673	1900	1547	1781	1885	1409	1810	1635	1572	1711	1648	1522
Q Serve(g_s), s	12.1	27.1	19.6	10.8	20.3	16.6	20.0	53.2	0.0	18.7	60.6	0.0
Cycle Q Clear(g_c), s	12.1	27.1	19.6	10.8	20.3	16.6	20.0	53.2	0.0	18.7	60.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	380	310	195	365	273	230	1992		218	2008	
V/C Ratio(X)	1.43	0.89	0.67	0.78	0.71	0.60	1.04	0.89		0.94	0.97	
Avail Cap(c_a), veh/h	466	604	492	195	588	439	230	1993		218	2010	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.2	61.1	58.1	49.1	59.3	57.8	68.6	43.5	0.0	68.0	45.7	0.0
Incr Delay (d2), s/veh	206.5	9.5	2.6	17.9	2.6	2.1	70.9	5.9	0.0	44.9	13.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	26.7	19.8	12.3	9.5	14.8	10.0	19.9	29.1	0.0	16.0	34.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	263.7	70.7	60.7	67.0	61.9	59.9	139.5	49.5	0.0	112.9	59.5	0.0
LnGrp LOS	F	E	E	E	E	E	F	D		F	E	
Approach Vol, veh/h		1214			575			2019	A		2152	A
Approach Delay, s/veh		175.2			62.6			60.2			64.6	
Approach LOS		F			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.0	71.9	19.0	37.4	29.0	71.9	18.0	38.4				
Change Period (Y+Rc), s	9.0	8.0	6.9	6.9	9.0	8.0	6.9	6.9				
Max Green Setting (Gmax), s	20.0	63.9	12.1	49.0	20.0	63.9	11.1	50.0				
Max Q Clear Time (g_c+I1), s	22.0	62.6	14.1	22.3	20.7	55.2	12.8	29.1				
Green Ext Time (p_c), s	0.0	1.2	0.0	1.8	0.0	7.9	0.0	2.3				

Intersection Summary

HCM 6th Ctrl Delay 85.4

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

9: US 27 & Kokomo Rd

03/10/2020

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	105	177	1993	107	264	1951
Future Volume (veh/h)	105	177	1993	107	264	1951
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1796	1856	1856	1811
Adj Flow Rate, veh/h	108	182	2055	0	272	2011
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	7	3	3	6
Cap, veh/h	116	195	2387		296	3528
Arrive On Green	0.19	0.19	0.49	0.00	0.17	0.71
Sat Flow, veh/h	609	1026	5065	1572	1767	5107
Grp Volume(v), veh/h	291	0	2055	0	272	2011
Grp Sat Flow(s),veh/h/ln	1640	0	1635	1572	1767	1648
Q Serve(g_s), s	26.9	0.0	56.9	0.0	23.3	30.2
Cycle Q Clear(g_c), s	26.9	0.0	56.9	0.0	23.3	30.2
Prop In Lane	0.37	0.63		1.00	1.00	
Lane Grp Cap(c), veh/h	312	0	2387		296	3528
V/C Ratio(X)	0.93	0.00	0.86		0.92	0.57
Avail Cap(c_a), veh/h	355	0	2676		390	4080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	61.3	0.0	34.9	0.0	63.0	10.6
Incr Delay (d2), s/veh	29.2	0.0	2.8	0.0	22.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.8	0.0	29.4	0.0	17.7	14.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	90.4	0.0	37.7	0.0	85.4	10.8
LnGrp LOS	F	A	D		F	B
Approach Vol, veh/h	291		2055	A		2283
Approach Delay, s/veh	90.4		37.7			19.7
Approach LOS	F		D			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	34.9	84.0			118.8	34.9
Change Period (Y+Rc), s	* 9.1	* 9.1			* 9.1	5.7
Max Green Setting (Gmax), s	* 34	* 84			* 1.3E2	33.3
Max Q Clear Time (g_c+I1), s	25.3	58.9			32.2	28.9
Green Ext Time (p_c), s	0.5	15.9			26.3	0.4

Intersection Summary

HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

12: US 27 & Crump Rd/W Main St

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	29	27	24	19	17	25	1939	72	49	1919	118
Future Volume (veh/h)	67	29	27	24	19	17	25	1939	72	49	1919	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1841	1841	1841	1900	1900	1900	1796	1870	1856	1781	1856
Adj Flow Rate, veh/h	71	31	29	26	20	18	27	2063	77	52	2041	126
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	0	0	0	7	2	3	8	3
Cap, veh/h	160	77	72	136	71	64	46	2563	828	68	2604	842
Arrive On Green	0.09	0.09	0.09	0.08	0.08	0.08	0.03	0.52	0.52	0.04	0.54	0.54
Sat Flow, veh/h	1810	875	818	1753	921	829	1810	4904	1585	1767	4863	1572
Grp Volume(v), veh/h	71	0	60	26	0	38	27	2063	77	52	2041	126
Grp Sat Flow(s),veh/h/ln	1810	0	1693	1753	0	1751	1810	1635	1585	1767	1621	1572
Q Serve(g_s), s	4.2	0.0	3.7	1.5	0.0	2.3	1.6	38.6	2.7	3.2	37.4	4.5
Cycle Q Clear(g_c), s	4.2	0.0	3.7	1.5	0.0	2.3	1.6	38.6	2.7	3.2	37.4	4.5
Prop In Lane	1.00		0.48	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	149	136	0	135	46	2563	828	68	2604	842
V/C Ratio(X)	0.45	0.00	0.40	0.19	0.00	0.28	0.59	0.81	0.09	0.77	0.78	0.15
Avail Cap(c_a), veh/h	487	0	456	472	0	471	406	2640	853	396	2618	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	0.0	48.0	48.2	0.0	48.5	53.7	21.9	13.4	53.1	20.7	13.1
Incr Delay (d2), s/veh	1.9	0.0	1.7	0.7	0.0	1.1	11.3	2.2	0.1	16.5	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	2.9	1.3	0.0	1.9	1.6	19.3	1.6	3.0	18.4	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	0.0	49.8	48.8	0.0	49.6	65.1	24.1	13.5	69.6	22.6	13.2
LnGrp LOS	D	A	D	D	A	D	E	C	B	E	C	B
Approach Vol, veh/h	131			64			2167			2219		
Approach Delay, s/veh	50.0			49.3			24.2			23.2		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	66.9		16.8	12.5	65.4		16.7				
Change Period (Y+Rc), s	8.2	7.2		7.0	8.2	7.2		8.1				
Max Green Setting (Gmax), s	25.0	60.0		30.0	25.0	60.0		30.0				
Max Q Clear Time (g_c+I1), s	3.6	39.4		6.2	5.2	40.6		4.3				
Green Ext Time (p_c), s	0.0	18.6		0.5	0.1	17.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay 24.8

