

**TRAFFIC IMPACT STUDY
FOR
405 CORONADO DRIVE HOTEL
CLEARWATER, FLORIDA**

PREPARED FOR:
AP BEACH PROPERTIES, LLC

PREPARED BY:
GULFCOAST CONSULTING, INC.
REVISED NOVEMBER 2021



Robert Pergolizzi, AICP / PTP
AICP #9023 / PTP #133

I. INTRODUCTION

The applicant is proposing to redevelop their property on Clearwater Beach into a 166 room resort hotel with ground level retail space. (See Figure 1) This analysis is for A hotel which will be located between Hamden Drive and Coronado Drive along the south side of 5th Street. The redevelopment of the property is the subject of a Comprehensive Infill Redevelopment in the Tourist “T” zoning district. This application requires an assessment of the traffic impacts of development. This analysis is a major revision to an analysis conducted in 2014 per a methodology established with the City of Clearwater staff in August 2021

II. EXISTING TRAFFIC CONDITIONS

The property has frontage on Coronado Drive, Hamden Drive and 5th Street and vehicular access will be taken from both 5th Street and Hamden Drive. South Gulfview Boulevard is a two-lane roadway with on-street parking running along Clearwater Beach. Coronado Drive is a three-lane roadway with on-street parking except for a short segment between 3rd Street Drive and S. Gulfview Boulevard which is 4-lanes undivided. Hamden Drive intersects with S. Gulfview Boulevard at a signalized intersection. The segment of S. Gulfview Boulevard between Hamden Drive and the Clearwater Pass bridge is three lanes (2 lanes EB & 1 lane WB) with a small portion being 4-lanes between Hamden Drive and Bayway Boulevard. Per the methodology 7-day machine traffic counts that were conducted during the week of July 26 - August 1, 2021 to determine the weekday average daily traffic (ADT) and also the PM peak hour for which a more detailed intersection counts were completed.

Based on the 7-day machine counts the hourly volumes are fairly consistent between 12 noon and 5 PM and the peak hour of the day is between 3-4PM. Therefore, intersection turning movement count data were obtained at the following intersections during the weekday PM peak period of 2:30 – 4:30 PM and were used as a basis for this study.

S. Gulfview Blvd. / Hamden Drive (signal)
Coronado Drive / Hamden Drive
Coronado Drive / 5th Street
S. Gulfview Blvd. / Coronado Drive (signal)
Hamden Drive / Bayside Drive
Hamden Drive / 5th Street

All traffic counts were converted to annual average equivalents using FDOT seasonal adjustment factors. Existing traffic volumes are shown in Figure 2. Existing intersections were analyzed using the SYNCHRO software. The count data, and SYNCHRO printouts are included in Appendix A.



PROJECT LOCATION – 405 CORONADO DRIVE HOTEL

PROJECT NO:
21-061



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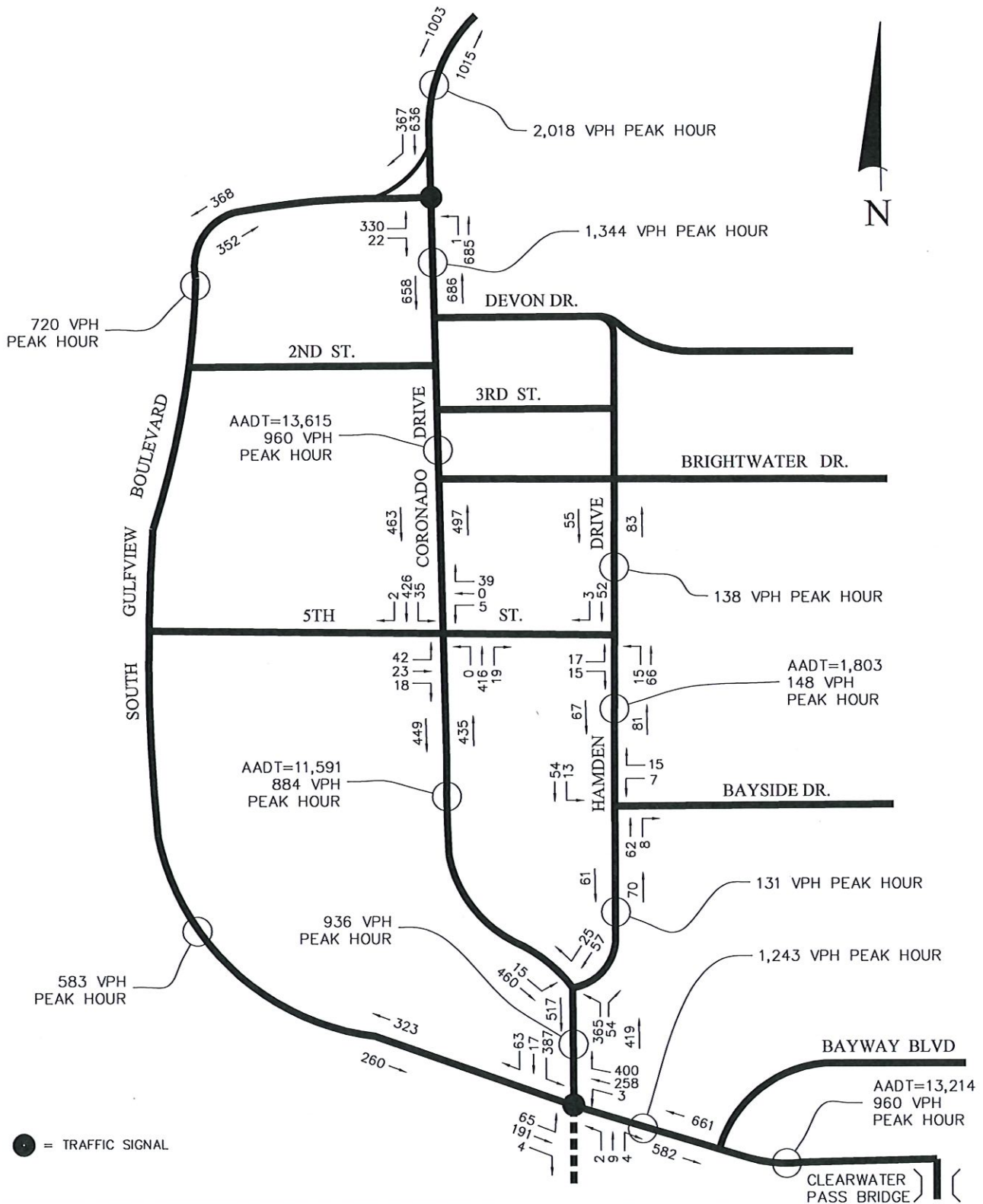
07/2021

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FIGURE:

1



EXISTING PM PEAK HOUR TRAFFIC (2021)

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8/2021

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GJS

FIGURE:

2

Presently the signalized intersection at S. Gulfview Boulevard / Hamden Drive operates at LOS B with average delay being 11.7 seconds per vehicle with ICU of 62.2%. The maximum v/c ratio is 0.64.

At the intersection of Hamden Drive / Coronado Drive the primary movements are southbound on Coronado Drive (slight right) and northbound-on Hamden-Coronado, whereas the southwestbound approach (Hamden Drive) is stop controlled. The SYNCHRO analysis shows the stop-controlled movements on Hamden Drive operate at LOS B with delay of 12.9 seconds per vehicle and a v/c ratio of 0.113.

At the Coronado Drive / 5th Street intersection, 5th Street is the stop-controlled minor street. Southbound left turns operate at LOS A with average delay of 8.4 seconds and a v/c ratio of 0.035, the eastbound approach operates at LOS E with average delay of 38.5 seconds and a v/c ratio of 0.46, and the westbound approach operates at LOS B with average delay of 14.8 seconds with a v/c ratio of 0.114.

Presently the signalized intersection at S. Gulfview Boulevard / Coronado Drive operates at LOS A with average delay being 6.9 seconds per vehicle and an intersection capacity utilization (ICU) of 51.3%. The maximum v/c ratio is 0.44.

At the Hamden Drive / Bayside Drive T- intersection, Bayside Drive is the minor stop-controlled street. Southbound left turns operate at LOS A with average delay of 7.5 seconds and a v/c ratio of 0.011, and the westbound approach (Bayside Drive) operates at LOS A with 9.5 seconds average delay and a v/c ratio of 0.033.

At the Hamden Drive / 5th Street intersection T-intersection, 5th Street (eastbound) is the stop controlled minor street. Northbound left turns operate at LOS A with average delay of 7.4 seconds and a v/c ratio of 0.012, and the eastbound approach operates at LOS A with average delay of 9.7 seconds and a v/c ratio of 0.047.

Coronado Drive is the main roadway through south Clearwater Beach providing vehicular access to most beachfront hotels and parking garages. The segment of Coronado Drive between the two traffic signals (S. Gulfview on the south end and S. Gulfview on the north end) is approximately ½ mile in length with a posted speed limit of 25 MPH. Coronado Drive functions as a class IV minor arterial per HCM criteria. The segment of Coronado Drive between the two traffic signals (S Gulfview to S Gulfview) was analyzed using the SYNCHRO and HCS software and presently operates at LOS B in the northbound (NB) direction and LOS C in the southbound (SB) direction.

South Gulfview Boulevard functions as a minor arterial roadway and according to FDOT 2012 QLOS Handbook capacity tables has a LOS D capacity of 1,330 vehicles per hour on the undivided segment. The segment of S. Gulfview Boulevard east of Hamden Drive is three-lane road with a LOS D capacity of 1,970 vehicles per hour and 2,190 vehicles per hour on the 4-lane portion between

Hamden Drive and Bayway Boulevard. Hamden Drive north of the Y-intersection with Coronado Drive is a two-lane city roadway with an estimated LOS D capacity of 930 vehicles per hour. The existing PM peak hour LOS for areas roadway segments is shown below:

EXISTING ROADWAY CONDITIONS (2021)

Roadway Segment	Lanes	PM Peak Volume	LOS D Capacity	LOS
S. Gulfview (E. of Bayway)	3-lanes	960	1970	D
S. Gulfview (Bywy-Hamden)	4-lanes	1243	2190	D
S. Gulfview (Hamden - 5 th)	2LU	583	1330	C
S. Gulfview (5 th – Coronado)	2LU	720	1330	D
Hamden (S. Gulfview-Coronado)	2LD	936	1390	C*
Coronado (Hamden – 5 th)	2LD	884	1390	C*
Coronado (5 th St – 3 rd St)	2LD	960	1390	C*
Coronado (3 rd St - S. Gulfview)	4LU	1344	2190	C*
Coronado (Gulfview - Roundabout)	4LD	2018	2900	D
Hamden (Coronado – Bayside)	2LU	131	930	C
Hamden (Bayside – 5 th St.)	2LU	148	930	C
Hamden (5 th – Brightwater)	2LU	136	930	C

* Coronado/Hamden is LOS B NB with average travel speed of 23.1 MPH and LOS C SB with average travel speed of 18.3 MPH.

Presently all roadway segments operate at LOS D or better which indicates acceptable levels of service and traffic operations.

Accident Data Evaluation

As requested, an evaluation of accidents at the six (6) intersection locations analyzed above was conducted. The City of Clearwater provided accident data, and the years 2018 -2020 were evaluated. A detailed chart is in Appendix A. During the 36 month period, there were a total of 60 accidents at these locations, 15 in 2018, 28 in 2019, and 17 in 2020. Of these most had no injuries, 4 accidents had possible or minor injuries, and one accident was fatal. The fatality occurred on June 16, 2018 when a bicyclist was struck by a vehicle at the Coronado Drive/S. Gulfview Blvd intersection. Of the 60 accidents, 44 occurred during daytime, and 16 occurred at dusk or nighttime in dark conditions. Accidents were sorted by location:

S Gulfview / Hamden (signal):	21 accidents
S Gulfview/Coronado (signal):	20 accidents
Coronado / Hamden (Stop):	9 accidents
Coronado / 5 th Street (stop)	8 accidents
Hamden / Bayside (stop)	2 accidents
Hamden / 5 th Street (stop)	0 accidents
TOTAL	60 accidents

The large majority of the accidents (68%) occurred at the signalized intersections, which is not uncommon. Most of these were “rear-end” accidents which is also common at signalized intersections. In reviewing the accident causative factors, it appears “careless driving”, “improper lane changes” “improper turns” were the major causes. It is highly possible that distracted driving is a major cause on Clearwater Beach which may lead to rear-end type accidents. In our evaluation it is unlikely geometric factors significantly contribute to the accidents.

III. FUTURE TRAFFIC CONDITIONS

The build-out year of the hotel is 2024. As requested, by staff per the methodology, existing traffic was adjusted by a 2% annual growth rate to the expected build-out year + 5years beyond to 2029 to account for background traffic from other nearby redevelopment projects. Background traffic volumes for 2029 are shown in Figure 3. Growth rate is shown in Appendix B.

The site will be developed as a 166 room resort hotel. Using Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition rates for Resort Hotel (LUC 330), the amount of new trips was calculated and estimates are shown below:

TRIP GENERATION ESTIMATES

Land Use	Amount	Daily Trips	PM Peak Trip
Resort Hotel	166 Rooms	1,388	68 (29/39)

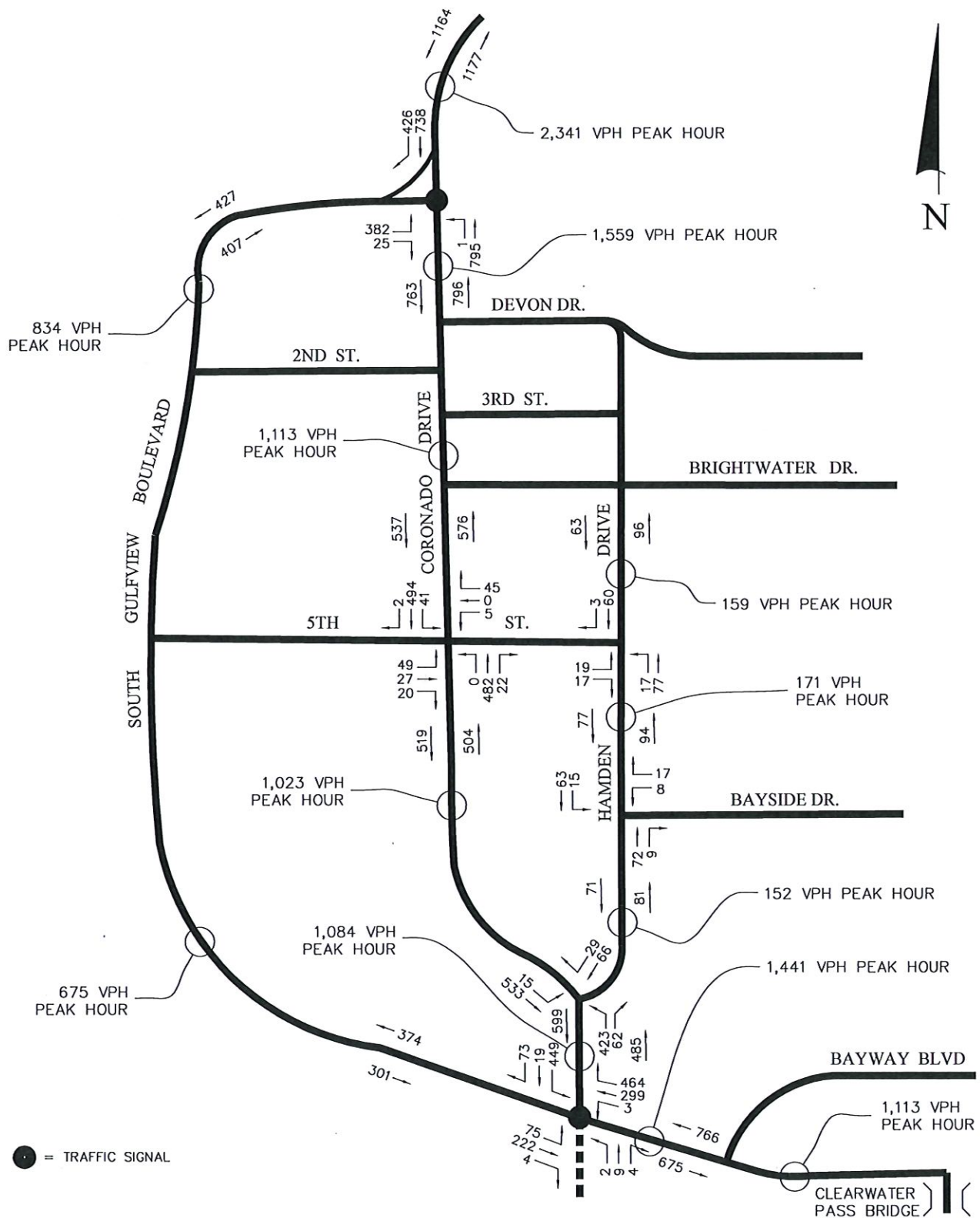
The vehicular access will be taken from Hamden Drive and 5th Street via separate driveways. Ingress is proposed for the 5th Street access, and egress onto Hamden Drive. The expected distribution is shown in Figure 4 and is as follows:

60% to / from the north (40 PM peak hour trips)
40% to / from the south (28 PM peak hour trips)

The projects impacts to the surrounding roadway system is shown below:

PROJECT IMPACT CALCULATIONS

Road Segment	Lanes	Project Trips	Capacity	Project Percent
S. Gulfview (E. of Bayway)	3-lanes	27	1970	1.37%
S. Gulfview (Bayway-Hamden)	4-lanes	27	2190	1.23%
Hamden (Gulfview – Coronado)	2LD	27	1390	1.94%
Coronado (5 th St – 3 rd St)	2LD	41	1390	2.94%
Coronado (3 rd St - S. Gulfview)	4LU	41	2190	1.87%
Coronado (Gulfview – Roundabout)	4LD	41	2900	1.41%
Hamden (Coronado – Project)	2LU	27	930	2.90%
Hamden (Project – 5 th St)	2LU	30	930	3.22%



BACKGROUND PM PEAK HOUR TRAFFIC (2029)

PROJECT NO:
21-061

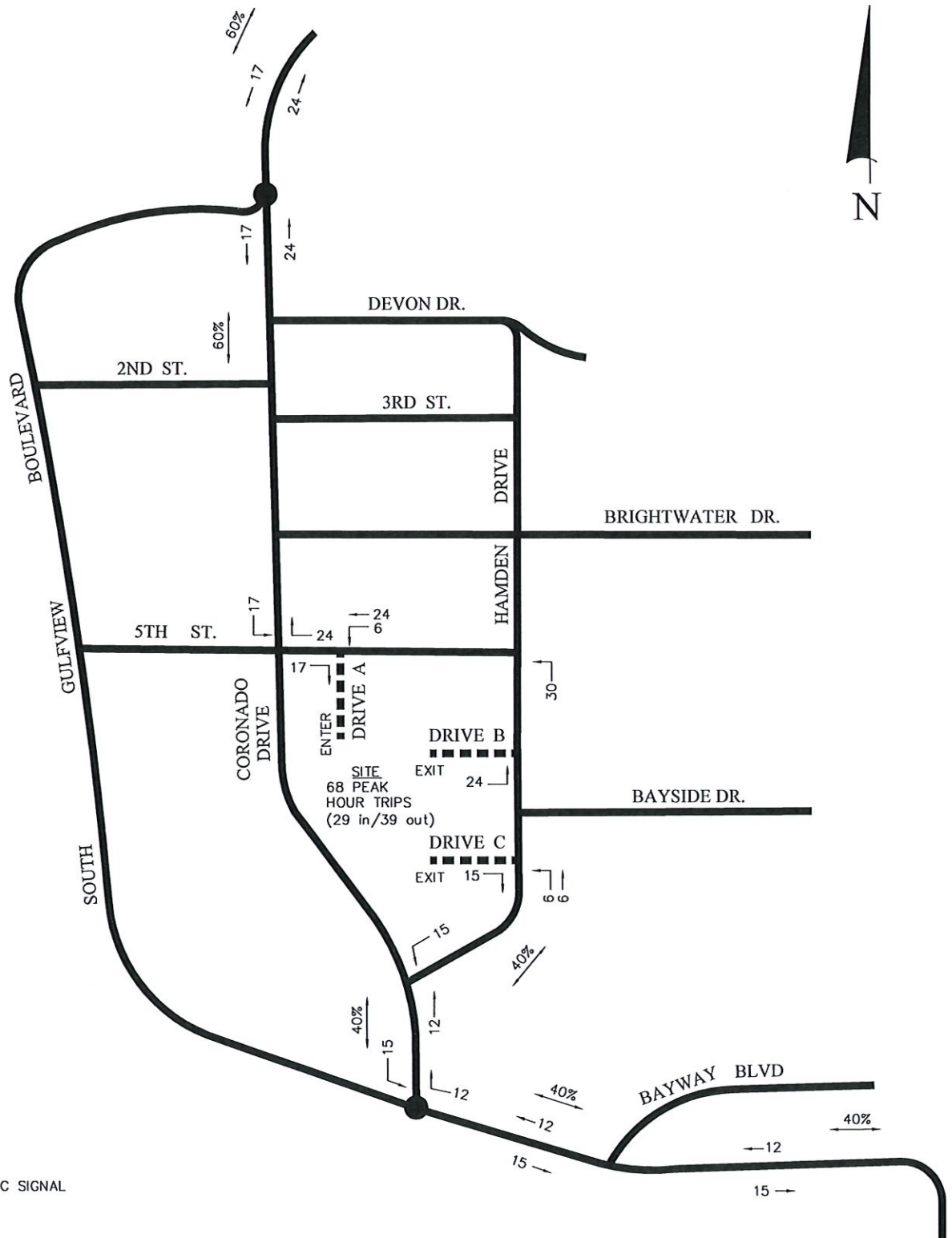


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FIGURE:

3



● = TRAFFIC SIGNAL

PROJECT TRAFFIC DISTRIBUTION

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FIGURE:

4

Significant Impact Area

Typically a project “significant impact area” is defined where the project added traffic comprises 5% or more of the roadway capacity. As shown above the project traffic does not “significantly impact” any roadway segment. Primary impacts will be to Hamden Drive.

