Richard Garcia & Associates, Inc.

SOMERSET CORAL GABLES UBC CAMPUS (PK – 8)

Traffic Impact Study
&
Accumulation Assessment

(Revised with 436 Students)

624 Anastasia Avenue
Coral Gables, Florida

October 5, 2011

ENGINEER'S CERTIFICATION

I, Richard Garcia, P.E. # 54886, certify that I currently hold an active Professional Engineers License in the State of Florida and am competent through education and experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. In addition, the firm Richard Garcia & Associates, Inc. holds a Certificate of Authorization # 9592 in the State of Florida. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions and recommendations made herein are true and correct to the best of my knowledge and ability.

PROJECT DESCRIPTION: Somerset Coral Gables (PK – 8) - UBC Campus
Traffic Impact Study (Revised with 436 Students)

PROJECT LOCATION: 624 Anastasia Avenue
Coral Gables, Florida

Florida Registration No, 54886 Date

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Executive Summary

The purpose of this study is to evaluate the revised traffic impacts and the projected vehicle accumulation for the proposed school at the University Baptist Church (UBC) site. This site is located on the southwest corner of Segovia Street and Anastasia Avenue at the address 624 Anastasia Avenue in the City of Coral Gables, Florida. The subject site is currently operating as a Private School, Day Care, Religious Educational Center and Church. This report follows the methodology discussed in the Memorandum of Understanding (MOU) and agreed to with the City's Public Works Department at the meeting held May 18th, 2010 as well as the comments received by City Staff and the City's Traffic Consultant.

The trip generation characteristics were developed using actual data from the surrogate school, Doral Academy Elementary. This data was collected during the school's AM and PM peak period of 7:00 to 9:00 AM and 1:30 to 4:00 PM, respectively. The AM peak period analysis resulted in 377 vehicle trips while the PM peak period analysis yielded 301 vehicle trips. Please note that since the subject school will have multiple arrivals and dismissals, all of the peak period trips will not occur during the school's peak hour. Therefore, the peak period trips were analyzed in 15-minute intervals consistent with the proposed school's arrival and dismissal times in order to obtain the AM and PM peak hour trips. As a result, the **AM Peak Hour Trip Generation** yielded 243 vehicle trips of which 124 vehicle trips are entering and 119 vehicle trips will exit the site. The **PM Peak Hour Trip Generation** yielded 195 vehicle trips of which 91 vehicle trips are entering and 104 vehicle trips will exit the site.

The AM and PM peak hour trips have been further distributed into the four quadrants and consistent with the project's Traffic Analysis Zone (TAZ). The traffic assignment was performed for two (2) scenarios as follows: Scenario A: All Site Traffic based on surrounding roadway network (this represents the standard traffic modeling approach) and Scenario B: All Site Traffic through Segovia Street/Anastasia Avenue (this is the "Segovia Access" scenario channeling all school traffic through Segovia Street). Although we do not recommend restricting the left-out at the driveway on Cardena Street, the driveway assignments for both scenarios depict all the exiting traffic as right-out only in order to reduce the vehicle conflict points.

The traffic impacts to the intersections most affected were also evaluated. This analysis was performed for the existing and proposed condition during the AM and PM peak hour. As a result, the analysis yielded LOS B or better for both the existing and proposed condition. Please note the proposed condition was analyzed for two (2) scenarios and consistent with the proposed roadway and median modifications on Segovia Street.

The proposed condition was analyzed for two (2) scenarios described above. Again, the proposed roadway configuration was performed consistent with the proposed roadway modifications on Segovia Street. The results for both proposed scenarios are summarized in Tables 1 and 2 below.

Table 1: AM Peak Hour Level of Service (LOS) Summary

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
Existing AM Peak Hour Condition												
1	Segovia Street & Anastasia Avenue	Signalized	23.9	C	22.8	C	3.2	A	3.0	A	8.1	A
2	Segovia Street & University Court	Unsignalized	12.2	B	N/A	N/A	0.0	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	19.4	C	12.4	B	0.1	A	2.1	A	5.1	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.2	A	0.1	A	9.5	A	0.0	A	0.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A
Proposed AM Peak Hour Condition with Project Traffic (Scenario A)												
1	Segovia Street & Anastasia Avenue	Signalized	26.7	C	20.0	C	5.7	A	4.9	A	11.7	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	27.8	D	15.6	C	0.5	A	2.0	A	7.2	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	3.7	A	10.2	B	11.4	B	4.6	A
5	Cardena Street & Riviera Drive	Unsignalized	0.7	A	0.1	A	10.3	B	9.1	A	1.0	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	4.3	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	5.3	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	9.0	A	0.1	A
Proposed AM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	29.1	C	19.3	B	6.0	A	5.3	A	12.5	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	28.5	D	14.5	B	0.1	A	1.9	A	6.8	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	5.3	A	9.5	A	0.0	A	5.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	7.2	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	4.2	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

Table 2: PM Peak Hour Level of Service (LOS) Summary

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
Existing PM Peak Hour Condition												
1	Segovia Street & Anastasia Avenue	Signalized	23.6	C	23.8	C	2.9	A	2.8	A	7.8	A
2	Segovia Street & University Court	Unsignalized	12.4	B	N/A	N/A	0.1	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	14.7	B	11.9	B	0.0	A	2.8	A	4.5	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	0.2	A	9.1	A	10.2	B	0.8	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.2	A	9.4	A	9.2	A	1.0	A
Proposed PM Peak Hour Condition with Project Traffic (Scenario A)												
1	Segovia Street & Anastasia Avenue	Signalized	24.1	C	21.4	C	4.6	A	4.5	A	10.3	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	18.9	C	14.0	B	0.5	A	2.6	A	5.4	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.4	A	2.5	A	10.0	B	11.7	B	4.5	A
5	Cardena Street & Riviera Drive	Unsignalized	1.2	A	0.2	A	10.0	B	9.5	A	1.4	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	6.8	A	3.6	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	5.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	8.9	A	0.2	A
Proposed PM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	25.5	C	20.8	C	4.8	A	4.9	A	10.8	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	19.3	C	13.5	B	0.1	A	2.5	A	5.0	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	4.2	A	9.4	A	14.1	B	5.0	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.1	A	9.4	A	9.3	A	0.9	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.0	A	6.5	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	4.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

In addition to the above, Accumulation Assessments were performed for the school's AM and PM peak period to determine the projected vehicle stacking at the proposed school during the arrival and dismissal times. These assessments follow the Miami-Dade County Public Works Department methodology and

consist of taking information from a similar school and applying it to the proposed charter school. The following hours are the proposed arrival and dismissal times for this charter school:

Grades	A / D	Students	Arrival Times (A)	Dismissal Times (D)
6th - 8th	**1st**	135	7:30 AM	2:30 PM
2nd - 5th	**2nd**	155	8:00 AM	3:00 PM
PK - 1st	**3rd**	146	8:30 AM	2:00 PM
Total		**436**		

Vehicular access is being provided via three (3) driveways; two (2) on Cardena Street and one (1) on Riviera Drive. Moreover, the subject project will have two (2) vehicular stacking areas; one on-site stacking area for passenger vehicles and one adjacent to Anastasia Avenue (not utilized in the analysis) for vans. Also, this project will provide 29 parking spaces for visitors (not utilized in the analysis) which may be used by parents to drop-off or pickup students during the arrival and dismissal times. It is important to note that up to 10 vehicles, not utilized in our analysis, can double stack to avoid any spill-over occurring onto Cardena Street. As previously mentioned, the subject project consists of a charter school with 436 students. However, the school will be phasing the total student population as follows:

- **Phase I:** is planned to have an enrollment of 260 students for the first year.
- **Phase II:** consists of increasing the enrollment by 88 students. As such, the school will have a total of 348 students enrolled by the second year.
- **Phase III:** will consist of increasing the previous enrollment by 88 students to have a total of 436 students by the third year.

Consistent with the requirements of Miami-Dade County, an Accumulation Assessment was performed to evaluate the stacking/queuing capacity for the proposed project. Moreover, the Accumulation Assessment was performed for three (3) phases described above. Also, each assessment is assuming three (3) arrivals and three (3) dismissals separated by 30-minute intervals in order to reduce the traffic impacts and to accommodate the projected vehicle stacking demand within the site. These Accumulation results have been performed based on dismissal information provided by the principal (Ms. Eleonora Cuesta) of the surrogate school, Doral Academy.

Phase I: The AM Peak Accumulation Assessment yielded **3.82 passenger vehicles** for each arrival, which corresponds to **760 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **16.26 vehicles** for each dismissal, which corresponds to **178 percent** being accommodated.

Phase II: The AM Peak Accumulation Assessment yielded **5.09 passenger vehicles** for each arrival, which corresponds to **570 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **21.68 vehicles** for each dismissal, which corresponds to **134 percent** being accommodated.

Phase III: The AM Peak Accumulation Assessment yielded **6.80 passenger vehicles** for a maximum arrival of 155 students (i.e. worst case arrival), which corresponds to **427 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **28.97 vehicles** for a maximum dismissal of 155 students, which corresponds to **100 percent** being accommodated.

As evident from the results shown above, the proposed stacking capacity of 29 passenger vehicles can accommodate the projected vehicle stacking demand within the site for the three phases. Again, the

proposed charter school is providing personnel to direct traffic and to supervise the drop-off and pick-up operations.

The following describes the proposed traffic mitigation measures and contingencies provided by the applicant in the event the vehicle stacking demand temporarily exceeds the stacking area (i.e. 29 vehicles) utilized in the Accumulation Assessment.

The Accumulation Assessment was performed utilizing the whole student's population and assumed all the students are drop-off or pick-up by parents in passenger vehicles. However, this is unlikely and not the case, in particular, since the subject school is mainly surrounded by residential uses and a portion of the student's population is expected to walk to school. Therefore, the vehicle stacking demand is expected to be less than the calculated stacking demand in the Accumulation Assessment, since the surrogate school was located in an industrial area and had nearly no students walking.

In addition, the subject project is proposing a stacking area along Anastasia Avenue exclusively for vans providing transportation for students. Although the van's stacking area was not utilized in the analysis, this area will reduce the amount of stacking vehicles within the site and the possibility of having a vehicular spill-over onto Cardena Street. The school is providing personnel to manage the traffic operations while assuring the safety of students is not compromised by through traffic on Anastasia Avenue during the arrival and dismissal times.

As indicated above, the school is providing a stacking area for 29 passenger vehicles within the on-site parking lot. However, ten (10) additional vehicles can be temporarily accommodated by double stacking them along the internal by-pass lane in the event the need arises. Lastly, the school also has 29 visitor parking spaces which may be utilized by parents during the arrival and dismissal times. Please note these mitigation measures were not utilized as part of the Accumulation Assessment which results in a conservative analysis. Therefore, these measures provide the school, residents and the City additional contingencies to handle the project's traffic.

In conclusion, the subject project will have sufficient stacking capacity and the intersections most impacted yielded acceptable LOS results. Therefore, this project does not pose a negative impact on traffic as sufficient roadway capacity exists.

Introduction

The purpose of this study is to evaluate the associated traffic impacts for the proposed charter school at the University Baptist Church (UBC) site. This site is located at the address 624 Anastasia Avenue in the City of Coral Gables, Florida and is currently operating as a School, Day Care, Religious Educational Center and Church. This report follows the methodology discussed in the Memorandum of Understanding (MOU) and agreed to with the City's Public Works Department at the meeting held May 18th, 2010 as well as the comments received by City Staff and the City's Traffic Consultant.

As such, the traffic impacts for this project were evaluated at the following intersections:

- Segovia Street & Anastasia Avenue
- Segovia Street & University Court
- Segovia Street & Riviera Drive
- Anastasia Avenue & Cardena Street
- Riviera Drive & Cardena Street
- Project's Driveways

A Level of Service (LOS) analysis was performed for the existing condition and proposed condition with project traffic during the school's AM and PM peak hour. This report follows the methodologies adopted by the Institute of Transportation Engineer's (ITE) Traffic Impact Studies Manual and follows the guidelines of Miami-Dade County Public Works Department (School Criteria). Lastly, this report has evaluated the following:

- Trip Generation
- Traffic Distribution
- Traffic Assignment
- Traffic Counts
- Level of Service
- Accumulation Assessment
- Recommendations

Project Location / Description

The subject project is located on the southwest corner of Segovia Street and Anastasia Avenue in the City of Coral Gables, Florida. This project is comprised of a charter school with 436 students in grades Pre-Kindergarten through Eighth (PK - 8). As previously mentioned, this site is currently being used as a School, Day Care, Religious Educational Center and Church. Please note the existing Church will remain as a component of this project.

The proposed school is providing vehicular access via three (3) driveways; two (2) on Cardena Street and one (1) on Riviera Drive. Moreover, the subject project will have two (2) vehicular stacking areas; one on-site stacking area for passenger vehicles and one adjacent to Anastasia Avenue (not utilized in the analysis) for vans. Also, this project will provide 29 parking spaces for visitors (not utilized in the analysis) which may be used by parents to drop-off or pickup students during the arrival and dismissal times. Lastly, the Somerset UBC Charter School is providing personnel to direct traffic and to supervise the drop-off and pick-up operations.

Figure 1 depicts the site's location map, while Figure 2 is the proposed site plan, provided for illustrative purposes only.

Figure 1: Location Map

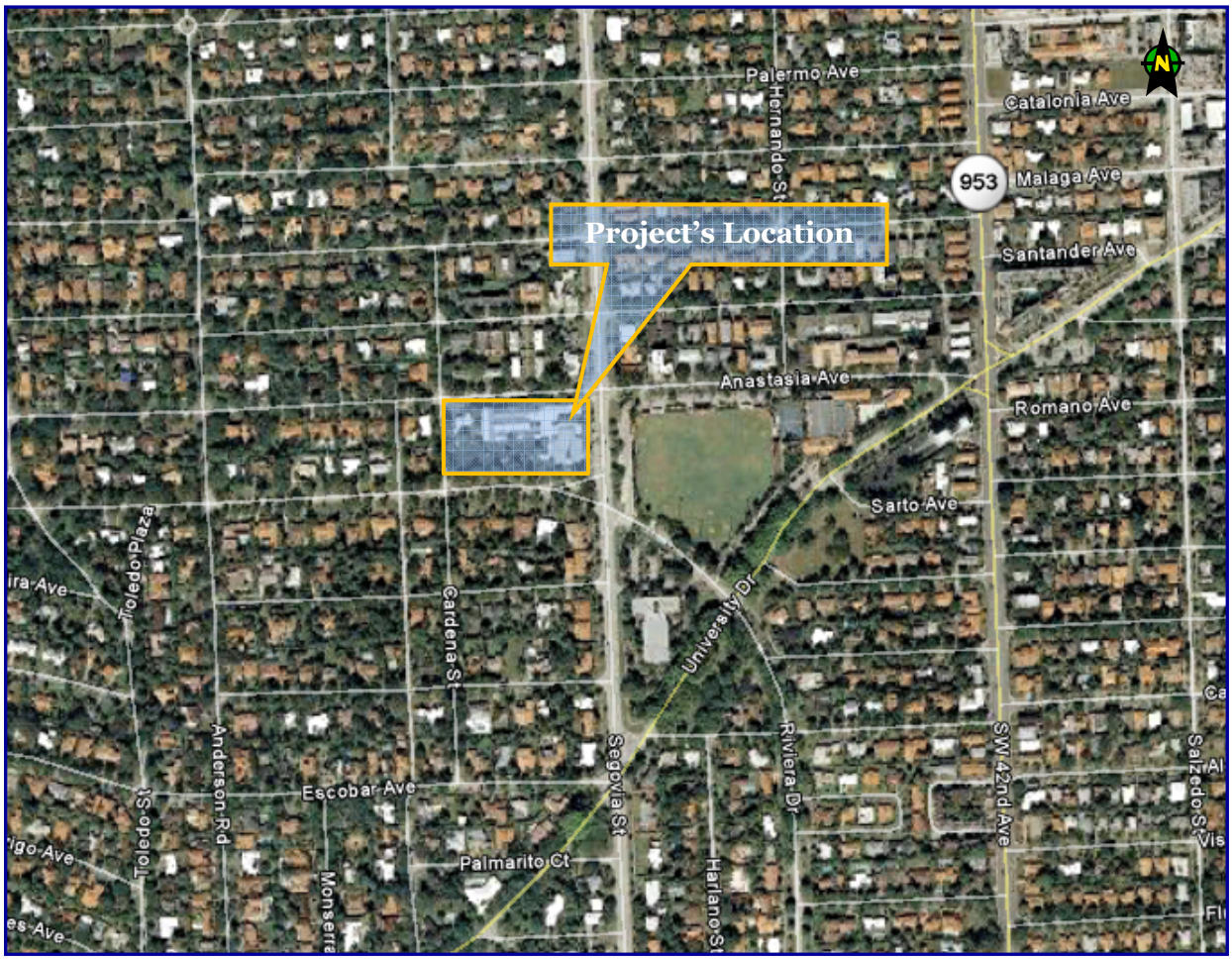
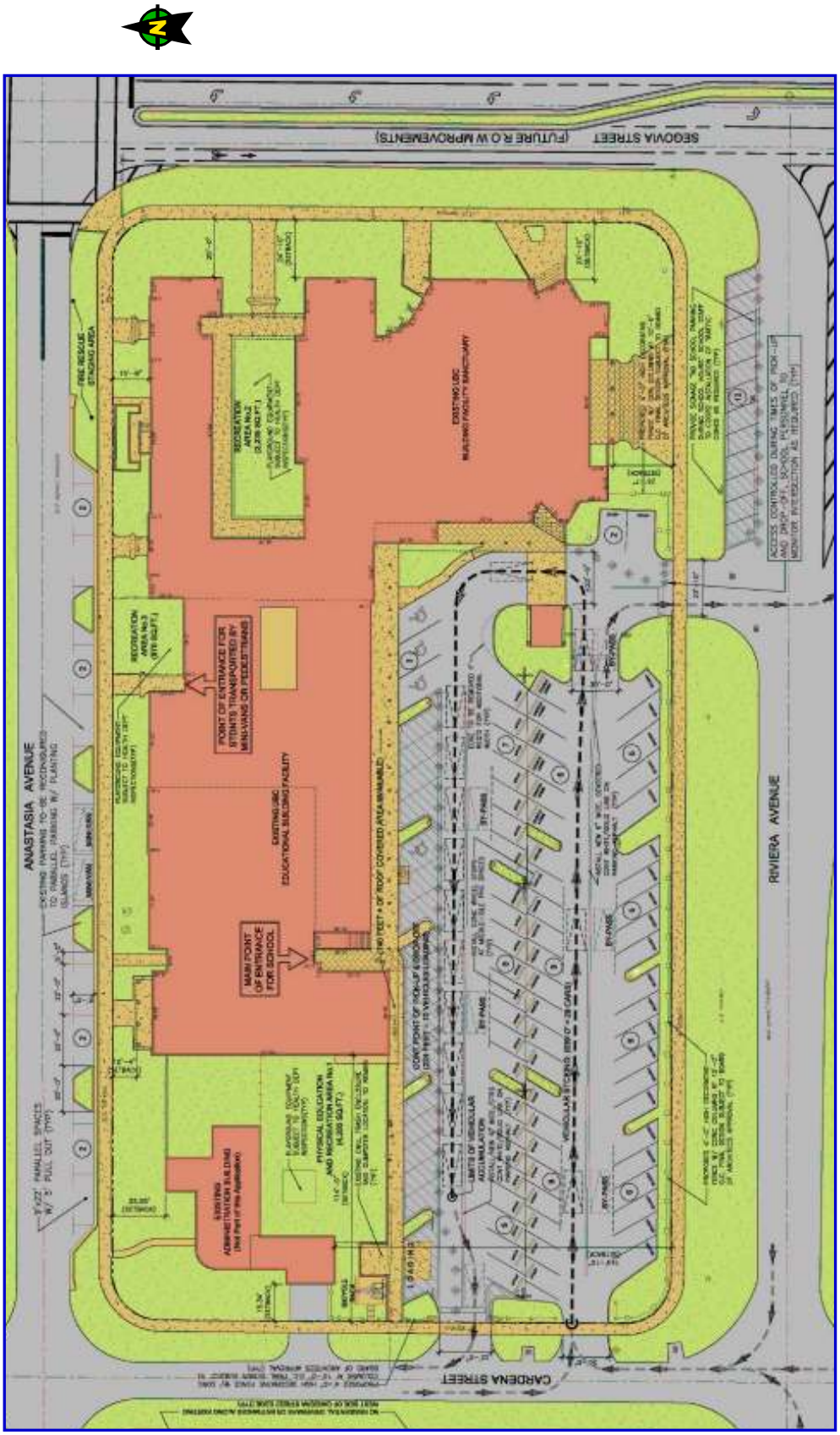


Figure 2: Site Plan



Existing Condition

The purpose of this section is to identify the current operational and geometric characteristics of the roadways within the study area in order to provide a comparison to future conditions.