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

18: US 27 & SR 542/Dundee Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	469	408	320	534	76	496	1558	166	140	915	360
Future Volume (veh/h)	287	469	408	320	534	76	496	1558	166	140	915	360
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1900	1900	1841	1856	1870	1885	1781	1841	1900	1796	1826
Adj Flow Rate, veh/h	302	494	429	337	562	80	522	1640	175	147	963	379
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	0	0	4	3	2	1	8	4	0	7	5
Cap, veh/h	331	419	355	204	438	374	349	1842	591	170	1374	434
Arrive On Green	0.10	0.22	0.22	0.12	0.24	0.24	0.19	0.38	0.38	0.09	0.28	0.28
Sat Flow, veh/h	3401	1900	1610	1753	1856	1585	1795	4863	1560	1810	4904	1547
Grp Volume(v), veh/h	302	494	429	337	562	80	522	1640	175	147	963	379
Grp Sat Flow(s),veh/h/ln	1700	1900	1610	1753	1856	1585	1795	1621	1560	1810	1635	1547
Q Serve(g_s), s	13.6	34.0	34.0	18.0	36.4	6.3	30.0	48.8	12.1	12.4	27.1	36.0
Cycle Q Clear(g_c), s	13.6	34.0	34.0	18.0	36.4	6.3	30.0	48.8	12.1	12.4	27.1	36.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	419	355	204	438	374	349	1842	591	170	1374	434
V/C Ratio(X)	0.91	1.18	1.21	1.65	1.28	0.21	1.50	0.89	0.30	0.87	0.70	0.87
Avail Cap(c_a), veh/h	331	419	355	204	438	374	349	1842	591	234	1652	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	60.2	60.2	68.2	59.0	47.5	62.2	44.9	33.6	69.0	49.8	53.0
Incr Delay (d2), s/veh	28.7	103.3	117.7	312.7	144.4	0.3	237.7	5.8	0.2	21.0	0.9	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	40.2	36.9	40.4	50.5	4.5	55.3	27.1	8.1	10.8	16.4	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.7	163.4	177.9	380.9	203.4	47.7	299.9	50.7	33.8	89.9	50.7	65.7
LnGrp LOS	F	F	F	F	F	D	F	D	C	F	D	E
Approach Vol, veh/h	1225			979			2337			1489		
Approach Delay, s/veh	152.3			251.8			105.1			58.4		
Approach LOS	F			F			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	50.5	22.4	43.6	22.7	65.7	24.8	41.2				
Change Period (Y+Rc), s	* 7.9	7.2	7.4	* 7.2	8.2	7.2	* 6.8	* 7.2				
Max Green Setting (Gmax), s	* 30	52.0	15.0	* 34	20.0	52.0	* 18	* 34				
Max Q Clear Time (g_c+I1), s	32.0	38.0	15.6	38.4	14.4	50.8	20.0	36.0				
Green Ext Time (p_c), s	0.0	5.2	0.0	0.0	0.2	1.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 127.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

23: US 27 & Cypress Gardens Blvd/Waverly Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	518	168	839	45	200	35	860	1320	37	40	1184	446
Future Volume (veh/h)	518	168	839	45	200	35	860	1320	37	40	1184	446
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1841	1885	1856	1885	1885	1885	1781	1900	1841	1796	1885
Adj Flow Rate, veh/h	582	189	943	51	225	39	966	1483	42	45	1330	501
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	4	1	3	1	1	1	8	0	4	7	1
Cap, veh/h	627	463	402	65	174	30	678	2475	820	58	1678	547
Arrive On Green	0.18	0.25	0.25	0.04	0.11	0.11	0.19	0.51	0.51	0.03	0.34	0.34
Sat Flow, veh/h	3483	1841	1598	1767	1565	271	3483	4863	1610	1753	4904	1598
Grp Volume(v), veh/h	582	189	943	51	0	264	966	1483	42	45	1330	501
Grp Sat Flow(s),veh/h/ln	1742	1841	1598	1767	0	1836	1742	1621	1610	1753	1635	1598
Q Serve(g_s), s	29.6	15.4	45.2	5.1	0.0	20.0	35.0	38.7	2.4	4.6	44.0	54.0
Cycle Q Clear(g_c), s	29.6	15.4	45.2	5.1	0.0	20.0	35.0	38.7	2.4	4.6	44.0	54.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	627	463	402	65	0	204	678	2475	820	58	1678	547
V/C Ratio(X)	0.93	0.41	2.35	0.78	0.00	1.29	1.42	0.60	0.05	0.78	0.79	0.92
Avail Cap(c_a), veh/h	678	463	402	197	0	204	678	2475	820	195	1773	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	56.1	67.3	85.8	0.0	79.9	72.4	31.2	22.3	86.3	53.4	56.7
Incr Delay (d2), s/veh	18.5	0.6	614.1	18.0	0.0	163.0	199.6	0.4	0.0	19.7	2.3	18.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.8	11.5	136.2	4.8	0.0	28.4	51.3	20.9	1.6	4.3	24.8	31.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.1	56.7	681.4	103.8	0.0	242.8	271.9	31.5	22.3	106.0	55.7	75.4
LnGrp LOS	F	E	F	F	A	F	F	C	C	F	E	E
Approach Vol, veh/h	1714				315				2491			
Approach Delay, s/veh	412.1				220.3				124.6			
Approach LOS	F				F				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.0	69.5	39.3	26.9	14.0	99.5	14.1	52.1				
Change Period (Y+Rc), s	9.0	8.0	7.0	6.9	* 8.1	8.0	7.5	6.9				
Max Green Setting (Gmax), s	35.0	65.0	35.0	20.0	* 20	65.0	20.0	20.0				
Max Q Clear Time (g_c+I1), s	37.0	56.0	31.6	22.0	6.6	40.7	7.1	47.2				
Green Ext Time (p_c), s	0.0	5.5	0.8	0.0	0.0	9.2	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay 188.0

HCM 6th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

26: US 27 & Market Blvd/Star Lake Dr

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	39	10	128	66	10	86	62	2007	30	66	2133	10
Future Volume (veh/h)	39	10	128	66	10	86	62	2007	30	66	2133	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1885	1693	1693	1900	1900	1826	1841	1870	1811	1900
Adj Flow Rate, veh/h	41	10	133	69	10	90	65	2091	31	69	2222	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	14	14	0	0	5	4	2	6	0
Cap, veh/h	43	6	299	45	3	302	83	3038	951	88	3016	982
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	1.00	1.00	0.05	0.61	0.61
Sat Flow, veh/h	0	33	1598	0	17	1610	1810	4985	1560	1781	4944	1610
Grp Volume(v), veh/h	51	0	133	79	0	90	65	2091	31	69	2222	10
Grp Sat Flow(s),veh/h/ln	33	0	1598	17	0	1610	1810	1662	1560	1781	1648	1610
Q Serve(g_s), s	0.0	0.0	11.1	0.0	0.0	7.2	5.3	0.0	0.0	5.7	47.7	0.4
Cycle Q Clear(g_c), s	28.1	0.0	11.1	28.1	0.0	7.2	5.3	0.0	0.0	5.7	47.7	0.4
Prop In Lane	0.80		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	0	299	48	0	302	83	3038	951	88	3016	982
V/C Ratio(X)	1.03	0.00	0.44	1.64	0.00	0.30	0.78	0.69	0.03	0.79	0.74	0.01
Avail Cap(c_a), veh/h	49	0	299	48	0	302	322	3038	951	203	3016	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	0.0	54.0	73.1	0.0	52.5	67.4	0.0	0.0	70.5	20.7	11.5
Incr Delay (d2), s/veh	137.0	0.0	1.0	362.9	0.0	0.5	14.6	1.3	0.1	14.3	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.0	8.1	12.1	0.0	5.4	4.7	0.7	0.0	5.2	23.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	208.6	0.0	55.1	436.0	0.0	53.0	82.0	1.3	0.1	84.8	22.4	11.5
LnGrp LOS	F	A	E	F	A	D	F	A	A	F	C	B
Approach Vol, veh/h		184			169			2187			2301	
Approach Delay, s/veh		97.6			232.0			3.7			24.2	
Approach LOS		F			F			A			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.2	99.8		35.0	15.3	99.7		35.0				
Change Period (Y+Rc), s	8.3	8.3		6.9	7.9	8.3		6.9				
Max Green Setting (Gmax), s	26.7	71.7		28.1	17.1	81.7		28.1				
Max Q Clear Time (g_c+I1), s	7.3	49.7		30.1	7.7	2.0		30.1				
Green Ext Time (p_c), s	0.1	20.2		0.0	0.1	58.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay 25.0