Analysis

Project traffic impacts will be primarily to Hamden Drive. Project traffic was added to accumulated background traffic for an analysis year of 2029. All intersections, roadway segments and project driveways were analyzed for future conditions. Future traffic volumes are shown in Figure 5, and the SYNCHRO and HCS printouts are included in Appendix B.

The signalized intersection at S. Gulfview Boulevard / Hamden Drive would operate at LOS B with average delay being 13.3 seconds per vehicle with ICU of 66.9%. The maximum v/c ratio would be 0.71.

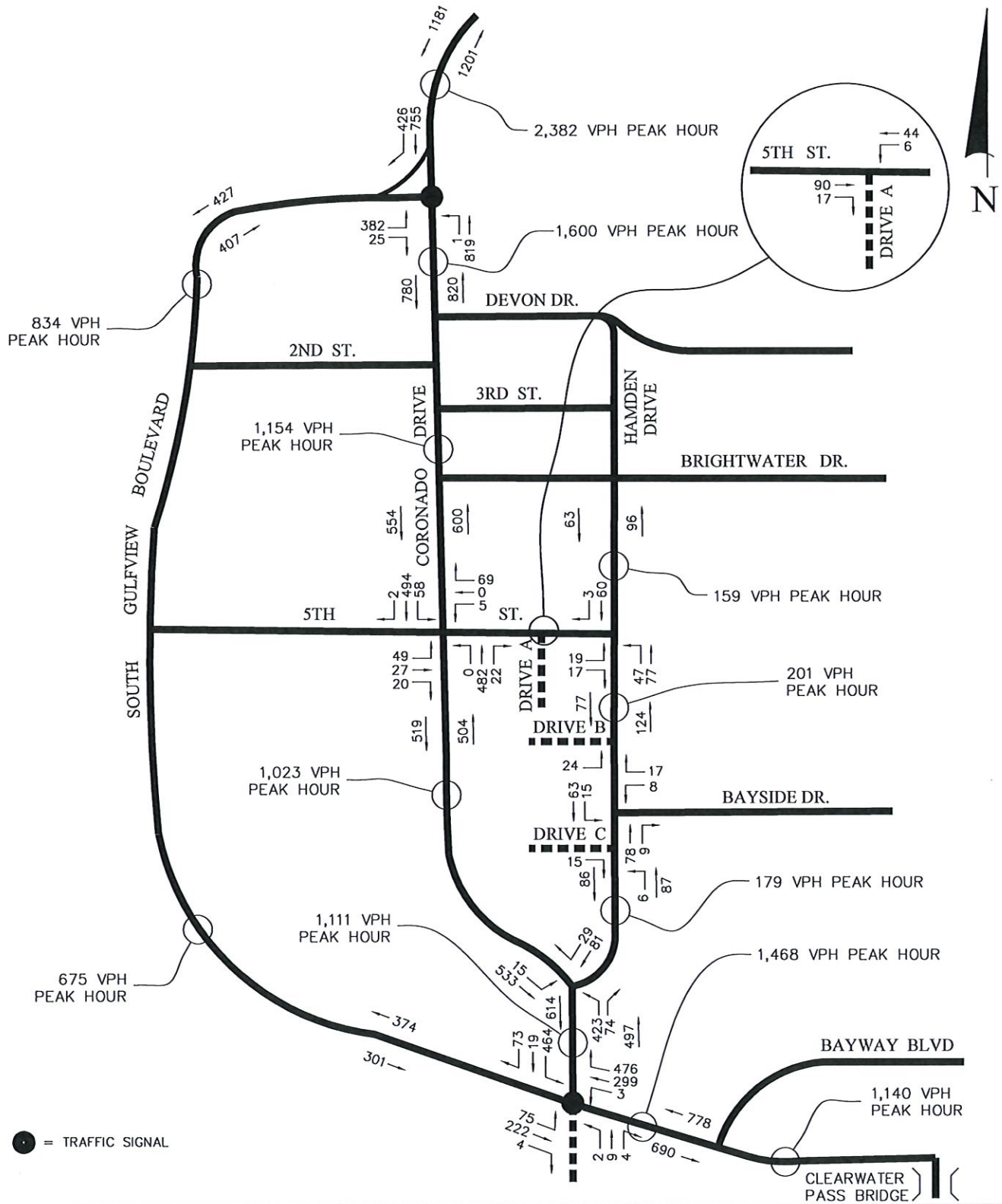
At the intersection of Hamden Drive / Coronado Drive, the analysis shows the stop-controlled movements on Hamden Drive would operate at LOS B with delay of 14.4 seconds per vehicle. The v/c ratio would be 0.177.

At the Coronado Drive / 5th Street intersection, northbound and southbound left turns would operate at LOS A with a v/c ratio of 0.061, the eastbound approach would operate at LOS F with average delay of 88.2 seconds and a v/c ratio of 0.765, and the westbound approach would operate at LOS C with average delay of 16.5 seconds and a v/c ratio of 0.203. Overall intersection delays are 8.3 seconds/vehicle.

The signalized intersection at S. Gulfview Boulevard / Coronado Drive would continue to operate at LOS A with average delay of 7.8 seconds per vehicle and an intersection capacity utilization (ICU) of 58.7%. The maximum v/c ratio would be 0.50.

At the Hamden Drive / Bayside Drive T- intersection. Southbound left turns operate at LOS A with average delay of 7.5 seconds and a v/c ratio, and the westbound approach (Bayside Drive) operates at LOS A with 9.7 seconds average delay and a v/c ratio of 0.039.

At the Hamden Drive / 5th Street intersection, northbound left turns would operate at LOS A with average delay of 7.5 seconds and a v/c ratio of 0.038, and the eastbound approach would operate at LOS B with average delay of 10.2 seconds and a v/c ratio of 0.058.



FUTURE PM PEAK HOUR TRAFFIC WITH PROJECT (2029)

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8/2021

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FIGURE:

5

At 5th Street / Drive A (ingress only) westbound left turns entering the site would operate at LOS A with 7.5 seconds average delay and a v/c ratio of 0.00.

At Hamden Drive / Drive B (north driveway exit only) exiting movements would operate at LOS A with 9.9 seconds average delay and a v/c ratio of 0.04.

At Hamden Drive / Drive C (south driveway) NB left turns entering would operate at LOS A with 7.4 seconds average delay and a v/c ratio of 0.00 and exiting movements would operate at LOS A with 8.8 seconds average delay and a v/c ratio of 0.02.

Expected roadway conditions with the project in impacts are shown below:

FUTURE ROADWAY CONDITIONS WITH PROJECT (2029)

Roadway Segment	Lanes	PM Peak Volume	LOS D Capacity	LOS
S. Gulfview (E. of Bayway) 3-lanes		1140	1970	D
S. Gulfview (Bywy-Hamden) 4-lanes		1468	2190	D
S. Gulfview (Hamden -5 th) 2LU		675	1330	D
S. Gulfview (5 th – Coronado) 2LU		834	1330	D
Hamden (S. Gulfview-Coronado) 2LD		1111	1390	C*
Coronado (Hamden – 5 th) 2LD		1023	1390	C*
Coronado (5 th St – 3 rd St) 2LD		1154	1390	C*
Coronado (3 rd St - S. Gulfview) 4LU		1600	2190	C*
Coronado (Gulfview - Roundabout) 4LD		2382	2900	D
Hamden (Coronado – Bayside) 2LU		179	930	C
Hamden (Bayside – 5 th St.) 2LU		201	930	C
Hamden (5 th – Brightwater) 2LU		159	930	C

* Coronado/Hamden is LOS B NB with average travel speed of 23.0 MPH and LOS C SB with average travel speed of 17.9 MPH.

All roadway segments would continue to operate at LOS D or better.

The table below shows queues at the hotel driveways and the intersections on 5th Street and Hamden Drive that are near the hotel driveways.

INTERSECTION	APPROACH	QUEUE (VEH)	QUEUE (FEET)	AVAILABLE DISTANCE
Coronado Dr./ 5 th St	WB	0.8	0-25 feet	90 feet from Coronado to hotel ingress
Hamden Dr. / Bayside Dr.	SB	0	0 feet	30 feet between Bayside to Drive B
Hamden Dr. / 5 th St	EB	0.2	0-25 feet	35 feet from portocochere

Hamden Dr. / 5 th St	NB	0.1	0-25 feet	100 feet between Drive B exit and 5 th St
5 th St / Drive A ingress	WB	0	0 feet	NA
Hamden Dr. / Drive C	NB	0	0 feet	NA

The maximum queues at intersections affecting driveways are 25 feet.

Internal Circulation

The hotel will include a 4-level parking garage with internal ramps. Access to 5th Street is for ingress only, and the garage will have two exiting driveways to Hamden Drive. All internal drive aisles and ramps should be 24 feet wide with appropriate signage. Sight triangles and visibility at the garage exits onto Hamden Drive appear to be adequate on the site plan and should provide clear visibility of pedestrians and vehicles along Hamden Drive.

Bicycle/Pedestrian Features

The hotel will include bicycle parking on the ground floor near the hotel lobby. The hotel will also construct sidewalk along both the 5th Street and Hamden Drive frontages thereby providing sidewalk where gaps currently exist.

IV. CONCLUSION

This analysis was conducted in accordance with a methodology established with City of Clearwater staff. The proposed resort hotel would generate 1,388 daily trips of which 68 would occur during the PM peak hour. The hotel traffic does not significantly impact any roadway segment above the 5% level. Most of the traffic impact is to Hamden Drive which carries very low traffic volume. This analysis demonstrates traffic operations at nearby intersections and on adjacent roadways would continue at acceptable levels of service with or without the project impacts.

APPENDIX A

**City of Clearwater
Engineering Department
Traffic Study Checklist**

Applicant: AP Beech Properties, LLC

Assigned Staff: _____

Reference Number: 405 Coronado Drive
JOB NAME/ ADDRESS

Traffic Study Submittal:

- ☒ Was prepared based on a scope of work approved by the City Traffic Engineer
- ☒ Used the most recent version of Synchro for intersection analysis
- ☒ Used the most recent version of the ITE Trip Generation
- ☒ Was prepared and reviewed under the supervision and direction of a qualified engineer or authorized owner/principal of firm
- ☒ Was prepared using count data collected within one year of the submittal date
- ☒ Includes an electronic copy, assembled as a complete document
- ☒ Includes One (1) hard copy
- ☒ Conforms to the most recent version of the City's Traffic Study Guidelines
- ☒ Includes operational analysis files (Synchro)

Traffic Study includes:

- ☒ Entitlement/ Parcel Map No. ADDRESS INCLUDED
- ☐ Assigned Staff name NA
- ☒ Stamp and/or signature of qualified engineer or authorized owner/principal of firm stating the study was prepared and reviewed under their supervision and direction
- ☒ Project description
- ☒ Methodology description
- ☒ Project Trip Generation
- ☐ Trip Generation Comparison (if a General Plan Amendment) NA
- ☒ Delay analysis
- ☐ Queuing analysis for all movements at all study intersections ✓ Intersection Plus
- ☒ Discussion of existing and planned bicycle, pedestrian and transit facilities ✓
- ☒ Collision analysis
- ☒ On-site circulation analysis
- ☒ Mitigations and Recommendations

**City of Clearwater
Engineering Department
Traffic Study Checklist**

Applicant: AP Bech Properties, LLC

Assigned Staff: _____

Reference Number: 405 Coronado Drive

Included Figures:

- ☒ Vicinity Map FIGURE 1
- ☒ Site Plan APPENDIX B
- ☒ Trip distribution at intersections/along roadways FIGURE 4
- ☒ Trip distribution at proposed access points FIGURE 4
- ☒ Volumes for all scenarios analyzed FIGURE 2 + FIGURE 5
- ☒ Lane configurations for all scenarios analyzed Intersection Piles
- ☐ Locations of approved projects NA

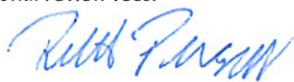
Included Appendices:

- ☒ Approved Scope of Work
- ☒ Model request SYNCHRO
- ☒ Model data HCS
- ☒ Count data
- ☒ Level of Service analysis worksheets
- ☒ Collision data
- ☐ Warrants NA

CERTIFICATION OF APPLICANT: Read each of the statements below. After you have read the statements and understand them, please sign and date in the space provided at the end of this section:

1) I certify that I have read the Traffic Study Checklist thoroughly, followed any and all instruction, and have supplied the necessary information to allow staff to review my study or application and that the supplied information is true and correct information herein to the best of my knowledge and belief.

2) I understand that falsification or misrepresentation on my part of any of the information that I have supplied above constitutes sufficient grounds for return of my submittal, or should any of my responses be determined false, misleading and/or incomplete will subject my application/plans to review delays and may result in the requirement for the applicant to pay additional review fees.



Applicant's signature: Date: 8/16/2021

Robert Pergolizzi

From: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Sent: Friday, August 13, 2021 3:38 PM
To: Robert Pergolizzi
Cc: Atallah, Omar
Subject: RE: 405 Coronado Drive Hotel

Hi Robert – thanks for the update, I will look for your TIS. Enjoy your weekend!
Thanks,
-Ben

Sr. Engineering Specialist
Traffic Operations Division
o:727.562.4775; c:727.439.8383
Bennett.elbo@myclearwater.com

From: Robert Pergolizzi <pergo@gulfcoastconsultinginc.com>
Sent: Friday, August 13, 2021 3:07 PM
To: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Subject: 405 Coronado Drive Hotel

CAUTION: This email originated from outside of the City of Clearwater. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ben – I hope the traffic count data we provided you is helping you in determining lane closure possibilities. As a follow-up to our methodology meeting from July 23, we have completed the traffic count collection, as you know.

We have completed 7-day machine counts on area roadways (particularly Coronado Drive), and the consistent peak hour is 3-4 PM. We have also obtained the intersection turning movement counts between 2:30-4:30 to capture the peak at the 6 intersections identified in our methodology. All counts were seasonally adjusted to annual averages and we have good data coverage of the south beach area, and in particular on Coronado Drive and Hamden Drive where the hotel impacts would be.

We are in the process of analyzing intersections using SYNCHRO. We are analyzing Coronado Drive using SYNCHRO and HCS.

As you requested, we are also evaluating accident data at the 6 intersection locations. Dave had provided that data to me.

As requested, we are adding background traffic at 2% annual growth rate to 2029, 5 years beyond the expected opening date of the hotel. The project traffic is 68 peak hour trips per ITE Trip Generation, 10th Edition. We will then reanalyze the intersections and the roadway segments using SYNCHRO & HCS. We are also reviewing internal circulation within the garage based on the site plan I was provided.

We expect to have our report completed soon and submit by the September 1 deadline.

Have a nice weekend.

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Email: pergo@gulfcoastconsultinginc.com

Robert Pergolizzi

From: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Sent: Wednesday, August 11, 2021 10:31 AM
To: Robert Pergolizzi
Cc: Atallah, Omar
Subject: RE: Traffic Study for a proposed 166 room hotel at 405 Coronado Drive

Much appreciated Sir.
-Ben

Sr. Engineering Specialist
Traffic Operations Division
o:727.562.4775; c:727.439.8383
Bennett.elbo@myclearwater.com

From: Robert Pergolizzi <pergo@gulfcoastconsultinginc.com>
Sent: Wednesday, August 11, 2021 10:23 AM
To: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Cc: Atallah, Omar <Omar.Atallah@MyClearwater.com>
Subject: RE: Traffic Study for a proposed 166 room hotel at 405 Coronado Drive

CAUTION: This email originated from outside of the City of Clearwater. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Ben – Per our discussion attached are the roadway traffic counts (7-days) and intersection turning movement counts we collected during the week of July 26-Aug 1. The daily profiles from the machine counts show traffic volume is low in the AM and generally pick up at 12 noon and stays consistent through 5PM then slowly drops off into the evening hours. Generally speaking the peak hour occurred between 3-4 PM, slightly earlier than the traditional PM peak (4-6PM) for commuters. Coronado Drive is clearly the main thoroughfare throughout south beach.

You will see from the turning movement count at S. Gulfview/Coronado Dr signal that Coronado south of this intersection is carrying over 1200 vph during the afternoon peak hour.

I hope this information is helpful to the city in determining hours of possible lane closures.

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Cell: 727-644-2695
Email: pergo@gulfcoastconsultinginc.com

From: Elbo, Bennett [<mailto:Bennett.Elbo@myClearwater.com>]
Sent: Wednesday, August 11, 2021 9:15 AM
To: Robert Pergolizzi

Cc: Atallah, Omar

Subject: Traffic Study for a proposed 166 room hotel at 405 Coronado Drive

Good morning Robert – hope you are doing well. Is it possible if you can be so kind to share the collected raw data counts today?

Thanks

-Ben

Sincerely,

Bennett Elbo

Sr. Engineering Specialist

100 S Myrtle Av, Suite 220

Clearwater, Florida 33756

727.562.4775

Bennett.elbo@myclearwater.com



Robert Pergolizzi

From: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Sent: Thursday, July 22, 2021 1:04 PM
To: Robert Pergolizzi
Cc: Atallah, Omar; Larremore, Dave M.
Subject: RE: Traffic Study Methodology - 405 Coronado hotel

Hi Robert – please schedule a TIS scoping meeting (in-person) with us. The city's new traffic engineering manager would like to attend the meeting. I will be on vacation beginning Monday, July 26th and returning the following Monday August 2nd.