Data Collection

Manual Turning Movement Counts (TMC's) were taken at the nearby intersections identified below. This data was collected on Thursday, May 20th, 2010 during the school's AM and PM peak hour of 7:00 AM to 9:00 AM and 2:00 PM to 4:00 PM, respectively. Moreover, the turning movement counts were adjusted for peak seasonal variations by utilizing the 2010 Florida Department of Transportation Seasonal Factor (SF) of 1.01. Moreover, these intersections would be the most impacted due to its close proximity to the subject location. Again, these intersections are included in the Memorandum of Understanding and were discussed and agreed by the City of Coral Gables Public Works Department. Traffic Counts and operational characteristics were gathered at the following intersections:

- **Segovia Street & Anastasia Avenue**
- **Segovia Street & University Court**
- **Segovia Street & Riviera Drive**
- **Anastasia Avenue & Cardena Street**
- **Riviera Drive & Cardena Street**

Figure 3 depicts a graphical representation of the seasonally adjusted existing AM peak hour TMC's, while Figure 4 is the School's PM peak hour TMC's.

Figure 3: Existing AM Peak Hour TMC's

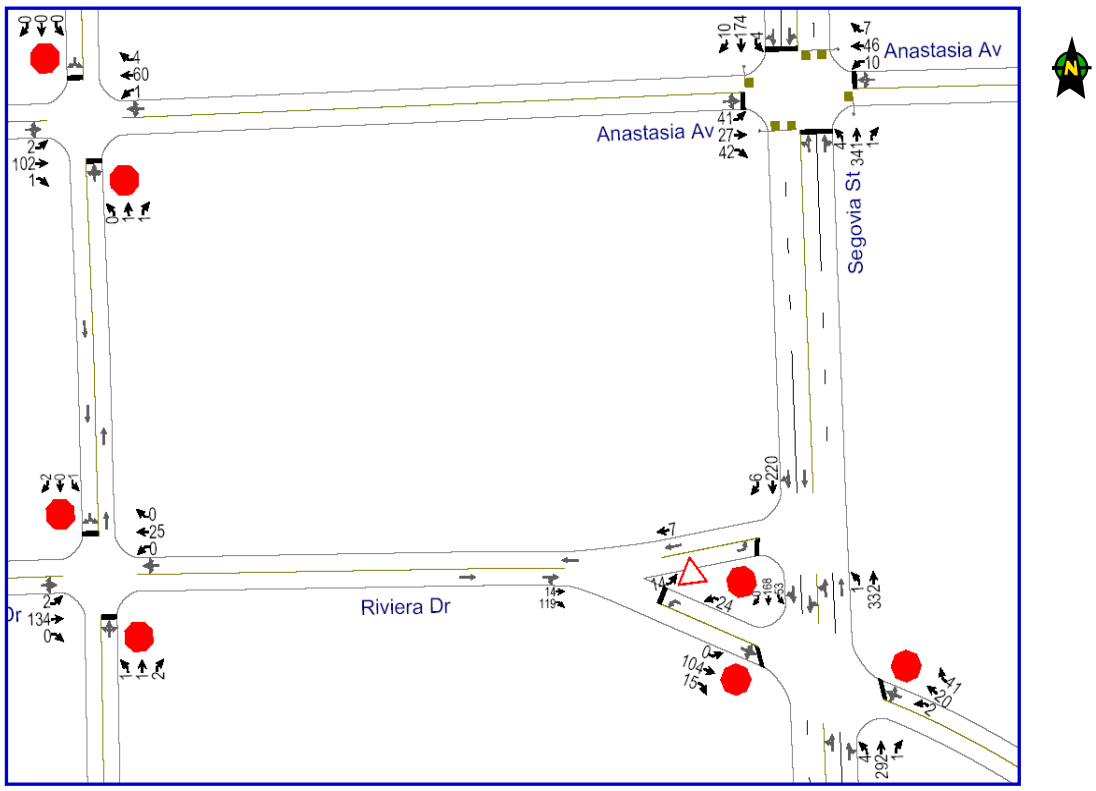
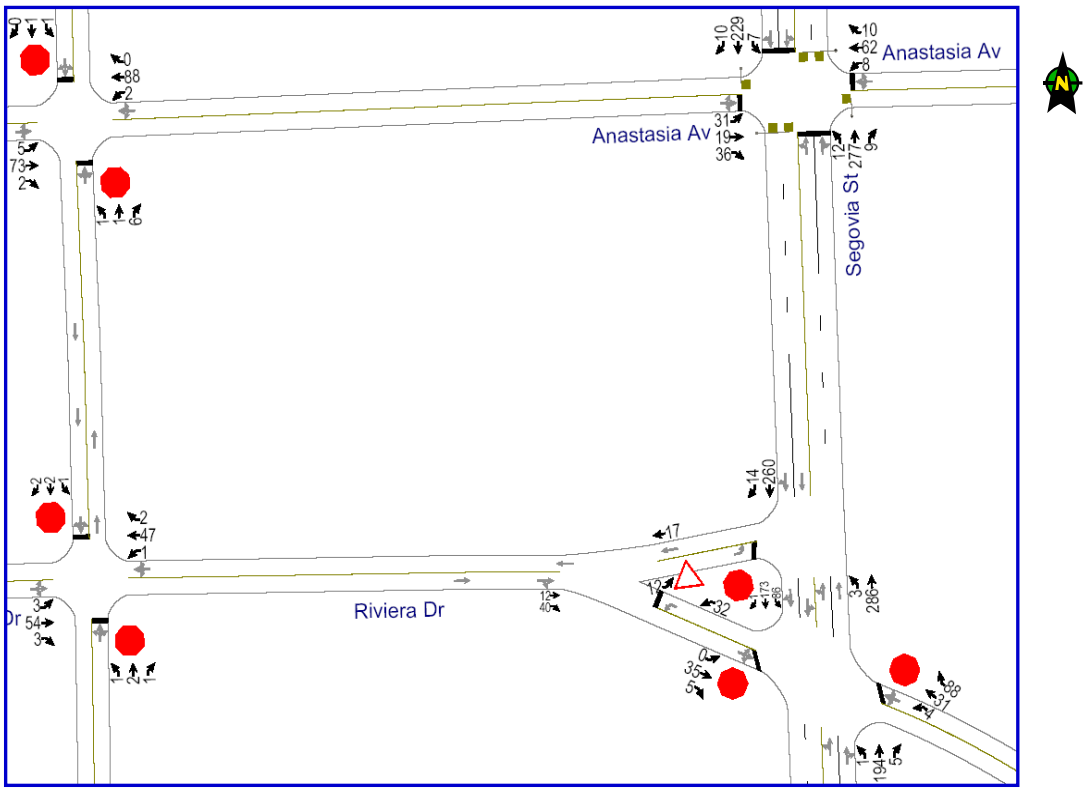


Figure 4: Existing School's PM Peak Hour TMC's



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Level of Service (LOS)

Using the above AM and school's PM TMC data, an intersection Level of Service (LOS) analysis was performed for the peak seasonal existing condition at the intersections previously described using the Synchro 7/SimTraffic software. The analysis was performed using the Highway Capacity Manual methodology. Moreover, this analysis was performed consistent with the roadway characteristics at the time the data collection took place and resulted in LOS A (overall) for all the analyzed intersections. Table 3 provides a summary of the AM peak hour LOS while Table 4 summarizes the PM peak hour LOS results.

Table 3: Existing AM Peak Hour Level of Service (LOS)

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
1	Segovia Street & Anastasia Avenue	Signalized	23.9	C	22.8	C	3.2	A	3.0	A	8.1	A
2	Segovia Street & University Court	Unsignalized	12.2	B	N/A	N/A	0.0	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	19.4	C	12.4	B	0.1	A	2.1	A	5.1	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.2	A	0.1	A	9.5	A	0.0	A	0.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A

Table 4: Existing PM Peak Hour Level of Service (LOS)

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
1	Segovia Street & Anastasia Avenue	Signalized	23.6	C	23.8	C	2.9	A	2.8	A	7.8	A
2	Segovia Street & University Court	Unsignalized	12.4	B	N/A	N/A	0.1	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	14.7	B	11.9	B	0.0	A	2.8	A	4.5	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	0.2	A	9.1	A	10.2	B	0.8	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.2	A	9.4	A	9.2	A	1.0	A

Project Traffic

This section of the report will cover the revise project traffic for the subject school. In addition to calculating the trip generation and trip distribution, the school's site traffic was assigned to the adjacent roadways and utilized to determine the future project traffic in the subsequent sections.

Trip Generation

The trip generation characteristics were updated for 436 students using actual data from the surrogate school, Doral Academy Elementary. This data was collected during the school's AM and PM peak period of 7:00 to 9:00 AM and 1:30 to 4:00 PM, respectively. These hours correspond to the arrival and dismissal times for the surrogate school.

The trip generation rate from the surrogate school yielded 0.865 and 0.690 trips per student during the AM and school's PM peak hour, respectively. The above rates have been updated based on information provided by the principal (Ms. Eleonora Cuesta) of the surrogate school, Doral Academy. Included in Appendix G is a letter from Ms. Cuesta with the corresponding information.

Subsequently, these trip generation rates were utilized to calculate the proposed vehicle trips. As a result, the subject project yielded **377 vehicle trips** during the **AM peak period** and **301 vehicle trips** during the **PM peak period**. Tables 5 and 6 summarize the trip generation for the charter school during the AM and PM peak period, respectively. Please note that since this school will have multiple arrivals and dismissals, all of the peak period trips will not occur during the school's peak hour. Additionally, the above peak period trips were utilized to calculate a Vehicle Occupancy rate as requested by the City of Coral Gables. As a result, the Vehicle Occupancy rate yielded 1.8 students per vehicle during the AM peak period and 2.0 students per vehicle during the PM peak period. The calculations of the rates and percentage are included in Appendix B.

Table 5: AM Peak Period (7:00 – 9:00 AM) Trip Generation

AM PEAK PERIOD TRIPS			TRIP GENERATION RATE	TRIPS		
LAND USE (LU)	UNITS	LU CODE		IN	OUT	TOTAL
PROPOSED USE						
Charter School (PK - 8)	436 Students	◇	0.865	192	185	377
Proposed Gross Vehicle Trips				**192**	**185**	**377**

NOTES:

◇Trip Generation Rate obtained from surrogate school data. See Appendix B.

Table 6: School's PM Peak Period (2:00 – 4:00 PM) Trip Generation

PM PEAK PERIOD TRIPS			TRIP GENERATION RATE	TRIPS		
LAND USE (LU)	UNITS	LU CODE		IN	OUT	TOTAL
PROPOSED USE						
Charter School (PK - 8)	436 Students	◇	0.690	140	161	301
Proposed Gross Vehicle Trips				**140**	**161**	**301**

NOTES:

◇Trip Generation Rate obtained from surrogate school data. See Appendix B.

Subsequently, the above peak period trips were analyzed in 15-minute intervals consistent with the proposed school's arrival and dismissal times in order to obtain the AM and PM peak hour trips. As a result, the **AM Peak Hour Trip Generation** yielded 243 vehicle trips of which 124 vehicle trips are entering and 119 vehicle trips will exit the site. The **PM Peak Hour Trip Generation** yielded 195 vehicle trips of which 91 vehicle trips are entering and 104 vehicle trips will exit the site. Table 7 depicts the AM Peak Hour Trip Generation while Table 8 is the PM peak hour results.

Table 7: AM Peak Hour Trip Generation

Time	Percent Arrivals	Student Percentage	Equivalent Student Arrival	Cummulative Students	Percent IN	Percent OUT	Vehicles IN	Vehicles OUT	Total Trips	Cummulative Total Trips IN	Cummulative Total Trips OUT	Cummulative Total Trips	Running Queue	Operation
7:00 AM - 7:15 AM	12%	31%	52	52	12%	9%	23	17	40	23	17	40	4	First Arrival 7:30 AM (Grades 6th - 8th)
7:15 AM - 7:30 AM	19%		83	**135**	19%	17%	37	31	68	**60**	**48**	**108**	8	
7:30 AM - 7:45 AM	15%	36%	65	65	15%	19%	29	35	64	29	35	64	2	Second Arrival 8:00 AM (Grades 2nd - 5th)
7:45 AM - 8:00 AM	21%		89	**155**	21%	15%	39	28	67	**68**	**63**	**131**	12	
8:00 AM - 8:15 AM	10%	33%	44	44	10%	14%	19	25	44	19	25	44	6	Third Arrival 8:30 AM (Grades PK - 1st)
8:15 AM - 8:30 AM	19%		83	126	19%	18%	37	33	70	56	58	114	9	
8:30 AM - 8:45 AM	5%		20	**146**	5%	9%	8	16	24	**64**	**74**	**138**	0	
Total	**100%**	**100%**	**436**	**436**	**100%**	**100%**	**192**	**185**	**377**	**192**	**185**	**377**		**PEAK HOUR**

School AM Peak Hour	Trips		
AM Peak Hour (7:15 - 8:15)	IN	OUT	TOTAL
	124	**119**	**243**

Table 8: School's PM Peak Hour Trip

Time	Percent Arrivals	Student Percentage	Equivalent Student Arrival	Cummulative Students	Percent IN	Percent OUT	Vehicles IN	Vehicles OUT	Total Trips	Cummulative Total Trips IN	Cummulative Total Trips OUT	Cummulative Total Trips	Running Queue	Operation
1:30 PM - 1:45 PM	7%	33%	29	29	7%	0%	9	0	9	9	0	9	9	First Dismissal 2:00 PM (Grades PK - 1st)
1:45 PM - 2:00 PM	15%		65	93	15%	1%	20	2	22	29	2	31	29	
2:00 PM - 2:15 PM	12%		52	**146**	12%	15%	17	24	41	46	26	**72**	22	
2:15 PM - 2:30 PM	25%	31%	108	108	25%	18%	34	29	63	34	29	63	28	Second Dismissal 2:30 PM (Grades 6th - 8th)
2:30 PM - 2:45 PM	6%		27	**135**	6%	12%	9	19	28	43	48	**91**	19	
2:45 PM - 3:00 PM	22%	36%	95	95	22%	20%	31	32	63	31	32	63	20	Third Dismissal 3:00 PM (Grades 2nd - 5th)
3:00 PM - 3:15 PM	10%		45	140	10%	10%	15	16	31	46	48	94	24	
3:15 PM - 3:30 PM	4%		15	**155**	4%	24%	5	39	44	51	87	**138**	0	
Total	**100%**	**100%**	**436**	**436**	**100%**	**100%**	**140**	**161**	**301**	**140**	**161**	**301**		**PEAK HOUR**

School PM Peak Hour	Trips		
PM Peak Hour (2:00 - 3:00)	IN	OUT	TOTAL
	91	**104**	**195**

Trip Distribution

The Traffic Analysis Zone for the subject project (TAZ 1065) was updated based on the most current information from Miami-Dade County MPO. However, the trip distribution percentages were based on the surrounding roadway network and local knowledge of traffic patterns within the project's area. The corresponding traffic distribution percentages were assigned to the North, South, East and West directions as outlined in Table 9. Figure 5 depicts the TAZ map while Figure 6 is the peak hour trips (ingress & egress). Figures 7 and 8 depict the AM and PM Peak Hour School Traffic, respectively.

Table 9: Traffic Distribution

TAZ 1065		UTILIZED FOR TRIP DISTRIBUTION		AM PEAK HOUR			PM PEAK HOUR		
DIRECTION	DISTRIBUTION	DIRECTION	DISTRIBUTION	IN	OUT	TOTAL	IN	OUT	TOTAL
NORTH	36.69%	NORTH	35%	43	42	85	32	36	68
EAST	25.78%	EAST	25%	31	29	60	23	26	49
SOUTH	16.09%	SOUTH	20%	25	24	49	18	21	39
WEST	21.44%	WEST	20%	25	24	49	18	21	39
	100.00%		**100.00%**	**124**	**119**	**243**	**91**	**104**	**195**

Figure 5: Traffic Analysis Zone (TAZ) Map

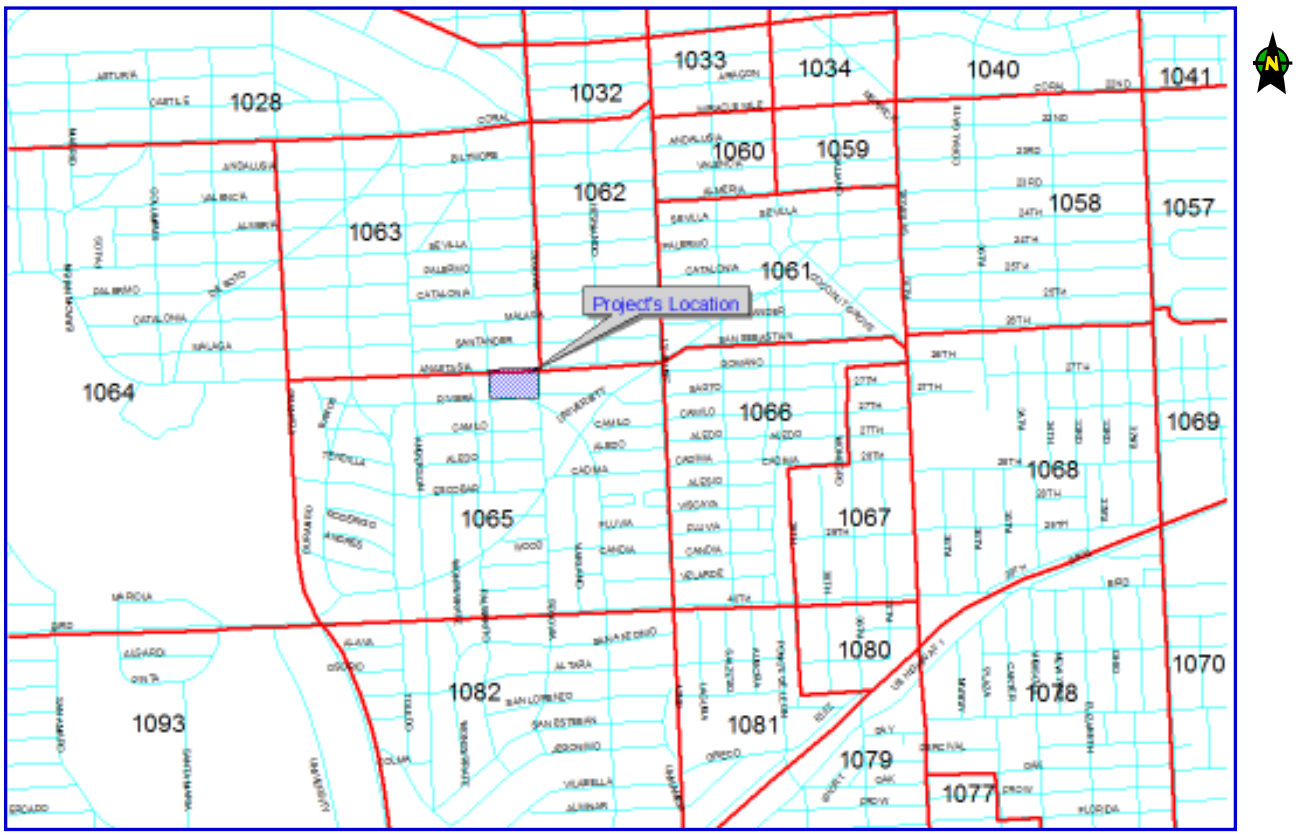

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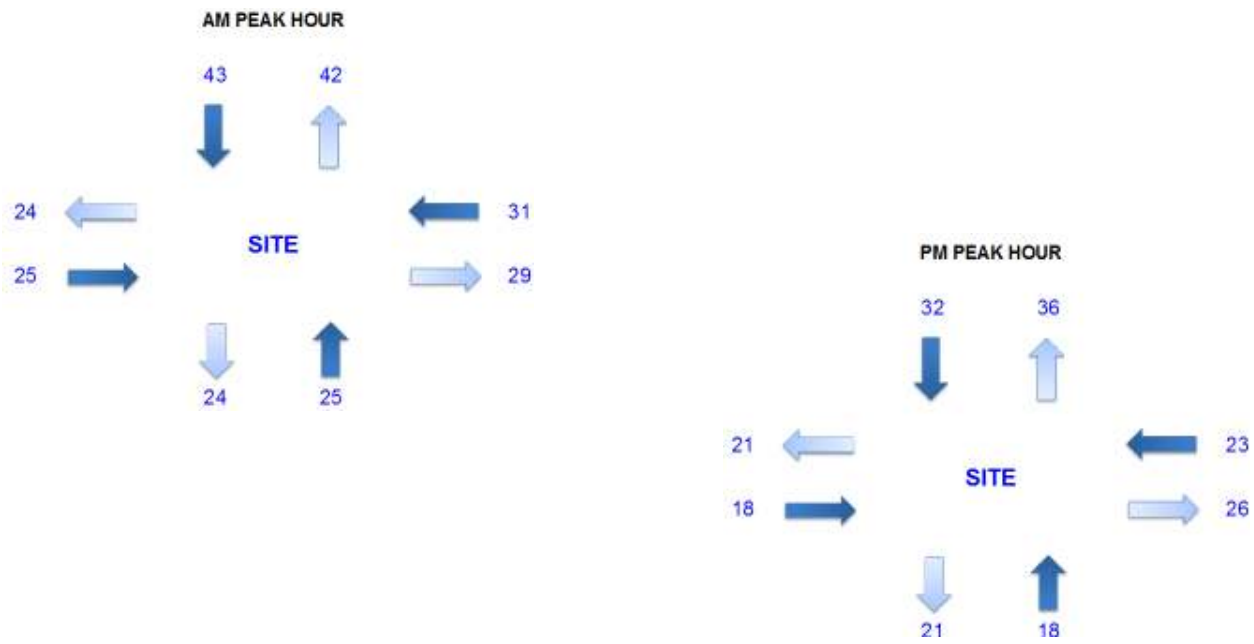
Figure 6: Directional Traffic Assignments (Ingress & Egress)