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

29: US 27 & Thompson Nursery Rd/Chalet Suzanne Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	194	309	226	256	332	273	1765	139	297	1506	164
Future Volume (veh/h)	190	194	309	226	256	332	273	1765	139	297	1506	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1900	1856	1885	1841	1900	1885	1811	1900	1900	1811	1811
Adj Flow Rate, veh/h	202	206	329	240	272	353	290	1878	148	316	1602	174
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	0	3	1	4	0	1	6	0	0	6	6
Cap, veh/h	192	281	233	245	272	238	309	2212	720	377	1860	577
Arrive On Green	0.08	0.15	0.15	0.09	0.15	0.15	0.34	0.89	0.89	0.21	0.75	0.75
Sat Flow, veh/h	1767	1900	1572	1795	1841	1610	1795	4944	1610	3510	4944	1535
Grp Volume(v), veh/h	202	206	329	240	272	353	290	1878	148	316	1602	174
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1795	1841	1610	1795	1648	1610	1755	1648	1535
Q Serve(g_s), s	12.2	15.5	22.2	13.2	22.2	16.5	23.5	25.0	1.2	12.9	34.2	5.4
Cycle Q Clear(g_c), s	12.2	15.5	22.2	13.2	22.2	16.5	23.5	25.0	1.2	12.9	34.2	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	281	233	245	272	238	309	2212	720	377	1860	577
V/C Ratio(X)	1.05	0.73	1.41	0.98	1.00	1.48	0.94	0.85	0.21	0.84	0.86	0.30
Avail Cap(c_a), veh/h	192	281	233	245	272	238	348	2212	720	377	1860	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	61.1	63.9	55.5	63.9	35.3	48.5	5.7	2.0	57.7	15.8	12.3
Incr Delay (d2), s/veh	79.5	9.4	209.6	51.8	54.1	237.8	31.2	4.3	0.6	19.6	5.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.6	12.8	34.5	10.1	20.5	34.8	16.4	6.0	1.2	10.1	10.4	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	133.3	70.5	273.5	107.3	117.9	273.1	79.7	10.0	2.6	77.2	21.3	13.6
LnGrp LOS	F	E	F	F	F	F	E	A	A	E	C	B
Approach Vol, veh/h	737			865			2316			2092		
Approach Delay, s/veh	178.3			178.3			18.2			29.1		
Approach LOS	F			F			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.7	65.3	20.0	30.0	25.0	75.0	20.0	30.0				
Change Period (Y+Rc), s	* 8.9	* 8.9	7.8	7.8	8.9	* 7.9	6.8	7.8				
Max Green Setting (Gmax), s	* 29	* 54	12.2	22.2	16.1	* 67	13.2	22.2				
Max Q Clear Time (g_c+I1), s	25.5	36.2	14.2	24.2	14.9	27.0	15.2	24.2				
Green Ext Time (p_c), s	0.3	14.8	0.0	0.0	0.1	31.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 64.7

HCM 6th LOS E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

32: US 27 & Eagle Ridge Mall Ent S

03/10/2020

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	106	29	30	2193	58	44	1916
Future Volume (veh/h)	106	29	30	2193	58	44	1916
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No
Adj Sat Flow, veh/h/ln	1841	1900		1811	1870	1900	1826
Adj Flow Rate, veh/h	116	32		2410	64	48	2105
Peak Hour Factor	0.91	0.91		0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	0		6	2	0	5
Cap, veh/h	168	80		3793	1216	101	4263
Arrive On Green	0.05	0.05		0.77	0.77	0.03	0.86
Sat Flow, veh/h	3401	1610		5107	1585	3510	5149
Grp Volume(v), veh/h	116	32		2410	64	48	2105
Grp Sat Flow(s),veh/h/ln	1700	1610		1648	1585	1755	1662
Q Serve(g_s), s	5.0	2.9		33.2	1.5	2.0	15.9
Cycle Q Clear(g_c), s	5.0	2.9		33.2	1.5	2.0	15.9
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	168	80		3793	1216	101	4263
V/C Ratio(X)	0.69	0.40		0.64	0.05	0.47	0.49
Avail Cap(c_a), veh/h	535	253		3793	1216	447	4263
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	69.1		7.9	4.2	71.7	2.7
Incr Delay (d2), s/veh	5.0	3.3		0.8	0.1	3.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	4.8		14.2	0.7	1.7	4.8
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	75.2	72.4		8.8	4.3	75.1	3.1
LnGrp LOS	E	E		A	A	E	A
Approach Vol, veh/h	148			2474			2153
Approach Delay, s/veh	74.6			8.6			4.7
Approach LOS	E			A			A
Timer - Assigned Phs							
	2			4	5	6	
Phs Duration (G+Y+Rc), s	136.2			13.8	13.2	123.0	
Change Period (Y+Rc), s	7.9			6.4	* 8.9	7.9	
Max Green Setting (Gmax), s	92.1			23.6	* 19	84.1	
Max Q Clear Time (g_c+l1), s	17.9			7.0	4.0	35.2	
Green Ext Time (p_c), s	55.1			0.4	0.1	44.1	
Intersection Summary							
HCM 6th Ctrl Delay			8.9				
HCM 6th LOS			A				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved ignoring U-Turning movement.							
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.							

HCM 6th Signalized Intersection Summary

37: US 27 & Huston Kia/E Mountain Lake Cutoff Rd

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	10	10	84	10	296	13	1833	94	482	1617	10
Future Volume (veh/h)	14	10	10	84	10	296	13	1833	94	482	1617	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1900	1796	1856	1870	1811	1811
Adj Flow Rate, veh/h	15	11	11	91	11	322	14	1992	102	524	1758	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	3	0	7	3	2	6	6
Cap, veh/h	54	39	23	173	17	210	27	1925	617	515	3378	21
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.39	0.39	0.29	0.67	0.67
Sat Flow, veh/h	121	293	175	920	127	1572	1810	4904	1572	1781	5070	32
Grp Volume(v), veh/h	37	0	0	102	0	322	14	1992	102	524	1143	626
Grp Sat Flow(s),veh/h/ln	590	0	0	1047	0	1572	1810	1635	1572	1781	1648	1805
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	18.0	1.0	53.0	5.7	39.0	23.9	23.9
Cycle Q Clear(g_c), s	14.4	0.0	0.0	14.1	0.0	18.0	1.0	53.0	5.7	39.0	23.9	23.9
Prop In Lane	0.41		0.30	0.89		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	116	0	0	190	0	210	27	1925	617	515	2196	1203
V/C Ratio(X)	0.32	0.00	0.00	0.54	0.00	1.54	0.51	1.03	0.17	1.02	0.52	0.52
Avail Cap(c_a), veh/h	116	0	0	190	0	210	67	1925	617	515	2196	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	0.0	0.0	56.8	0.0	58.5	66.0	41.0	26.6	48.0	11.5	11.5
Incr Delay (d2), s/veh	1.6	0.0	0.0	3.0	0.0	263.6	14.0	30.1	0.3	44.4	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	0.0	6.2	0.0	35.5	1.0	34.3	3.8	30.9	12.1	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	0.0	0.0	59.7	0.0	322.1	80.0	71.1	26.9	92.4	11.9	12.3
LnGrp LOS	D	A	A	E	A	F	E	F	C	F	B	B
Approach Vol, veh/h		37			424			2108			2293	
Approach Delay, s/veh		53.8			259.0			69.0			30.4	
Approach LOS		D			F			E			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	98.0		26.0	48.0	61.0		26.0				
Change Period (Y+Rc), s	9.0	8.0		8.0	9.0	8.0		8.0				
Max Green Setting (Gmax), s	5.0	87.0		18.0	39.0	53.0		18.0				
Max Q Clear Time (g_c+I1), s	3.0	25.9		20.0	41.0	55.0		16.4				
Green Ext Time (p_c), s	0.0	37.6		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				67.3								
HCM 6th LOS				E								