Thanks,
-Ben

Sr. Engineering Specialist
Traffic Operations Division
o:727.562.4775; c:727.439.8383
Bennett.elbo@myclearwater.com

From: Robert Pergolizzi <pergo@gulfcoastconsultinginc.com>
Sent: Wednesday, July 21, 2021 2:01 PM
To: Elbo, Bennett <Bennett.Elbo@myClearwater.com>
Subject: Traffic Study Methodology - 405 Coronado hotel

CAUTION: This email originated from outside of the City of Clearwater. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Bennett – I will be doing a Traffic Study for a proposed 166 room hotel at 405 Coronado Drive on Clearwater Beach. This was formerly known as "Hotel C" and I had done a study back in 2014. The 166 room hotel would generate 1,388 daily trips and 68 PM peak hour trips per ITE Trip Generation, 10th Edition rates.

I would follow the methodology I had used in 2014, however to consider development since 2014 I will be getting new updated PM peak period (4-6 PM) traffic counts at the following intersections:

S Gulfview / Hamden (signal)
S Gulfview / Coronado (signal)
Coronado / Hamden
Coronado / 5th Street
Hamden / 5th Street
Hamden / Bayside Drive

All counts will be seasonally adjusted to annual average conditions using FDOT seasonal adjustment factors. Roadway segment traffic volumes will be calculated using the seasonally adjusted intersection counts. Existing conditions at the intersections and roadway segments will be analyzed using SYNCHRO & HCS. Project traffic distribution (as in 2014) will be 60% north and 40% south. A background growth rate of 2% per year will be used, and a 2024 buildout will be assumed.

Intersections, roadway segments and project driveways will be reanalyzed to consider background and project traffic. A written report will be prepared for submittal by the applicant for your review.

Let me know if you have any questions. I look forward to starting soon.

Robert Pergolizzi, AICP PTP
Gulf Coast Consulting, Inc.
13825 ICOT Boulevard, Suite 605
Clearwater, FL 33760
Phone: 727-524-1818
Fax: 727-524-6090
Cell: 727-644-2695
Email: pergo@gulfcoastconsultinginc.com

2020 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1500 PINELLAS COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.90 PSCF
* 1	01/01/2020 - 01/04/2020	1.02	1.13
* 2	01/05/2020 - 01/11/2020	0.94	1.04
* 3	01/12/2020 - 01/18/2020	0.85	0.94
* 4	01/19/2020 - 01/25/2020	0.84	0.93
* 5	01/26/2020 - 02/01/2020	0.82	0.91
* 6	02/02/2020 - 02/08/2020	0.81	0.90
* 7	02/09/2020 - 02/15/2020	0.79	0.88
* 8	02/16/2020 - 02/22/2020	0.83	0.92
* 9	02/23/2020 - 02/29/2020	0.86	0.96
*10	03/01/2020 - 03/07/2020	0.90	1.00
*11	03/08/2020 - 03/14/2020	0.94	1.04
*12	03/15/2020 - 03/21/2020	0.97	1.08
*13	03/22/2020 - 03/28/2020	1.11	1.23
14	03/29/2020 - 04/04/2020	1.25	1.39
15	04/05/2020 - 04/11/2020	1.39	1.54
16	04/12/2020 - 04/18/2020	1.53	1.70
17	04/19/2020 - 04/25/2020	1.42	1.58
18	04/26/2020 - 05/02/2020	1.32	1.47
19	05/03/2020 - 05/09/2020	1.21	1.34
20	05/10/2020 - 05/16/2020	1.10	1.22
21	05/17/2020 - 05/23/2020	1.08	1.20
22	05/24/2020 - 05/30/2020	1.06	1.18
23	05/31/2020 - 06/06/2020	1.04	1.16
24	06/07/2020 - 06/13/2020	1.02	1.13
25	06/14/2020 - 06/20/2020	1.00	1.11
26	06/21/2020 - 06/27/2020	1.01	1.12
27	06/28/2020 - 07/04/2020	1.02	1.13
28	07/05/2020 - 07/11/2020	1.02	1.13
29	07/12/2020 - 07/18/2020	1.03	1.14
30	07/19/2020 - 07/25/2020	1.03	1.14
31	07/26/2020 - 08/01/2020	1.03	1.14
32	08/02/2020 - 08/08/2020	1.02	1.13
33	08/09/2020 - 08/15/2020	1.02	1.13
34	08/16/2020 - 08/22/2020	1.02	1.13
35	08/23/2020 - 08/29/2020	1.02	1.13
36	08/30/2020 - 09/05/2020	1.02	1.13
37	09/06/2020 - 09/12/2020	1.02	1.13
38	09/13/2020 - 09/19/2020	1.02	1.13
39	09/20/2020 - 09/26/2020	1.01	1.12
40	09/27/2020 - 10/03/2020	1.00	1.11
41	10/04/2020 - 10/10/2020	0.99	1.10
42	10/11/2020 - 10/17/2020	0.98	1.09
43	10/18/2020 - 10/24/2020	0.99	1.10
44	10/25/2020 - 10/31/2020	0.99	1.10
45	11/01/2020 - 11/07/2020	1.00	1.11
46	11/08/2020 - 11/14/2020	1.00	1.11
47	11/15/2020 - 11/21/2020	1.01	1.12
48	11/22/2020 - 11/28/2020	1.01	1.12
49	11/29/2020 - 12/05/2020	1.01	1.12
50	12/06/2020 - 12/12/2020	1.02	1.13
51	12/13/2020 - 12/19/2020	1.02	1.13
52	12/20/2020 - 12/26/2020	0.94	1.04
53	12/27/2020 - 12/31/2020	0.85	0.94

COVID SHUTDOWN

Count Data Collected

* PEAK SEASON

27-FEB-2021 10:30:07

830UPD

7_1500_PKSEASON.TXT

Type of report: Tube Count - Volume Data

LOCATION: S Gulfview Blvd btwn Bayway Blvd and Gulf Blvd (CLWTR PASS BRIDGE)
 QC JOB #: 15521806
 DIRECTION: EB, WB
 DATE: Jul 26 2021 - Aug 1 2021
 CITY/STATE: Clearwater, FL

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	153	163	147	159	138	152	254	316	190	
01:00 AM	95	84	60	88	82	82	178	170	108	
02:00 AM	63	49	41	76	79	62	113	143	81	
03:00 AM	43	33	28	53	45	40	99	83	55	
04:00 AM	34	24	33	54	61	41	52	66	46	
05:00 AM	82	76	73	73	75	76	66	66	73	
06:00 AM	238	222	232	255	236	237	195	155	219	
07:00 AM	424	377	411	396	420	406	332	279	377	
08:00 AM	592	510	538	549	526	543	442	437	513	
09:00 AM	650	649	615	661	655	646	623	612	638	
10:00 AM	576	759	576	796	774	696	790	811	726	
11:00 AM	589	853	824	938	877	816	934	857	839	
12:00 PM	848	933	848	906	967	900	1006	879	912	
01:00 PM	800	581	856	865	931	807	1004	980	860	
02:00 PM	793	714	888	907	897	840	914	990	872	
03:00 PM	887	941	955	867	1012	932	963	955	940	
04:00 PM	809	905	856	819	912	860	1018	945	895	
05:00 PM	847	896	822	853	965	877	932	905	889	
06:00 PM	731	869	793	839	838	814	1000	889	851	
07:00 PM	749	740	602	766	848	741	941	867	788	
08:00 PM	693	764	647	726	913	749	950	830	789	
09:00 PM	561	651	642	666	793	663	910	736	708	
10:00 PM	444	479	434	551	655	513	631	467	523	
11:00 PM	231	312	303	347	486	336	526	287	356	
Day Total	11932	12584	12224	13210	14185	12829	14873	13725	13248	
% Weekday Average	93%	98.1%	95.3%	103%	110.6%					
% Week Average	90.1%	95%	92.3%	99.7%	107.1%	96.8%	112.3%	103.6%		
AM Peak Volume	9:00 AM 650	11:00 AM 853	11:00 AM 824	11:00 AM 938	11:00 AM 877	11:00 AM 816	11:00 AM 934	11:00 AM 857	11:00 AM 839	
PM Peak Volume	3:00 PM 887	3:00 PM 941	3:00 PM 955	2:00 PM 907	3:00 PM 1012	3:00 PM 932	4:00 PM 1018	2:00 PM 990	3:00 PM 940	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

SF = 1.03

12,829 * 1.03 =
ADT * SF

13,214 ADT

932 * 1.03 = 960 vph

LOCATION: S Gulfview Blvd btwn Bayway Blvd and Gulf Blvd										
QC JOB #: 15521806										
DIRECTION: EB										
DATE: Jul 26 2021 - Aug 1 2021										
SPECIFIC LOCATION:										
CITY/STATE: Clearwater, FL										
Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	62	64	63	66	59	63	103	131	78	
01:00 AM	35	35	25	36	32	33	72	70	44	
02:00 AM	28	24	19	40	28	28	46	69	36	
03:00 AM	19	19	15	25	21	20	43	41	26	
04:00 AM	15	12	17	19	29	18	21	37	21	
05:00 AM	39	39	38	40	42	40	37	33	38	
06:00 AM	101	95	89	111	110	101	99	66	96	
07:00 AM	204	186	221	206	214	206	162	130	189	
08:00 AM	288	251	295	270	250	271	184	215	250	
09:00 AM	332	336	300	332	323	325	292	315	319	
10:00 AM	431	401	345	396	391	393	404	387	394	
11:00 AM	421	470	456	483	447	455	520	425	460	
12:00 PM	436	454	455	451	510	461	624	455	484	
01:00 PM	387	471	429	441	512	448	616	545	486	
02:00 PM	387	481	419	422	488	439	465	542	458	
03:00 PM	470	460	462	448	504	469	511	519	482	
04:00 PM	410	436	408	380	478	422	580	486	454	
05:00 PM	386	402	389	394	452	405	489	438	421	
06:00 PM	350	429	397	415	417	402	480	448	419	
07:00 PM	343	326	274	400	440	357	477	425	384	
08:00 PM	319	357	300	346	434	351	466	456	383	
09:00 PM	220	256	237	256	302	254	352	288	273	
10:00 PM	176	189	178	210	291	209	254	188	212	
11:00 PM	105	140	147	167	228	157	220	127	162	
Day Total	5964	6333	5978	6354	7002	6327	7517	6836	6569	
% Weekday Average	94.3%	100.1%	94.5%	100.4%	110.7%					
% Week Average	90.8%	96.4%	91%	96.7%	106.6%	96.3%	114.4%	104.1%		
AM Peak Volume	10:00 AM 431	11:00 AM 470	11:00 AM 456	11:00 AM 483	11:00 AM 447	11:00 AM 455	11:00 AM 520	11:00 AM 425	11:00 AM 460	
PM Peak Volume	3:00 PM 470	2:00 PM 481	3:00 PM 462	12:00 PM 451	1:00 PM 512	3:00 PM 469	12:00 PM 624	1:00 PM 		

LOCATION: S Gulfview Blvd btwn Bayway Blvd and Gulf Blvd										
QC JOB #: 15521806										
DIRECTION: WB										
DATE: Jul 26 2021 - Aug 1 2021										
SPECIFIC LOCATION:										
CITY/STATE: Clearwater, FL										
Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	91	99	84	93	79	89	151	185	112	
01:00 AM	60	49	35	52	50	49	106	100	65	
02:00 AM	35	25	22	36	51	34	67	74	44	
03:00 AM	24	14	13	28	24	21	56	42	29	
04:00 AM	19	12	16	35	32	23	31	29	25	
05:00 AM	43	37	35	33	33	36	29	33	35	
06:00 AM	137	127	143	144	126	135	96	89	123	
07:00 AM	220	191	190	190	206	199	170	149	188	
08:00 AM	304	259	243	279	276	272	258	222	263	
09:00 AM	318	313	315	329	332	321	331	297	319	
10:00 AM	145	358	231	400	383	303	386	424	332	
11:00 AM	168	383	368	455	430	361	414	432	379	
12:00 PM	412	479	393	455	457	439	382	424	429	
01:00 PM	413	110	427	424	419	359	388	435	374	
02:00 PM	406	233	469	485	409	400	449	448	414	
03:00 PM	417	481	493	419	508	464	452	436	458	
04:00 PM	399	469	448	439	434	438	438	459	441	
05:00 PM	461	494	433	459	513	472	443	467	467	
06:00 PM	381	440	396	424	421	412	520	441	432	
07:00 PM	406	414	328	366	408	384	464	442	404	
08:00 PM	374	407	347	380	479	397	484	374	406	
09:00 PM	341	395	405	410	491	408	558	448	435	
10:00 PM	268	290	256	341	364	304	377	279	311	
11:00 PM	126	172	156	180	258	178	306	160	194	
Day Total	5968	6251	6246	6856	7183	6498	7356	6889	6679	
% Weekday Average	91.8%	96.2%	96.1%	105.5%	110.5%					
% Week Average	89.4%	93.6%	93.5%	102.7%	107.5%	97.3%	110.1%	103.1%		
AM Peak Volume	9:00 AM 318	11:00 AM 383	11:00 AM 368	11:00 AM 455	11:00 AM 430	11:00 AM 361	11:00 AM 414	11:00 AM 432	11:00 AM 379	
PM Peak Volume	5:00 PM 461	5:00 PM 494	3:00 PM 493	2:00 PM 485	5:00 PM 513	5:00 PM 472	9:00 PM 558	5:0		

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Fifth St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521808

DIRECTION: NB, SB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	159	182	141	149	166	159	236	315	193	
01:00 AM	95	80	58	86	85	81	180	175	108	
02:00 AM	62	30	39	71	66	54	100	141	73	
03:00 AM	41	34	30	51	43	40	91	79	53	
04:00 AM	39	36	42	47	49	43	57	78	50	
05:00 AM	88	78	86	95	81	86	78	74	83	
06:00 AM	252	243	239	249	249	246	171	139	220	
07:00 AM	367	358	370	351	361	361	297	258	337	
08:00 AM	493	443	465	492	473	473	381	375	446	
09:00 AM	585	584	530	573	560	566	536	480	550	
10:00 AM	655	635	581	681	686	648	701	732	667	
11:00 AM	731	747	749	778	757	752	773	731	752	
12:00 PM	728	780	803	744	795	770	781	767	771	
01:00 PM	758	764	706	750	768	749	758	850	765	
02:00 PM	726	783	741	779	713	748	505	766	716	
03:00 PM	738	808	798	733	760	767	576	733	735	
04:00 PM	710	777	766	710	750	743	737	730	740	
05:00 PM	722	799	674	710	843	750	718	734	743	
06:00 PM	601	776	700	675	773	705	594	693	687	
07:00 PM	585	660	549	627	713	627	675	732	649	
08:00 PM	567	584	529	583	728	598	752	699	635	
09:00 PM	450	534	550	561	637	546	489	581	543	
10:00 PM	368	421	346	448	556	428	543	405	441	
11:00 PM	212	286	321	311	435	313	467	278	330	
Day Total	10732	11422	10813	11754	12047	11253	11196	11545	11287	
% Weekday Average	95.4%	101.5%	96.1%	100%	107.1%					
% Week Average	95.1%	101.2%	95.8%	99.7%	106.7%	99.7%	99.2%	102.3%		
AM Peak Volume	11:00 AM 731	11:00 AM 747	11:00 AM 749	11:00 AM 778	11:00 AM 757	11:00 AM 752	11:00 AM 773	10:00 AM 732	11:00 AM 752	
PM Peak Volume	1:00 PM 758	3:00 PM 808	12:00 PM 803	2:00 PM 779	5:00 PM 843	12:00 PM 770	12:00 PM 781	1:00 PM 850	12:00 PM 771	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

$11,253 \times 1.03 = 11,591$
ADT $\sim$ SF

$767 \times 1.03 = 790$ vph

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Fifth St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521808

DIRECTION: NB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	85	87	72	76	89	82	131	175	102	
01:00 AM	53	36	32	39	41	40	93	100	56	
02:00 AM	32	12	24	33	26	25	56	78	37	
03:00 AM	24	22	20	24	23	23	47	46	29	
04:00 AM	22	20	24	25	32	25	29	49	29	
05:00 AM	51	46	53	53	51	51	48	42	49	
06:00 AM	106	103	96	110	99	103	85	60	94	
07:00 AM	191	195	198	183	180	189	138	131	174	
08:00 AM	250	228	262	239	231	242	157	201	224	
09:00 AM	300	313	287	302	298	300	265	249	288	
10:00 AM	347	352	337	366	392	359	361	363	360	
11:00 AM	394	423	438	411	376	408	410	370	403	
12:00 PM	399	386	435	358	427	401	462	384	407	
01:00 PM	369	405	355	364	416	382	433	458	400	
02:00 PM	334	371	343	375	353	355	119	400	328	
03:00 PM	378	387	362	354	400	376	182	353	345	
04:00 PM	330	340	336	306	351	333	378	318	337	
05:00 PM	337	366	311	332	373	344	320	312	336	
06:00 PM	281	372	332	309	343	327	186	322	306	
07:00 PM	271	285	246	308	331	288	283	354	297	
08:00 PM	254	262	231	251	295	259	313	335	277	
09:00 PM	180	198	207	218	260	213	68	207	191	
10:00 PM	149	179	136	180	243	177	224	168	183	
11:00 PM	107	137	156	157	223	156	222	136	163	
Day Total	5244	5525	5293	5373	5853	5458	5010	5611	5415	
% Weekday Average	96.1%	101.2%	97%	98.4%	107.2%					
% Week Average	96.8%	102%	97.7%	99.2%	108.1%	100.8%	92.5%	103.6%		
AM Peak Volume	11:00 AM 394	11:00 AM 423	11:00 AM 438	11:00 AM 411	10:00 AM 392	11:00 AM 408	11:00 AM 410	11:00 AM 370	11:00 AM 403	
PM Peak Volume	12:00 PM 399	1:00 PM 405	12:00 PM 435	2:00 PM 375	12:00 PM 427	12:00 PM 401	12:00 PM 462	1:00 PM 458	12:00 PM 407	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Fifth St

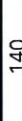
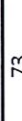
SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521808

DIRECTION: SB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	74	95	69	73	77	78	105	140	90	
01:00 AM	42	44	26	47	44	41	87	75	52	
02:00 AM	30	18	15	38	40	28	44	63	35	
03:00 AM	17	12	10	27	20	17	44	33	23	
04:00 AM	17	16	18	22	17	18	28	29	21	
05:00 AM	37	32	33	42	30	35	30	32	34	
06:00 AM	146	140	143	139	150	144	86	79	126	
07:00 AM	176	163	172	168	181	172	159	127	164	
08:00 AM	243	215	203	253	242	231	224	174	222	
09:00 AM	285	271	243	271	262	266	271	231	262	
10:00 AM	308	283	244	315	294	289	340	369	308	
11:00 AM	337	324	311	367	381	344	363	361	349	
12:00 PM	329	394	368	386	368	369	319	383	364	
01:00 PM	389	359	351	386	352	367	325	392	365	
02:00 PM	392	412	398	404	360	393	386	366	388	
03:00 PM	360	421	436	379	360	391	394	380	390	
04:00 PM	380	437	430	404	399	410	359	412	403	
05:00 PM	385	433	363	378	470	406	398	422	407	
06:00 PM	320	404	368	366	430	378	408	371	381	
07:00 PM	314	375	303	319	382	339	392	378	352	
08:00 PM	313	322	298	332	433	340	439	364	357	
09:00 PM	270	336	343	343	377	334	421	374	352	
10:00 PM	219	242	210	268	313	250	319	237	258	
11:00 PM	105	149	165	154	212	157	245	142	167	
Day Total	5488	5897	5520	5881	6194	5797	6186	5934	5870	
% Weekday Average	94.7%	101.7%	95.2%	101.4%	106.8%					
% Week Average	93.5%	100.5%	94%	100.2%	105.5%	98.8%	105.4%	101.1%		
AM Peak Volume	11:00 AM 337	11:00 AM 324	11:00 AM 311	11:00 AM 367	11:00 AM 381	11:00 AM 344	11:00 AM 363	10:00 AM 369	11:00 AM 349	
PM Peak Volume	2:00 PM 392	4:00 PM 437	3:00 PM 436	2:00 PM 404	5:00 PM 470	4:00 PM 410	8:00 PM 439	5:00 PM 422	5:00 PM 407	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Third St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521809