Site Traffic

Vehicular access to the subject site is being provided via three (3) driveways; two (2) on Cardena Street and one (1) on Riviera Drive. The Riviera Drive driveway will be access controlled during pick-up and drop-off of students. The AM and PM peak hour trips from Tables 7 and 8 have been further distributed into the four quadrants and consistent with the project's Traffic Analysis Zone (TAZ). Appendix C includes the ingress and egress traffic distribution with the corresponding assignments to the North, South, East and West for the AM and PM peak hour. Please note the site traffic was performed for two (2) scenarios as follows:

- **Scenario A:** All Site Traffic based on surrounding roadway network
  - This represents the standard traffic modeling approach
- **Scenario B:** All Site Traffic through Segovia Street/Anastasia Avenue
  - This is "Segovia Access" scenario channeling all school traffic

Although we do not recommend restricting the left-out at the driveway on Cardena Street, the driveway assignments for both scenarios depict all the exiting traffic as right-out only in order to reduce the vehicle conflict points. Figures 7 and 8 depict the AM peak hour site traffic and driveway assignments for scenarios A and B, respectively. Figures 9 and 10 illustrate the PM peak hour site traffic for scenarios A and B, respectively.

Figure 7: AM Peak Hour Site Traffic (Scenario A)

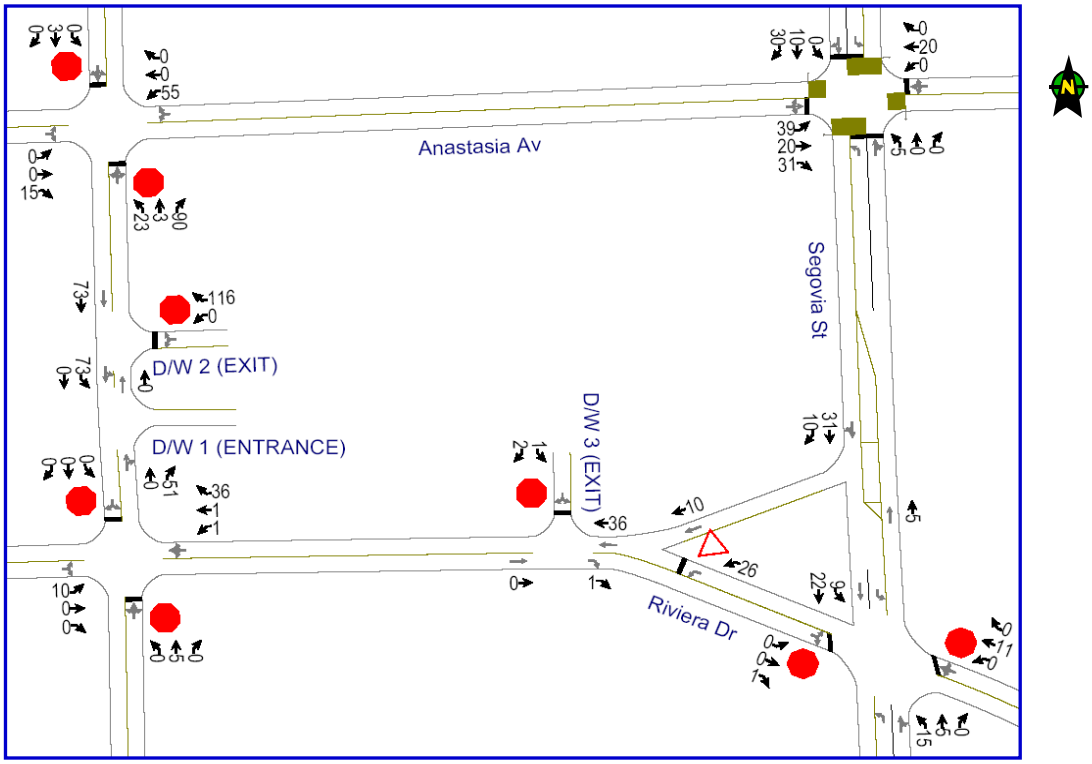


Figure 8: AM Peak Hour Site Traffic (Scenario B)

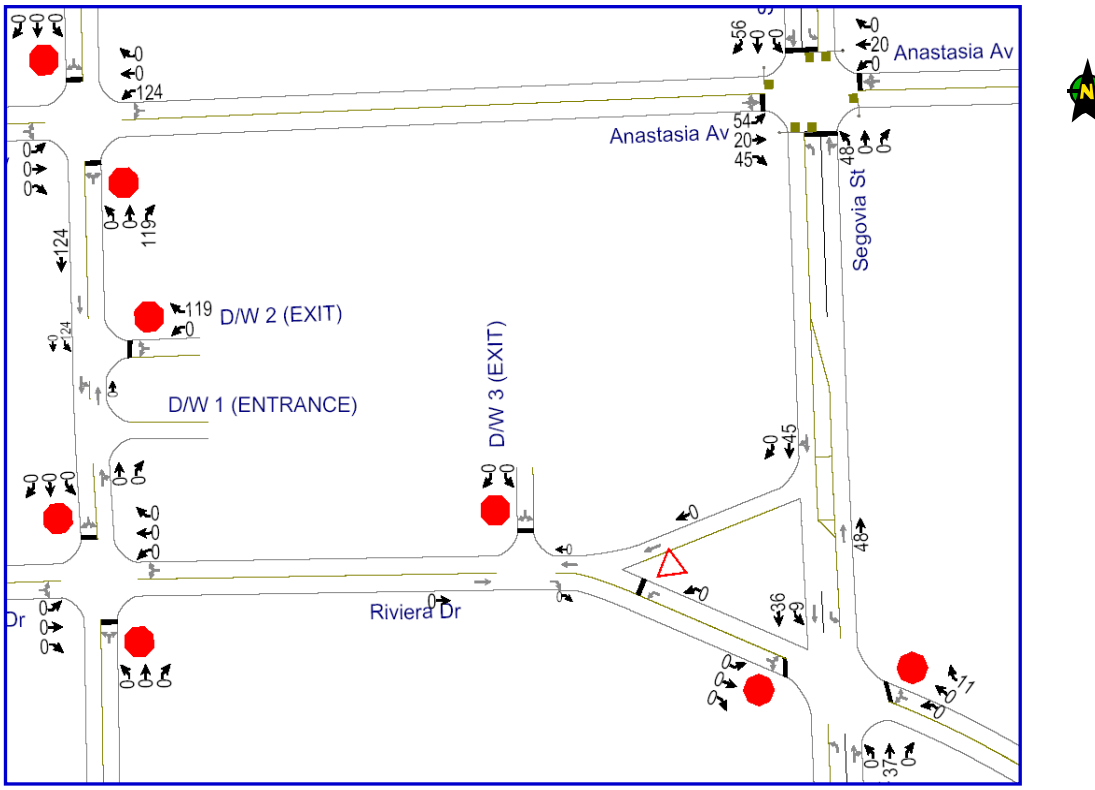


Figure 9: School's PM Peak Hour Site Traffic (Scenario A)

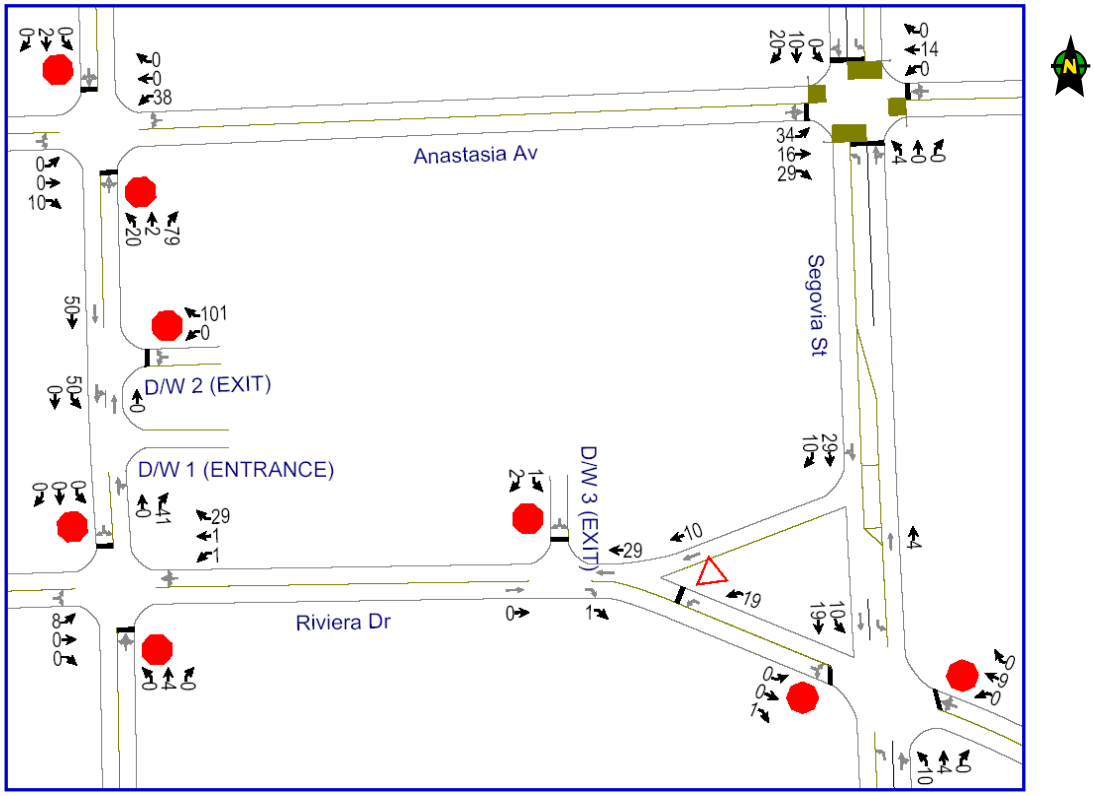
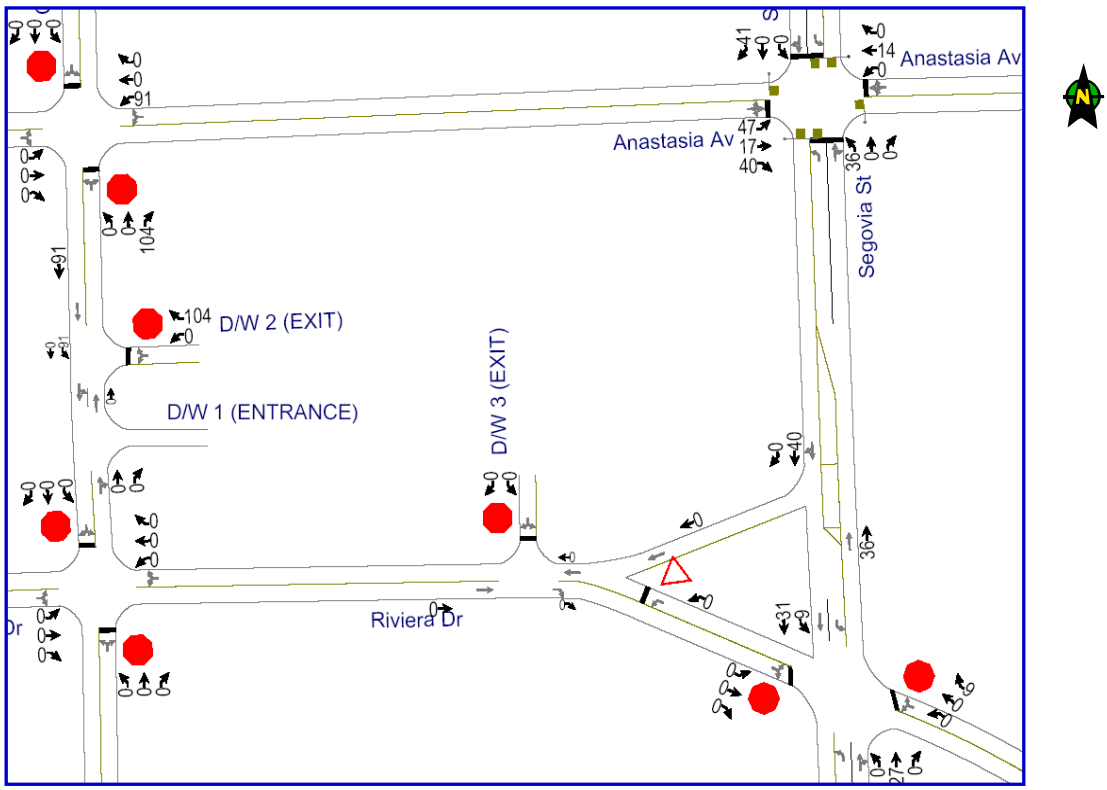


Figure 10: School's PM Peak Hour Site Traffic (Scenario B)



Proposed Condition

The proposed condition includes the future roadway modifications on Segovia Street, background growth and site traffic. The existing traffic was grown with a background growth rate was updated based on the latest historical traffic count station and resulted in 1.44 percent per year. This growth rate was obtained utilizing the 2010 historical traffic counts data from the Florida Department of Transportation.

Proposed Roadway Modifications on Segovia Street

As discussed in the methodology meeting held on May 18th, 2010, the City of Coral Gables is proposing median modifications on Segovia Street adjacent to the subject school, which includes the construction of new raised landscaped medians, a bike lane and the removal of a through lane for both north and south directions. Please note the removal of a through lane will reduce the roadway capacity on Segovia Street. Furthermore, the removal of the eastbound approach is being planned at University Court and Segovia Street. Lastly, our proposed condition analysis was performed consistent with the current roadway improvements.

Background Growth

Using the historical traffic counts data from the Florida Department of Transportation's Count Stations 0024, a regression analysis was performed for the last ten (10) years of available data. The results indicate a growth trend rate of 1.44 percent. In addition, a growth rate was calculated using the trips from the SERPM travel demand for 2005 and 2035 and resulted in 0.79 percent. Therefore, the most conservative growth rate of 1.44 percent was applied to the existing traffic counts to address traffic background growth in the area. Appendix D includes the count station data and analyses performed to determine the growth rate.

Proposed Condition with Project Traffic

The intersections previously shown in Figure 3 and 4 were augmented with the background growth and site traffic. This forms the basis for the proposed future condition with project traffic. Moreover, the proposed condition was analyzed for two (2) scenarios, which is consistent with the scenarios previously described in the Site Traffic section of this report. Again, the proposed condition analysis was performed consistent with the proposed median modifications on Segovia Street. The results for both proposed scenarios yielded Level of Service (LOS) B or better. Tables 10 and 11 summarize the LOS results for the proposed AM and PM peak hour, respectively. The calculations for the specific movements at each intersection are included in Appendix E. Figures 11 and 12 depict the proposed AM peak hour condition for scenarios A and B, respectively. Figures 13 and 14 illustrate the proposed PM peak hour condition for scenarios A and B, respectively.

Figure 11: Proposed AM Peak Hour Volumes (Scenario A)

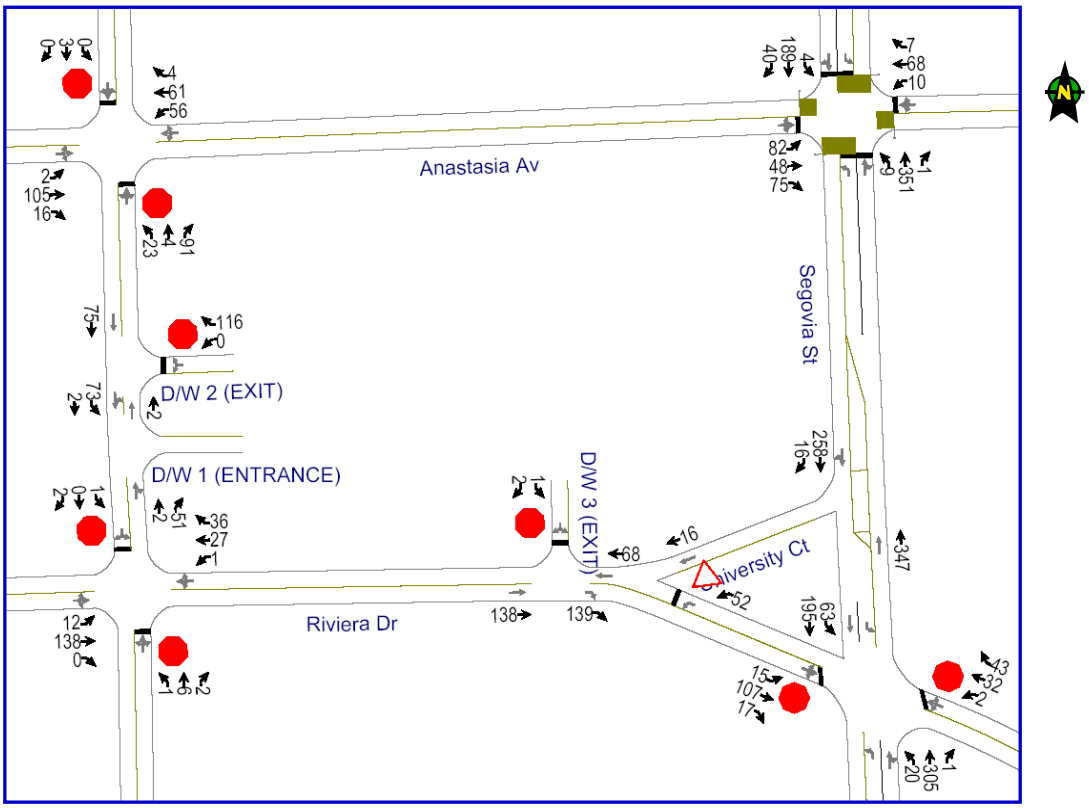


Figure 12: Proposed AM Peak Hour Volumes (Scenario B)