HCM 6th Signalized Intersection Summary

40: US 27 & Washington Ave

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	50	30	71	48	96	130	1792	66	148	1578	22
Future Volume (veh/h)	21	50	30	71	48	96	130	1792	66	148	1578	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1663	1663	1693	1633	1633	1885	1796	1707	1885	1796	1500
Adj Flow Rate, veh/h	23	54	33	77	52	104	141	1948	0	161	1715	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	16	16	14	18	18	1	7	13	1	7	27
Cap, veh/h	135	141	86	194	71	142	267	2603		248	2633	682
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.53	0.00	0.06	0.54	0.54
Sat Flow, veh/h	1250	966	590	1186	486	972	1795	4904	1447	1795	4904	1271
Grp Volume(v), veh/h	23	0	87	77	0	156	141	1948	0	161	1715	24
Grp Sat Flow(s),veh/h/ln	1250	0	1557	1186	0	1458	1795	1635	1447	1795	1635	1271
Q Serve(g_s), s	1.6	0.0	4.5	5.6	0.0	9.2	3.1	27.7	0.0	3.6	22.3	0.8
Cycle Q Clear(g_c), s	10.8	0.0	4.5	10.2	0.0	9.2	3.1	27.7	0.0	3.6	22.3	0.8
Prop In Lane	1.00		0.38	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	0	228	194	0	213	267	2603		248	2633	682
V/C Ratio(X)	0.17	0.00	0.38	0.40	0.00	0.73	0.53	0.75		0.65	0.65	0.04
Avail Cap(c_a), veh/h	301	0	434	351	0	407	662	2737		632	2737	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	0.0	34.6	39.2	0.0	36.6	13.5	16.4	0.0	17.5	14.8	9.8
Incr Delay (d2), s/veh	0.6	0.0	1.1	1.3	0.0	4.8	1.6	1.4	0.0	2.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	3.2	3.0	0.0	6.3	2.0	13.7	0.0	3.1	11.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	35.6	40.5	0.0	41.3	15.1	17.8	0.0	20.4	15.5	9.8
LnGrp LOS	D	A	D	D	A	D	B	B		C	B	A
Approach Vol, veh/h	110				233				2089			
Approach Delay, s/veh	37.0				41.0				17.6			
Approach LOS	D				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	56.3		19.8	14.0	55.8		19.8				
Change Period (Y+Rc), s	8.2	8.2		* 6.7	8.2	8.2		* 6.7				
Max Green Setting (Gmax), s	25.0	50.0		* 25	25.0	50.0		* 25				
Max Q Clear Time (g_c+I1), s	5.1	24.3		12.2	5.6	29.7		12.8				
Green Ext Time (p_c), s	0.3	20.4		0.9	0.4	17.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay 18.6

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

43: US 27 & W Central Ave

03/10/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	160	43	174	101	203	47	1447	119	217	1555	122
Future Volume (veh/h)	213	160	43	174	101	203	47	1447	119	217	1555	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1885	1885	1870	1811	1900	1856	1811	1900	1856	1796	1856
Adj Flow Rate, veh/h	227	170	46	185	107	216	50	1539	0	231	1654	130
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	1	1	2	6	0	3	6	0	3	7	3
Cap, veh/h	310	209	57	263	295	263	64	2118		291	2383	764
Arrive On Green	0.08	0.15	0.15	0.09	0.16	0.16	0.04	0.43	0.00	0.08	0.49	0.49
Sat Flow, veh/h	1753	1429	387	1781	1811	1610	1767	4944	1610	3428	4904	1572
Grp Volume(v), veh/h	227	0	216	185	107	216	50	1539	0	231	1654	130
Grp Sat Flow(s),veh/h/ln	1753	0	1816	1781	1811	1610	1767	1648	1610	1714	1635	1572
Q Serve(g_s), s	9.2	0.0	13.8	10.6	6.3	15.5	3.4	31.0	0.0	7.9	31.4	5.6
Cycle Q Clear(g_c), s	9.2	0.0	13.8	10.6	6.3	15.5	3.4	31.0	0.0	7.9	31.4	5.6
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	0	266	263	295	263	64	2118		291	2383	764
V/C Ratio(X)	0.73	0.00	0.81	0.70	0.36	0.82	0.78	0.73		0.79	0.69	0.17
Avail Cap(c_a), veh/h	310	0	636	263	665	591	114	2401		389	2651	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	49.6	39.6	44.6	48.5	57.3	28.4	0.0	53.8	23.9	17.3
Incr Delay (d2), s/veh	8.7	0.0	8.2	8.2	1.1	8.8	18.0	1.4	0.0	8.0	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	11.1	8.9	5.2	11.1	3.2	17.2	0.0	6.5	16.8	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	0.0	57.8	47.8	45.7	57.3	75.2	29.8	0.0	61.8	24.9	17.5
LnGrp LOS	D	A	E	D	D	E	E	C		E	C	B
Approach Vol, veh/h		443			508			1589	A		2015	
Approach Delay, s/veh		55.0			51.4			31.2			28.7	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	65.8	16.0	26.3	18.6	58.9	18.0	24.3				
Change Period (Y+Rc), s	* 7.3	7.6	* 6.8	* 6.8	* 8.4	* 7.6	* 6.8	* 6.8				
Max Green Setting (Gmax), s	* 7.7	64.8	* 9.2	* 44	* 14	* 58	* 11	* 42				
Max Q Clear Time (g_c+I1), s	5.4	33.4	11.2	17.5	9.9	33.0	12.6	15.8				
Green Ext Time (p_c), s	0.0	24.0	0.0	2.0	0.2	18.4	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay 34.6

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

6: US 27 & Sunshine Dr/Paradise Island Dr

03/09/2020

Intersection												
Int Delay, s/veh	79.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	10	22	10	10	17	25	2104	10	46	2205	30
Future Vol, veh/h	29	10	22	10	10	17	25	2104	10	46	2205	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	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	400	-	355	400	-	415
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	11	25	0	0	0	7	0	5	6	7
Mvmt Flow	31	11	23	11	11	18	27	2238	11	49	2346	32
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3399	4747	1173	3334	4768	1119	2378	0	0	2249	0	0
Stage 1	2444	2444	-	2292	2292	-	-	-	-	-	-	-
Stage 2	955	2303	-	1042	2476	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.32	6.9	6.5	7.1	5.3	-	-	5.4	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.8	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	7.2	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	4.01	4.05	4	3.9	3.1	-	-	3.15	-	-
Pot Cap-1 Maneuver	~ 8	~ 1	148	~ 6	~ 1	175	82	-	-	90	-	-
Stage 1	~ 19	63	-	17	75	-	-	-	-	-	-	-
Stage 2	254	74	-	188	60	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	0	148	~ 2	0	175	82	-	-	90	-	-
Mov Cap-2 Maneuver	~ 11	~ 1	-	~ 7	-	-	-	-	-	-	-	-
Stage 1	~ 13	29	-	11	50	-	-	-	-	-	-	-
Stage 2	120	50	-	46	27	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, \$	5169.7		1058.3		0.8		1.7					
HCM LOS	F		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	82	-	-	3	148	7	175	90	-	-		
HCM Lane V/C Ratio	0.324	-	-	13.83	0.158	3.04	0.103	0.544	-	-		
HCM Control Delay (s)	68.7	-	-	\$ 8066.8	33	\$ 1934.2	27.9	84.9	-	-		
HCM Lane LOS	F	-	-	F	D	F	D	F	-	-		
HCM 95th %tile Q(veh)	1.2	-	-	7	0.5	3.9	0.3	2.4	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC

15: US 27 & FairBridge Inn Express/Frederick Ave

03/09/2020

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↵	↑↑↑	↵	↵	↑↑↑	
Traffic Vol, veh/h	10	10	10	38	10	60	20	1954	59	115	2017	10
Future Vol, veh/h	10	10	10	38	10	60	20	1954	59	115	2017	10
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	-	-	-	-	-	-	340	-	360	340	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	0	4	0	7	3	4	7	0
Mvmt Flow	11	11	11	40	11	64	21	2079	63	122	2146	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3275	4580	1079	3229	4522	1040	2157	0	0	2142	0	0
Stage 1	2396	2396	-	2121	2121	-	-	-	-	-	-	-
Stage 2	879	2184	-	1108	2401	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.46	6.5	7.18	5.3	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.36	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.76	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.83	4	3.94	3.1	-	-	3.14	-	-
Pot Cap-1 Maneuver	~ 10	~ 1	186	~ 10	~ 1	192	107	-	-	~ 103	-	-
Stage 1	20	66	-	~ 31	92	-	-	-	-	-	-	-
Stage 2	283	85	-	200	66	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	186	-	0	192	107	-	-	~ 103	-	-
Mov Cap-2 Maneuver	~ 4	0	- ~ 101	~ -27		-	-	-	-	-	-	-
Stage 1	16	0	- ~ 25	74		-	-	-	-	-	-	-
Stage 2	130	68	-	-	0	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s					0.5		12.1					
HCM LOS	-		-									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	107	-	-	-	-	~ 103	-	-				
HCM Lane V/C Ratio	0.199	-	-	-	-	1.188	-	-				
HCM Control Delay (s)	46.8	-	-	-	-	225.3	-	-				
HCM Lane LOS	E	-	-	-	-	F	-	-				
HCM 95th %tile Q(veh)	0.7	-	-	-	-	8.1	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 6th TWSC
21: US 27 & Lincoln Ave

PM Peak Hour

03/09/2020

Intersection							
Int Delay, s/veh	3.4						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	28	25	0	2083	24	42	2025
Future Vol, veh/h	28	25	0	2083	24	42	2025
Conflicting Peds, #/hr	2	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	215	-	235	235	-
Veh in Median Storage, #	1	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	0	0	6
Mvmt Flow	29	26	0	2147	25	43	2088
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	3070	1074	1524	0	0	2172	0
Stage 1	2147	-	-	-	-	-	-
Stage 2	923	-	-	-	-	-	-
Critical Hdwy	5.84	7.1	5.6	-	-	5.3	-
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-	-
Follow-up Hdwy	3.87	3.9	2.3	-	-	3.1	-
Pot Cap-1 Maneuver	~ 22	188	229	-	-	105	-
Stage 1	43	-	-	-	-	-	-
Stage 2	304	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 13	188	229	-	-	105	-
Mov Cap-2 Maneuver	35	-	-	-	-	-	-
Stage 1	43	-	-	-	-	-	-
Stage 2	179	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, s	224.2	0		1.2			
HCM LOS	F						
Minor Lane/Major Mvmt	NBU	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	229	-	-	57	105	-	
HCM Lane V/C Ratio	-	-	-	0.959	0.412	-	
HCM Control Delay (s)	0	-	-	224.2	61.5	-	
HCM Lane LOS	A	-	-	F	F	-	
HCM 95th %tile Q(veh)	0	-	-	4.4	1.7	-	
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

HCM 6th TWSC

34: US 27 & Vanguard School Ent/Tower Point Ent

03/09/2020

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕↕↕	↕	↕	↕↕↕	↕
Traffic Vol, veh/h	10	10	10	21	10	26	39	2047	29	56	2083	10
Future Vol, veh/h	10	10	10	21	10	26	39	2047	29	56	2083	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	280	-	525	510	-	380
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	12	0	5	7	4	5	0
Mvmt Flow	11	11	11	22	11	27	41	2155	31	59	2193	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3261	4579	1097	3238	4559	1078	2204	0	0	2186	0	0
Stage 1	2311	2311	-	2237	2237	-	-	-	-	-	-	-
Stage 2	950	2268	-	1001	2322	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	7.1	6.4	6.5	7.34	5.3	-	-	5.38	-	-
Critical Hdwy Stg 1	7.3	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.5	-	6.7	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8	4	3.9	3.8	4	4.02	3.1	-	-	3.14	-	-
Pot Cap-1 Maneuver	~ 10	~ 1	181	~ 11	~ 1	171	101	-	-	98	-	-
Stage 1	23	73	-	26	80	-	-	-	-	-	-	-
Stage 2	256	77	-	238	72	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 3	0	181	~ 4	0	171	101	-	-	98	-	-
Mov Cap-2 Maneuver	11	~ 22	-	~ 9	~ 15	-	-	-	-	-	-	-
Stage 1	14	29	-	~ 15	48	-	-	-	-	-	-	-
Stage 2	100	46	-	57	29	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	121.5	\$ 433.1	1.2	2.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	101	-	-	59 19 171	98	-	-
HCM Lane V/C Ratio	0.406	-	-	0.535 1.717 0.16	0.602	-	-
HCM Control Delay (s)	63.2	-	-	121.5\$ 771.2 30	86.2	-	-
HCM Lane LOS	F	-	-	F F D	F	-	-
HCM 95th %tile Q(veh)	1.7	-	-	2.1 4.5 0.6	2.9	-	-

Notes

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

APPENDIX F

Future Bicycle and Pedestrian Quality/Level of Service Analysis

Appendix F

Bicycle and Pedestrian Quality/Level of Service

US 27 Corridor Bicycle Quality/Level of Service (Q/LOS) and Pedestrian Q/LOS was calculated using the 2012 FDOT Quality/Level of Service Handbook Tables. Each roadway segment was inventoried to determine the presence of bicycle and pedestrian facilities that meet current FDOT design standards (*FDOT Design Manual*, January 1, 2018). Per the Q/LOS Handbook tables, the presence or lack of facilities were compared to the Average Annual Daily Traffic¹ (AADT) and assigned a letter grade of B through F, of which F signifies the poorest conditions.

Bicycle Q/LOS

The presence of bicycle lanes was determined by whether there were bicycle lane pavement markings (indicated by a '2' in **Table F-1** below) or if 5 foot wide (or greater than 5 foot wide) paved shoulder was accompanied by keyhole lanes present at intersections (indicated by a '1' in Table F-1). If neither was present, a 0 was assigned.

For each roadway segment, the northbound (NB) and southbound (SB) facilities were considered together. A lack of a bicycle facility on one *or both* sides of a segment was considered to be a wholly deficient segment. As a major arterial roadway, standard facilities should be available for all users.

The FDOT Q/LOS Handbook Generalized Service Volume Table (**Figure F-1** on the following page) for Bicycle Mode was referenced based on number of lanes and AADT to determine the Q/LOS. The FDOT two-way maximum service volumes for 0-49% coverage were applied where a designated bicycle lane or paved 5 foot wide (or greater) shoulder does not exist on both sides of the road. If a designated bicycle lane or a paved 5-foot wide (or greater) shoulder exists on both sides of US 27, then coverage was considered to be 100% and the FDOT two-way maximum service volumes for 85-100% coverage were applied. The determination of Bicycle Mode Q/LOS for each segment is shown on Table F-1.

Pedestrian Q/LOS

The process of determining Pedestrian Q/LOS was performed in a similar manner as Bicycle Q/LOS. For pedestrian Q/LOS, each roadway segment was evaluated to note whether sidewalk was present. A lack of facility on one *or both* sides of a segment was considered to be a wholly deficient segment. As a major arterial roadway, standard facilities should be available for all users.

The FDOT Q/LOS Handbook Generalized Service Volume Table (Figure F-1 on the following page) for Pedestrian Mode was referenced based on number of lanes and AADT to determine the Q/LOS. The FDOT two-way maximum service volumes for 0-49% coverage were applied where a sidewalk does not exist on both sides of the road. If a sidewalk exists on both sides of US 27, then coverage was considered to be 100% and the FDOT two-way maximum service volumes for 85-100% coverage were applied. The determination of Pedestrian Mode Q/LOS for each segment is shown on Table F-2.