DIRECTION: NB, SB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	210	223	201	208	218	212	302	429	256	
01:00 AM	109	99	74	115	111	102	233	204	135	
02:00 AM	68	49	51	75	74	63	138	165	89	
03:00 AM	55	51	37	70	60	55	92	121	69	
04:00 AM	42	38	51	61	58	50	66	94	59	
05:00 AM	82	71	77	85	73	78	81	79	78	
06:00 AM	252	237	240	243	240	242	185	144	220	
07:00 AM	388	391	386	390	418	395	322	285	369	
08:00 AM	556	499	520	570	523	534	442	403	502	
09:00 AM	675	626	627	639	597	633	605	560	618	
10:00 AM	791	770	701	789	778	766	804	802	776	
11:00 AM	845	869	804	886	844	850	912	912	867	
12:00 PM	822	900	891	890	889	878	939	883	888	
01:00 PM	914	864	881	913	911	897	918	964	909	
02:00 PM	795	944	848	911	863	872	838	947	878	
03:00 PM	922	997	928	851	888	917	842	917	906	
04:00 PM	813	995	857	854	883	880	905	895	886	
05:00 PM	856	992	855	826	917	889	918	890	893	
06:00 PM	713	943	800	817	890	833	758	868	827	
07:00 PM	678	836	681	772	836	761	822	912	791	
08:00 PM	651	696	661	741	820	714	915	807	756	
09:00 PM	546	699	636	686	820	677	581	678	664	
10:00 PM	438	534	483	545	692	538	674	503	553	
11:00 PM	263	314	389	400	543	382	606	388	415	
Day Total	12484	13637	12679	13337	13946	13218	13898	13850	13404	
% Weekday Average	94.4%	103.2%	95.9%	100.9%	105.5%					
% Week Average	93.1%	101.7%	94.6%	99.5%	104%	98.6%	103.7%	103.3%		
AM Peak Volume	11:00 AM 845	11:00 AM 869	11:00 AM 804	11:00 AM 886	11:00 AM 844	11:00 AM 850	11:00 AM 912	11:00 AM 912	11:00 AM 867	
PM Peak Volume	3:00 PM 922	3:00 PM 997	3:00 PM 928	1:00 PM 913	5:00 PM 917	3:00 PM 917	12:00 PM 939	1:00 PM 964	1:00 PM 909	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

13,615 AADT

SF = 1.03
13,218 * 1.03 =
ADT SF

917 * 1.03 = 945 vph

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Third St

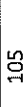
SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521809

DIRECTION: NB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	116	120	102	102	85	105	174	228	132	
01:00 AM	60	50	37	63	56	53	114	113	70	
02:00 AM	35	22	27	35	29	30	82	104	48	
03:00 AM	31	32	26	35	29	31	50	74	40	
04:00 AM	27	24	25	31	37	29	38	58	34	
05:00 AM	49	39	49	51	42	46	53	49	47	
06:00 AM	107	105	89	106	101	102	93	65	95	
07:00 AM	206	206	198	200	214	205	146	149	188	
08:00 AM	291	266	284	287	335	293	203	200	267	
09:00 AM	360	328	345	329	319	336	313	296	327	
10:00 AM	422	418	428	391	407	413	406	396	410	
11:00 AM	461	459	467	456	453	459	462	458	459	
12:00 PM	441	404	491	444	470	450	495	443	455	
01:00 PM	469	441	443	442	480	455	475	498	464	
02:00 PM	395	464	375	414	437	417	300	465	407	
03:00 PM	461	479	463	402	430	447	294	448	425	
04:00 PM	387	464	383	381	383	400	413	413	403	
05:00 PM	387	472	410	375	0	329	359	385	341	
06:00 PM	357	454	374	415	1	320	203	395	314	
07:00 PM	296	374	312	359	0	268	318	430	298	
08:00 PM	295	286	299	334	10	245	381	407	287	
09:00 PM	223	269	280	286	312	274	71	255	242	
10:00 PM	196	219	199	229	283	225	296	243	238	
11:00 PM	123	308	190	203	265	218	276	188	222	
Day Total	6195	6703	6296	6370	5178	6150	6015	6760	6213	
% Weekday Average	100.7%	109%	102.4%	103.6%	84.2%					
% Week Average	99.7%	107.9%	101.3%	102.5%	83.3%	99%	96.8%	108.8%		
AM Peak Volume	11:00 AM 461	11:00 AM 459	11:00 AM 467	11:00 AM 456	11:00 AM 453	11:00 AM 459	11:00 AM 462	11:00 AM 458	11:00 AM 459	
PM Peak Volume	1:00 PM 469	3:00 PM 479	12:00 PM 491	12:00 PM 444	1:00 PM 480	1:00 PM 455	12:00 PM 495	1:00 PM 498	1:00 PM 464	
Comments:										

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of report: Tube Count - Volume Data

LOCATION: Coronado Dr south of Third St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521809

DIRECTION: SB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	94	103	99	106	133	107	128	201	123	
01:00 AM	49	49	37	52	55	48	119	91	65	
02:00 AM	33	27	24	40	45	34	56	61	41	
03:00 AM	24	19	11	35	31	24	42	47	30	
04:00 AM	15	14	26	30	21	21	28	36	24	
05:00 AM	33	32	28	34	31	32	28	30	31	
06:00 AM	145	132	151	137	139	141	92	79	125	
07:00 AM	182	185	188	190	204	190	176	136	180	
08:00 AM	265	233	236	283	188	241	239	203	235	
09:00 AM	315	298	282	310	278	297	292	264	291	
10:00 AM	369	352	273	398	371	353	398	406	367	
11:00 AM	384	410	337	430	391	390	450	454	408	
12:00 PM	381	496	400	446	419	428	444	440	432	
01:00 PM	445	423	438	471	431	442	443	466	445	
02:00 PM	400	480	473	497	426	455	538	482	471	
03:00 PM	461	518	465	449	458	470	548	469	481	
04:00 PM	426	531	474	473	500	481	492	482	483	
05:00 PM	469	520	445	451	917	560	559	505	552	
06:00 PM	356	489	426	402	889	512	555	473	513	
07:00 PM	382	462	369	413	836	492	504	482	493	
08:00 PM	356	410	362	407	810	469	534	400	468	
09:00 PM	323	430	356	400	508	403	510	423	421	
10:00 PM	242	315	284	316	409	313	378	260	315	
11:00 PM	140	6	199	197	278	164	330	200	193	
Day Total	6289	6934	6383	6967	8768	7067	7883	7090	7187	
% Weekday Average	89%	98.1%	90.3%	98.6%	124.1%					
% Week Average	87.5%	96.5%	88.8%	96.9%	122%	98.3%	109.7%	98.7%		
AM Peak Volume	11:00 AM 384	11:00 AM 410	11:00 AM 337	11:00 AM 430	11:00 AM 391	11:00 AM 390	11:00 AM 450	11:00 AM 454	11:00 AM 408	
PM Peak Volume	5:00 PM 469	4:00 PM 531	4:00 PM 474	2:00 PM 497	5:00 PM 917	5:00 PM 560	5:00 PM 559	5:00 PM 505	5:00 PM 552	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of report: Tube Count - Volume Data

LOCATION: S Hamden Dr south of Fifth St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521810

DIRECTION: NB, SB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	22	11	15	11	11	14	26	34	19	
01:00 AM	8	7	9	9	6	8	27	18	12	
02:00 AM	4	6	10	4	10	7	8	14	8	
03:00 AM	7	6	7	5	3	6	14	12	8	
04:00 AM	9	4	6	8	4	6	6	5	6	
05:00 AM	5	8	6	7	5	6	9	6	7	
06:00 AM	20	18	18	24	21	20	28	16	21	
07:00 AM	26	31	38	40	39	35	48	24	35	
08:00 AM	66	68	71	87	75	73	54	48	67	
09:00 AM	95	76	78	90	97	87	88	73	85	
10:00 AM	110	107	107	100	114	108	115	103	108	
11:00 AM	111	124	102	132	129	120	134	123	122	
12:00 PM	112	115	107	113	145	118	176	104	125	
01:00 PM	120	131	117	124	150	128	167	142	136	
02:00 PM	133	148	125	140	142	138	271	141	157	
03:00 PM	129	141	144	125	179	144	308	137	166	
04:00 PM	117	153	124	132	157	137	213	143	148	
05:00 PM	115	142	123	114	178	134	201	154	147	
06:00 PM	103	106	76	90	177	110	230	133	131	
07:00 PM	88	87	75	96	130	95	215	126	117	
08:00 PM	73	76	81	90	142	92	184	95	106	
09:00 PM	62	55	61	73	112	73	208	103	96	
10:00 PM	63	48	56	53	84	61	69	52	61	
11:00 PM	31	29	22	24	45	30	53	24	33	
Day Total	1629	1697	1578	1691	2155	1750	2852	1830	1921	
% Weekday Average	93.1%	97%	90.2%	96.6%	123.1%					
% Week Average	84.8%	88.3%	82.1%	88%	112.2%	91.1%	148.5%	95.3%		
AM Peak Volume	111	124	107	132	129	120	134	123	11:00 AM 122	
PM Peak Volume	133	153	144	140	179	144	308	154	3:00 PM 166	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

SF = 1.03

1750 x 1.03 =
ADT SF

1803 AADT

144 x 1.03 = 148 vph

Type of report: Tube Count - Volume Data

LOCATION: S Hamden Dr south of Fifth St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521810

DIRECTION: NB

DATE: Jul 26 2021 - Aug 1 2021

Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	14	8	11	6	7	9	20	23	13	
01:00 AM	4	3	6	5	1	4	17	9	6	
02:00 AM	4	6	6	2	8	5	6	14	7	
03:00 AM	3	3	3	3	0	2	8	10	4	
04:00 AM	6	4	4	4	1	4	2	4	4	
05:00 AM	3	6	4	4	5	4	5	2	4	
06:00 AM	14	11	11	16	13	13	16	11	13	
07:00 AM	19	24	29	25	20	23	29	14	23	
08:00 AM	51	41	48	57	48	49	35	32	45	
09:00 AM	60	45	41	48	47	48	50	51	49	
10:00 AM	64	72	61	61	80	68	65	69	67	
11:00 AM	60	74	64	85	85	74	88	80	77	
12:00 PM	65	74	67	68	93	73	120	60	78	
01:00 PM	71	80	59	76	89	75	122	91	84	
02:00 PM	74	95	67	77	86	80	204	105	101	
03:00 PM	79	92	90	80	114	91	227	87	110	
04:00 PM	78	86	85	77	99	85	161	90	97	
05:00 PM	65	75	68	64	99	74	153	110	91	
06:00 PM	66	67	40	57	117	69	168	91	87	
07:00 PM	47	59	39	54	92	58	135	91	74	
08:00 PM	46	46	51	59	87	58	118	62	67	
09:00 PM	38	32	38	39	75	44	137	62	60	
10:00 PM	44	33	32	30	55	39	43	30	38	
11:00 PM	18	16	12	14	24	17	24	16	18	
Day Total	993	1052	936	1011	1345	1066	1953	1214	1217	
% Weekday Average	93.2%	98.7%	87.8%	94.8%	126.2%					
% Week Average	81.6%	86.4%	76.9%	83.1%	110.5%	87.6%	160.5%	99.8%		
AM Peak Volume	10:00 AM 64	11:00 AM 74	11:00 AM 64	11:00 AM 85	11:00 AM 85	11:00 AM 74	11:00 AM 88	11:00 AM 80	11:00 AM 77	
PM Peak Volume	3:00 PM 79	2:00 PM 95	3:00 PM 90	3:00 PM 80	6:00 PM 117	3:00 PM 91	3:00 PM 227	5:00 PM 110	3:00 PM 110	

Comments:

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of report: Tube Count - Volume Data

LOCATION: S Hamden Dr south of Fifth St

SPECIFIC LOCATION:

CITY/STATE: Clearwater, FL

QC JOB #: 15521810

DIRECTION: SB

DATE: Jul 26 2021 - Aug 1 2021

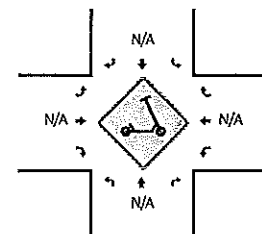
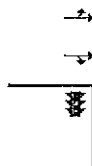
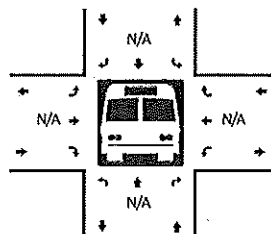
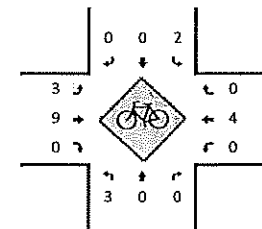
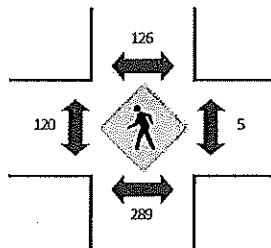
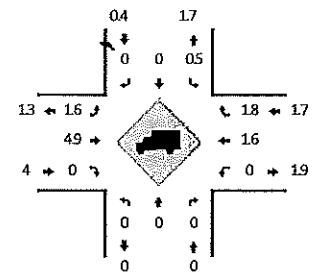
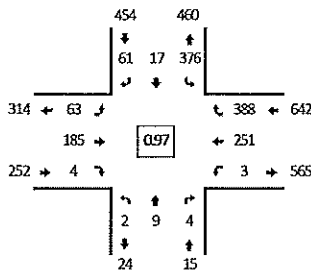
Start Time	Mon 26 Jul 21	Tue 27 Jul 21	Wed 28 Jul 21	Thu 29 Jul 21	Fri 30 Jul 21	Average Weekday Hourly Traffic	Sat 31 Jul 21	Sun 1 Aug 21	Average Week Hourly Traffic	Average Week Profile
12:00 AM	8	3	4	5	4	5	6	11	6	
01:00 AM	4	4	3	4	5	4	10	9	6	
02:00 AM	0	0	4	2	2	2	2	0	1	
03:00 AM	4	3	4	2	3	3	6	2	3	
04:00 AM	3	0	2	4	3	2	4	1	2	
05:00 AM	2	2	2	3	0	2	4	4	2	
06:00 AM	6	7	7	8	8	7	12	5	8	
07:00 AM	7	7	9	15	19	11	19	10	12	
08:00 AM	15	27	23	30	27	24	19	16	22	
09:00 AM	35	31	37	42	50	39	38	22	36	
10:00 AM	46	35	46	39	34	40	50	34	41	
11:00 AM	51	50	38	47	44	46	46	43	46	
12:00 PM	47	41	40	45	52	45	56	44	46	
01:00 PM	49	51	58	48	61	53	45	51	52	
02:00 PM	59	53	58	63	56	58	67	36	56	
03:00 PM	50	49	54	45	65	53	81	50	56	
04:00 PM	39	67	39	55	58	52	52	53	52	
05:00 PM	50	67	55	50	79	60	48	44	56	
06:00 PM	37	39	36	33	60	41	62	42	44	
07:00 PM	41	28	36	42	38	37	80	35	43	
08:00 PM	27	30	30	31	55	35	66	33	39	
09:00 PM	24	23	23	34	37	28	71	41	36	
10:00 PM	19	15	24	23	29	22	26	22	23	
11:00 PM	13	13	10	10	21	13	29	8	15	
Day Total	636	645	642	680	810	682	899	616	703	
% Weekday Average	93.3%	94.6%	94.1%	99.7%	118.8%					
% Week Average	90.5%	91.7%	91.3%	96.7%	115.2%	97%	127.9%	87.6%		
AM Peak Volume	11:00 AM 51	11:00 AM 50	10:00 AM 46	11:00 AM 47	9:00 AM 50	11:00 AM 46	10:00 AM 50	11:00 AM 43	11:00 AM 46	
PM Peak Volume	2:00 PM 59	4:00 PM 67	1:00 PM 58	2:00 PM 63	5:00 PM 79	5:00 PM 60	3:00 PM 81	4:00 PM 53	2:00 PM 56	
Comments:										

Report generated on 8/5/2021 9:40 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: S Hamden Dr -- S Gulfview Blvd
CITY/STATE: Clearwater, FLQC JOB #: 15521817
DATE: Tue, Jul 27 2021Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 2:45 PM -- 3:00 PM

R* = RTOR

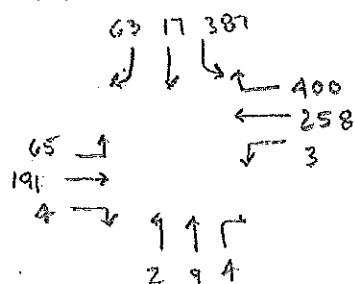
15-Min Count Period Beginning At	S Hamden Dr (Northbound)					S Hamden Dr (Southbound)					S Gulfview Blvd (Eastbound)					S Gulfview Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	1	1	2	0	0	84	8	10	0	3	15	51	2	0	0	2	65	37	0	28	309	
2:45 PM	1	1	2	0	0	92	6	17	0	1	16	44	2	0	0	1	66	67	0	35	351	
3:00 PM	0	1	2	0	0	91	2	8	0	7	19	40	1	0	0	0	61	60	0	52	344	
3:15 PM	0	4	0	0	0	99	4	12	0	4	18	47	1	0	0	1	64	53	0	26	333	1337
3:30 PM	1	3	0	0	0	94	5	9	0	3	10	54	0	0	0	1	60	67	0	28	335	1363
3:45 PM	0	0	1	0	0	91	4	13	0	6	20	49	0	0	0	1	63	59	0	28	335	1347
4:00 PM	0	2	2	0	0	104	2	9	0	3	12	53	4	0	0	0	62	36	1	42	332	1335
4:15 PM	0	1	2	0	0	123	4	15	0	3	17	41	0	0	0	1	62	40	0	39	348	1350
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	4	4	8	0	0	368	24	72	0	4	64	176	8	0	0	4	264	408	0	140	1548	
Heavy Trucks	0	0	0			0	0	0			0	8	0			0	4	8			20	
Buses																						
Pedestrians		224					88					104					0				416	
Bicycles	4	0	0			0	0	0			0	12	0			0	0	0			16	
Scooters																						

Comments:

Report generated on 8/10/2021 9:07 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