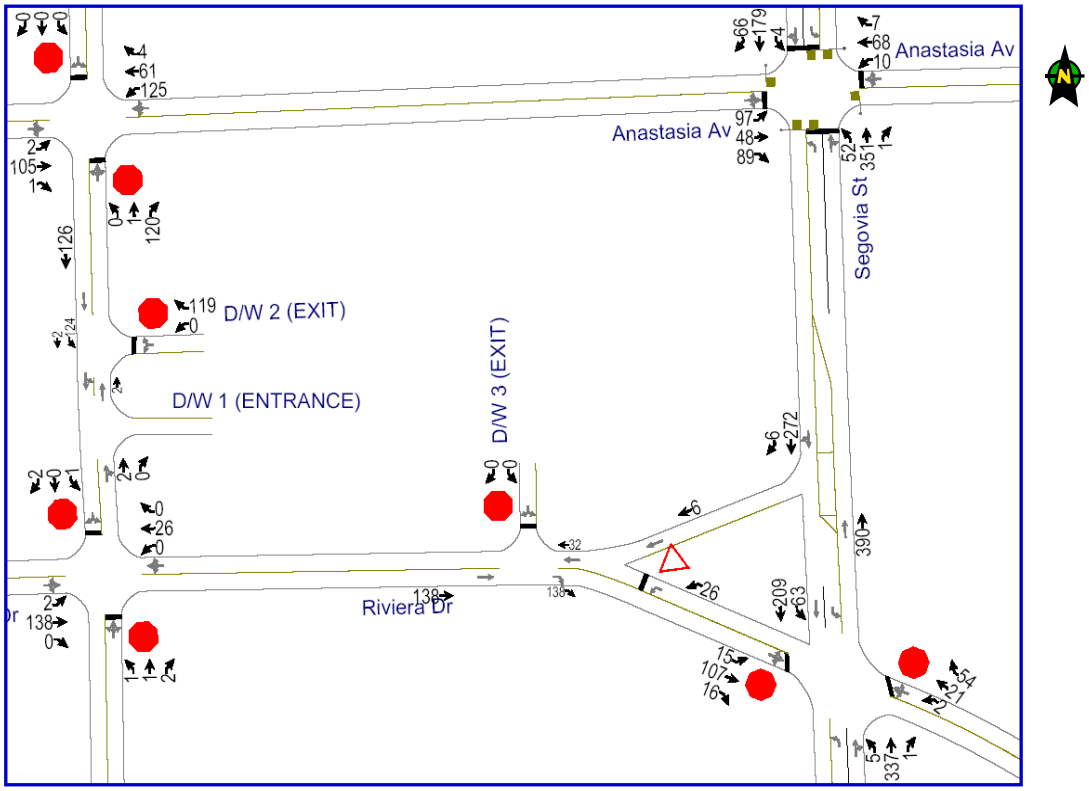


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Figure 13: Proposed School's PM Peak Hour Volumes (Scenario A)

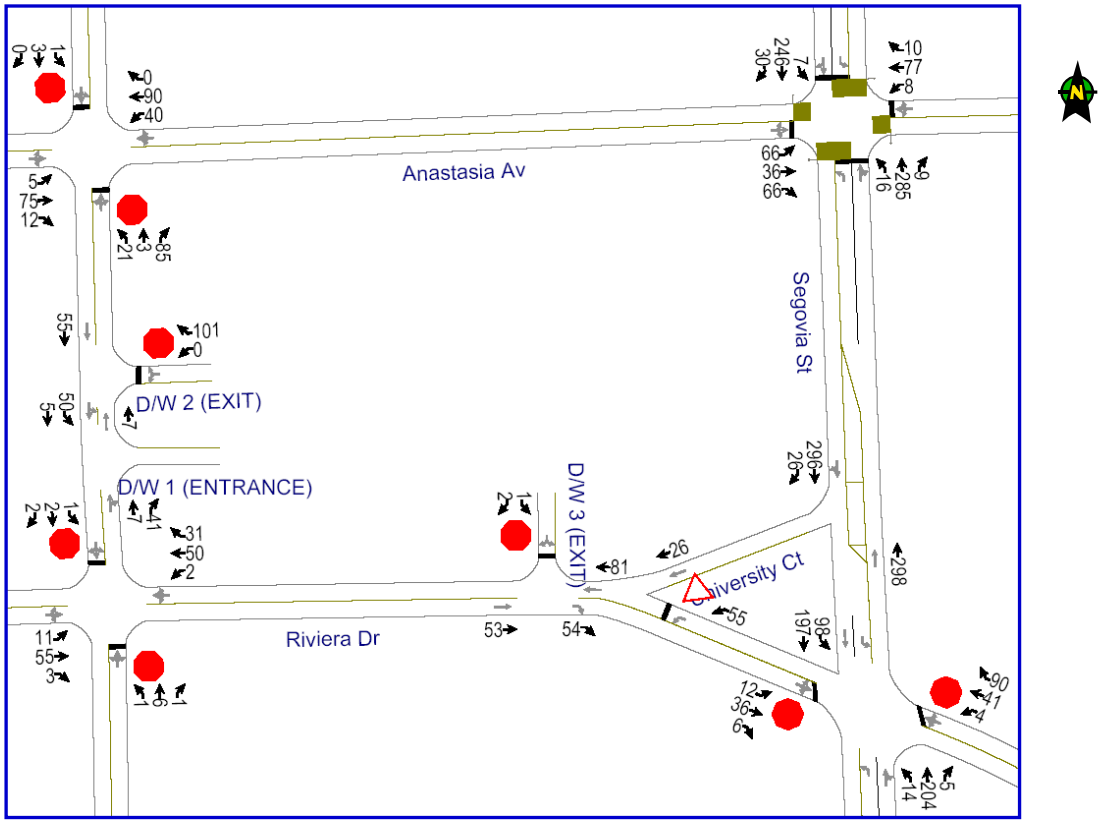
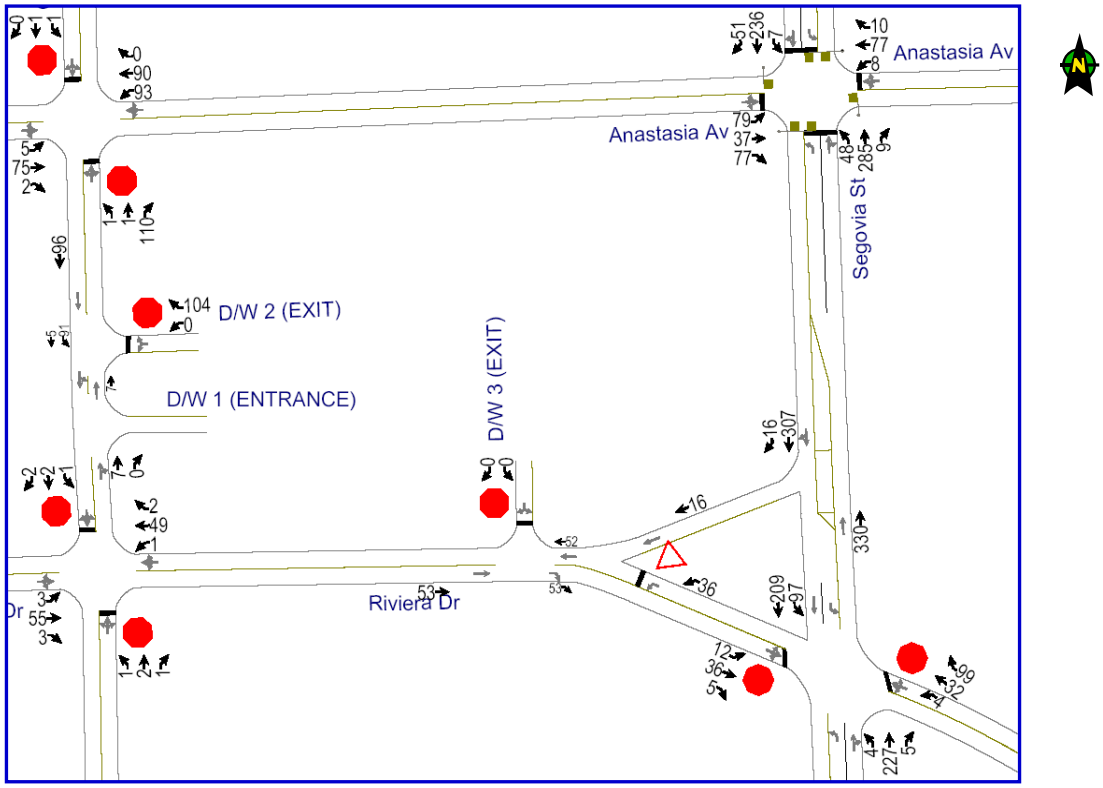


Figure 14: Proposed School's PM Peak Hour Volumes (Scenario B)



Moreover, we have performed a driveway analysis for the site driveways. The driveway's volumes were determined by using the trip distribution analysis according to the ingress and egress calculations from the trip generation section of this report. The site's driveways yielded LOS A. Appendix F contains the supporting documentation.

Table 10: Proposed AM Peak Hour Level of Service (LOS)

Proposed AM Peak Hour Condition with Project Traffic (Scenario A)												
	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
1	Segovia Street & Anastasia Avenue	Signalized	26.7	C	20.0	C	5.7	A	4.9	A	11.7	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	27.8	D	15.6	C	0.5	A	2.0	A	7.2	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	3.7	A	10.2	B	11.4	B	4.6	A
5	Cardena Street & Riviera Drive	Unsignalized	0.7	A	0.1	A	10.3	B	9.1	A	1.0	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	4.3	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	5.3	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	9.0	A	0.1	A
Proposed AM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	29.1	C	19.3	B	6.0	A	5.3	A	12.5	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	28.5	D	14.5	B	0.1	A	1.9	A	6.8	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	5.3	A	9.5	A	0.0	A	5.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	7.2	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	4.2	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

Table 11: Proposed PM Peak Hour Level of Service (LOS)

Proposed PM Peak Hour Condition with Project Traffic (Scenario A)												
	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
1	Segovia Street & Anastasia Avenue	Signalized	24.1	C	21.4	C	4.6	A	4.5	A	10.3	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	18.9	C	14.0	B	0.5	A	2.6	A	5.4	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.4	A	2.5	A	10.0	B	11.7	B	4.5	A
5	Cardena Street & Riviera Drive	Unsignalized	1.2	A	0.2	A	10.0	B	9.5	A	1.4	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	6.8	A	3.6	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	5.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	8.9	A	0.2	A
Proposed PM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	25.5	C	20.8	C	4.8	A	4.9	A	10.8	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	19.3	C	13.5	B	0.1	A	2.5	A	5.0	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	4.2	A	9.4	A	14.1	B	5.0	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.1	A	9.4	A	9.3	A	0.9	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.0	A	6.5	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	4.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

Accumulation Assessment

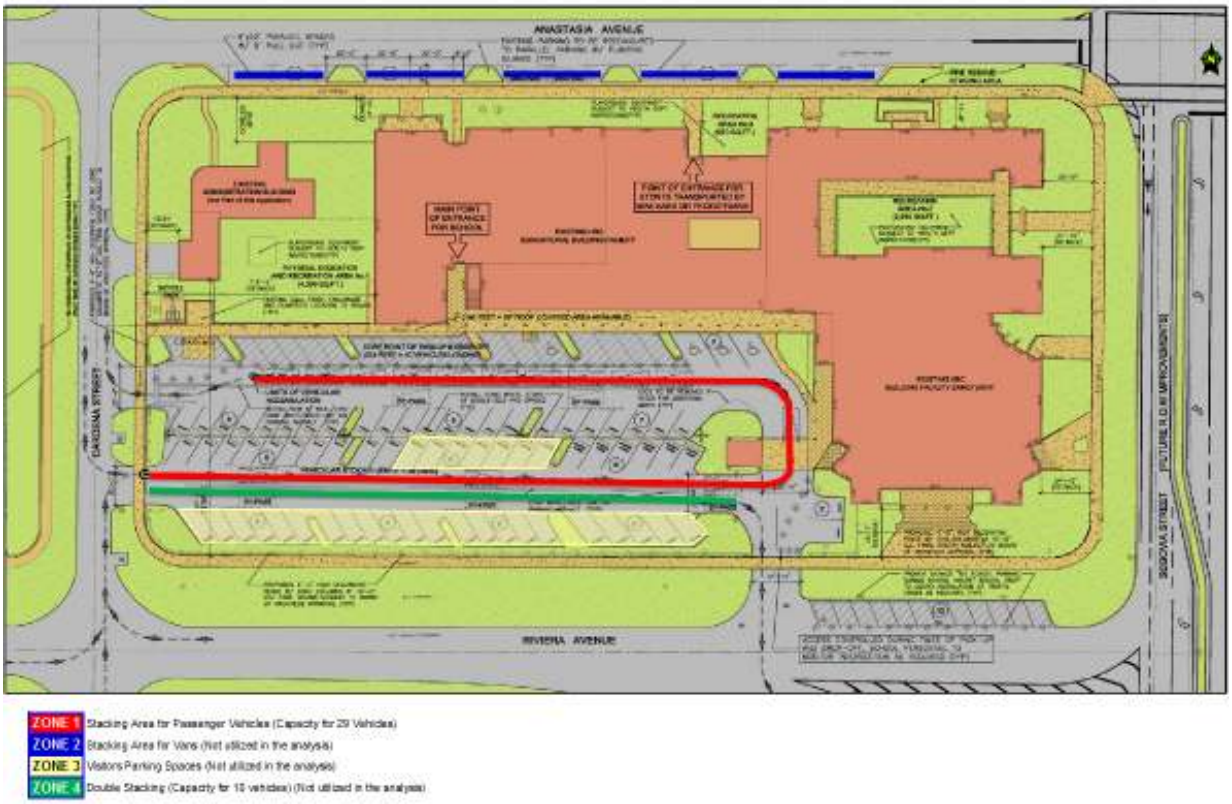
The subject school is proposing an internal stacking area for passenger vehicles, an exclusive drop-off area for vans along Anastasia Avenue (not utilized in the analysis) and a parking lot with 29 visitor parking spaces (not utilized in the analysis). The stacking area for passenger vehicles can accommodate up to 29 stacking vehicles. It is important to note that up to 10 vehicles, not utilized in our analysis, can double stack to avoid any spill-over occurring onto Cardena Street.

Likewise, the drop-off area for vans and the visitor parking was not utilized in the Accumulation Assessment in the subsequent sections; these areas can be used as mitigation measures for stacking of vehicles in case needed. Table 12 describes the stacking areas while Figure 14 illustrates the stacking areas.

Table 12: Vehicle Stacking / Queuing Capacity

Zone	Location Description	Distance	Units	Vehicle Type	Vehicle Length (ft)	Vehicles Accommodated
1	Vehicle Stacking Area	639	LF	Car/Van	22	29
2	Van Stacking Area **(9 Provided, None Utilized)**	200	LF	Car/Van	22	0
3	Visitor Parking Spaces **(29 Provided, None Utilized)**					0
					Total Stacking Capacity	**29**

Figure 15: Vehicle Accumulation Graph



As previously mentioned, the subject project consists of a charter school with 436 students. However, the applicant is proposing to achieve the total number of students by phasing. Therefore, the school population will be phased as follows:

- **Phase I** is planned to have an enrollment of 260 students for the first year.
- **Phase II** consists of increasing the enrollment by 88 students. As such, the school will have a total of 348 students enrolled by the second year.
- **Phase III** will consist of increasing the previous enrollment by 88 students to have a total of 436 students by the third year.

Consistent with the requirements of Miami-Dade County, an Accumulation Assessment was performed to evaluate the stacking/queuing capacity for the proposed project. This assessment consisted of taking local school data, in this case the Doral Academy Elementary, and applying it to the proposed charter school.

Moreover, the Accumulation Assessment was performed for three (3) phases described above. Also, each assessment is assuming three (3) arrivals and three (3) dismissals separated by 30-minute intervals in order to reduce the traffic impacts and to accommodate the projected vehicle stacking demand within the site. These Accumulation results have been performed based on dismissal information provided by the principal (Ms. Eleonora Cuesta) of the surrogate school, Doral Academy.

Phase I: The AM Peak Accumulation Assessment yielded **3.82 passenger vehicles** for each arrival, which corresponds to **760 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **16.26 vehicles** for each dismissal, which corresponds to **178 percent** being accommodated.

Phase II: The AM Peak Accumulation Assessment yielded **5.09 passenger vehicles** for each arrival, which corresponds to **570 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **21.68 vehicles** for each dismissal, which corresponds to **134 percent** being accommodated.

Phase III: The AM Peak Accumulation Assessment yielded **6.80 passenger vehicles** for a maximum arrival of 155 students (i.e. worst case arrival), which corresponds to **427 percent** being accommodated. The PM Peak Accumulation Assessment resulted in **28.97 vehicles** for a maximum dismissal of 155 students, which corresponds to **100 percent** being accommodated.

As evident from the results shown above, the proposed stacking capacity of 29 passenger vehicles can accommodate the projected vehicle stacking demand within the site for the three phases. Again, the proposed charter school is providing personnel to direct traffic and to supervise the drop-off and pick-up operations. Table 13 below summarizes the Accumulation Assessment results while Appendix G contains the supporting documentation.

Table 13: Accumulation Assessment Summary (Three Arrivals & Three Dismissals)

Description	Stacking Spaces	Projected Vehicle Accumulation			Percent Accommodated		
		Phase I	Phase II	Phase III	Phase I	Phase II	Phase III
Max. Arrival	29	3.82	5.09	6.80	760%	570%	427%
Max. Dismissal	29	16.26	21.68	28.97	178%	134%	100%

Notes: Phase I consists of 260 total students.
Phase II consists of 348 total students.
Phase III consists of 436 total students.

Traffic Mitigation & Contingency Plan

This section describes the proposed traffic mitigation measures and contingencies provided by the applicant in the event the vehicle stacking demand temporarily exceeds the stacking area (i.e. 29 vehicles) utilized in the Accumulation Assessment.

The Accumulation Assessment was performed utilizing the whole student's population and assumed all the students are drop-off or pick-up by parents in passenger vehicles. However, this is unlikely and not the case, in particular, since the subject school is mainly surrounded by residential uses and a portion of the student's population is expected to walk to school. Therefore, the vehicle stacking demand is expected to be less than the calculated stacking demand in the Accumulation Assessment, since the surrogate school was located in an industrial area and had nearly no students walking.

In addition, the subject project is proposing a stacking area along Anastasia Avenue exclusively for vans providing transportation for students. Although the van's stacking area was not utilized in the analysis, this area will reduce the amount of stacking vehicles within the site and the possibility of having a vehicular spill-over onto Cardena Street. The school is providing personnel to manage the traffic operations while assuring the safety of students is not compromised by through traffic on Anastasia Avenue during the arrival and dismissal times.

As indicated above, the school is providing a stacking area for 29 passenger vehicles within the on-site parking lot. However, ten (10) additional vehicles can be temporarily accommodated by double stacking them along the internal by-pass lane in the event the need arises. Lastly, the school also has 29 visitor parking spaces which may be utilized by parents during the arrival and dismissal times. Please note these mitigation measures were not utilized as part of the Accumulation Assessment which results in a conservative analysis. Therefore, these measures provide the school, residents and the City additional contingencies to handle the project's traffic.

Conclusion

The proposed charter school is being programmed to accommodate 436 students. This school was evaluated for the existing and future levels of service with the improvements on Segovia Street. The levels of service yielded acceptable results (i.e. LOS B or better). Moreover, we have performed a "Segovia Access" scenario by evaluating the assignment of all inbound and outbound traffic onto the signalized intersection of Anastasia Avenue and Segovia Street. The results are all scenarios will not fall below an LOS B condition. While both scenarios provide effective strategies for traffic flow management, it is the school's intent to work with City staff and local stakeholders to determine which scenario is best suited for the school and neighborhood.

Moreover, the school will have capacity to accommodate 29 stacking/queuing vehicles during the arrival and dismissal of students. Additionally, up to 10 vehicles, not utilized in our analysis, can double stack to avoid any spill-over occurring onto Cardena Street.

Based on the Accumulation Assessment results, the subject project can operate satisfactorily with the three (3) staggered arrivals and three (3) staggered dismissals, separated by 30-minute intervals, within the site. The AM and PM Accumulation Assessment results provided in this report finds the subject project will have sufficient stacking capacity to accommodated the projected vehicle accumulation for the three phases analyzed.

In conclusion, the subject project will have sufficient vehicular stacking capacity. Lastly, the intersections most impacted yielded acceptable LOS results and therefore, this project does not pose a negative impact on traffic as sufficient roadway capacity exists.