¹ Florida Department of Transportation, Transportation Data & Analytics Office, *Annual Average Daily Traffic*. 09/21/2019, <https://ftp.fdot.gov/file/d/FTP/FDOT/co/planning/transtat/gis/shapefiles/aadt.zip>

Figure F-1: FDOT Q/LOS Handbook Table

**Generalized Annual Average Daily Volumes for Florida's
Urbanized Areas**

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	16,800	17,700	**	4	47,400	64,000	77,900	84,600	
4	Divided	*	37,900	39,800	**	6	69,900	95,200	116,600	130,600	
6	Divided	*	58,400	59,900	**	8	92,500	126,400	154,300	176,600	
8	Divided	*	78,800	80,100	**	10	115,100	159,700	194,500	222,700	
						12	162,400	216,700	256,600	268,900	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	7,300	14,800	15,600	4	45,800	61,500	74,400	79,900	
4	Divided	*	14,500	32,400	33,800	6	68,100	93,000	111,800	123,300	
6	Divided	*	23,300	50,000	50,900	8	91,500	123,500	148,700	166,800	
8	Divided	*	32,000	67,300	68,100	10	114,800	156,000	187,100	210,300	
Non-State Signalized Roadway Adjustments						Freeway Adjustments					
(Alter corresponding state volumes by the indicated percent.)						Auxiliary Lanes Ramp					
Non-State Signalized Roadways - 10%						Present in Both Directions Metering					
						+ 20,000 + 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	8,600	17,000	24,200	33,300
2	Undivided	No	No	-20%		4	Divided	36,700	51,800	65,600	72,600
Multi	Undivided	Yes	No	-5%		6	Divided	55,000	77,700	98,300	108,800
Multi	Undivided	No	No	-25%							
-	-	-	Yes	+ 5%							
One-Way Facility Adjustment						Uninterrupted Flow Highway Adjustments					
Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
BICYCLE MODE ²						¹ Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.					
Paved Shoulder/Bicycle Lane Coverage						³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
	B	C	D	E		* Cannot be achieved using table input value defaults.					
0-49%	*	2,900	7,600	19,700		** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
50-84%	2,100	6,700	19,700	>19,700							
85-100%	9,300	19,700	>19,700	**							
PEDESTRIAN MODE ²											
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage	B	C	D	E							
0-49%	*	*	2,800	9,500							
50-84%	*	1,600	8,700	15,800							
85-100%	3,800	10,700	17,400	>19,700							
BUS MODE (Scheduled Fixed Route) ³						Source:					
(Buses in peak hour in peak direction)						Florida Department of Transportation					
Sidewalk Coverage	B	C	D	E		Systems Planning Office					
0-84%	> 5	≥ 4	≥ 3	≥ 2		www.dot.state.fl.us/planning/systems/sm/los/default.shtm					
85-100%	> 4	≥ 3	≥ 2	≥ 1							