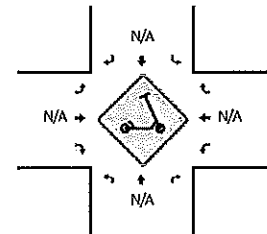
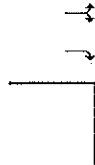
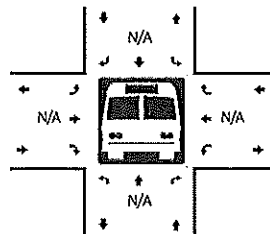
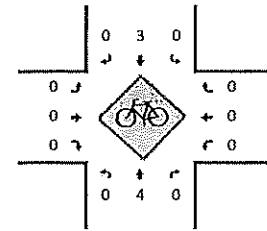
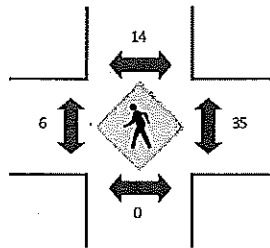
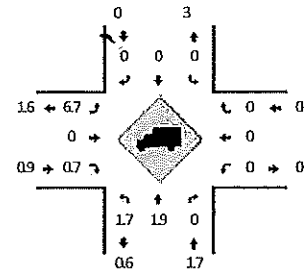
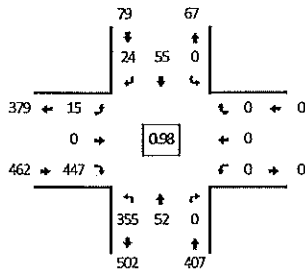
SF = 1.03



LOCATION: S Hamden Dr -- Coronado Dr
CITY/STATE: Clearwater, FL

QC JOB #: 15521819
DATE: Tue, Jul 27 2021

Peak-Hour: 3:30 PM -- 4:30 PM
Peak 15-Min: 4:15 PM -- 4:30 PM



R* = RTOR

15-Min Count Period Beginning At	S Hamden Dr (Northbound)					S Hamden Dr (Southbound)					Coronado Dr (Eastbound)					Coronado Dr (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	71	8	0	0	0	0	10	4	0	0	5	0	97	0	0	0	0	0	0	0	195	905
2:45 PM	98	19	0	0	0	0	12	4	0	0	4	0	111	0	0	0	0	0	0	0	248	
3:00 PM	114	20	0	0	0	0	10	7	0	0	6	0	93	0	0	0	0	0	0	0	250	
3:15 PM	90	12	0	0	0	0	16	0	0	0	2	0	92	0	0	0	0	0	0	0	212	
3:30 PM	100	10	0	0	0	0	7	3	0	0	6	0	109	0	0	0	0	0	0	0	235	
3:45 PM	88	18	0	0	0	0	14	5	0	0	1	0	103	0	0	0	0	0	0	0	229	
4:00 PM	80	16	0	0	0	0	20	8	0	0	3	0	114	0	0	0	0	0	0	0	241	
4:15 PM	87	8	0	0	0	0	14	8	0	0	5	0	121	0	0	0	0	0	0	0	243	
																					948	

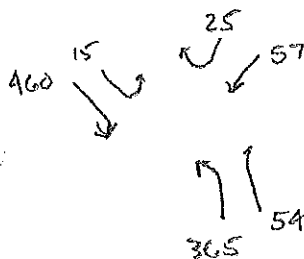
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	348	32	0	0	0	0	56	32	0	0	20	0	484	0	0	0	0	0	0	0	972
Heavy Trucks	4	0	0	0	0	0	0	0	0	0	4	0	8	0	0	0	0	0	0	0	16
Buses																					
Pedestrians	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	24	0	0	0	0	32
Bicycles	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Scooters																					

Comments:

Report generated on 8/10/2021 9:07 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

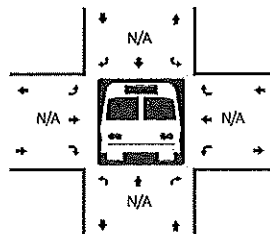
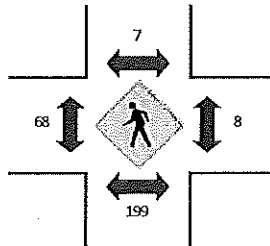
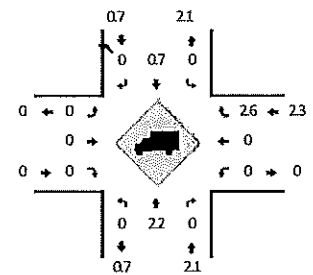
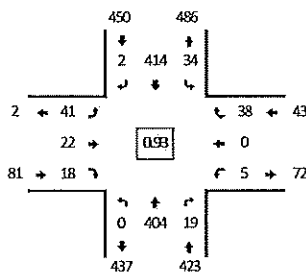
SF = 1.03



LOCATION: Coronado Dr -- Fifth St
CITY/STATE: Clearwater, FL

QC JOB #: 15521820
DATE: Tue, Jul 27 2021

Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:00 PM -- 3:15 PM



R* = RTOR

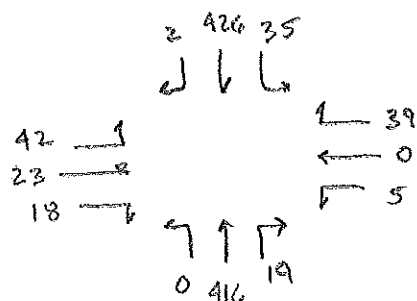
15-Min Count Period Beginning At	Coronado Dr (Northbound)					Coronado Dr (Southbound)					Fifth St (Eastbound)					Fifth St (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	0	78	3	0	0	5	101	0	0	0	19	6	2	0	0	2	0	6	0	0	222	
2:45 PM	0	95	2	0	0	9	107	1	2	0	9	9	3	0	0	2	0	11	0	0	250	
3:00 PM	0	112	9	0	0	8	101	1	0	0	16	8	3	0	0	1	0	9	0	0	268	
3:15 PM	0	89	4	0	0	8	89	0	1	0	7	2	8	0	0	2	0	6	0	0	216	956
3:30 PM	0	108	4	0	0	6	117	0	0	0	9	3	4	0	0	0	0	12	0	0	263	997
3:45 PM	0	87	4	0	0	5	107	0	3	0	6	11	4	0	0	1	0	4	0	0	232	979
4:00 PM	0	92	1	0	0	6	112	0	0	0	6	4	4	0	0	1	0	12	0	0	238	949
4:15 PM	0	95	5	0	0	9	124	0	0	0	15	3	6	0	0	1	0	5	0	0	263	996
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	448	36	0	0	32	404	4	0	0	64	32	12	0	0	4	0	36	0	0	1072	
Heavy Trucks	0	8	0			0	0	0			0	0	0			0	0	0			8	
Buses																						
Pedestrians		204					4					52					4				264	
Bicycles	0	12	0			0	0	0			0	0	0			0	0	0			12	
Scooters																						

Comments:

Report generated on 8/10/2021 9:07 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

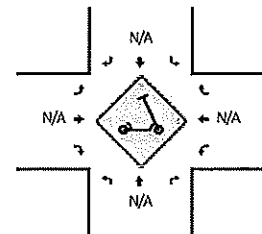
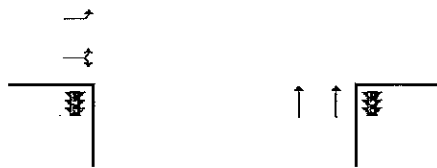
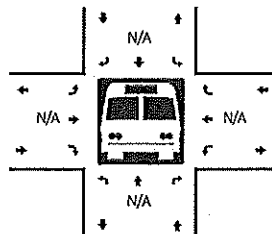
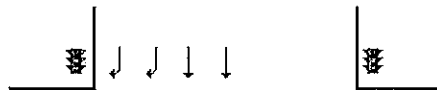
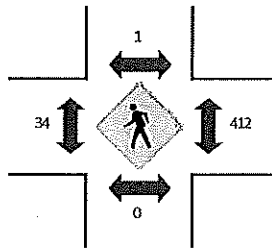
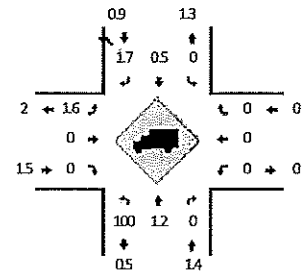
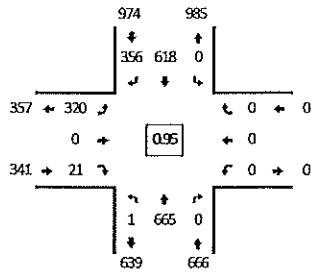
SF = 1.03



LOCATION: Coronado Dr -- S Gulfview Blvd
CITY/STATE: Clearwater, FL

QC JOB #: 15521818
DATE: Tue, Jul 27 2021

Peak-Hour: 3:15 PM -- 4:15 PM
Peak 15-Min: 4:00 PM -- 4:15 PM



R* = RTOR

15-Min Count Period Beginning At	Coronado Dr (Northbound)					Coronado Dr (Southbound)					S Gulfview Blvd (Eastbound)					S Gulfview Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	0	130	0	0	0	0	137	104	0	0	71	0	9	0	2	0	0	0	0	0	453	
2:45 PM	0	156	0	0	0	0	147	100	0	0	71	0	11	0	1	0	0	0	0	0	486	
3:00 PM	0	187	0	0	0	0	117	102	0	0	72	0	2	0	5	0	0	0	0	0	485	
3:15 PM	1	163	0	0	0	0	143	87	0	0	83	0	3	0	1	0	0	0	0	0	481	1905
3:30 PM	0	166	0	0	0	0	159	84	0	0	80	0	7	0	0	0	0	0	0	0	496	1948
3:45 PM	0	160	0	0	0	0	159	85	0	0	74	0	4	0	2	0	0	0	0	0	484	1946
4:00 PM	0	176	0	0	0	0	157	100	0	0	83	0	3	0	1	0	0	0	0	0	520	1981
4:15 PM	0	168	0	0	0	0	149	71	0	0	70	0	2	0	0	0	0	0	0	0	460	1960
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	704	0	0	0	0	628	400	0	0	332	0	16	0	4	0	0	0	0	0	2084	
Heavy Trucks	0	12	0			0	0	8			8	0	0			0	0	0			28	
Buses																						
Pedestrians	0	0				0					12					604					616	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Scoters																						

Comments:

Report generated on 8/9/2021 12:58 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

SF = 1.03

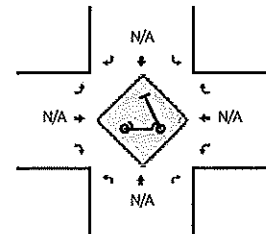
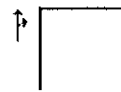
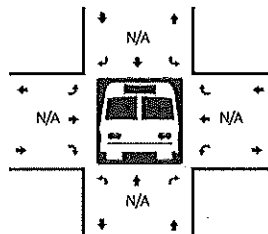
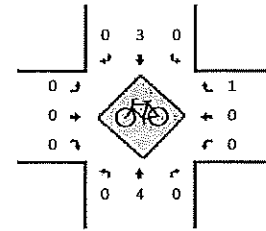
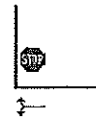
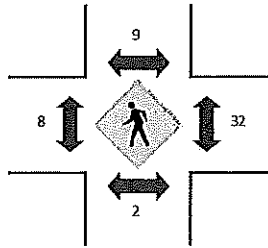
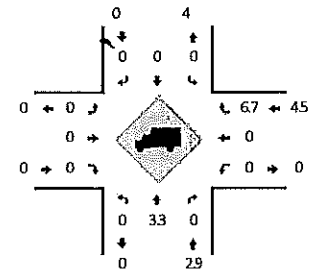
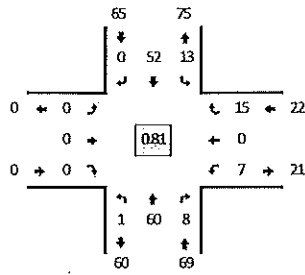
367 636
↓ ↓

330 ↓
22 → 99
1 685

LOCATION: S Hamden Dr -- Bayside Dr
CITY/STATE: Clearwater, FL

QC JOB #: 15521822
DATE: Tue, Jul 27 2021

Peak-Hour: 3:30 PM -- 4:30 PM
Peak 15-Min: 3:45 PM -- 4:00 PM



R* = RTOR

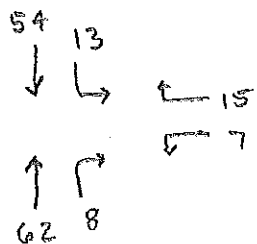
15-Min Count Period Beginning At	S Hamden Dr (Northbound)					S Hamden Dr (Southbound)					Bayside Dr (Eastbound)					Bayside Dr (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	0	12	0	0	0	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	26	140
2:45 PM	0	19	3	0	0	2	13	0	1	0	0	0	0	0	0	0	0	4	0	0	42	
3:00 PM	0	27	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	1	0	0	37	
3:15 PM	0	15	2	0	0	2	10	0	0	0	0	0	0	0	0	0	0	6	0	0	35	
3:30 PM	0	12	2	0	0	1	5	0	0	0	0	0	0	0	0	1	0	4	0	0	25	
3:45 PM	0	19	1	0	0	4	18	0	0	0	0	0	0	0	0	1	0	5	0	0	48	
4:00 PM	0	15	5	0	0	5	12	0	0	0	0	0	0	0	0	4	0	3	0	0	44	152
4:15 PM	0	14	0	1	0	3	17	0	0	0	0	0	0	0	0	1	0	3	0	0	39	156
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	76	4	0	0	16	72	0	0	0	0	0	0	0	0	4	0	20	0	0	192	
Heavy Trucks	0	4	0			0	0	0			0	0	0			0	0	4			8	
Buses																						
Pedestrians	0	0				0					0							32			32	
Bicycles	0	8	0			0	4	0			0	0	0			0	0	4			16	
Scooters																						

Comments:

Report generated on 8/10/2021 9:07 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

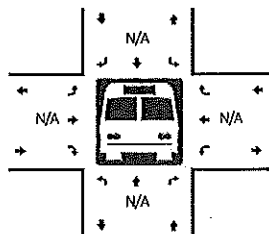
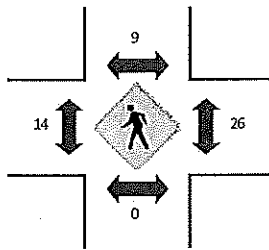
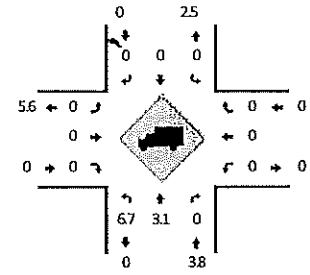
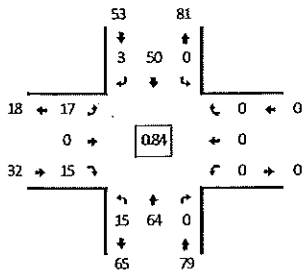
SF = 1.03



LOCATION: S Hamden Dr -- Fifth St
CITY/STATE: Clearwater, FL

QC JOB #: 15521821
DATE: Tue, Jul 27 2021

Peak-Hour: 3:30 PM -- 4:30 PM
Peak 15-Min: 3:45 PM -- 4:00 PM



R* = RTOR

15-Min Count Period Beginning At	S Hamden Dr (Northbound)					S Hamden Dr (Southbound)					Fifth St (Eastbound)					Fifth St (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
2:30 PM	5	6	0	0	0	0	13	2	0	0	3	0	0	0	0	0	0	0	0	0	29	
2:45 PM	10	19	0	0	0	0	13	0	0	0	0	0	6	0	0	0	0	0	0	0	48	
3:00 PM	6	23	0	0	0	0	5	0	0	0	4	0	4	0	0	0	0	0	0	0	42	
3:15 PM	4	15	0	0	0	0	6	0	0	0	1	0	5	1	0	0	0	0	0	0	32	151
3:30 PM	4	13	0	0	0	0	5	0	0	0	4	0	1	0	0	0	0	0	0	0	27	149
3:45 PM	4	20	0	0	0	0	15	1	0	0	3	0	6	0	0	0	0	0	0	0	49	150
4:00 PM	3	18	0	0	0	0	16	1	0	0	5	0	1	0	0	0	0	0	0	0	44	152
4:15 PM	4	13	0	0	0	0	14	1	0	0	5	0	7	0	0	0	0	0	0	0	44	164
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	16	80	0	0	0	0	60	4	0	0	12	0	24	0	0	0	0	0	0	0	196	
Heavy Trucks	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Buses																						
Pedestrians		0					28					8					16				52	
Bicycles	0	12	0			0	4	0			0	0	0			0	0	0			16	
Scooters																						

Comments:

Report generated on 8/10/2021 9:07 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

SF = 1.03

3 52
↓

17 ↑
15 ↓
15 66

Lanes, Volumes, Timings

1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

8/10/2021

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	2	9	4	387	17	63	65	191	4	3	258	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	202		550	355		355	800		409
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96		0.99	0.89		0.79	0.99			1.00	0.60
Frt		0.964			0.959			0.997				0.850
Flt Protected		0.993		0.950	0.968		0.950				0.999	
Satd. Flow (prot)	0	1802	0	1715	1503	0	1736	1800	0	0	1861	1583
Flt Permitted		0.993		0.950	0.968		0.571				0.997	
Satd. Flow (perm)	0	1739	0	1689	1488	0	829	1800	0	0	1849	950
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			18			1				412
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			565			611			887	
Travel Time (s)		7.8			15.4			16.7			24.2	
Confl. Peds. (#/hr)	120		5	5		120	126		289	289		126
Confl. Bikes (#/hr)									9			4
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
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	2	9	4	399	18	65	67	197	4	3	266	412
Shared Lane Traffic (%)				39%								
Lane Group Flow (vph)	0	15	0	243	239	0	67	201	0	0	269	412
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2	2		6	6			4			4	
Permitted Phases							4			4		4
Detector Phase	2	2		6	6		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	25.0	25.0		30.0	30.0		25.0	25.0		25.0	25.0	25.0
Total Split (s)	25.0	25.0		40.0	40.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	22.7%	22.7%		36.4%	36.4%		40.9%	40.9%		40.9%	40.9%	40.9%
Maximum Green (s)	21.0	21.0		36.0	36.0		41.0	41.0		41.0	41.0	41.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		Min	Min		None	None		None	None	None
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		6.9		13.9	13.9		18.0	18.0			18.0	18.0
Actuated g/C Ratio		0.16		0.33	0.33		0.42	0.42			0.42	0.42
v/c Ratio		0.05		0.44	0.48		0.19	0.26			0.34	0.64

Lanes, Volumes, Timings

1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

8/10/2021

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay		22.5		16.8	16.9		11.0	10.2			10.8	6.9
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay		22.5		16.8	16.9		11.0	10.2			10.8	6.9
LOS		C		B	B		B	B			B	A
Approach Delay		22.5	Hotel		16.9	Hamden		10.4	S. Gulfview		8.4	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)		2		36	33		7	22			31	0
Queue Length 95th (ft)		23		175	168		46	105			140	65
Internal Link Dist (ft)		207			485			531			807	
Turn Bay Length (ft)				202			355					409
Base Capacity (vph)		1062		1472	1293		741	1610			1654	893
Starvation Cap Reductn		0		0	0		0	0			0	0
Spillback Cap Reductn		0		0	0		0	0			0	0
Storage Cap Reductn		0		0	0		0	0			0	0
Reduced v/c Ratio		0.01		0.17	0.18		0.09	0.12			0.16	0.46

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 42.6

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 11.7

Intersection LOS: B

Intersection Capacity Utilization 62.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

		
g2	g6	g4
25 s	40 s	45 s

Intersection

Int Delay, s/veh 0

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Vol, veh/h	365	54	15	460	57	25
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	75	-	0	40
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	1	1	0	0
Mvmt Flow	372	55	15	469	58	26

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	386	514
Stage 1	-	-	14
Stage 2	-	-	500
Critical Hdwy	-	-	6.4
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	-	3.5
Pot Cap-1 Maneuver	-	-	524
Stage 1	-	-	-
Stage 2	-	-	613
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	514
Mov Cap-2 Maneuver	-	-	514
Stage 1	-	-	-
Stage 2	-	-	609

Approach	NB	SB	SW
HCM Control Delay, s	0	-	-
HCM LOS	-	-	-

Minor Lane/Major Mvmt	NBT	NBR	SBL	SBT	SWLn1	SWLn2
Capacity (veh/h)	-	-	-	-	514	-
HCM Lane V/C Ratio	-	-	-	-	0.113	-
HCM Control Delay (s)	-	-	-	-	12.9	-
HCM Lane LOS	-	-	-	-	B	-
HCM 95th %ile Q(veh)	-	-	-	-	0.4	-

SW Bound (Hamden) (Top)
Approach

Intersection												
Int Delay, s/veh	4			OVERALL			DELAY					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	42	23	18	5	0	39	0	416	19	35	426	2
Conflicting Peds, #/hr	68	0	68	8	0	8	199	0	199	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	2	2	2	2	2	2	1	1	1
Mvmt Flow	45	25	19	5	0	42	0	447	20	38	458	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1088	1078	726	1090	1069	473	528	0	0	476	0	0
Stage 1	602	602	-	466	466	-	-	-	-	-	-	-
Stage 2	486	476	-	624	603	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	195	220	428	193	221	591	1039	-	-	1091	-	-
Stage 1	490	492	-	577	562	-	-	-	-	-	-	-
Stage 2	566	560	-	473	488	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	164	197	324	128	198	583	842	-	-	1084	-	-
Mov Cap-2 Maneuver	164	197	-	128	198	-	-	-	-	-	-	-
Stage 1	458	444	-	573	558	-	-	-	-	-	-	-
Stage 2	522	556	-	328	440	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.5	14.8	0	0.6
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	842	-	-	194	415	1084	-	-
HCM Lane V/C Ratio	-	-	-	0.46	0.114	0.035	-	-
HCM Control Delay (s)	0	-	-	38.5	14.8	8.4	-	-
HCM Lane LOS	A	-	-	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	2.2	0.4	0.1	-	-

WB

SBL7 CORONADO DR.