Appendix A: Memorandum of Understanding

Appendix B: Trip Generation

Appendix C: Trip Distribution

Appendix D: Signal Timing, Growth Rate & Adjustment Factors

Appendix E: Traffic Counts (TMC's)

Appendix F: Intersections & Driveway LOS

Appendix G: Accumulation Assessment

Appendix A: Memorandum of Understanding

To: James J. Kay, P.E.
Engineering Division Supervisor
City of Coral Gables
2800 SW 72nd Avenue
Miami, Florida 33155

From: Richard Garcia, P.E.
Richard Garcia & Associates, Inc.
13117 NW 107th Avenue, Unit 4
Hialeah Gardens, Florida 33018

Date: May 18, 2010

SUBJECT: Traffic Study Methodology for the Somerset UBC Project

As discussed on our meeting Today, May 18th, 2010, the following traffic study methodology will be utilized for the referenced project. Please review and confirm this methodology in order for us to proceed with our analysis. Should you need clarification or wish to discuss this further please do not hesitate to contact me.

Traffic Impact Study Methodology

- Traffic Counts – including trucks and pedestrians.
  - **Eight** (4 AM & 4 PM) Turning Movement Counts (7:00 AM – 9:00 AM & 2:00 PM – 4:00 PM) at the following intersections:
    - **Segovia Street & Anastasia Avanue**
    - **Segovia Street & University Court**
    - **Anastasia Avenue & Cardena Street**
    - **University Court & Cardena Street**
- Signals Location and Timing
  - Traffic signals shall be identified by Miami-Dade County Asset ID. Existing Signal Phasing/Timing shall be utilized in the analysis.
- Trip Generation / Trip Distribution / Trip Assignment
  - Trip Generation will be determined using the Miami-Dade County (MDC) adopted surrogate school method.
  - Trip Distribution shall begin by defining the Traffic Analysis Zone (TAZ) number for the project location. Distribute trips using the project's TAZ and the current Miami Urban Area Transportation Study (MUATS).
- Background Growth
  - A background growth rate will be utilized in the proposed condition LOS analysis to address future growth within the project's vicinity.

- 1 Year Build Out Year
  - This represents a date in the future in which the facility/ development will be operational. It shall be used as the date for future conditions analysis.

- LOS Analysis
  - Intersection capacity /LOS based on HCM 2000 methodology using Synchro/SimTraffic software
  - Such analysis will provide the results for the Level of Service (LOS), volume to capacity ratio (V/C) and other outputs such as Queue Lengths and Vehicular Delay.
  - Above for the following conditions:
    1. Existing Condition Base Year (2008)
    2. Proposed Future Year without project (2011)
    3. Proposed Future Year with Project (2011)

The above will be depicted with graphics in the traffic report.

Appendix B: Trip Generation

TABLE: A1

Somerset UBC Coral Gables

AM Peak Period Trip Generation

AM PEAK PERIOD TRIPS			TRIP GENERATION RATE	TRIPS				
LAND USE (LU)	UNITS	LU CODE		%	IN	%	OUT	TOTAL
PROPOSED USE								
Charter School (PK - 8)	436 Students	◇	0.865	51%	192	49%	185	377
Proposed Gross Vehicle Trips				**51%**	**192**	**49%**	**185**	**377**

NOTES:

◇ Trip Generation Rate obtained from surrogate school data. See Appendix A.

TABLE: A1-1

Somerset UBC Coral Gables

Vehicle Occupancy Calculation (AM Peak Period)

AM Peak Period (7 AM to 9 AM)			
In	Out	Total	Students
192	185	377	436

10%	Walking	44
15%	Vans	65
75%	Vehicles	327
Total		436

1.8 Veh Occ Rate (w/o Vans)

2.1 Veh Occ Rate (w/ Vans)

TABLE A2

Somerset UBC Coral Gables

School AM Peak Hour Trip Generation (Three Arrivals)

Operation	Time	Percent Arrivals	Student Percentage	Equivalent Student Arrival	Cummulative Students	Percent IN	Percent OUT	Vehicles IN	Vehicles OUT	Total Trips	Cummulative Total Trips IN	Cummulative Total Trips OUT	Cummulative Total Trips	Running Queue	Operation
First Arrival 7:30 AM (Grades 6th - 8th)	7:00 AM - 7:15 AM	12%	31%	52	54	12%	9%	23	17	40	33	17	50	4	First Arrival 7:30 AM (Grades 6th - 8th)
	7:15 AM - 7:30 AM	19%		82	135	19%	17%	37	31	68	60	48	108	8	
Second Arrival 8:00 AM (Grades 2nd - 5th)	7:30 AM - 7:45 AM	15%	36%	65	65	15%	19%	29	35	64	29	35	64	2	Second Arrival 8:00 AM (Grades 2nd - 5th)
	7:45 AM - 8:00 AM	21%		89	155	21%	15%	38	28	67	68	63	131	12	
Third Arrival 8:30 AM (Grades PK - 1st)	8:00 AM - 8:15 AM	10%	33%	44	44	10%	14%	19	25	44	19	25	44	6	Third Arrival 8:30 AM (Grades PK - 1st)
	8:15 AM - 8:30 AM	19%		81	125	19%	18%	17	11	28	56	59	115	9	
	8:30 AM - 8:45 AM	15%		21	146	15%	9%	8	16	24	64	74	138	0	
	Total	100%	100%	436	436	100%	100%	182	185	377	192	185	377		PEAK HOUR

SCHOOL AM PEAK HOUR	TRIPS		
	IN	OUT	TOTAL
AM Peak Hour (7:15 - 8:15)	124	119	243

TABLE A3

Somerset UBC Coral Gables

PM Peak Period Trip Generation

PM PEAK PERIOD TRIPS			TRIP GENERATION RATE	TRIPS				
LAND USE (LU)	UNITS	LU CODE		%	IN	%	OUT	TOTAL
PROPOSED USE								
Charter School (PK - 8)	436 Students	◇	0.690	46%	140	54%	161	301
Proposed Gross Vehicle Trips				**46%**	**140**	**54%**	**161**	**301**

NOTES:

◇ Trip Generation Rate obtained from surrogate school data. See Appendix A

TABLE A3-1

Somerset UBC Coral Gables

Vehicle Occupancy Calculation (PM Peak Hour)

PM Peak Period (2 PM to 4 PM)			
In	Out	Total	Students
140	161	301	436

10%	Walking	44
15%	Vans	65
10%	After School	44
65%	Vehicles	283
Total		**436**

2.0 Veh Occ Rate (w/o Vans)

2.5 Veh Occ Rate (w/ Vans)

TABLE A-1

Somerset UBC Coral Gables

School PM Peak Hour Trip Generation (Three Dismissals)

Operation	Time	Percent Arrivals	Student Percentage	Equivalent Student Arrival	Cummulative Students	Percent IN	Percent OUT	Vehicles IN	Vehicles OUT	Total Trips	Cummulative Total Trips IN	Cummulative Total Trips OUT	Cummulative Total Trips	Running Queue	Operation
First Dismissal 2:00 PM (Grades PK - 1st)	1:00 PM - 1:45 PM	7%	31%	29	29	7%	0%	0	0	0	0	0	0	0	First Dismissal 2:00 PM (Grades PK - 1st)
	1:45 PM - 2:00 PM	15%		63	93	15%	1%	20	2	22	20	2	22	22	
	2:00 PM - 2:15 PM	12%		52	146	12%	15%	17	24	41	46	26	72	22	
Second Dismissal 2:30 PM (Grades 6th - 8th)	2:15 PM - 2:30 PM	25%	31%	108	108	25%	18%	34	29	63	34	29	63	28	Second Dismissal 2:30 PM (Grades 6th - 8th)
	2:30 PM - 2:45 PM	5%		22	130	5%	12%	0	19	28	43	48	91	19	
Third Dismissal 3:00 PM (Grades 2nd - 5th)	2:45 PM - 3:00 PM	22%	36%	95	95	22%	20%	31	32	63	31	32	63	23	Third Dismissal 3:00 PM (Grades 2nd - 5th)
	3:00 PM - 3:15 PM	18%		65	160	18%	10%	15	16	31	46	48	94	24	
	3:15 PM - 3:30 PM	4%		15	155	4%	24%	5	39	44	51	87	138	0	
	Total	100%	100%	438	438	100%	100%	140	161	301	140	161	301		PEAK HOUR

SCHOOL PM PEAK HOUR	TRIPS		
	IN	OUT	TOTAL
PM Peak Hour (2:00 - 3:00)	91	104	195

TABLE: A7

Somerset UBC Coral Gables

School Operation Plan

Grades	A / D	Students	Arrival Times (A)	Dismissal Times (D)
6th - 8th	**1st**	135	7:30 AM	2:30 PM
2nd - 5th	**2nd**	155	8:00 AM	3:00 PM
PK - 1st	**3rd**	146	8:30 AM	2:00 PM
Total		**436**		

TABLE: T1

Surrogate School
AM Peak Trip Generation

School Name: Doral Academy Elementary
Location: 2450 NW 97 Avenue, Doral FL

Date: 2/9/2010

Time	Vehicles-In	Vehicles-Out	Total Trips	Bus-In	Bus-Out	Total Bus
7:00 AM - 7:15 AM	20	9	29	0	0	0
7:15 AM - 7:30 AM	52	24	76	0	0	0
7:30 AM - 7:45 AM	59	41	100	0	0	0
7:45 AM - 8:00 AM	77	59	136	1	0	1
8:00 AM - 8:15 AM	102	87	189	0	1	1
8:15 AM - 8:30 AM	117	109	226	0	0	0
8:30 AM - 8:45 AM	55	82	137	0	0	0
8:45 AM - 9:00 AM	0	3	3	0	0	0
Total	**482**	**414**	**896**	**1**	**1**	**2**

Surrogate School AM Peak Trip Generation Rate					
Number of Students:	798	IN	OUT	TOTAL	
		0.441	0.424	0.865	Trips/Student

Peak Hour

Notes
Vehicles included cars and passenger vans
Trip Generation Rate includes busses.

TABLE: T2

Surrogate School
PM Peak Trip Generation

School Name: Doral Academy Elementary
Location: 2450 NW 97 Avenue, Doral FL

Date: 2/9/2010

Time	Vehicles-In	Vehicles-Out	Total Trips	Bus-In	Bus-Out	Total Bus
1:30 PM - 1:45 PM	11	3	14	0	0	0
1:45 PM - 2:00 PM	22	6	28	0	0	0
2:00 PM - 2:15 PM	34	29	63	1	1	2
2:15 PM - 2:30 PM	18	16	34	0	0	0
2:30PM - 2:45 PM	41	12	53	0	0	0
2:45 PM - 3:00 PM	50	13	63	1	0	1
3:00 PM - 3:15 PM	46	101	147	0	1	1
3:15 PM - 3:30 PM	22	72	94	0	0	0
3:30 PM - 3:45 PM	8	34	42	0	0	0
3:45 PM - 4:00 PM	4	9	13	0	0	0
Total	**256**	**295**	**551**	**2**	**2**	**4**

Peak Hour

Surrogate School PM Trip Generation Rate					
Number of Students:	**798**	**IN**	**OUT**	**TOTAL**	
		0.321	**0.370**	**0.690**	Trips/Student

Notes:
Vehicles included cars and passenger vans
Trip Generation Rate includes busses

Appendix C: Trip Distribution

TABLE: A5

Somerset UBC Coral Gables

Project Quadrant Distribution - AM Peak Hour

(TAZ 1065)

DIRECTION	DISTRIBUTION (%) DESIGN YEAR	TAZ 1065		UTILIZED FOR TRIP DISTRIBUTION				
		DIRECTION	DISTRIBUTION	DIRECTION	DISTRIBUTION	IN	OUT	TOTAL
NNE ENE ESE SSE SSW WSW WNW NNW	20.32 17.80 7.99 2.98 13.11 10.06 11.38 16.37	NORTH	36.69%	NORTH	35%	43	42	85
		EAST	25.78%	EAST	25%	31	29	60
		SOUTH	16.09%	SOUTH	20%	25	24	49
		WEST	21.44%	WEST	20%	25	24	49
TOTAL	100.00		100.00%		100.00%	124	119	243

AM PEAK HOUR

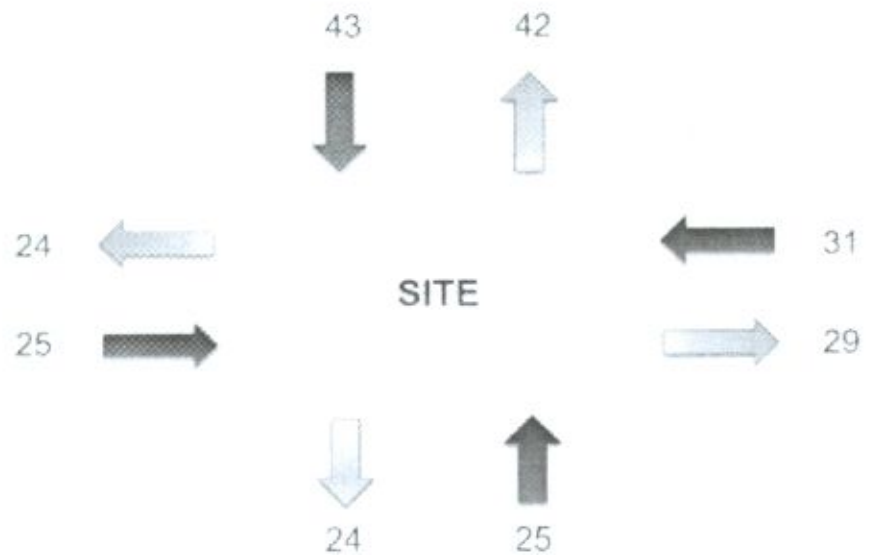


TABLE A5-1

Somerset UBC Coral Gables

Project Cardinal Distribution - AM Peak Hour

(TAZ 1065)

DIRECTION	DISTRIBUTION PERCENTAGES (%)			AM PEAK HOUR TRIPS		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2005	2035	2012			
NNE	21.27	17.21	20.32	26	24	50
ENE	19.83	11.11	17.80	22	21	43
ESE	8.71	5.61	7.99	10	9	19
SSE	2.64	4.09	2.98	4	4	8
SSW	12.01	16.73	13.11	16	16	32
WSW	9.95	10.41	10.06	12	12	24
WNW	10.98	12.69	11.38	14	14	28
NNW	14.61	22.15	16.37	20	19	39
TOTAL	100.00	100.00	100.00	124	119	243

Note

Based on Miami-Dade Transportation Plan (to the Year 2035) Directional Trip Distribution Report, October 2009. Since the current data is only available for the model years 2005 and 2035, the eight (8) cardinal directions were interpolated to the design year of 2012.

TABLE A5-2

AM PEAK HOUR	IN	OUT	TOTAL
VOLUME:	124	119	243
PERCENT:	51.03%	48.97%	(Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	20.32	25.20010667	26	24.18392333	24	50
ENE	17.80	22.06621333	22	21.17644667	21	43
ESE	7.99	9.903466667	10	9.504133333	9	19
SSE	2.98	3.693133333	4	3.544216667	4	8
SSW	13.11	16.25805333	16	15.60248667	16	32
WSW	10.06	12.47109333	12	11.96822667	12	24
WNW	11.38	14.10996	14	13.54101	14	28
NNW	16.37	20.29797333	20	19.47950667	19	39
TOTAL	100.00	124	124	119	119	243

TABLE A6

Somerset UBC Coral Gables

Project Quadrant Distribution - PM Peak Hour

(TAZ 1065)

DIRECTION	DISTRIBUTION (%) DESIGN YEAR	TAZ 1065		UTILIZED FOR TRIP DISTRIBUTION				
		DIRECTION	DISTRIBUTION	DIRECTION	DISTRIBUTION	IN	OUT	TOTAL
NNE ENE ESE SSE SSW WSW WNW NNW	20.32 17.80 7.99 2.98 13.11 10.06 11.38 16.37	NORTH	36.69%	NORTH	35%	32	36	68
		EAST	25.78%	EAST	25%	23	26	49
		SOUTH	16.09%	SOUTH	20%	18	21	39
		WEST	21.44%	WEST	20%	18	21	39
TOTAL	100.00		100.00%		100.00%	91	104	195

PM PEAK HOUR

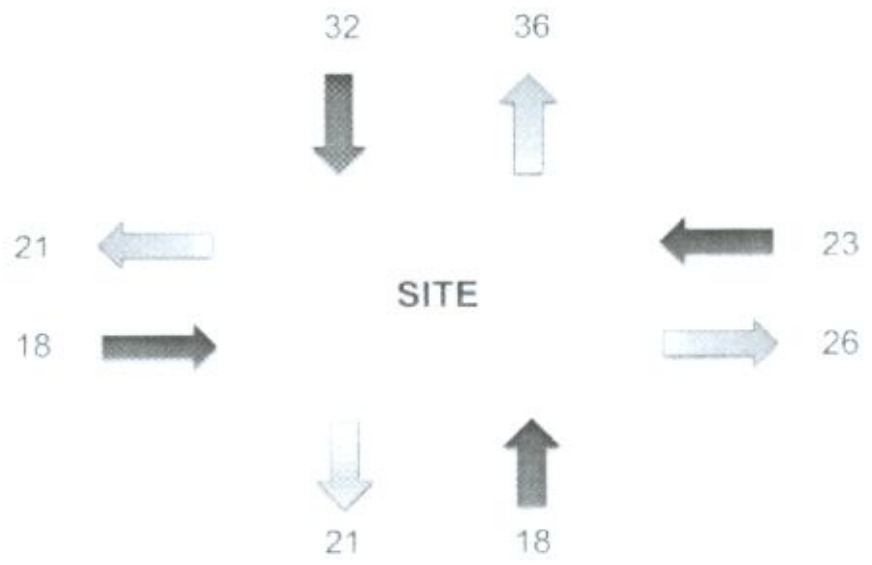


TABLE A6-1

Somerset UBC Coral Gables

Project Cardinal Distribution - PM Peak Hour

(TAZ 1065)

DIRECTION	DISTRIBUTION PERCENTAGES (%)			PM PEAK HOUR TRIPS		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2005	2035	2012			
NNE	21.27	17.21	20.32	19	21	40
ENE	19.83	11.11	17.80	16	19	35
ESE	8.71	5.61	7.99	7	8	15
SSE	2.64	4.09	2.98	3	3	6
SSW	12.01	16.73	13.11	12	14	26
WSW	9.95	10.41	10.06	9	10	19
WNW	10.98	12.69	11.38	10	12	22
NNW	14.61	22.15	16.37	15	17	32
TOTAL	100.00	100.00	100.00	91	104	195

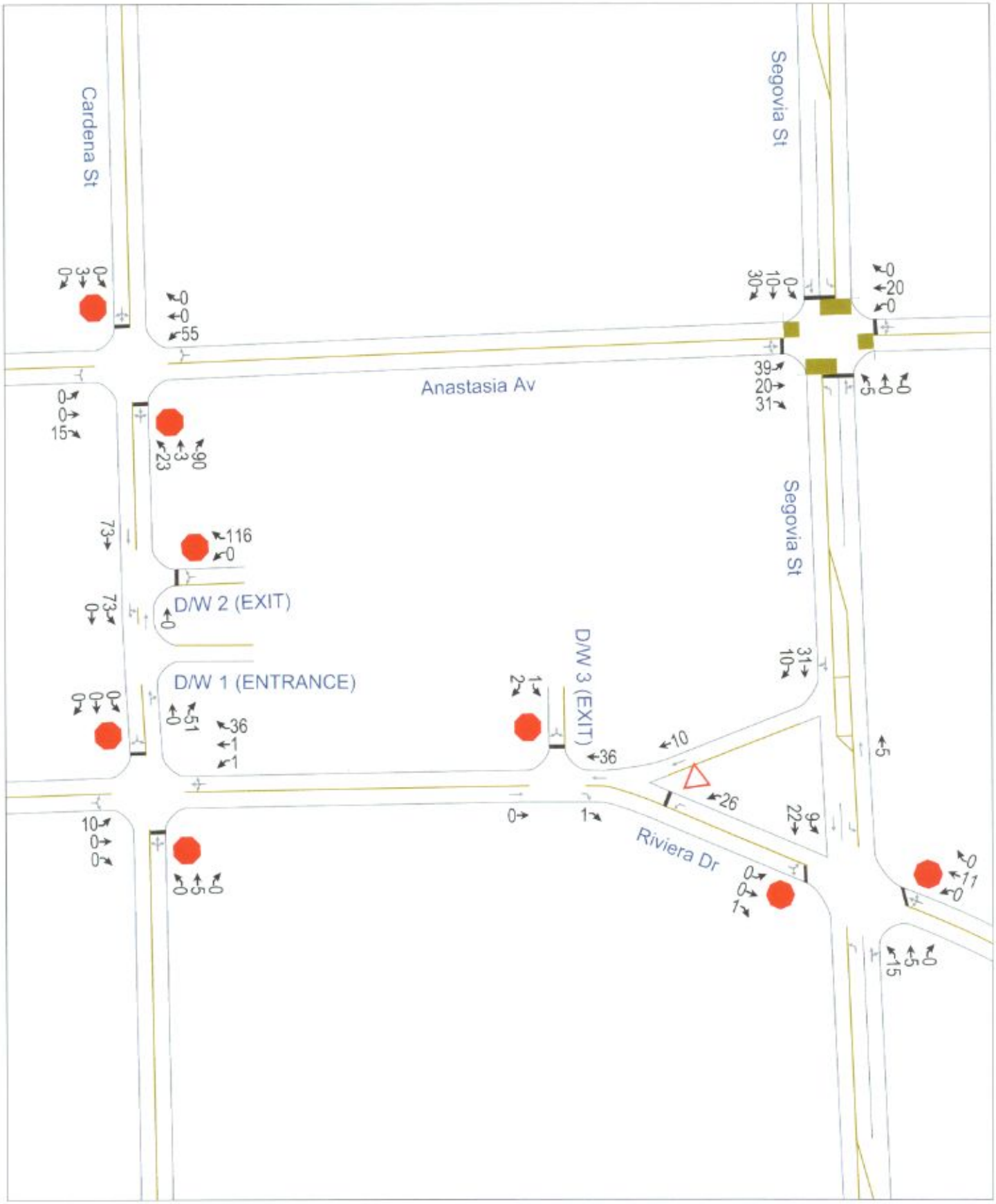
Note

Based on Miami-Dade Transportation Plan (to the Year 2035) Directional Trip Distribution Report. October 2009. Since the current data is only available for the model years 2005 and 2035, the eight (8) cardinal directions were interpolated to the design year of 2012.