2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES

Table F-1
Future No-Build Conditions Bicycle Q/LOS Analysis

SEG	START MILE POST	END MILE POST	LANE COUNT	LEFT PAVED SHOULDER	RIGHT PAVED SHOULDER	LEFT BIKE LANE	RIGHT BIKE LANE	FUTURE AADT	Does Left Shoulder Meet Standard?	Does Right Shoulder Meet Standard?	Left-Side Bike Lane	Right-Side Bike Lane	Do the combined segment shoulders meet standard?	Are there adequate bike lanes throughout segment?	LOS D THRESHOLD	FUTURE BQLOS
				(in feet)	(in feet)	0 = No 1 = Wide Shoulder 2 = Std Fac. w/ Pvmt Markings	0 = No 1 = Wide Shoulder 2 = Std Fac. w/ Pvmt Markings		0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes		
1	0	0.095	4	6	4	0	0	56000	1	0	0	0	1	0	15200	F
2	0.095	0.221	4	4	0	0	1	56000	0	0	0	1	0	1	15200	F
3	0.221	0.315	6	4	8	1	1	56000	0	1	1	1	1	1	> 59100	C
4	0.315	0.69	6	8	9	1	1	56000	1	1	1	1	1	1	> 59100	C
5	0.69	1.247	6	4	4	1	1	57500	0	0	1	1	1	1	> 59100	C
6	1.247	1.378	6	6	5	1	1	57500	1	1	1	1	1	1	> 59100	C
7	1.378	1.784	6	6	5	1	1	57500	1	1	1	1	1	1	> 59100	C
8	1.784	1.891	6	6	5	1	1	57500	1	1	1	1	1	1	> 59100	C
9	1.891	2.47	6	6	5	1	1	64500	1	1	1	1	1	1	> 59100	D
10	2.47	2.961	6	6	5	0	0	64500	1	1	0	0	1	1	> 59100	D
11	2.961	3.778	6	6	5	0	0	67000	1	1	0	0	1	1	> 59100	D
12	3.778	4.331	6	4	4	0	0	62500	0	0	0	0	0	0	22800	F
13	4.331	5.002	6	4	4	0	0	67000	0	0	0	0	0	0	22800	F
14	5.002	5.041	6	4	4	0	0	69500	0	0	0	0	0	0	22800	F
15	5.041	5.944	6	4	4	0	0	69500	0	0	0	0	0	0	22800	F
16	5.944	6.125	6	6	6	0	0	60000	1	1	0	0	1	1	> 59100	D
17	6.125	6.407	6	6	6	0	0	60000	1	1	0	0	1	1	> 59100	D
18	6.407	6.566	6	5	5	0	0	60000	1	1	0	0	1	1	> 59100	D
19	6.566	6.749	6	5	5	0	0	60000	1	1	0	0	1	1	> 59100	D
20	6.749	6.962	6	5	5	0	0	60000	1	1	0	0	1	1	> 59100	D
21	6.962	7.013	6	5	5	0	0	62500	1	1	0	0	1	1	> 59100	D
22	7.013	7.481	6	5	5	0	0	62500	1	1	0	0	1	1	> 59100	D
23	7.481	8	6	5	5	0	0	62500	1	1	0	0	1	1	> 59100	D
24	8	8.026	6	5	5	0	0	62500	1	1	0	0	1	1	> 59100	D
25	8.026	8.174	6	4	4	1	1	62500	0	0	1	1	1	1	> 59100	D
26	8.174	8.694	6	4	4	2	2	65500	0	0	1	1	1	1	> 59100	D
27	8.694	8.884	6	4	4	2	2	65500	0	0	1	1	1	1	> 59100	D
28	8.884	9.193	6	4	4	2	2	58500	0	0	1	1	1	1	> 59100	C
29	9.193	9.704	6	4	4	2	2	58500	0	0	1	1	1	1	> 59100	C
30	9.704	9.782	6	4	4	1	1	58500	0	0	1	1	1	1	> 59100	C
31	9.782	9.848	6	7	6	1	1	58500	1	1	1	1	1	1	> 59100	C
32	9.848	10.308	6	6	6	1	1	58500	1	1	1	1	1	1	> 59100	C
33	10.308	10.343	6	5	5	1	1	58500	1	1	1	1	1	1	> 59100	C
34	10.343	10.493	6	5	5	1	1	58500	1	1	1	1	1	1	> 59100	C
35	10.493	10.608	6	5	5	0	0	58500	1	1	0	0	1	1	> 59100	C
36	10.608	10.925	6	6	6	0	0	58500	1	1	0	0	1	1	> 59100	C
37	10.925	11.138	6	6	6	0	0	58500	1	1	0	0	1	1	> 59100	C
38	11.138	11.442	6	6	6	0	0	58500	1	1	0	0	1	1	> 59100	C
39	11.442	12.912	6	4	4	0	0	65500	0	0	0	0	0	0	22800	F
40	12.912	13.032	6	5	4	0	0	69500	1	0	0	0	1	0	22800	F
41	13.032	13.144	6	5	4	0	0	69500	1	0	0	0	1	0	22800	F
42	13.144	13.244	6	5	4	2	0	69500	1	0	1	0	1	0	22800	F
43	13.244	13.402	6	5	4	0	0	83500	1	0	0	0	1	0	22800	F
44	13.402	13.541	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
45	13.541	14.411	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
46	14.411	14.555	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
47	14.555	14.663	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
48	14.663	14.678	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
49	14.678	14.738	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
50	14.738	14.748	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
51	14.748	14.882	6	4	4	0	0	83500	0	0	0	0	0	0	22800	F
52	14.882	15.092	6	9	9	0	0	83500	1	1	0	0	1	1	> 59100	D
53	15.092	15.407	6	9	9	0	0	89000	1	1	0	0	1	1	> 59100	D
54	15.407	15.539	6	8	8	0	0	89000	1	1	0	0	1	1	> 59100	D
55	15.539	15.628	6	4	4	0	0	89000	0	0	0	0	0	0	22800	F
56	15.628	15.872	6	4	4	1	1	89000	0	0	1	1	1	1	> 59100	D
57	15.872	16.138	6	4	4	1	1	96000	0	0	1	1	1	1	> 59100	D
58	16.138	16.253	6	4	4	1	1	91500	0	0	1	1	1	1	> 59100	D
59	16.253	16.389	6	4	4	1	1	91500	0	0	1	1	1	1	> 59100	D
60	16.389	16.44	6	4	4	1	1	91500	0	0	1	1	1	1	> 59100	D
61	16.44	16.521	6	4	4	1	1	98500	0	0	1	1	1	1	> 59100	D
62	16.521	16.538	6	4	4	1	1	98500	0	0	1	1	1	1	> 59100	D
63	16.538	16.62	6	4	4	1	1	98500	0	0	1	1	1	1	> 59100	D
64	16.62	16.734	6	5	5	1	1	98500	1	1	1	1	1	1	> 59100	D
65	16.734	16.923	6	5	5	1	1	98500	1	1	1	1	1	1	> 59100	D
66	16.923	16.931	6	5	5	1	1	98500	1	1	1	1	1	1	> 59100	D
67	16.931	17.212	6	5	5	2	1	98500	1	1	1	1	1	1	> 59100	D
68	17.212	17.291	6	5	5	2	0	98500	1	1	1	0	1	1	> 59100	D
69	17.291	17.405	6	5	5	2	0	79500	1	1	1	0	1	1	> 59100	D
70	17.405	17.764	6	5	5	0	0	79500	1	1	0	0	1	1	> 59100	D
71	17.764	18.023	6	5	5	0	0	79500	1	1	0	0	1	1	> 59100	D
72	18.023	18.32	6	5	5	0	0	79500	1	1	0	0	1	1	> 59100	D
73	18.32	18.426	6	5	5	0	0	79500	1	1	0	0	1	1	> 59100	D
74	18.426	18.677	6	5	5	0	1	79500	1	1	0	1	1	1	> 59100	D
75	18.677	18.857	6	5	5	0	2	84000	1	1	0	1	1	1	> 59100	D
76	18.857	20.168	6	5	5	0	0	84000	1	1	0	0	1	1	> 59100	D
77	20.168	20.539	6	5	5	0	1	88000	1	1	0	1	1	1	> 59100	D
78	20.539	22.739	6	5	5	0	0	92500	1	1	0	0	1	1	> 59100	D
79	22.739	22.859	6	5	5	0	0	94500	1	1	0	0	1	1	> 59100	D
80	22.859	23.086	6	5	5	1	0	88000	1	1	1	0	1	1	> 59100	D
81	23.086	23.171	7	4	4	0	0	99500	0	0	0	0	0	0	22800	F
82	23.171	23.293	7	4	4	0	0	85500	0	0	0	0	0	0	22800	F
83	23.293	23.382	7	4	4	2	0	88500	0	0	1	0	1	0	22800	F
84	23.382	23.582	7	4	4	1	0	110000	0	0	1	0	1	0	22800	F
85	23.582	23.749	6	4	5	2	0	110000	0	1	1	0	1	1	22800	D
86	23.749	23.892	6	4	4	0	0	110000	0	0	0	0	0	0	22800	F
87	23.892	23.941	6	4	4	0	0	110000	0	0	0	0	0	0	22800	F
88	23.941	23.969	6	5	5	0	0	110000	1	1	0	0	1	1	> 59100	D
89	23.969	24.006	6	5	5	0	0	110000	1	1	0	0	1	1	> 59100	D
90	24.006	24.084	6	4	4	0	0	69000	0	0	0	0	0	0	22800	F
91	24.084	24.218	6	4	4	0	0	69000	0	0	0	0	0	0	> 59100	F

Table F-1
Future No-Build Conditions Bicycle Q/LOS Analysis

SEG	START MILE POST	END MILE POST	LANE COUNT	LEFT PAVED SHOULDER	RIGHT PAVED SHOULDER	LEFT BIKE LANE	RIGHT BIKE LANE	FUTURE AADT	Does Left Shoulder Meet Standard?	Does Right Shoulder Meet Standard?	Left-Side Bike Lane	Right-Side Bike Lane	Do the combined segment shoulders meet standard?	Are there adequate bike lanes throughout segment?	LOS D THRESHOLD	FUTURE BQLOS
				(in feet)	(in feet)	0 = No 1 = Wide Shoulder 2 = Std Fac. w/ Pvmt Markings	0 = No 1 = Wide Shoulder 2 = Std Fac. w/ Pvmt Markings		0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes	0 = No 1 = Yes		
92	24.218	24.336	6	5	4	0	0	69000	1	0	0	0	1	0	> 59100	F
93	24.336	24.621	6	10	4	0	0	86500	1	0	0	0	1	0	> 59100	F
94	24.621	24.726	6	5	6	2	2	86500	1	1	1	1	1	1	> 59100	D
95	24.726	24.907	6	12	6	2	2	86500	1	1	1	1	1	1	> 59100	D
96	24.907	25.107	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
97	25.107	25.57	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
98	25.57	25.752	6	6	4	2	2	86500	1	0	1	1	1	1	> 59100	D
99	25.752	27.438	6	6	5	2	2	86500	1	1	1	1	1	1	> 59100	D
100	27.438	27.688	6	6	5	2	2	86500	1	1	1	1	1	1	> 59100	D
101	27.688	28.211	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
102	28.211	28.416	6	6	5	2	2	86500	1	1	1	1	1	1	> 59100	D
103	28.416	28.711	6	6	5	2	2	86500	1	1	1	1	1	1	> 59100	D
104	28.711	28.963	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
105	28.963	29.327	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
106	29.327	29.468	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
107	29.468	29.601	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
108	29.601	30.226	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
109	30.226	30.373	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
110	30.373	30.732	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
111	30.732	31.492	6	5	5	2	2	86500	1	1	1	1	1	1	> 59100	D
112	31.492	31.503	6	5	5	2	0	72500	1	1	1	0	1	1	> 59100	D
113	31.503	31.767	6	5	5	2	0	72500	1	1	1	0	1	1	> 59100	D
114	31.767	31.917	6	5	5	2	0	72500	1	1	1	0	1	1	> 59100	D
115	31.917	32.046	6	17	9	2	0	72500	1	1	1	0	1	1	> 59100	D