Lanes, Volumes, Timings
17: Coronado Dr & Gulfview Dr.

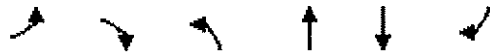
8/10/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙↘			↕↕	↕↕	↗
Volume (vph)	330	22	1	685	636	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	291	0	400			200
Storage Lanes	1	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor	1.00			1.00		0.88
Frt	0.991					0.850
Flt Protected	0.955					
Satd. Flow (prot)	3306	0	0	3421	3421	1531
Flt Permitted	0.955			0.954		
Satd. Flow (perm)	3297	0	0	3264	3421	1343
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					386
Link Speed (mph)	25			25	25	
Link Distance (ft)	435			400	542	
Travel Time (s)	11.9			10.9	14.8	
Confl. Peds. (#/hr)	1		34			34
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	347	23	1	721	669	386
Shared Lane Traffic (%)						
Lane Group Flow (vph)	370	0	0	722	669	386
Turn Type	Prot		Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases			2			6
Detector Phase	4		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	30.0		80.0	80.0	80.0	80.0
Total Split (%)	27.3%		72.7%	72.7%	72.7%	72.7%
Maximum Green (s)	26.0		76.0	76.0	76.0	76.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.0			4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	9.6			18.8	18.8	18.8
Actuated g/C Ratio	0.26			0.51	0.51	0.51
v/c Ratio	0.42			0.43	0.38	0.44

Lanes, Volumes, Timings
17: Coronado Dr & Gulfview Dr.

8/10/2021



Lane/Group	EBL	EBR	NBL	NBT	SBT	SBR
Control Delay	13.8			6.5	6.1	2.5
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.8			6.5	6.1	2.5
LOS	B			A	A	A
Approach Delay	13.8			6.5	4.8	
Approach LOS	B			A	A	
Queue Length 50th (ft)	29			38	34	0
Queue Length 95th (ft)	74			76	68	26
Internal Link Dist (ft)	355			320	462	
Turn Bay Length (ft)	291					200
Base Capacity (vph)	2429			3264	3421	1343
Starvation Cap Reductn	0			0	0	0
Spillback Cap Reductn	0			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.15			0.22	0.20	0.29

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 36.7

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 6.9

Intersection Capacity Utilization: 51.3%

Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service A

Splits and Phases: 17: Coronado Dr & Gulfview Dr.

p2 80 s	p4 30 s
p6 80 s	

Intersection

Int Delay, s/veh 1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	7	15	62	8	13	54
Conflicting Peds, #/hr	34	32	0	2	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	3	3	0	0
Mvmt Flow	9	19	77	10	16	67

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	214	124	0
Stage 1	115	-	-
Stage 2	99	-	-
Critical Hdwy	6.45	6.25	4.1
Critical Hdwy Stg 1	5.45	-	-
Critical Hdwy Stg 2	5.45	-	-
Follow-up Hdwy	3.545	3.345	2.2
Pot Cap-1 Maneuver	768	919	1480
Stage 1	902	-	-
Stage 2	917	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	734	882	1467
Mov Cap-2 Maneuver	734	-	-
Stage 1	873	-	-
Stage 2	905	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	1.5
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	829	1467	-
HCM Lane V/C Ratio	-	-	0.033	0.011	-
HCM Control Delay (s)	-	-	9.5	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

SBLT (HAMDEN)

WB APPROACH BAYSIDE

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	17	15	15	66	52	3
Conflicting Peds, #/hr	26	26	0	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	6	6	4	4	0	0
Mvmt Flow	20	18	18	79	62	4

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	204	90	91
Stage 1	90	-	-
Stage 2	114	-	-
Critical Hdwy	6.46	6.26	4.14
Critical Hdwy Stg 1	5.46	-	-
Critical Hdwy Stg 2	5.46	-	-
Follow-up Hdwy	3.554	3.354	2.236
Pot Cap-1 Maneuver	776	957	1491
Stage 1	924	-	-
Stage 2	901	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	728	933	1491
Mov Cap-2 Maneuver	728	-	-
Stage 1	901	-	-
Stage 2	867	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1491	-	812	-	-
HCM Lane V/C Ratio	0.012	-	0.047	-	-
HCM Control Delay (s)	7.4	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

EB APPROACH (5th St)

NBL1 (HAMDEN)

AASHTO's functional classes are based on travel volume, mileage, and the characteristic of service the urban street is intended to provide. The analysis method in this manual makes use of the AASHTO distinction between principal arterial and minor arterial. But a second classification step is used herein to determine the appropriate design category for the arterial. The design category depends on the posted speed limit, signal density, driveway/access-point density, and other design features. The third step is to determine the appropriate urban street class on the basis of a combination of functional category and design category. Exhibits 10-3 and 10-4 are useful for establishing urban street class.

Four urban street classes are defined in this manual. The classes are designated by number (i.e., I, II, III, and IV) and reflect unique combinations of street function and design, as shown in Exhibit 10-3. The functional component is separated into two categories: principal arterial and minor arterial. The design component is separated into four categories: high-speed, suburban, intermediate, and urban. The characteristics associated with each category are described in the remainder of this section. Exhibit 10-4 summarizes these characteristics.

EXHIBIT 10-3. URBAN STREET CLASS BASED ON FUNCTIONAL AND DESIGN CATEGORIES

Design Category	Functional Category	
	Principal Arterial	Minor Arterial
High-Speed	I	N/A
Suburban	II	II
Intermediate	II	III or IV
Urban	III or IV	IV

EXHIBIT 10-4. FUNCTIONAL AND DESIGN CATEGORIES

Criterion	Functional Category			
	Principal Arterial	Minor Arterial		
Mobility function	Very important	Important		
Access function	Very minor	Substantial		
Points connected	Freeways, important activity centers, major traffic generators	Principal arterials		
Predominant trips served	Relatively long trips between major points and through-trips entering, leaving, and passing through the city	Trips of moderate length within relatively small geographical areas		
Criterion	Design Category			
	High-Speed	Suburban	Intermediate	Urban
Driveway/access density	Very low density	Low density	Moderate density	High density
Arterial type	Multilane divided; undivided or two-lane with shoulders	Multilane divided; undivided or two-lane with shoulders	Multilane divided or undivided; one-way, two-lane	Undivided one-way, two-way, two or more lanes
Parking	No	No	Some	Significant
Separate left-turn lanes	Yes	Yes	Usually	Some
Signals/mi	0.5–2	1–5	4–10	6–12
Speed limit	45–55 mi/h	40–45 mi/h	30–40 mi/h	25–35 mi/h
Pedestrian activity	Very little	Little	Some	Usually
Roadside development	Low density	Low to medium density	Medium to moderate density	High density

A principal arterial serves major through movements between important centers of activity in a metropolitan area and a substantial portion of trips entering and leaving the area. It also connects freeways with major traffic generators. In smaller cities

(population under 50,000), its importance is derived from the service provided to traffic passing through the urban area. Service to abutting land is subordinate to the function of moving through traffic.

A minor arterial connects and augments the principal arterial system. Although its main function is traffic mobility, it performs this function at a lower level and places more emphasis on land access than does the principal arterial. A system of minor arterials serves trips of moderate length and distributes travel to geographical areas smaller than those served by the principal arterial.

The urban street is further classified by its design category. Exhibit 10-3 shows urban street classes based on functional and design categories.

High-speed design represents an urban street with a very low driveway/access-point density, separate left-turn lanes, and no parking. It may be multilane divided or undivided or a two-lane facility with shoulders. Signals are infrequent and spaced at long distances. Roadside development is low density, and the speed limit is typically 45 to 55 mi/h. This design category includes many urban streets in suburban settings.

Suburban design represents a street with a low driveway/access-point density, separate left-turn lanes, and no parking. It may be multilane divided or undivided or a two-lane facility with shoulders. Signals are spaced for good progressive movement (up to five signals per mile). Roadside development is low to medium density, and speed limits are usually 40 to 45 mi/h.

Intermediate design represents an urban street with a moderate driveway/access-point density. It may be a multilane divided, an undivided one-way, or a two-lane facility. It may have some separate or continuous left-turn lanes and some portions where parking is permitted. It has a higher density of roadside development than the typical suburban design and usually has four to ten signals per mile. Speed limits are typically 30 to 40 mi/h.

Urban design represents an urban street with a high driveway/access-point density. It frequently is an undivided one-way or two-way facility with two or more lanes. Parking is usually permitted. Generally, there are few separate left-turn lanes, and some pedestrian interference is present. It commonly has six to twelve signals per mile. Roadside development is dense with commercial uses. Speed limits range from 25 to 35 mi/h.

In addition to the above definitions, Exhibit 10-4 can be used as an aid in the determination of functional and design categories. Once the functional and design categories have been determined, the urban street classification may be established by referring to Exhibit 10-3.

In practice, there are sometimes ambiguities in determining the proper categories. The measurement or estimation of the free-flow speed is a great aid in this determination, because each urban street class has a characteristic range of free-flow speeds, as shown in Chapter 15.

Length

The portion of the urban street being analyzed should be at least 1 mi long in a downtown area and 2 mi long elsewhere for the LOS speed criteria to be meaningful. Study lengths shorter than 1 mi should be analyzed as individual intersections and the LOS assessed according to individual intersection criteria.

Free-Flow Speed

The free-flow speed is used to determine the urban street class and to estimate the segment running time. If FFS cannot be measured in the field, the analyst should attempt to take measurements on a similar facility in the same area or should resort to established local policies. Lacking any of these options, the analyst might rely on the posted speed limit (or some value around that limit) or on default values in this manual.

High-speed design defined

Suburban design defined

Intermediate design defined

Urban design defined

Measure free-flow speed as far as possible from nearest signal or stop-controlled intersection and at flows < 200 veh/h/ln

other hand, longer urban street segments comprising heavily loaded intersections can provide reasonably good LOS, although an individual signalized intersection might be operating at a lower level. The term through vehicle refers to all vehicles passing directly through a street segment and not turning.

Exhibit 15-2 lists urban street LOS criteria based on average travel speed and urban street class. It should be noted that if demand volume exceeds capacity at any point on the facility, the average travel speed might not be a good measure of the LOS. The street classifications identified in Exhibit 15-2 are defined in the next section.

EXHIBIT 15-2. URBAN STREET LOS BY CLASS

Urban Street Class	I	II	III	IV
Range of free-flow speeds (FFS)	55 to 45 mi/h	45 to 35 mi/h	35 to 30 mi/h	35 to 25 mi/h
Typical FFS	50 mi/h	40 mi/h	35 mi/h *	30 mi/h
LOS	Average Travel Speed (mi/h)			
A	> 42	> 35	> 30	> 25
B	> 34-42	> 28-35	> 24-30	> 19-25
C	> 27-34	> 22-28	> 18-24	> 13-19
D	> 21-27	> 17-22	> 14-18	> 9-13
E	> 16-21	> 13-17	> 10-14	> 7-9
F	≤ 16	≤ 13	≤ 10	≤ 7

Travel speed defines LOS on urban streets

DETERMINING URBAN STREET CLASS

The first step in the analysis is to determine the urban street's class. This can be based on direct field measurement of the FFS or on an assessment of the subject street's functional and design categories. A procedure for measuring the FFS is described in Appendix B.

If the FFS measurements are not available, the street's functional and design categories must be used to identify its class. The functional category is identified first, followed by the design category. This identification uses the definitions provided in Chapter 10 and Exhibit 10-4. After determining the functional and design categories, the urban street class can be established using Exhibit 10-3.

DETERMINING RUNNING TIME

There are two principal components of the total time that a vehicle spends on a segment of an urban street: running time and control delay at signalized intersections. To compute the running time for a segment, the analyst must know the street's classification, its segment length, and its FFS. The segment running time then can be found by using Exhibit 15-3.

Within each urban street class there are several influences on actual running time. Exhibit 15-3 shows the effect of street length. In addition, the presence of parking, side friction, local development, and street use can affect running time. In this chapter, these also are assumed to influence the FFS. Direct observation of the FFS, therefore, includes the effect of these factors and, by implication, their effect on the running speed.

If it is not possible to observe the FFS on the actual or a comparable facility, default values are given in a note to Exhibit 15-3.

DETERMINING DELAY

Computing the urban street or section speed requires the intersection control delays. Because the function of an urban street is to serve through traffic, the lane group for through traffic is used to characterize the urban street.

Running time is estimated using FFS, urban street classification, and arterial segment length

Arterial Level of Service: NB Coronado Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Gulfview Dr.	IV	25	76.5	6.5	83.0	0.53	23.1	B
Total	IV		76.5	6.5	83.0	0.53	23.1	B

Arterial Level of Service: SB Coronado Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Gulfview Dr.	IV	25	22.6	6.1	28.7	0.10	12.9	D
Total	IV		22.6	6.1	28.7	0.10	12.9	D

(S Gulfview - S. Gulfview)
(S) (LN)

NOT SAME SEGMENT

URBAN STREET WORKSHEET #1								
General Information				Site Information				
Analyst	RP			Urban Street	CORONADO/HAMDEN			
Agency/Co.	GCC			Direction of Travel	South-bound			
Date Performed	8/12/2021			Jurisdiction	CLEARWATER			
Time Period	AFTERNOON PEAK HR			Analysis Year	2021			
Project Description: EXISTING CONDITIONS - CORONADO/HAMDEN SB								
Input Parameters								
Analysis Period(h) T = 0.25	Segments							
	1	2	3	4	5	6	7	8
Cycle length, C (s)	110.0							
Eff. green to cycle ratio, g/C	0.360	0	0	0	0	0	0	0
v/c ratio for lane group, X	0.440	0	0	0	0	0	0	0
Cap of lane group, c (veh/h)	1472	0	0	0	0	0	0	0
Pct Veh on Grn., PVG								
Arrival type, AT	3							
Unit extension, UE (sec)	0.0							
Length of segment, L (mi)	0.53							
Initial queue, Q _b (veh)	0							
Urban street class, SC	4							
Free-flow speed, FSS (mi/h)	25							
Running time, TR (s)	76.3							
Other delay, (s)	0.0							
Delay Computation								
Uniform delay, d ₁ (s)	26.8	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Incremental delay adj, k	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Upstream filtering adj factor, I	1.000							
Incremental delay, d ₂ (s)	1.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Initial queue delay, d ₃ (s)	0							
Progression adj factor, PF	1.000	0.256	0.256	0.256	0.256	0.256	0.256	0.256
Control delay, d (s)	27.7							
Segment LOS Determination								
Travel time, ST (s)	104.0							
Travel speed, SA (mi/h)	18.3							
Segment LOS	C							
Urban Street LOS Determination								
Total travel time (s)	104.0							
Total length (mi)	0.53							
Total travel speed, SA (mi/h)	18.3							
Total urban street LOS	C							

**Generalized Peak Hour Directional Volumes for Florida's
Urbanized Areas¹**

TABLE 7

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	2	2,260	3,020	3,660	3,940	
1	Undivided	*	830	880	**	3	3,360	4,580	5,500	6,080	
2	Divided	*	1,910	2,000	**	4	4,500	6,080	7,320	8,220	
3	Divided	*	2,940	3,020	**	5	5,660	7,680	9,220	10,360	
4	Divided	*	3,970	4,040	**	6	7,900	10,320	12,060	12,500	
Class II (35 mph or slower posted speed limit)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lane	Ramp Metering				
1	Undivided	*	370	750	800	+ 1,000	+ 5%				
2	Divided	*	730	1,630	1,700	← → → 1970 vph					
3	Divided	*	1,170	2,520	2,560						
4	Divided	*	1,610	3,390	3,420						
S.G. Brown BLAME -25% 548 1220 SB											
Non-State Signalized Roadway Adjustments											
(Alter corresponding state volumes by the indicated percent.)											
Non-State Signalized Roadways - 10%											
Median & Turn Lane Adjustments											
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors							
1	Divided	Yes	No	+5%							
1	Undivided	No	No	-20%							
Multi	Undivided	Yes	No	-5%							
Multi	Undivided	No	No	-25%							
-	-	-	Yes	+ 5%							
One-Way Facility Adjustment											
Multiply the corresponding directional volumes in this table by 1.2											

UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E
1	Undivided	420	840	1,190	1,640
2	Divided	1,810	2,560	3,240	3,590
3	Divided	2,720	3,840	4,860	5,380
Uninterrupted Flow Highway Adjustments					
Lanes	Median	Exclusive left lanes	Adjustment factors		
1	Divided	Yes	+5%		
Multi	Undivided	Yes	-5%		
Multi	Undivided	No	-25%		

¹Values shown are presented as peak hour directional 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.

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.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** 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.