TABLE A6-2

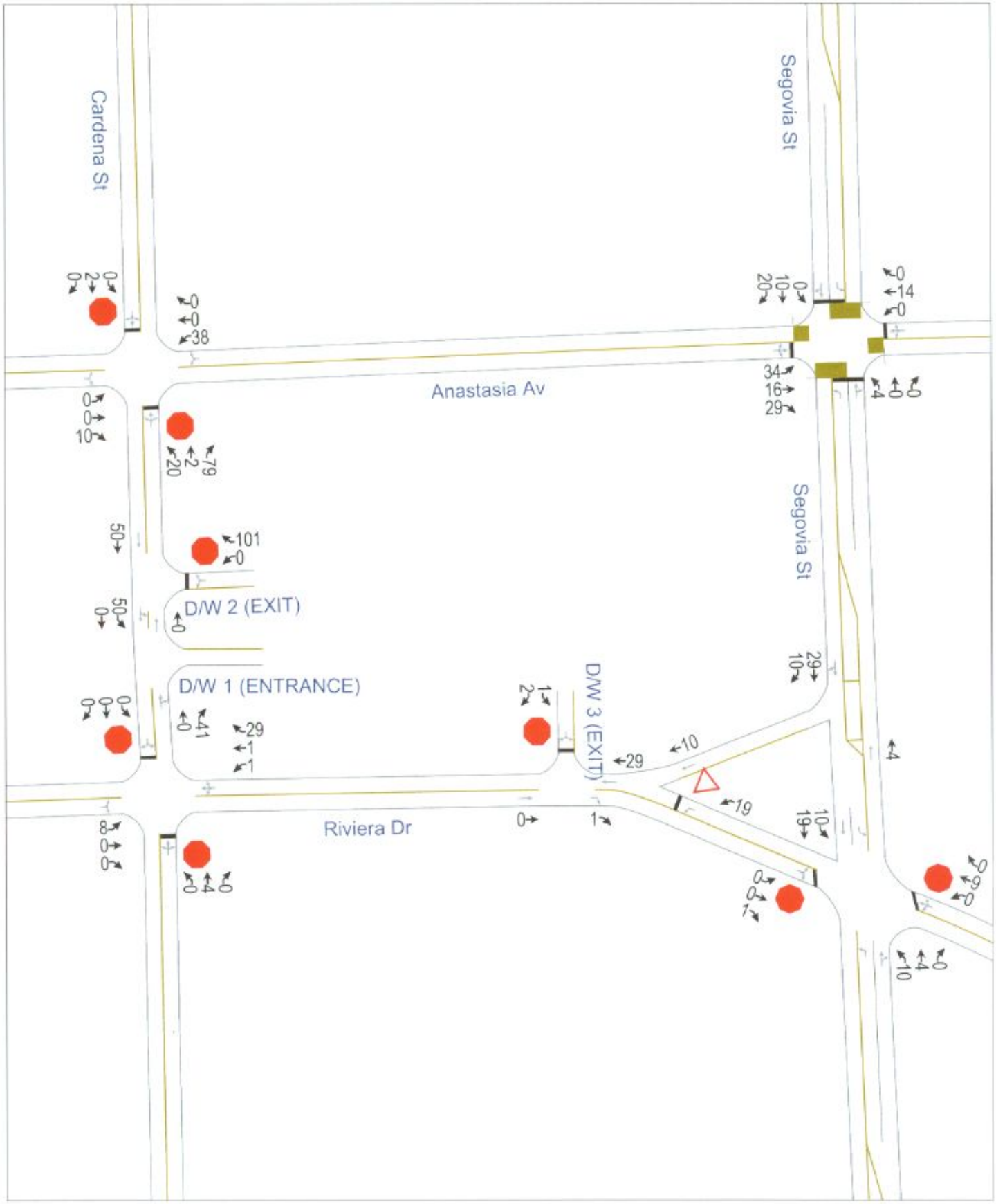
PM PEAK HOUR	IN	OUT	TOTAL
VOLUME:	91	104	195
PERCENT:	46.67%	53.33%	(Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	20.32	18.49362667	19	21.13557333	21	40
ENE	17.80	16.19375333	16	18.50714667	19	35
ESE	7.99	7.267866667	7	8.306133333	8	15
SSE	2.98	2.710283333	3	3.097466667	3	6
SSW	13.11	11.93131333	12	13.63578667	14	26
WSW	10.06	9.152173333	9	10.45962667	10	19
WNW	11.38	10.35489	10	11.83416	12	22
NNW	16.37	14.89609333	15	17.02410667	17	32
TOTAL	100.00	91	91	104	104	195


Cardena St
Segovia St
Anastasia Av
Segovia St
D/W 2 (EXIT)
D/W 1 (ENTRANCE)
D/W 3 (EXIT)
Riviera Dr

Somerset UBC Coral Gables

AM SITE TRAFFIC (SCENARIO B)
ALL SCHOOL TRAFFIC THROUGH ANASTASIA AV/SEGOVIA ST


Cardena St
Segovia St
Anastasia Av
Segovia St
D/W 2 (EXIT)
D/W 1 (ENTRANCE)
D/W 3 (EXIT)
Riviera Dr

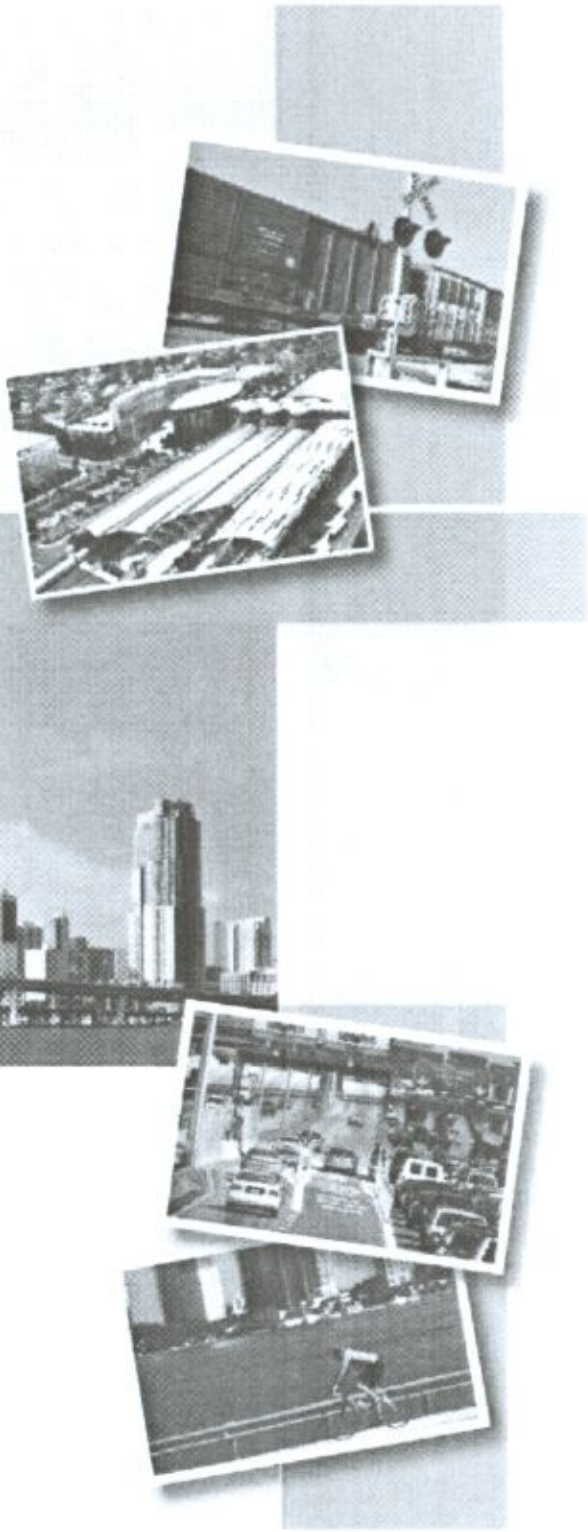
Somerset UBC Coral Gables

PM SITE TRAFFIC (SCENARIO B)
ALL SCHOOL TRAFFIC THROUGH ANASTASIA AV/SEGOVIA ST

Traffic Analysis Zone (TAZ)

Miami-Dade 2035 Long Range Transportation Plan

Directional Trip Distribution Report



October 29, 2009

2035 Miami-Dade Transportation Plan

Prepared by:

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In association with:

Advanced Transportation Engineering Consultants

AECOM Consult

Charesse Chester and Associates

Citilabs

Metropolitan Center at Florida International University

Strategy Solutions

MIAMI-DADE 2005 DIRECTIONAL DISTRIBUTION SUMMARY											
ORIGIN ZONE			CARDINAL DIRECTIONS								
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	TOTAL
1041	3741	TRIPS	1092	981	187	298	871	1238	835	1141	6,643
		PERCENT	16.44	14.77	2.81	4.49	13.11	18.64	12.57	17.18	
1042	3742	TRIPS	995	1124	236	311	840	954	932	979	6,411
		PERCENT	15.52	17.53	3.68	4.85	13.1	15.5	14.54	15.27	
1043	3744	TRIPS	744	837	172	158	542	696	670	671	4,490
		PERCENT	16.57	18.64	3.83	3.52	12.07	15.5	14.92	14.94	
1044	3744	TRIPS	689	609	95	80	382	722	483	654	3,714
		PERCENT	18.56	16.4	2.56	2.15	10.29	19.45	13.01	17.59	
1045	3745	TRIPS	854	909	98	130	475	993	757	1006	5,222
		PERCENT	16.35	17.41	1.88	2.49	9.1	19.02	14.5	19.26	
1046	3746	TRIPS	688	882	98	207	469	748	778	717	4,587
		PERCENT	15	19.23	2.14	4.51	10.22	16.31	16.96	15.63	
1047	3747	TRIPS	564	637	176	58	336	442	549	384	3,144
		PERCENT	17.93	20.26	5.6	1.84	10.69	14.06	17.46	12.18	
1048	3748	TRIPS	895	875	176	87	272	684	613	509	4,111
		PERCENT	21.77	21.28	4.28	2.12	6.62	16.64	14.91	12.38	
1049	3749	TRIPS	768	739	203	87	383	828	834	937	4,779
		PERCENT	16.07	15.46	4.25	1.82	8.01	17.33	17.45	19.61	
1050	3750	TRIPS	121	98	3	19	19	100	94	83	537
		PERCENT	22.53	18.25	0.56	3.54	3.54	18.62	17.5	15.46	
1051	3751	TRIPS	349	171	12	41	49	274	198	209	1,303
		PERCENT	26.78	13.12	0.92	3.15	3.76	21.03	15.2	16.04	
1052	3752	TRIPS	2950	765	85	50	440	2436	2091	2413	11,230
		PERCENT	26.27	6.81	0.76	0.45	3.92	21.69	18.62	21.49	
1053	3753	TRIPS	1231	494	52	1	199	1117	875	1020	4,989
		PERCENT	24.67	9.9	1.04	0.02	3.99	22.39	17.54	20.44	
1054	3754	TRIPS	1429	806	96	1	713	1337	1137	1267	6,786
		PERCENT	21.06	11.88	1.41	0.01	10.51	19.7	16.76	18.67	
1055	3755	TRIPS	1126	743	120	55	503	1191	867	1045	5,650
		PERCENT	19.93	13.15	2.12	0.97	8.9	21.08	15.35	18.5	
1056	3756	TRIPS	870	734	98	63	437	1031	733	745	4,711
		PERCENT	18.47	15.58	2.08	1.34	9.28	21.88	15.56	15.81	
1057	3757	TRIPS	1333	1171	204	332	239	1405	1099	1250	7,533
		PERCENT	17.7	15.54	2.71	4.41	9.81	18.65	14.59	16.59	
1058	3758	TRIPS	1762	1481	280	566	1434	1849	1839	2003	11,014
		PERCENT	16	13.45	2.54	5.14	13.02	16.79	14.88	18.19	
1059	3759	TRIPS	1911	1441	555	632	2023	2601	1470	2510	13,141
		PERCENT	14.54	10.96	4.22	4.81	15.39	19.79	11.18	19.1	
1060	3760	TRIPS	800	853	362	258	747	1074	640	997	5,731
		PERCENT	13.96	14.88	6.32	4.5	13.03	18.74	11.17	17.4	
1061	3761	TRIPS	2411	1795	626	312	2155	2799	1575	2417	14,081
		PERCENT	17.12	12.75	4.45	2.22	15.3	19.88	11.18	17.16	
1062	3762	TRIPS	1290	1375	336	263	1043	1285	843	1117	7,550
		PERCENT	17.09	18.21	4.45	3.48	13.81	16.99	11.17	14.79	
1063	3763	TRIPS	532	1248	275	154	390	332	375	576	3,882
		PERCENT	13.7	32.15	7.08	3.97	10.05	8.55	9.66	14.84	
1064	3764	TRIPS	901	1296	622	384	863	1325	756	1044	6,881
		PERCENT	13.09	18.83	9.04	5.58	12.54	14.9	10.99	15.03	
1065	3765	TRIPS	620	578	254	77	356	290	320	420	2,915
		PERCENT	21.27	19.83	8.71	2.64	12.18	9.95	10.98	14.41	
1066	3766	TRIPS	800	580	212	158	588	633	456	716	4,143
		PERCENT	19.31	14	5.12	3.81	14.19	15.28	11.01	17.28	
1067	3767	TRIPS	377	361	137	78	277	328	223	553	2,334
		PERCENT	16.15	15.47	5.87	3.34	11.87	14.05	9.55	23.69	
1068	3768	TRIPS	974	834	318	79	641	947	688	1263	5,744
		PERCENT	16.96	14.52	5.54	1.38	11.16	16.49	11.98	21.99	
1069	3769	TRIPS	505	495	91	135	239	530	530	529	3,050
		PERCENT	16.34	16.02	2.94	4.37	8.5	17.15	17.15	17.12	
1070	3770	TRIPS	4528	2092	590	0	1688	4434	3132	4794	21,062
		PERCENT	20.55	9.76	2.85	0	8.03	21.13	14.89	22.79	
1071	3771	TRIPS	3257	968	117	0	1000	3440	2798	3315	14,895
		PERCENT	21.87	6.5	0.79	0	6.71	23.1	18.78	22.26	
1072	3772	TRIPS	700	232	11	0	190	520	373	724	2,824
		PERCENT	27.69	8.22	0.39	0	6.73	18.42	13.21	25.64	
1073	3773	TRIPS	441	80	7	10	43	173	146	433	1,333

MIAMI-DADE 2035 DIRECTIONAL DISTRIBUTION SUMMARY											
			CARDINAL DIRECTIONS								
ORIGIN ZONE			NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	TOTAL
		PERCENT	17.2	12.69	0.64	1.72	13.22	21.61	4.29	19.2	
1053	3755	TRIPS	2218	1830	81	253	936	1424	1057	1445	9,213
		PERCENT	23.94	19.83	0.88	2.74	10.14	15.43	11.39	15.66	
1056	3756	TRIPS	1630	1625	201	475	593	1057	870	1118	7,559
		PERCENT	21.56	21.5	2.69	6.28	7.84	13.98	11.51	14.79	
1057	3757	TRIPS	1646	1761	257	575	1266	994	1063	1594	9,178
		PERCENT	17.93	19.19	2.8	6.26	13.79	10.83	11.6	17.37	
1058	3758	TRIPS	2137	2184	755	1165	2296	2156	1049	2667	14,444
		PERCENT	14.87	5.02	5.19	8	15.79	14.92	7.21	17.9	
1059	3759	TRIPS	2686	2755	894	818	2677	2716	1568	2476	16,710
		PERCENT	16.07	16.48	5.35	4.9	16.02	16.25	9.38	14.81	
1060	3760	TRIPS	1356	1033	260	239	1204	1246	932	1324	7,594
		PERCENT	17.86	13.62	3.43	3.76	15.86	16.41	12.28	17.46	
1061	3761	TRIPS	4150	3911	908	1168	3818	3974	1915	2115	20,964
		PERCENT	19.8	18.66	4.33	5.57	18.21	18.96	9.13	10.09	
1062	3762	TRIPS	1541	2387	565	612	1321	1153	553	927	9,437
		PERCENT	16.33	25.29	5.99	6.49	14	12.21	5.86	9.82	
1063	3763	TRIPS	662	1376	752	422	305	242	241	460	4,461
		PERCENT	14.84	30.85	16.86	9.46	6.84	5.43	5.4	10.31	
1064	3764	TRIPS	1605	844	274	231	847	816	1039	1142	6,798
		PERCENT	23.61	12.41	4.03	3.4	12.46	12.00	15.28	16.80	
1065	3765	TRIPS	635	416	202	151	612	784	496	817	5,089
		PERCENT	12.48	8.17	3.97	2.97	12.03	15.41	9.75	16.06	
1066	3766	TRIPS	673	546	254	191	730	789	542	1,200	4,874
		PERCENT	13.8	11.21	5.21	3.92	14.98	16.19	11.12	24.63	
1067	3767	TRIPS	333	316	136	86	354	487	417	669	2,793
		PERCENT	11.92	11.31	4.87	3.08	12.67	17.44	14.93	23.95	
1068	3768	TRIPS	919	734	113	359	927	923	1140	1157	6,912
		PERCENT	13.29	10.61	1.63	5.19	13.41	13.35	16.49	16.74	
1069	3769	TRIPS	902	412	87	0	325	389	433	1053	3,602
		PERCENT	25.04	11.43	2.41	0	9.02	10.8	12.02	29.23	
1070	3770	TRIPS	7275	1611	201	0	2304	7044	3924	7089	30,455
		PERCENT	23.89	5.3	0.67	0	7.56	23.13	12.89	23.28	
1071	3771	TRIPS	5307	2706	160	0	1118	335	2,943	476	26,247
		PERCENT	20.2	10.31	0.61	0	4.26	1.28	11.21	1.81	
1072	3772	TRIPS	1279	126	12	14	268	358	286	676	3,352
		PERCENT	38.15	3.76	0.36	0.42	7.99	10.68	8.53	20.17	
1073	3773	TRIPS	520	87	4	0	94	128	156	585	1,479
		PERCENT	35.16	5.9	0.27	0	6.36	8.65	10.55	39.55	
1074	3774	TRIPS	850	574	14	36	381	475	241	795	3,368
		PERCENT	25.23	17.04	0.42	1.13	11.31	14.1	7.15	23.6	
1075	3775	TRIPS	767	462	14	0	292	664	331	1,203	3,734
		PERCENT	20.54	12.4	0.37	0	7.82	17.78	8.86	32.22	
1076	3776	TRIPS	679	25	57	0	252	398	182	605	2,704
		PERCENT	25.1	10.89	2.47	0	10.94	14.24	7.9	26.25	
1077	3777	TRIPS	800	900	278	194	648	960	681	960	4,947
		PERCENT	16.2	18.19	5.62	4.03	13.13	19.29	13.77	19.49	
1078	3778	TRIPS	930	1020	49	24	301	542	362	1,160	4,408
		PERCENT	21.1	23.14	1.11	1	6.83	12.3	8.21	26.32	
1079	3779	TRIPS	1150	935	737	463	1246	1410	535	1409	7,884
		PERCENT	14.59	11.86	9.35	5.93	15.8	17.88	6.8	17.87	
1080	3780	TRIPS	897	597	25	165	739	895	402	280	4,606
		PERCENT	19.47	12.82	5.39	2.26	15.87	19.57	8.63	16.75	
1081	3781	TRIPS	4328	2415	821	760	3036	2562	1296	1933	7,087
		PERCENT	25.53	14.3	4.8	4.49	17.76	14.84	7.59	11.5	
1082	3782	TRIPS	2186	865	54	152	496	668	427	1519	6,386
		PERCENT	34.22	3.82	0.52	2.38	7.76	10.93	6.69	23.78	
1083	3783	TRIPS	1276	866	55	17	364	314	324	816	3,934
		PERCENT	32.45	21.94	0.83	0.43	9.2	15.98	8.2	20.74	
1084	3784	TRIPS	213	60	2	20	23	35	29	67	531
		PERCENT	40.08	11.3	0.38	3.76	4.3	6.6	5.46	12.66	
1085	3785	TRIPS	835	297	98	28	83	79	24	84	1,531
		PERCENT	27.04	19.39	6.4	1.83	5.42	5.16	1.57	5.48	
1086	3786	TRIPS	2787	1004	54	435	2160	2765	1909	1681	12,797
		PERCENT	21.78	7.85	0.42	3.4	16.88	21.61	14.92	13.14	
1087	3787	TRIPS	652	26	32	179	284	364	208	226	2,067
		PERCENT	31.54	1.26	1.55	8.66	13.74	17.61	10.06	10.93	
1088	3788	TRIPS	1774	257	199	508	313	1,[illegible]	46	784	6,972