SEG	START MILE POST	END MILE POST	LANE COUNT	LEFT PAVED SHOULDER (in feet)	RIGHT PAVED SHOULDER (in feet)	LEFT SIDEWALK 0 = No 1 = Yes	RIGHT SIDEWALK 0 = No 1 = Yes	FUTURE AADT	FUTURE PED QLOS
1	0	0.095	4	6	4	0	0	56000	F
2	0.095	0.221	4	4	0	0	0	56000	F
3	0.221	0.315	6	4	8	1	1	56000	E
4	0.315	0.69	6	8	9	1	1	56000	E
5	0.69	1.247	6	4	4	1	1	57500	E
6	1.247	1.378	6	6	5	0	0	57500	F
7	1.378	1.784	6	6	5	0	0	57500	F
8	1.784	1.891	6	6	5	0	0	57500	F
9	1.891	2.47	6	6	5	0	0	64500	F
10	2.47	2.961	6	6	5	0	0	64500	F
11	2.961	3.778	6	6	5	0	0	67000	F
12	3.778	4.331	6	4	4	0	0	62500	F
13	4.331	5.002	6	4	4	0	0	67000	F
14	5.002	5.041	6	4	4	0	0	69500	F
15	5.041	5.944	6	4	4	0	0	69500	F
16	5.944	6.125	6	6	6	0	0	60000	F
17	6.125	6.407	6	6	6	0	0	60000	F
18	6.407	6.566	6	5	5	0	0	60000	F
19	6.566	6.749	6	5	5	0	0	60000	F
20	6.749	6.962	6	5	5	0	0	60000	F
21	6.962	7.013	6	5	5	0	0	62500	F
22	7.013	7.481	6	5	5	0	0	62500	F
23	7.481	8	6	5	5	0	0	62500	F
24	8	8.026	6	5	5	0	0	62500	F
25	8.026	8.174	6	4	4	1	1	62500	E
26	8.174	8.694	6	4	4	1	1	65500	E
27	8.694	8.884	6	4	4	1	1	65500	E
28	8.884	9.193	6	4	4	1	1	58500	E
29	9.193	9.704	6	4	4	1	1	58500	E
30	9.704	9.782	6	4	4	1	1	58500	E
31	9.782	9.848	6	7	6	0	0	58500	F
32	9.848	10.308	6	6	6	0	0	58500	F
33	10.308	10.343	6	5	5	0	0	58500	F
34	10.343	10.493	6	5	5	1	1	58500	E
35	10.493	10.608	6	5	5	1	1	58500	E
36	10.608	10.925	6	6	6	0	0	58500	F
37	10.925	11.138	6	6	6	0	0	58500	F
38	11.138	11.442	6	6	6	0	0	58500	F
39	11.442	12.912	6	4	4	0	0	65500	F
40	12.912	13.032	6	5	4	0	0	69500	F
41	13.032	13.144	6	5	4	0	0	69500	F
42	13.144	13.244	6	5	4	1	0	69500	F
43	13.244	13.402	6	5	4	0	0	83500	F
44	13.402	13.541	6	4	4	0	0	83500	F
45	13.541	14.411	6	4	4	0	0	83500	F

SEG	START MILE POST	END MILE POST	LANE COUNT	LEFT PAVED SHOULDER (in feet)	RIGHT PAVED SHOULDER (in feet)	LEFT SIDEWALK 0 = No 1 = Yes	RIGHT SIDEWALK 0 = No 1 = Yes	FUTURE AADT	FUTURE PED QLOS
46	14.411	14.555	6	4	4	0	0	83500	F
47	14.555	14.663	6	4	4	0	0	83500	F
48	14.663	14.678	6	4	4	0	0	83500	F
49	14.678	14.738	6	4	4	0	1	83500	F
50	14.738	14.748	6	4	4	0	1	83500	F
51	14.748	14.882	6	4	4	0	0	83500	F
52	14.882	15.092	6	9	9	0	0	83500	F
53	15.092	15.407	6	9	9	0	0	89000	F
54	15.407	15.539	6	8	8	0	0	89000	F
55	15.539	15.628	6	4	4	0	0	89000	F
56	15.628	15.872	6	4	4	1	1	89000	E
57	15.872	16.138	6	4	4	1	1	96000	E
58	16.138	16.253	6	4	4	1	1	91500	E
59	16.253	16.389	6	4	4	1	1	91500	E
60	16.389	16.44	6	4	4	1	1	91500	E
61	16.44	16.521	6	4	4	0	1	98500	F
62	16.521	16.538	6	4	4	0	1	98500	F
63	16.538	16.62	6	4	4	0	1	98500	F
64	16.62	16.734	6	5	5	0	0	98500	F
65	16.734	16.923	6	5	5	0	0	98500	F
66	16.923	16.931	6	5	5	0	0	98500	F
67	16.931	17.212	6	5	5	1	0	98500	F
68	17.212	17.291	6	5	5	1	0	98500	F
69	17.291	17.405	6	5	5	1	1	79500	E
70	17.405	17.764	6	5	5	0	0	79500	F
71	17.764	18.023	6	5	5	0	0	79500	F
72	18.023	18.32	6	5	5	0	0	79500	F
73	18.32	18.426	6	5	5	0	0	79500	F
74	18.426	18.677	6	5	5	0	0	79500	F
75	18.677	18.857	6	5	5	0	1	84000	F
76	18.857	20.168	6	5	5	0	1	84000	F
77	20.168	20.539	6	5	5	0	1	88000	F
78	20.539	22.739	6	5	5	0	0	92500	F
79	22.739	22.859	6	5	5	0	1	94500	F
80	22.859	23.086	6	5	5	0	1	88000	F
81	23.086	23.171	7	4	4	0	1	99500	F
82	23.171	23.293	7	4	4	1	1	85500	E
83	23.293	23.382	7	4	4	1	1	88500	E
84	23.382	23.582	7	4	4	1	0	110000	F
85	23.582	23.749	6	4	5	1	0	110000	F
86	23.749	23.892	6	4	4	1	1	110000	E
87	23.892	23.941	6	4	4	1	1	110000	E
88	23.941	23.969	6	5	5	1	1	110000	E
89	23.969	24.006	6	5	5	1	1	110000	E
90	24.006	24.084	6	4	4	1	1	69000	E

SEG	START MILE POST	END MILE POST	LANE COUNT	LEFT PAVED SHOULDER <i>(in feet)</i>	RIGHT PAVED SHOULDER <i>(in feet)</i>	LEFT SIDEWALK <i>0 = No 1 = Yes</i>	RIGHT SIDEWALK <i>0 = No 1 = Yes</i>	FUTURE AADT	FUTURE PED QLOS
91	24.084	24.218	6	4	4	1	1	69000	E
92	24.218	24.336	6	5	4	0	1	69000	F
93	24.336	24.621	6	10	4	0	1	86500	F
94	24.621	24.726	6	5	6	1	1	86500	E
95	24.726	24.907	6	12	6	1	1	86500	E
96	24.907	25.107	6	5	5	1	1	86500	E
97	25.107	25.57	6	5	5	1	1	86500	E
98	25.57	25.752	6	6	4	1	1	86500	E
99	25.752	27.438	6	6	5	1	1	86500	E
100	27.438	27.688	6	6	5	1	1	86500	E
101	27.688	28.211	6	5	5	1	1	86500	E
102	28.211	28.416	6	6	5	1	1	86500	E
103	28.416	28.711	6	6	5	1	1	86500	E
104	28.711	28.963	6	5	5	1	1	86500	E
105	28.963	29.327	6	5	5	1	1	86500	E
106	29.327	29.468	6	5	5	1	1	86500	E
107	29.468	29.601	6	5	5	1	1	86500	E
108	29.601	30.226	6	5	5	1	1	86500	E
109	30.226	30.373	6	5	5	1	1	86500	E
110	30.373	30.732	6	5	5	1	1	86500	E
111	30.732	31.492	6	5	5	1	1	86500	E
112	31.492	31.503	6	5	5	1	0	72500	E
113	31.503	31.767	6	5	5	1	0	72500	E
114	31.767	31.917	6	5	5	1	0	72500	E
115	31.917	32.046	6	17	9	1	0	72500	E