BICYCLE MODE ²				
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)				
Paved Shoulder/Bicycle	B	C	D	E
Lane Coverage				
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**
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%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000
BUS MODE (Scheduled Fixed Route) ³				
(Buses in peak hour in peak direction)				
Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/srp/ps/default.shtm

Generalized Peak Hour Two-Way Volumes for Florida's
Urbanized Areas¹

TABLE 4

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	4	4,120	5,540	6,700	7,190	
2	Undivided	*	1,510	1,600	**	6	6,130	8,370	10,060	11,100	
4	Divided	*	3,420	3,580	**	8	8,230	11,100	13,390	15,010	
6	Divided	*	5,250	5,390	**	10	10,330	14,040	16,840	18,930	
8	Divided	*	7,090	7,210	**	12	14,450	18,880	22,030	22,860	
Class II (35 mph or slower posted speed limit)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes		Ramp			
2	Undivided	9,600	660	1,330	1,410	Present in Both Directions		Metering			
4	Divided	4,000	1,310	2,920	3,040	+ 1,800		+ 5%			
6	Divided	*	2,090	4,500	4,590						
8	Divided	*	2,880	6,060	6,130						
Non-State Signalized Roadway Adjustments						S. GULFVIEW (S of Coronado) D					
(After corresponding state volumes by the indicated percent)						2LV 660 1330					
Non-State Signalized Roadways - 10%						Coronado Hamden 2LV 690 1390					
Hamden 2LV 70% 400 930						+ 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	770	1,530	2,170	2,990
2	Undivided	No	No	(-20%)		4	Divided	3,300	4,660	5,900	6,530
Multi	Undivided	Yes	No	-5%		6	Divided	4,950	6,990	8,840	9,790
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments					
-	-	-	Yes	+ 5%		Lanes	Median	Exclusive left lanes	Adjustment factors		
One-Way Facility Adjustment						2	Divided	Yes	+5%		
Multiply the corresponding two-directional volumes in this table by 0.6						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		

BICYCLE MODE ²						¹ Values shown are presented as peak hour two-way 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.)											
Paved Shoulder/Bicycle											
Lane Coverage	B	C	D	E		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.					
0-49%	*	260	680	1,770							
50-84%	190	600	1,770	>1,770							
85-100%	830	1,770	>1,770	**		³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
PEDESTRIAN MODE ²											
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						* Cannot be achieved using table input value defaults.					
Sidewalk Coverage	B	C	D	E							
0-49%	*	*	250	850							
50-84%	*	150	780	1,420		** 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.					
85-100%	340	960	1,560	>1,770							
BUS MODE (Scheduled Fixed Route) ³						Source: Florida Department of Transportation Systems Planning Office www.dot.state.fl.us/planning/systems/sni/los/default.shtml					
(Buses in peak hour in peak direction)											
Sidewalk Coverage	B	C	D	E							
0-84%	>5	≥4	≥3	≥2							
85-100%	>4	≥3	≥2	≥1							

ACCIDENT DATA 2018 - 2020

405 CORONADO DRIVE

	Date	Time	Location	Type & Cause	Injury	Light	Weather
1	2/26/18	8:50 AM	BAYSIDE DR / Hamden Dr	Backing into parked car - Careless Driving	NO	Day	Clear
2	3/19/18	10:58 PM	CORONADO DR / GULFVIEW BLVD S	Rear end NB/NB - Careless Driving	NO	DARK	Cloudy
3	3/25/18	12:05 PM	CORONADO DR / GULFVIEW BLVD S	Rear end S&S - Improper Lane Change	NO	Day	Clear
4	4/17/18	3:25 PM	GULFVIEW BLVD S / HAMDEN DR	Rearend W&W	NO	Day	Clear
5	4/22/18	5:29 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end W&W - Followed too closely	NO	DARK	Clear
6	4/29/18	10:34 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end NB/NB - Careless Driving	NO	Day	Clear
7	6/16/18	12:05 PM	CORONADO DR / GULFVIEW BLVD S	Bike Crosswalk mid block - Ran Redlight	FATAL	Day	Clear
8	7/9/18	10:10 AM	CORONADO DR / 5TH ST.	Left Turn/Angle NBT SBLT - Failed to yield ROW	NO	Day	Clear
9	7/10/18	2:35 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end SB - Followed too close	NO	Day	Clear
10	8/5/18	4:35 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end - Careless Driving - Alcohol	NO	Day	Clear
11	8/11/18	9:08 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end - Improper Backing	NO	DARK	Clear
12	10/5/18	11:18 AM	GULFVIEW BLVD S / CORONADO DR	Rearend	POSS	Day	Clear
13	10/7/18	3:09 PM	HAMDEN DR / BAYSIDE DR	Angle SBLT / WB	NO	Day	Clear
14	11/3/18	5:21 PM	CORONADO DR / GULFVIEW BLVD S	Sideswipe NB/NB - Careless Driving Lane change	NO	Day	Clear
15	11/11/18	12:20 PM	GULFVIEW BLVD S / HAMDEN DR	Angle SBRT NB stopped	POSS	DAY	Clear
16	1/23/19	3:55 PM	HAMDEN DR / CORONADO DR	Sideswipe Rear end WB - Improper Lane Change	NO	Day	Clear
17	3/9/19	4:59 PM	5TH ST / CORONADO DR	Angle SB WB Ran Stop Sign	NO	Day	Clear
18	3/14/19	2:00 PM	CORONADO DR / GULFVIEW BLVD	Sideswipe NB Failed to yield ROW, lane change	NO	Day	Clear
19	3/23/19	10:51 PM	HAMDEN DR / CORONADO DR	Sideswipe SB Strayed from Lane on Hamden	NO	DARK	Clear
20	3/24/19	1:11 PM	GULFVIEW BLVD S / CORONADO DR	Sideswipe WB/WB - Failed to Yield ROW, Curve	NO	Day	Clear
21	4/5/19	8:32 PM	HAMDEN DR / CORONADO DR	Rear end SB - Careless Driving	NO	DARK	Clear
22	4/7/19	9:15 AM	CORONADO DR / 5TH ST.	Angle SBLT / SBT - Improper Turn	NO	Day	Clear
23	4/29/19	5:55 PM	GULFVIEW BLVD S / CORONADO DR	Rear end SB/SB - Careless Driving	NO	Day	Clear
24	5/2/19	4:32 PM	CORONADO DR / GULFVIEW BLVD S	Rear end NB/NB - Careless Driving	NO	Day	Clear
25	5/5/19	4:59 PM	GULFVIEW BLVD S / CORONADO DR	Rear end EB/EB Careless Driving	NO	Day	Clear
26	5/24/19	4:30 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end WB/WB - Stopped	NO	Day	Clear
27	5/27/19	9:36 PM	CORONADO DR / HAMDEN DR	Rear end SB/SB - Careless Driving	NO	DARK	Clear
28	6/3/19	2:55 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end N WB/WB - Careless Driving	NO	Day	Clear
29	6/4/19	2:15 PM	CORONADO DR / GULFVIEW BLVD S	Bike NB / Car	POSS	Day	Clear
30	6/6/19	8:40 AM	CORONADO DR / GULFVIEW BLVD S	Angle SB/SB - Improper Turn From Lane	NO	Day	Clear
31	6/7/19	1:16 AM	GULFVIEW BLVD S / HAMDEN DR	Rear end WB/WB - Careless Driving	NO	DARK	Clear
32	6/19/19	12:07 PM	GULFVIEW BLVD S / HAMDEN DR	Hit Parked Car SB	NO	Day	Cloudy

ACCIDENT DATA 2018 - 2020

405 CORONADO DRIVE

33	6/20/19	9:25 PM	CORONADO DR / GULFVIEW BLVD S	Sideswipe SB/SB - Failed to stay in lane	NO	DARK	Clear
34	6/23/19	8:02 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end NB/NB - Careless Driving	NO	DAY	Clear
35	8/20/19	9:03 PM	GULFVIEW BLVD S / HAMDEN DR	Rearend WB/WB	POSS	Day	Clear
36	9/20/19	6:57 PM	5TH ST / CORONADO DR	Hit Fixed Object WB Driver	NO	Day	Clear
37	9/30/19	1:39 AM	GULFVIEW BLVD S / HAMDEN DR	Head on NB/SB - Wrong Side of Road	NO	DARK	Clear
38	10/1/19	11:00 AM	CORONADO DR / GULFVIEW BLVD S	Sideswipe SB/SB Careless Driving	NO	Day	Clear
39	10/8/19	3:35 PM	HAMDEN DR / CORONADO DR	Sideswipe SB/SB Careless Driving	NO	Day	Clear
40	10/26/19	8:45 PM	CORONADO DR / 5TH ST.	Rear end SB/SB - Careless Driving	NO	DARK	Clear
41	11/11/19	3:52 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end EB/EB - Followed too close	NO	Day	Clear
42	11/25/19	9:17 AM	CORONADO DR / GULFVIEW BLVD S	Rearend SB/SB	NO	Day	Clear
43	12/16/19	1:10 PM	HAMDEN DR / CORONADO DR	Sideswipe SB/SB - Careless Driving, Lane Change	NO	Day	Clear
44	3/5/20	4:22 PM	CORONADO DR / GULFVIEW BLVD S	Sideswipe SB/SB - Failed to yield ROW	NO	Day	Clear
45	5/8/20	2:00 PM	CORONADO DR / 5TH ST.	Hit Parked Car NB Car	NO	Day	Clear
46	5/26/20	9:19 PM	GULFVIEW BLVD S / HAMDEN DR	Rear end WB/WB - Careless Driving	NO	DARK	Clear
47	6/10/20	1:00 PM	CORONADO DR / 5TH ST.	Sideswipe NB/NB - Improper Passing	NO	Day	Clear
48	6/14/20	9:50 PM	GULFVIEW BLVD S / CORONADO DR	Head on SB/NB	NO	DARK	Clear
49	6/15/20	12:05 AM	CORONADO DR / GULFVIEW BLVD S	Rear end NB/NB - Careless DUI Alcohol	MINOR	DARK	Clear
50	6/16/20	4:47 PM	CORONADO DR / GULFVIEW BLVD S	Angle NB Lane Change - Careless Driving	NO	Day	Clear
51	6/21/20	10:30 AM	HAMDEN DR / CORONADO DR	Sideswipe SB/SB - Careless Driving in Curve	NO	Day	Clear
52	7/29/20	11:17 AM	HAMDEN DR / GULFVIEW BLVD S	Rear end NB - Backed into car	NO	Day	Clear
53	8/12/20	2:30 PM	HAMDEN DR / CORONADO DR	Rearend SBLT/SB NA	NO	Day	Cloudy
54	8/19/20	2:15 PM	5TH ST / CORONADO DR	Rear end NB/SB Backing - Careless Driving	NO	Day	Clear
55	9/1/20	12:45 PM	GULFVIEW BLVD S / HAMDEN DR	Angle NB/NB - Entering Lane	NO	Day	Clear
56	9/1/20	10:05 PM	CORONADO DR / GULFVIEW BLVD S	Rear end NB/NB - Careless Driving Distracted	NO	DARK	Clear
57	9/27/20	2:48 PM	HAMDEN DR / GULFVIEW BLVD S	Hit Fixed Object WB - Leaving Lane	NO	Day	Clear
58	12/18/20	5:30 PM	HAMDEN DR / GULFVIEW BLVD S	Sideswipe SB/SB - Entering Lane	NO	DUSK	Clear
59	12/27/20	8:45 PM	GULFVIEW BLVD S / HAMDEN DR	Sideswipe WB/WB - NA	NO	DARK	Clear
60	12/30/20	11:00 AM	HAMDEN DR / CORONADO DR	Angle NB/SB - Backing into lane - Careless Driving	NO	Day	Clear

APPENDIX B

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 15 - PINELLAS

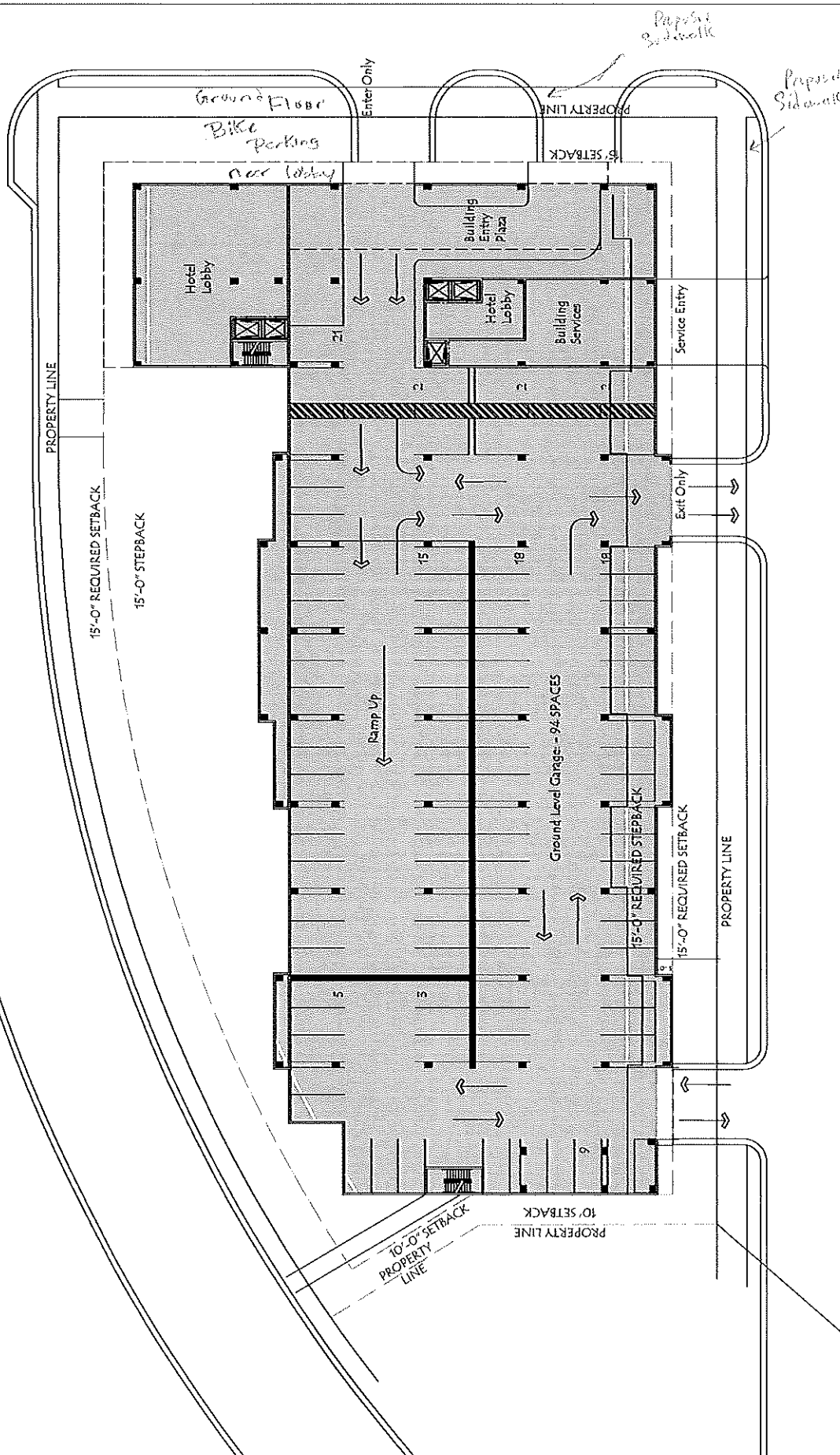
SITE: 9188 - CORONADO DR, N OF GULFVIEW BLVD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
-----	-----	-----	-----	-----	-----	-----
2020	8500 X	0	0	9.00	55.30	3.40
2019	9100 X	0	0	9.00	55.70	3.30
2018	9000 X	0	0	9.00	55.50	3.20
2017	8900 6	0	0	9.00	54.50	2.90
2016	8700 V	0	0	9.00	55.90	2.90
2015	8500 R	0	0	9.00	55.00	2.90
2014	8300 T	0	0	9.00	55.40	3.20
2013	8200 S	0	0	9.00	55.20	3.00
2012	8200 F	0	0	9.00	55.00	2.80
2011	8200 C	N	S	9.00	56.50	3.10

GROWTH 2011-2020 = 3.6% in 9 yrs = 0.41%/yr

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

LEVEL ONE PLAN



Hotel (310)

Vehicle Trip Ends vs: Rooms
On a: Weekday

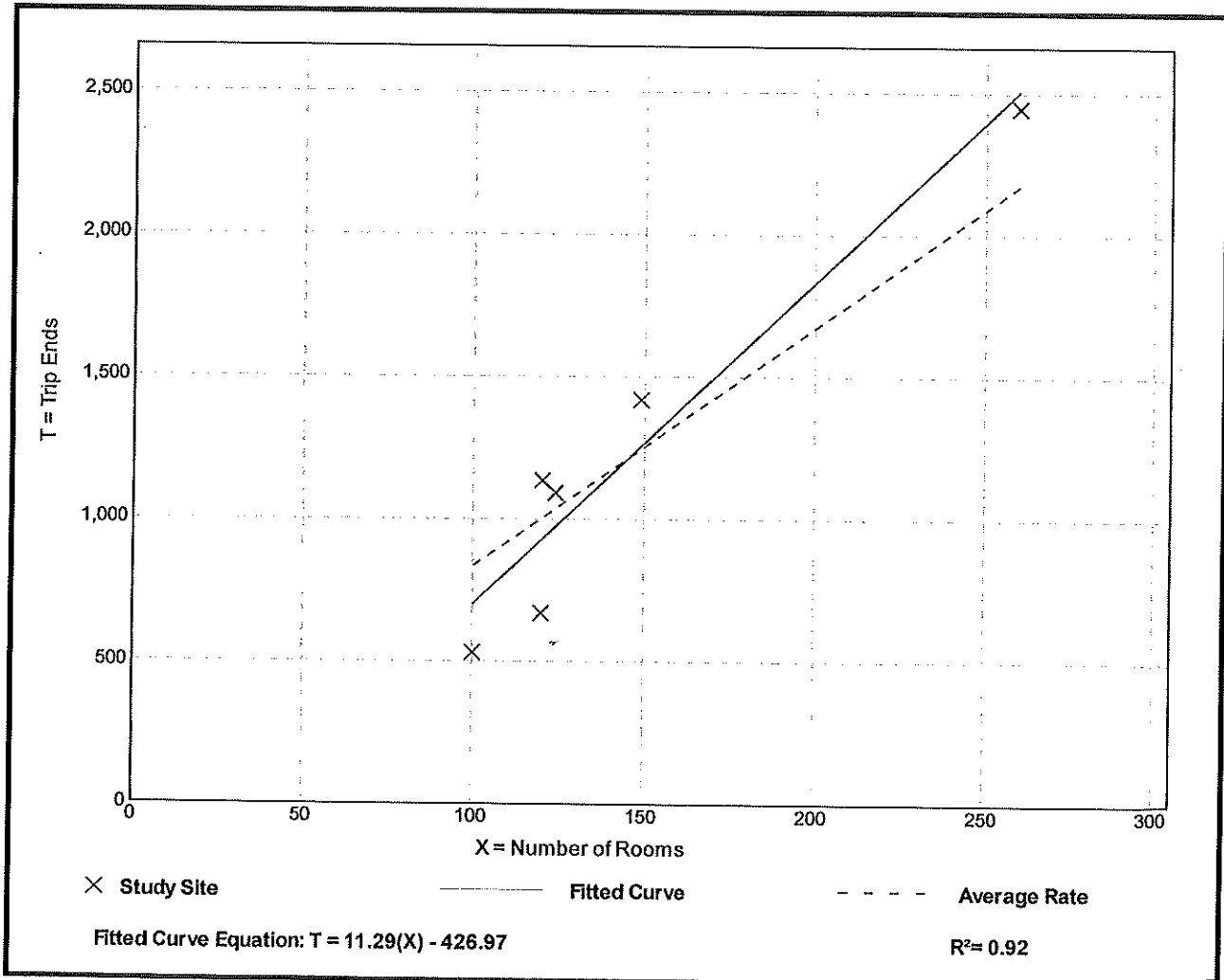
Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Rooms: 146
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
8.36	5.31 - 9.53	1.86

Data Plot and Equation

146 Rooms * 8.36 = 1388 Daily



Resort Hotel (330)