Appendix D: Signal Timing, Growth Rate & Adjustment Factors

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	41	27	10	46	4	341	4	174
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	20.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	20.0	20.0	39.0	39.0	39.0	39.0
Total Split (%)	33.9%	33.9%	33.9%	33.9%	66.1%	66.1%	66.1%	66.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	C-Max	C-Max
Act Eff Green (s)		8.8		8.8		41.2		41.2
Actuated g/C Ratio		0.15		0.15		0.70		0.70
v/c Ratio		0.49		0.28		0.17		0.10
Control Delay		21.1		22.0		3.7		3.3
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		21.1		22.0		3.7		3.3
LOS		C		C		A		A
Approach Delay		21.1		22.0		3.7		3.3
Approach LOS		C		C		A		A

Intersection Summary

Cycle Length: 59
Actuated Cycle Length: 59
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 7.9 — Intersection LOS: A
Intersection Capacity Utilization 32.3% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Anastasia Av & Segovia St

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	31	19	8	62	12	277	7	229
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	20.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	20.0	20.0	39.0	39.0	39.0	39.0
Total Split (%)	33.9%	33.9%	33.9%	33.9%	66.1%	66.1%	66.1%	66.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.2		8.2		41.8		41.8
Actuated g/C Ratio		0.14		0.14		0.71		0.71
v/c Ratio		0.40		0.37		0.15		0.12
Control Delay		19.3		24.0		3.2		3.1
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		19.3		24.0		3.2		3.1
LOS		B		C		A		A
Approach Delay		19.3		24.0		3.2		3.1
Approach LOS		B		C		A		A

Intersection Summary

Cycle Length: 59
Actuated Cycle Length: 59
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 7.5 — Intersection LOS: A
Intersection Capacity Utilization 35.9% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Anastasia Av & Segovia St

MIAMI-DADE ATMS
SIGNAL DATA SHEET

Signal Asset ID: 6033
Signal Location: ANASTASIA AVE Y SEGOVIA ST
Analysis Period: (AM) / (PM) (Circle One)
Local Time of Day Schedule: _____ Plan
Local Time of Day Function: _____ Setting (Blank or Number#)

Signal Settings: –
(i.e. Blank, Plan #1 – Phase Bank 1, Max 1)

Cycle Length: 59 seconds

PHASE:	Φ1	Φ2		
	↓ ↑	← →		
G(w)	7	–		
G(f)	10	–		
G(g)	18	15		
G(total)	35	15		
Y	4	4		
R	–	1		
SPLIT	39	20		

Print Date:
12/4/2009

Miami-Dade County Traffic Signals

Print Time:
1:01 PM

MIAMI-DADE

TOD Schedule Report for 6033: Anastasia &Segovia St

Active Phase Bank: Phase Bank

Phase		Walk Phase Bank 1	2	3	Don't Walk 1	2	3	Min Initial 1	2	3	Veh Ext 1	2	3	Max Limit 1	2	3	Max 2 1	2	3	Yellow	Red
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	SBT	7	7	7	10	10	10	23	23	23	2.5	2.5	2.5	35	35	35	0	0	0	4	0.3
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	WBT	7	7	7	10	10	10	7	7	7	2.5	2.5	2.5	15	15	15	0	0	0	4	0.9
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	NBT	7	7	7	10	10	10	23	23	23	2.5	2.5	2.5	35	35	35	0	0	0	4	0.3
7		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	EBT	7	7	7	10	10	10	7	7	7	2.5	2.5	2.5	15	15	15	0	0	0	4	0.9

Last In Service Date:

Permitted Phases

	12345678
Default	-2-4-6-8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	1 SBT	2	3	4 WBT	5	6 NBT	7	8 EBT	Ring Offset	Offset

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

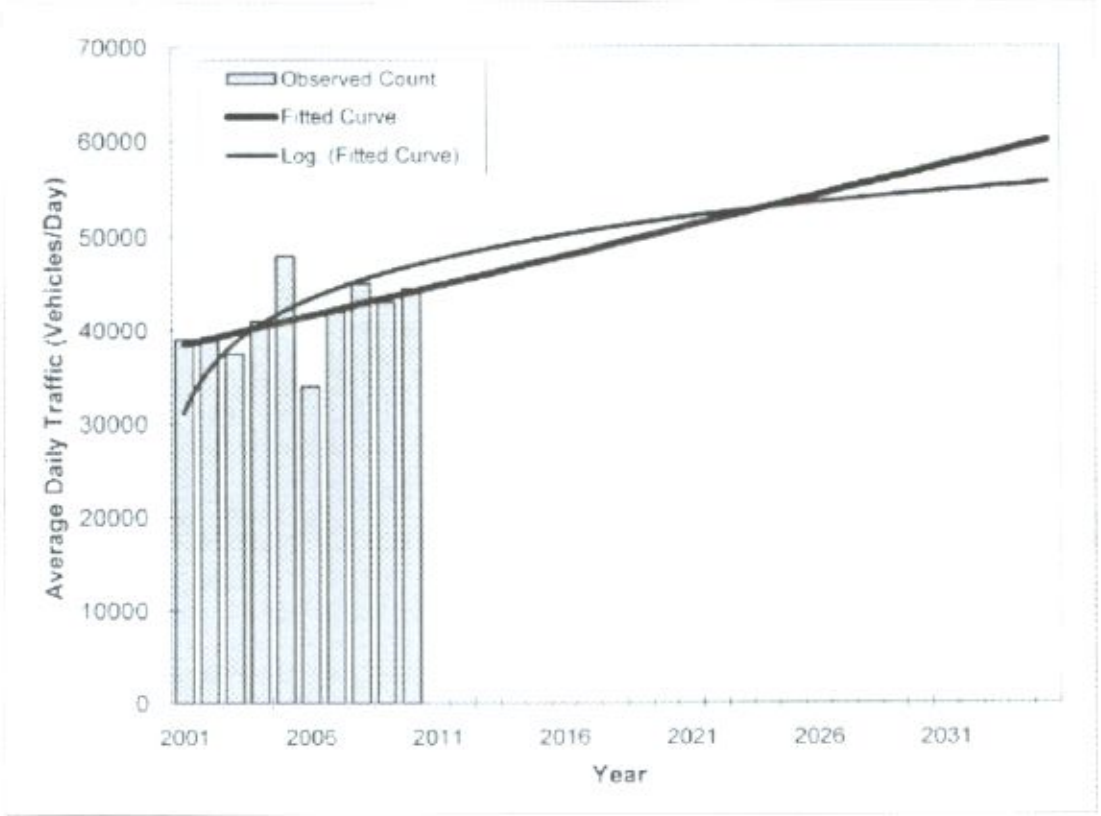
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

Traffic Trends - V2.0

SR 953/LEJEUNE RD -- 200' S CORAL WAY/SR 972

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	0024
Highway:	SR 953/LEJEUNE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	39000	38500
2002	39000	39100
2003	37500	39700
2004	41000	40400
2005	48000	41000
2006	34000	41600
2007	42000	42200
2008	45000	42900
2009	43000	43500
2010	44500	44100
2011 Opening Year Trend		
2011	N/A	44800
2012 Mid-Year Trend		
2012	N/A	45400
2013 Design Year Trend		
2013	N/A	46000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	630
Trend R-squared:	21.76%
Trend Annual Historic Growth Rate:	1.62%
Trend Growth Rate (2010 to Design Year):	1.44%
Printed:	19-Jul-11

Straight Line Growth Option

TABLE: A8

Somerset UBC Coral Gables

MPO Based Growth Rate

TAZ	1065				
Year	Total Trips	Total Growth	Number of Years	Growth / Yr	Growth Rate
2005	2,915	774	30	25.8	0.79%
2035	3,689				

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2010 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 0024 - SR 945/LEJEUNE RD. 200' S OCEAN WAY/SR 972

YEAR	AADT	DIRECTION 1	DIRECTION 2	K FACTOR	D FACTOR	T FACTOR
2010	44500 C	N 22000	S 22500	7.93	50.27	1.80
2009	41000 C	N 22500	S 20500	7.88	55.98	4.20
2008	40000 C	N 24500	S 21500	8.09	46.41	2.20
2007	42000 C	N 22000	S 20000	7.96	51.12	4.70
2006	34000 C	N 15500	S 18500	7.99	58.65	7.20
2005	48000 F	N 21500	S 26500	7.70	45.70	5.33
2004	41000 C	N 18500	S 22500	8.10	47.12	3.10
2003	37500 C	N 20000	S 17500	8.30	70.30	5.50
2002	38000 C	N 17500	S 20500	8.20	68.60	3.40
2001	38000 C	N 20500	S 18500	8.20	53.50	5.70
2000	40500 C	N 21000	S 19500	8.20	53.10	4.10
1999	49000 C	N 28000	S 21000	8.30	52.70	4.40
1998	41,000 C	N 21000	S 20000	8.30	52.70	6.10
1997	35000 C	N 19500	S 16000	8.10	54.20	4.20
1996	34000 C	N 18500	S 15500	8.50	55.10	3.50
1995	34000 C	N 17000	S 17000	7.90	52.60	5.20

AADT FLAGS: C - COMPUTED; M - MANUAL ESTIMATE; F - FIRST YEAR ESTIMATE
S - SECOND YEAR ESTIMATE; T - THIRD YEAR ESTIMATE; X - UNKNOWN

2010 PEAK SEASON FACTOR CATEGORY REPORT REPORT TYPE: ALL
CATEGORY: 8701 MIAMI-DADE SOUTH

MODE: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2010 - 01/02/2010	1.00	1.02
2	01/03/2010 - 01/09/2010	1.03	1.05
3	01/10/2010 - 01/16/2010	1.05	1.07
4	01/17/2010 - 01/23/2010	1.05	1.07
5	01/24/2010 - 01/30/2010	1.04	1.06
6	01/31/2010 - 02/06/2010	1.03	1.05
7	02/07/2010 - 02/13/2010	1.02	1.04
8	02/14/2010 - 02/20/2010	1.02	1.04
9	02/21/2010 - 02/27/2010	1.01	1.03
10	02/28/2010 - 03/06/2010	1.01	1.03
11	03/07/2010 - 03/13/2010	1.01	1.03
12	03/14/2010 - 03/20/2010	1.00	1.02
13	03/21/2010 - 03/27/2010	1.00	1.02
14	03/28/2010 - 04/03/2010	1.00	1.02
15	04/04/2010 - 04/10/2010	1.00	1.02
16	04/11/2010 - 04/17/2010	1.00	1.02
17	04/18/2010 - 04/24/2010	1.00	1.02
18	04/25/2010 - 05/01/2010	1.00	1.02
19	05/02/2010 - 05/08/2010	1.00	1.02
20	05/09/2010 - 05/15/2010	1.01	1.03
21	05/16/2010 - 05/22/2010	x1.01 SF	1.03
22	05/23/2010 - 05/29/2010	1.01	1.03
23	05/30/2010 - 06/05/2010	1.01	1.03
24	06/06/2010 - 06/12/2010	1.02	1.04
25	06/13/2010 - 06/19/2010	1.02	1.04
26	06/20/2010 - 06/26/2010	1.02	1.04
27	06/27/2010 - 07/03/2010	1.02	1.04
28	07/04/2010 - 07/10/2010	1.02	1.04
29	07/11/2010 - 07/17/2010	1.02	1.04
30	07/18/2010 - 07/24/2010	1.01	1.03
31	07/25/2010 - 07/31/2010	1.00	1.02
32	08/01/2010 - 08/07/2010	0.99	1.01
33	08/08/2010 - 08/14/2010	0.99	1.01
34	08/15/2010 - 08/21/2010	0.98	1.00
35	08/22/2010 - 08/28/2010	0.98	1.00
*36	08/29/2010 - 09/04/2010	0.98	1.00
*37	09/05/2010 - 09/11/2010	0.99	1.01
*38	09/12/2010 - 09/18/2010	0.99	1.01
*39	09/19/2010 - 09/25/2010	0.98	1.00
*40	09/26/2010 - 10/02/2010	0.98	1.00
*41	10/03/2010 - 10/09/2010	0.97	0.99
*42	10/10/2010 - 10/16/2010	0.97	0.98
*43	10/17/2010 - 10/23/2010	0.97	0.99
*44	10/24/2010 - 10/30/2010	0.97	0.99
*45	10/31/2010 - 11/06/2010	0.97	0.99
*46	11/07/2010 - 11/13/2010	0.97	0.99
*47	11/14/2010 - 11/20/2010	0.98	1.00
*48	11/21/2010 - 11/27/2010	0.98	1.00
49	11/28/2010 - 12/04/2010	0.99	1.01
50	12/05/2010 - 12/11/2010	1.00	1.02
51	12/12/2010 - 12/18/2010	1.00	1.02
52	12/19/2010 - 12/25/2010	1.03	1.05
53	12/26/2010 - 12/31/2010	1.05	1.07

* PEAK SEASON

09-FEB-2012 13:45:30 S30UPD [1.0.0.1] 6_8701_PKSEASON.TXT

Appendix E: Traffic Counts (TMC's)

TABLE: A9

Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - AM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	AM PEAK HR COUNT	Date of Count	PHF	SF	AM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Segovia Street & Anastasia Avenue	SOUTHBOUND	SBR	10	Thursday, May 20, 2010	0.842	1.01	10	0	10	30	56	40	66
			SBT	172			1.01	174	5	179	10	0	189	179
			SBL	4			1.01	4	0	4	0	0	4	4
			TOTAL	**186**				**188**	**5**	**193**	**40**	**56**	**233**	**249**
		WESTBOUND	WBR	7			1.01	7	0	7	0	0	7	7
			WBT	46			1.01	46	1	48	20	20	68	68
			WBL	10			1.01	10	0	10	0	0	10	10
			TOTAL	**63**				**64**	**2**	**65**	**20**	**20**	**85**	**85**
		NORTHBOUND	NBR	1			1.01	1	0	1	0	0	1	1
			NBT	338			1.01	341	10	351	0	0	351	351
			NBL	4			1.01	4	0	4	5	48	9	52
			TOTAL	**343**				**346**	**10**	**356**	**5**	**48**	**361**	**404**
		EASTBOUND	EBR	42			1.01	42	1	44	31	45	75	89
			EBT	27			1.01	27	1	28	20	20	48	48
			EBL	41			1.01	41	1	43	39	54	82	97
			TOTAL	**110**				**111**	**3**	**114**	**90**	**119**	**204**	**233**
	TOTAL			***702***				***709***	***21***	***730***	***155***	***243***	***885***	***973***
2	Segovia Street & University Court	SOUTHBOUND	SBR	6	Thursday, May 20, 2010	0.816	1.01	6	0	6	10	0	16	6
			SBT	218			1.01	220	6	227	31	45	258	272
			SBL	0			1.01	0	0	0	0	0	0	0
			TOTAL	**224**				**226**	**7**	**233**	**41**	**45**	**274**	**278**
		WESTBOUND	WBR	0			1.01	0	0	0	0	0	0	0
			WBT	0			1.01	0	0	0	0	0	0	0
			WBL	0			1.01	0	0	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**	**0**	**0**
		NORTHBOUND	NBR	0			1.01	0	0	0	0	0	0	0
			NBT	329			1.01	332	10	342	5	48	347	390
			NBL	1			1.01	1	0	1	0	0	0	0
			TOTAL	**330**				**333**	**10**	**343**	**5**	**48**	**347**	**390**
		EASTBOUND	EBR	0			1.01	0	0	0	0	0	0	0
			EBT	0			1.01	0	0	0	0	0	0	0
			EBL	14			1.01	14	0	15	0	0	0	0
			TOTAL	**14**				**14**	**0**	**15**	**0**	**0**	**0**	**0**
	TOTAL			***568***				***574***	***17***	***590***	***46***	***93***	***621***	***668***

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Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - AM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	AM PEAK HR COUNT	Date of Count	PHF	SF	AM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
3	Segovia Street & Riviera Drive	SOUTHBOUND	SBR	0	Thursday, May 20, 2010	0.864	1.01	0	0	0	0	0	0	0
			SBT	166			1.01	168	5	173	22	36	195	209
			SBL	52			1.01	53	2	54	9	9	63	63
			TOTAL	**218**				**220**	**6**	**227**	**31**	**45**	**258**	**272**
		WESTBOUND	WBR	41			1.01	41	1	43	0	11	43	54
			WBT	20			1.01	20	1	21	11	0	32	21
			WBL	2			1.01	2	0	2	0	0	2	2
			TOTAL	**63**				**64**	**2**	**65**	**11**	**11**	**76**	**76**
		NORTHBOUND	NBR	1			1.01	1	0	1	0	0	1	1
			NBT	289			1.01	292	8	300	5	37	305	337
			NBL	4			1.01	4	0	5	15	0	20	5
			TOTAL	**294**				**297**	**9**	**307**	**20**	**37**	**327**	**344**
		EASTBOUND	EBR	15			1.01	15	0	16	1	0	17	16
			EBT	103			1.01	104	3	107	0	0	107	107
			EBL	0			1.01	0	0	15	0	0	15	15
			TOTAL	**118**				**119**	**3**	**137**	**1**	**0**	**138**	**137**
	TOTAL			***693***				***700***	***20***	***736***	***63***	***93***	***799***	***829***
4	Cardena Street & Anastasia Avenue	SOUTHBOUND	SBR	0	Thursday, May 20, 2010	0.924	1.01	0	0	0	0	0	0	0
			SBT	0			1.01	0	0	0	3	0	3	0
			SBL	0			1.01	0	0	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**3**	**0**	**3**	**0**
		WESTBOUND	WBR	4			1.01	4	0	4	0	0	4	4
			WBT	59			1.01	60	2	61	0	0	61	61
			WBL	1			1.01	1	0	1	55	124	56	125
			TOTAL	**64**				**65**	**2**	**67**	**55**	**124**	**122**	**191**
		NORTHBOUND	NBR	1			1.01	1	0	1	90	119	91	120
			NBT	1			1.01	1	0	1	3	0	4	1
			NBL	0			1.01	0	0	0	23	0	23	0
			TOTAL	**2**				**2**	**0**	**2**	**116**	**119**	**118**	**121**
		EASTBOUND	EBR	1			1.01	1	0	1	15	0	16	1
			EBT	101			1.01	102	3	105	0	0	105	105
			EBL	2			1.01	2	0	2	0	0	2	2
			TOTAL	**104**				**105**	**3**	**108**	**15**	**0**	**123**	**108**
	TOTAL			***170***				***172***	***5***	***177***	***189***	***243***	***366***	***420***