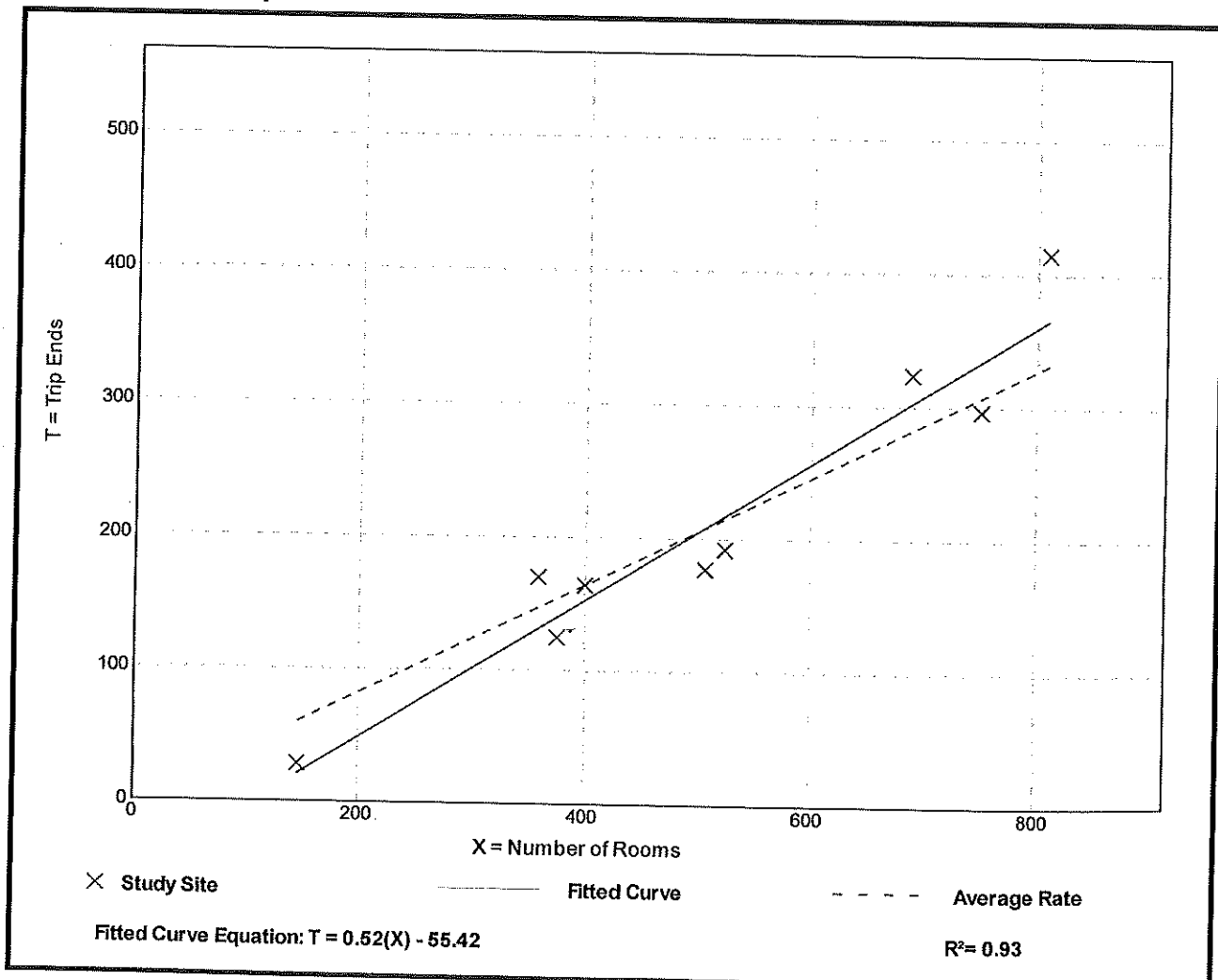
Vehicle Trip Ends vs: Rooms
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 9
 Avg. Num. of Rooms: 507
 Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.41	0.19 - 0.51	0.08

Data Plot and Equation

166 Rooms * 0.41 = 68.86 PM PEAK (29/39)



Queues

1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

8/12/2021

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	2	9	4	464	19	73	75	222	4	3	299	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	202		550	355		355	800		409
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96		0.99	0.89		0.82	0.99			1.00	0.60
Frt		0.964			0.960			0.997				0.850
Flt Protected		0.993		0.950	0.968		0.950					
Satd. Flow (prot)	0	1802	0	1715	1508	0	1736	1803	0	0	1863	1583
Flt Permitted		0.993		0.950	0.968		0.514				0.998	
Satd. Flow (perm)	0	1742	0	1689	1493	0	772	1803	0	0	1853	950
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			18			1				491
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			709			611			887	
Travel Time (s)		7.8			19.3			16.7			24.2	
Confl. Peds. (#/hr)	120		5	5		120	126		289	289		126
Confl. Bikes (#/hr)									9			4
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
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Adj. Flow (vph)	2	9	4	478	20	75	77	229	4	3	308	491
Shared Lane Traffic (%)				39%								
Lane Group Flow (vph)	0	15	0	292	281	0	77	233	0	0	311	491
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2	2		6	6			4			4	
Permitted Phases							4			4		4
Detector Phase	2	2		6	6		4	4		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	25.0	25.0		30.0	30.0		25.0	25.0		25.0	25.0	25.0
Total Split (s)	25.0	25.0		40.0	40.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	22.7%	22.7%		36.4%	36.4%		40.9%	40.9%		40.9%	40.9%	40.9%
Maximum Green (s)	21.0	21.0		36.0	36.0		41.0	41.0		41.0	41.0	41.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		Min	Min		None	None		None	None	None
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)		7.0		16.7	16.7		21.5	21.5			21.5	21.5
Actuated g/C Ratio		0.14		0.34	0.34		0.44	0.44			0.44	0.44
v/c Ratio		0.06		0.50	0.53		0.23	0.29			0.38	0.71

Queues

1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

8/12/2021

												
Lane/Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay		26.1		18.8	19.0		12.8	11.4			12.2	8.2
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay		26.1		18.8	19.0		12.8	11.4			12.2	8.2
LOS		C		B	B		B	B			B	A
Approach Delay		26.1			18.9			11.7			9.7	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)		2		54	49		10	31			43	0
Queue Length 95th (ft)		25		223	212		57	133			178	87
Internal Link Dist (ft)		207			629			531			807	
Turn Bay Length (ft)				202			355					409
Base Capacity (vph)		922		1356	1196		652	1523			1565	879
Starvation Cap Reductn		0		0	0		0	0			0	0
Spillback Cap Reductn		0		0	0		0	0			0	0
Storage Cap Reductn		0		0	0		0	0			0	0
Reduced v/c Ratio		0.02		0.22	0.23		0.12	0.15			0.20	0.56

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 49

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.3

Intersection Capacity Utilization: 66.9%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service C

Splits and Phases: 1: Hotel driveway/Hamden & S Gulfview Blvd/S Gulfview Blvd.

		
p2	p6	p4
25 s	40 s	45 s

HCM 2010 TWSC
3: Hamden/Coronado & Hamden Dr

8/13/2021

Intersection

Int Delay, s/veh 0

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Vol, veh/h	423	74	15	533	81	29
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	75	-	0	40
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	1	1	0	0
Mvmt Flow	432	76	15	544	83	30

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	446
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	NB	SB	SW
HCM Control Delay, s	0		
HCM LOS			

Minor Lane/Major Mvmt	NBT	NBR	SBL	SBT	SWLn1	SWLn2
Capacity (veh/h)	-	-	-	-	466	-
HCM Lane V/C Ratio	-	-	-	-	0.177	-
HCM Control Delay (s)	-	-	-	-	14.4	-
HCM Lane LOS	-	-	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	-	0.6	-

SW BOUND (HAMDEN) (STOP)

Intersection												
Int Delay, s/veh	8.3	OVERALL DELAY										

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	49	27	20	5	0	69	0	482	22	58	494	2
Conflicting Peds, #/hr	68	0	68	8	0	8	199	0	199	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	2	2	2	2	2	2	1	1	1
Mvmt Flow	53	29	22	5	0	74	0	518	24	62	531	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1300	1275	799	1288	1264	545	601	0	0	550	0	0
Stage 1	725	725	-	538	538	-	-	-	-	-	-	-
Stage 2	575	550	-	750	726	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	140	168	389	141	169	538	976	-	-	1025	-	-
Stage 1	420	433	-	527	522	-	-	-	-	-	-	-
Stage 2	507	519	-	403	430	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	107	146	295	85	147	530	791	-	-	1018	-	-
Mov Cap-2 Maneuver	107	146	-	85	147	-	-	-	-	-	-	-
Stage 1	393	380	-	523	518	-	-	-	-	-	-	-
Stage 2	433	515	-	263	378	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	88.2	16.5	0	0.9
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	791	-	-	135	392	1018	-	-
HCM Lane V/C Ratio	-	-	-	0.765	0.203	0.061	-	-
HCM Control Delay (s)	0	-	-	88.2	16.5	8.8	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	4.5	0.8	0.2	-	-

SBLT CORONADO

Lanes, Volumes, Timings
17: Coronado Dr & Gulfview Dr.

8/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	⇈⇈			⇈⇈	⇈⇈	⇈
Volume (vph)	382	25	1	819	755	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	291	0	400			200
Storage Lanes	1	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor	1.00			1.00		0.88
Frt	0.991					0.850
Flt Protected	0.955					
Satd. Flow (prot)	3306	0	0	3421	3421	1531
Flt Permitted	0.955			0.954		
Satd. Flow (perm)	3297	0	0	3264	3421	1343
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					448
Link Speed (mph)	25			25	25	
Link Distance (ft)	435			400	542	
Travel Time (s)	11.9			10.9	14.8	
Confl. Peds. (#/hr)	1		34			34
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	402	26	1	862	795	448
Shared Lane Traffic (%)						
Lane Group Flow (vph)	428	0	0	863	795	448
Turn Type	Prot		Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases			2			6
Detector Phase	4		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	30.0		80.0	80.0	80.0	80.0
Total Split (%)	27.3%		72.7%	72.7%	72.7%	72.7%
Maximum Green (s)	26.0		76.0	76.0	76.0	76.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.0			4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Efft Green (s)	11.3			24.1	24.1	24.1
Actuated g/C Ratio	0.26			0.55	0.55	0.55
v/c Ratio	0.50			0.48	0.42	0.48

Lanes, Volumes, Timings
17: Coronado Dr & Gulfview Dr.

8/13/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Control Delay	17.4			6.9	6.5	2.5
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	17.4			6.9	6.5	2.5
LOS	B			A	A	A
Approach Delay	17.4			6.9	5.0	
Approach LOS	B			A	A	
Queue Length 50th (ft)	43			54	47	0
Queue Length 95th (ft)	107			109	96	28
Internal Link Dist (ft)	355			320	462	
Turn Bay Length (ft)	291					200
Base Capacity (vph)	2082			3264	3421	1343
Starvation Cap Reductn	0			0	0	0
Spillback Cap Reductn	0			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.21			0.26	0.23	0.33

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 43.8

Natural Cycle: 45

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 7.8

Intersection Capacity Utilization: 58.7%

Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service B

Splits and Phases: 17: Coronado Dr & Gulfview Dr.

p2 80 s	p4 30 s
p6 80 s	

Intersection

Int Delay, s/veh 1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	8	17	78	9	15	63
Conflicting Peds, #/hr	34	32	0	2	9	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	3	3	0	0
Mvmt Flow	10	21	96	11	19	78

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	251	145	0
Stage 1	136	-	-
Stage 2	115	-	-
Critical Hdwy	6.45	6.25	4.1
Critical Hdwy Stg 1	5.45	-	-
Critical Hdwy Stg 2	5.45	-	-
Follow-up Hdwy	3.545	3.345	2.2
Pot Cap-1 Maneuver	731	894	1455
Stage 1	883	-	-
Stage 2	902	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	696	858	1443
Mov Cap-2 Maneuver	696	-	-
Stage 1	854	-	-
Stage 2	888	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	1.4
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	799	1443	-
HCM Lane V/C Ratio	-	-	0.039	0.013	-
HCM Control Delay (s)	-	-	9.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

SBLT (HAMDEN)
WB APPROACH (BAYSIDE)

Intersection

Int Delay, s/veh 3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	19	17	47	77	60	3
Conflicting Peds, #/hr	26	26	0	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	6	6	4	4	0	0
Mvmt Flow	23	20	56	92	71	4

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	303	99	101
Stage 1	99	-	-
Stage 2	204	-	-
Critical Hdwy	6.46	6.26	4.14
Critical Hdwy Stg 1	5.46	-	-
Critical Hdwy Stg 2	5.46	-	-
Follow-up Hdwy	3.554	3.354	2.236
Pot Cap-1 Maneuver	680	946	1479
Stage 1	915	-	-
Stage 2	821	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	621	923	1479
Mov Cap-2 Maneuver	621	-	-
Stage 1	892	-	-
Stage 2	769	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	2.9	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1479	-	734	-	-
HCM Lane V/C Ratio	0.038	-	0.058	-	-
HCM Control Delay (s)	7.5	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

EB APPROACH (5th ST)
NBL7 HAMDEN

HCS7 Two-Way Stop-Control Report

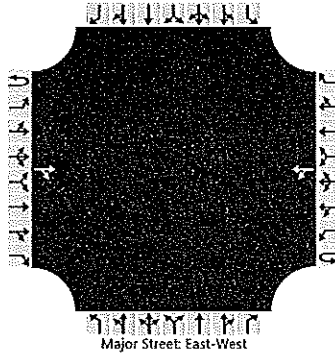
General Information

Analyst	RP
Agency/Co.	GCC
Date Performed	8/13/2021
Analysis Year	2023
Time Analyzed	AFTERNOON PEAK HR
Intersection Orientation	East-West
Project Description	FUTURE CONDITIONS WITH HOTEL

Site Information

Intersection	5TH ST / DRIVE A INGRESS
Jurisdiction	CLEARWATER
East/West Street	5TH STREET
North/South Street	DRIVE A ENTER ONLY
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT										
Volume (veh/h)			90	17		6	44									
Percent Heavy Vehicles (%)						3										
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1										
Critical Headway (sec)						4.13										
Base Follow-Up Headway (sec)						2.2										
Follow-Up Headway (sec)						2.23										

Delay, Queue Length, and Level of Service

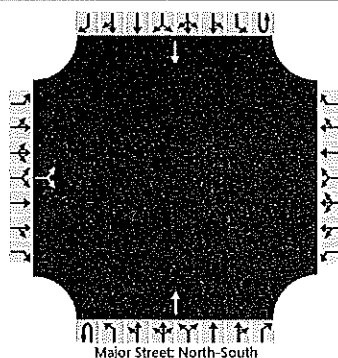
Flow Rate, v (veh/h)						7										
Capacity, c (veh/h)						1452										
v/c Ratio						0.00										
95% Queue Length, Q ₉₅ (veh)						0.0										
Control Delay (s/veh)						7.5										
Level of Service (LOS)						A										
Approach Delay (s/veh)						0.9										
Approach LOS																

WBLT
ENTER

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RP	Intersection	HAMDEN / DRIVE B - EXIT
Agency/Co.	GCC	Jurisdiction	CLEARWATER
Date Performed	8/13/2021	East/West Street	DRIVE B - NORTHERN DR
Analysis Year	2023	North/South Street	HAMDEN DRIVE
Time Analyzed	AFTERNOON PEAK HR	Peak Hour Factor	0.81
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	FUTURE CONDITIONS WITH HOTEL		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR								T				T	
Volume (veh/h)		24		0							100				77	
Percent Heavy Vehicles (%)		3		3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.43		6.23												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.53		3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			30													
Capacity, c (veh/h)			767													
v/c Ratio			0.04													
95% Queue Length, Q ₉₅ (veh)			0.1													
Control Delay (s/veh)			9.9													
Level of Service (LOS)			A													
Approach Delay (s/veh)			9.9													
Approach LOS			A													

HCS7 Two-Way Stop-Control Report

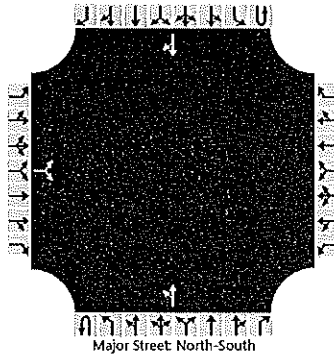
General Information

Analyst	RP
Agency/Co.	GCC
Date Performed	8/13/2021
Analysis Year	2023
Time Analyzed	AFTERNOON PEAK HR
Intersection Orientation	North-South
Project Description	FUTURE CONDITIONS WITH HOTEL

Site Information

Intersection	HAMDEN / DRIVE C -
Jurisdiction	CLEARWATER
East/West Street	DRIVE C - SOUTHERN DR
North/South Street	HAMDEN DRIVE
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		15						6	87				71	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			19							7						
Capacity, c (veh/h)			968							1502						
v/c Ratio			0.02							0.00						
95% Queue Length, Q ₉₅ (veh)			0.1							0.0						
Control Delay (s/veh)			8.8							7.4						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)			8.8							0.5						
Approach LOS			A													

EB EXIT

NBLT ENTER

Arterial Level of Service

8/13/2021

Arterial Level of Service: NB Coronado Dr

(S GULFVIEW S - S. GULFVIEW N)

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Gulfview Dr.	IV	25	76.5	6.9	83.4	0.53	23.0	B
Total	IV		76.5	6.9	83.4	0.53	23.0	B

Arterial Level of Service: SB Coronado Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Gulfview Dr.	IV	25	22.6	6.5	29.1	0.10	12.7	D
Total	IV		22.6	6.5	29.1	0.10	12.7	D

URBAN STREET WORKSHEET #1

General Information

Analyst *RP*
 Agency/Co. *GCC*
 Date Performed *8/13/21*
 Time Period *AFTERNOON PEAK HR*

Site Information

Urban Street *CORONADO/HAMDEN*
 Direction of Travel *South-bound*
 Jurisdiction *CLEARWATER*
 Analysis Year *2023*

Project Description: *FUTURE CONDITIONS - CORONADO/HAMDEN SB*

Input Parameters

Analysis Period(h) T = 0.25	Segments							
	1	2	3	4	5	6	7	8
Cycle length, C (s)	110.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Eff. green to cycle ratio, g/C	0.340	0.700	0.700	0.700	0.700	0.700	0.700	0.700
v/c ratio for lane group, X	0.500	0.600	0.600	0.600	0.600	0.600	0.600	0.600
Cap of lane group, c (veh/h)	1356	600	600	600	600	600	600	600
Pct Veh on Grn., PVG								
Arrival type, AT	3	4	4	4	4	4	4	4
Unit extension, UE (sec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Length of segment, L (mi)	0.53							
Initial queue, Q _b (veh)	0	0	0	0	0	0	0	0
Urban street class, SC	4	4	4	4	4	4	4	4
Free-flow speed, FSS (mi/h)	25	30	30	30	30	30	30	30
Running time, TR (s)	76.3							
Other delay, (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Delay Computation

Uniform delay, d ₁ (s)	28.9	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Incremental delay adj, k	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Upstream filtering adj factor, I	1.000	0.899	0.769	0.769	0.769	0.769	0.769	0.769
Incremental delay, d ₂ (s)	1.3	4.0	3.4	3.4	3.4	3.4	3.4	3.4
Initial queue delay, d ₃ (s)	0	0	0	0	0	0	0	0
Progression adj factor, PF	1.000	0.256	0.256	0.256	0.256	0.256	0.256	0.256
Control delay, d (s)	30.2	5.4	4.8	4.8	4.8	4.8	4.8	4.8

Segment LOS Determination

Travel time, ST (s)	106.5							
Travel speed, SA (mi/h)	17.9							
Segment LOS	C							

Urban Street LOS Determination

Total travel time (s)	106.5
Total length (mi)	0.53
Total travel speed, SA (mi/h)	17.9
Total urban street LOS	C