TABLE: A9

Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - AM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	AM PEAK HR COUNT	Date of Count	PHF	SF	AM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5	Cardena Street & Riviera Drive	SOUTHBOUND	SBR	2	Thursday, May 20, 2010	0.888	1.01	2	0	2	0	0	2	2
			SBT	0			1.01	0	0	0	0	0	0	0
			SBL	1			1.01	1	0	1	0	0	1	1
			TOTAL	**3**				**3**	**0**	**3**	**0**	**0**	**3**	**3**
		WESTBOUND	WBR	0			1.01	0	0	0	36	0	36	0
			WBT	25			1.01	25	1	26	1	0	27	26
			WBL	0			1.01	0	0	0	1	0	1	0
			TOTAL	**25**				**25**	**1**	**26**	**38**	**0**	**64**	**26**
		NORTHBOUND	NBR	2			1.01	2	0	2	0	0	2	2
			NBT	1			1.01	1	0	1	5	0	6	1
			NBL	1			1.01	1	0	1	0	0	1	1
			TOTAL	**4**				**4**	**0**	**4**	**5**	**0**	**9**	**4**
		EASTBOUND	EBR	0			1.01	0	0	0	0	0	0	0
			EBT	133			1.01	134	4	138	0	0	138	138
			EBL	2			1.01	2	0	2	10	0	12	2
			TOTAL	**135**				**136**	**4**	**140**	**10**	**0**	**150**	**140**
	TOTAL			***167***				***169***	***5***	***174***	***53***	***0***	***227***	***174***

Notes:
1 Intersection Name
2 Intersection Approach
3 Intersection Approach Movement
4 TMC data provided by RGA, Inc.
5 Date of Count
6 Peak Hour Factor
7 Seasonal Factor obtained from FDOT
8 Seasonally Adjusted TMC = Count * SF (These are the volumes utilized in the existing condition intersection LOS).
9 A 1.44 percent background growth was utilized with a project build-out of 2 years.
10 Net Traffic = Peak Seasonally Adjusted TMC + Backgound
11,12 Site traffic assignment.
13,14 Total Traffic = Net Traffic + Site Traffic (These are the volumes utilized in the proposed intersection LOS analysis)

TABLE: A10

Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - PM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	PM PEAK HR COUNT	Date of Count	PHF	SF	PM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
1	2	3		4	5	6	7	8	9	10	11	12	13	14
1	Segovia Street & Anastasia Avenue	SOUTHBOUND	SBR	10	Thursday, May 20, 2010	0.857	1.01	10	0	10	20	41	30	51
			SBT	227			1.01	229	7	236	10	0	246	236
			SBL	7			1.01	7	0	7	0	0	7	7
			TOTAL	**244**				**246**	**7**	**254**	**30**	**41**	**284**	**295**
		WESTBOUND	WBR	10			1.01	10	0	10	0	0	10	10
			WBT	61			1.01	62	2	63	14	14	77	77
			WBL	8			1.01	8	0	8	0	0	8	8
			TOTAL	**79**				**80**	**2**	**82**	**14**	**14**	**96**	**96**
		NORTHBOUND	NBR	9			1.01	9	0	9	0	0	9	9
			NBT	274			1.01	277	8	285	0	0	285	285
			NBL	12			1.01	12	0	12	4	36	16	48
			TOTAL	**295**				**298**	**9**	**307**	**4**	**36**	**311**	**343**
		EASTBOUND	EBR	36			1.01	36	1	37	29	40	66	77
			EBT	19			1.01	19	1	20	16	17	36	37
			EBL	31			1.01	31	1	32	34	47	66	79
			TOTAL	**86**				**87**	**3**	**89**	**79**	**104**	**168**	**193**
	TOTAL			***704***				***711***	***21***	***732***	***127***	***195***	***859***	***927***
2	Segovia Street & University Court	SOUTHBOUND	SBR	14	Thursday, May 20, 2010	0.842	1.01	14	0	16	10	0	26	16
			SBT	257			1.01	260	8	267	29	40	296	307
			SBL	0			1.01	0	0	0	0	0	0	0
			TOTAL	**271**				**274**	**8**	**283**	**39**	**40**	**322**	**323**
		WESTBOUND	WBR	0			1.01	0	0	0	0	0	0	0
			WBT	0			1.01	0	0	0	0	0	0	0
			WBL	0			1.01	0	0	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**	**0**	**0**
		NORTHBOUND	NBR	0			1.01	0	0	0	0	0	0	0
			NBT	283			1.01	286	8	294	4	36	298	330
			NBL	3			1.01	3	0	3	0	0	0	0
			TOTAL	**286**				**289**	**8**	**297**	**4**	**36**	**298**	**330**
		EASTBOUND	EBR	0			1.01	0	0	0	0	0	0	0
			EBT	0			1.01	0	0	0	0	0	0	0
			EBL	12			1.01	12	0	12	0	0	0	0
			TOTAL	**12**				**12**	**0**	**12**	**0**	**0**	**0**	**0**
	TOTAL			***569***				***575***	***17***	***592***	***43***	***76***	***620***	***653***

TABLE: A10

Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - PM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	PM PEAK HR COUNT	Date of Count	PHF	SF	PM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
1		2	3	4	5	6	7	8	9	10	11	12	13	14
3	Segovia Street & Riviera Drive	SOUTHBOUND	SBR	1	Thursday, May 20, 2010	0.905	1.01	1	0	1	0	0	0	0
			SBT	171			1.01	173	5	178	19	31	197	209
			SBL	85			1.01	86	2	88	10	9	98	97
			TOTAL	**257**				**260**	**8**	**267**	**29**	**40**	**295**	**306**
		WESTBOUND	WBR	87			1.01	88	3	90	0	9	90	99
			WBT	31			1.01	31	1	32	9	0	41	32
			WBL	4			1.01	4	0	4	0	0	4	4
			TOTAL	**122**				**123**	**4**	**127**	**9**	**9**	**136**	**136**
		NORTHBOUND	NBR	5			1.01	5	0	5	0	0	5	5
			NBT	192			1.01	194	6	200	4	27	204	227
			NBL	1			1.01	1	0	4	10	0	14	4
			TOTAL	**198**				**200**	**6**	**209**	**14**	**27**	**223**	**236**
		EASTBOUND	EBR	5			1.01	5	0	5	1	0	6	5
			EBT	35			1.01	35	1	36	0	0	36	36
			EBL	0			1.01	0	0	12	0	0	12	12
			TOTAL	**40**				**40**	**1**	**54**	**1**	**0**	**55**	**54**
	TOTAL			***617***				***623***	***18***	***657***	***53***	***76***	***709***	***732***
4	Cardena Street & Anastasia Avenue	SOUTHBOUND	SBR	0	Thursday, May 20, 2010	0.824	1.01	0	0	0	0	0	0	0
			SBT	1			1.01	1	0	1	2	0	3	1
			SBL	1			1.01	1	0	1	0	0	1	1
			TOTAL	**2**				**2**	**0**	**2**	**2**	**0**	**4**	**2**
		WESTBOUND	WBR	0			1.01	0	0	0	0	0	0	0
			WBT	87			1.01	88	3	90	0	0	90	90
			WBL	2			1.01	2	0	2	38	91	40	93
			TOTAL	**89**				**90**	**3**	**92**	**38**	**91**	**130**	**183**
		NORTHBOUND	NBR	6			1.01	6	0	6	79	104	85	110
			NBT	1			1.01	1	0	1	2	0	3	1
			NBL	1			1.01	1	0	1	20	0	21	1
			TOTAL	**8**				**8**	**0**	**8**	**101**	**104**	**109**	**112**
		EASTBOUND	EBR	2			1.01	2	0	2	10	0	12	2
			EBT	72			1.01	73	2	75	0	0	75	75
			EBL	5			1.01	5	0	5	0	0	5	5
			TOTAL	**79**				**80**	**2**	**82**	**10**	**0**	**92**	**82**
	TOTAL			***178***				***180***	***5***	***185***	***151***	***195***	***336***	***380***

TABLE: A10

Somerset UBC Coral Gables

INTERSECTION APPROACH VOLUMES - PM PEAK HOUR

INTERSECTION NO.	INTERSECTION NAME	APPROACH	MOVEMENT	PM PEAK HR COUNT	Date of Count	PHF	SF	PM PEAK SEASONAL ADJUSTMENT (EXISTING)	BACKGROUND GROWTH @ 1.44% FOR 2 YEARS	Net Traffic w/o Project Traffic	Site Traffic (VPH) (SCENARIO A)	Site Traffic (VPH) (SCENARIO B)	Total Traffic (VPH) (PROPOSED) (SCENARIO A)	Total Traffic (VPH) (PROPOSED) (SCENARIO B)
1		2	3	4	5	6	7	8	9	10	11	12	13	14
5	Cardena Street & Riviera Drive	SOUTHBOUND	SBR	2	Thursday, May 20, 2010	0.833	1.01	2	0	2	0	0	2	2
			SBT	2			1.01	2	0	2	0	0	2	2
			SBL	1			1.01	1	0	1	0	0	1	1
			TOTAL	**5**				**5**	**0**	**5**	**0**	**0**	**5**	**5**
		WESTBOUND	WBR	2			1.01	2	0	2	29	0	31	2
			WBT	47			1.01	47	1	49	1	0	50	49
			WBL	1			1.01	1	0	1	1	0	2	1
			TOTAL	**50**				**51**	**1**	**52**	**31**	**0**	**83**	**52**
		NORTHBOUND	NBR	1			1.01	1	0	1	0	0	1	1
			NBT	2			1.01	2	0	2	4	0	6	2
			NBL	1			1.01	1	0	1	0	0	1	1
			TOTAL	**4**				**4**	**0**	**4**	**4**	**0**	**8**	**4**
		EASTBOUND	EBR	3			1.01	3	0	3	0	0	3	3
			EBT	53			1.01	54	2	55	0	0	55	55
			EBL	3			1.01	3	0	3	8	0	11	3
			TOTAL	**59**				**60**	**2**	**61**	**8**	**0**	**69**	**61**
	TOTAL			***118***				***119***	***3***	***123***	***43***	***0***	***166***	***123***

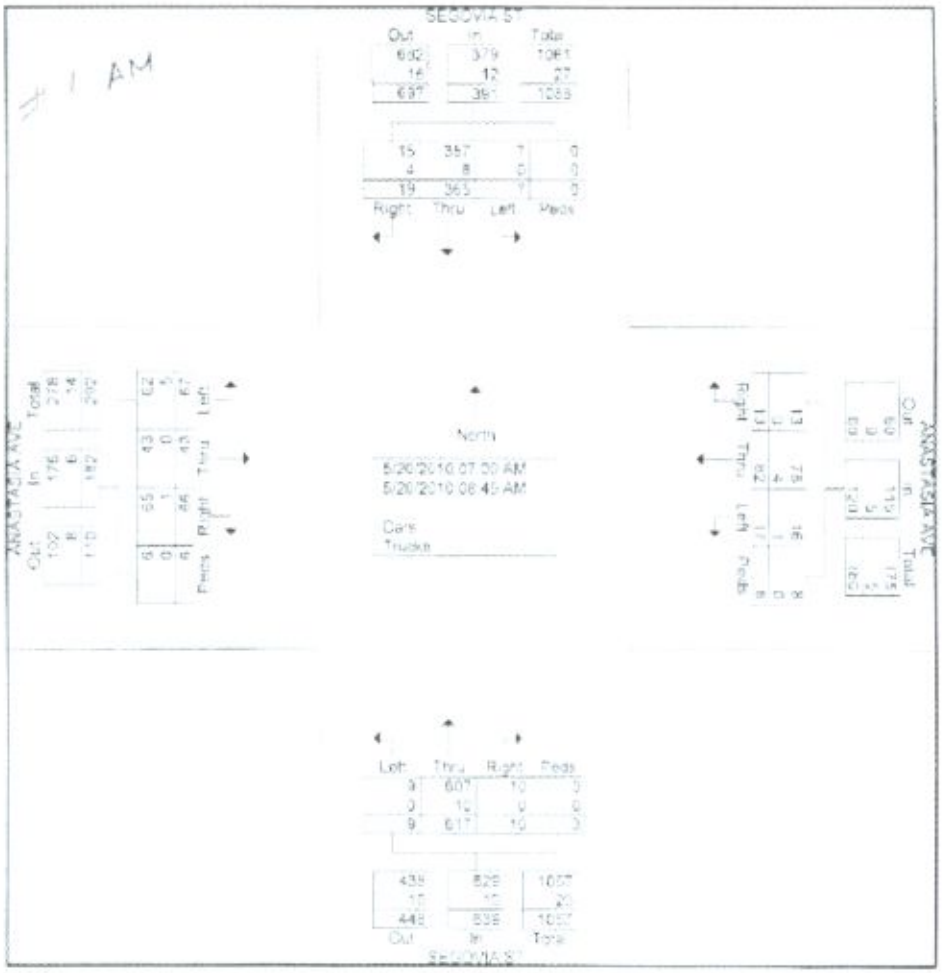
Notes:
1 Intersection Name
2 Intersection Approach
3 Intersection Approach Movement
4 TMC data provided by RGA, Inc.
5 Date of Count
6 Peak Hour Factor
7 Seasonal Factor obtained from FDOT
8 Seasonally Adjusted TMC = Count * SF (These are the volumes utilized in the existing condition intersection LOS).
9 A 1.44 percent background growth was utilized with a project build-out of 2 years.
10 Net Traffic = Peak Seasonally Adjusted TMC + Backgound
11,12 Site traffic assignment.
13,14 Total Traffic = Net Traffic + Site Traffic (These are the volumes utilized in the proposed intersection LOS analysis)

Richard Garcia & Associates Inc
13317 NW 107 Ave Ste # 4
Hialeah Gardens, FL 33018
Tel: 305-595-7505 Fax: 305-675-6474

File Name : SEGOVIA ST & ANASTASIA AV AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					ANASTASIA AVE Westbound					SEGOVIA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	62	0	0	64	4	5	0	1	10	3	56	1	0	60	8	0	2	1	11	145
07:15 AM	3	58	1	0	62	0	9	3	0	12	3	91	1	2	97	6	4	7	2	19	190
07:30 AM	1	34	1	0	36	1	11	1	2	15	2	66	3	1	72	5	5	4	1	15	138
07:45 AM	3	39	1	0	43	1	11	3	1	16	1	66	0	0	67	5	7	13	1	26	152
Total	9	193	3	0	205	6	36	7	4	53	9	279	5	3	296	24	16	26	5	71	625
08:00 AM	3	25	0	0	28	1	15	2	2	20	0	60	1	0	61	5	8	11	0	24	133
08:15 AM	1	45	1	0	47	2	6	2	1	11	1	67	0	0	68	13	7	11	0	31	157
08:30 AM	4	53	2	0	59	2	15	3	0	20	0	103	0	0	103	14	2	8	1	25	207
08:45 AM	2	49	1	0	52	2	10	3	1	16	0	108	3	0	111	10	10	11	0	31	210
Total	10	172	4	0	186	7	46	10	4	67	1	338	4	0	343	42	27	41	1	111	707
Grand Total	19	365	7	0	391	13	82	17	8	120	10	617	9	3	639	66	43	67	6	182	1332
Apprch %	4.9	93.4	1.8	0		10.8	68.3	14.2	6.7		1.6	96.6	1.4	0.5		36.3	23.6	36.8	3.3		
Total %	1.4	27.4	0.5	0	29.4	1	6.2	1.3	0.6	9	0.8	46.3	0.7	0.2	48	5	3.2	5	0.5	13.7	
Cars	15	357	7	0	379	13	78	16	8	115	10	607	9	3	629	65	43	62	6	176	1299
% Cars	78.9	97.8	100	0	96.9	100	95.1	94.1	100	95.8	100	98.4	100	100	98.4	98.5	100	92.5	100	96.7	97.5	
Trucks	4	8	0	0	12	0	4	1	0	5	0	10	0	0	10	1	0	5	0	6	33
% Trucks	21.1	2.2	0	0	3.1	0	4.9	5.9	0	4.2	0	1.6	0	0	1.6	1.5	0	7.5	0	3.3	2.5



Richard Garcia & Associates Inc
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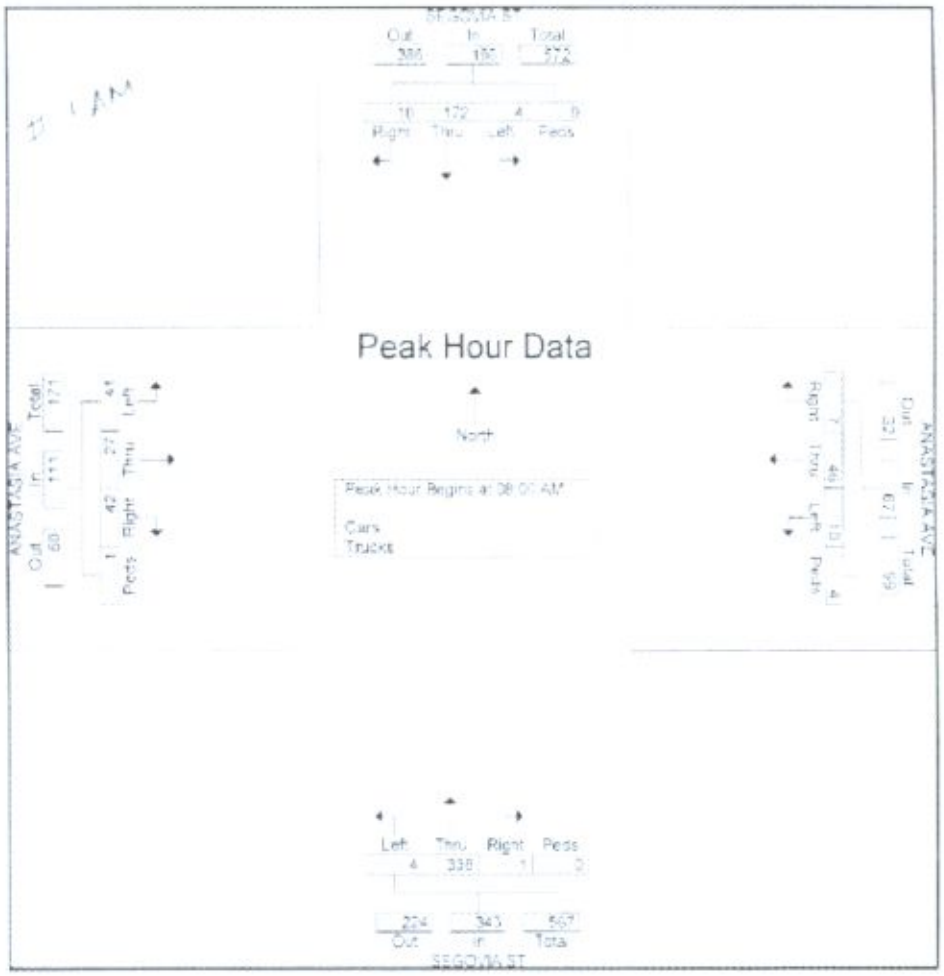
File Name : SEGOVIA ST & ANASTASIA AV AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

	SEGOVIA ST Southbound					ANASTASIA AVE Westbound					SEGOVIA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	3	25	0	0	28	1	**15**	2	**2**	**20**	0	60	1	0	61	5	8	**11**	0	24	133
08:15 AM	1	45	1	0	47	**2**	6	2	1	11	**1**	67	0	0	68	13	7	**11**	0	**31**	157
08:30 AM	**4**	**53**	**2**	0	**59**	2	15	**3**	0	20	0	103	0	0	103	**14**	2	8	**1**	25	207
08:45 AM	2	49	1	0	52	2	10	3	1	16	0	**108**	**3**	0	**111**	10	**10**	11	0	31	**210**
Total Volume	10	172	4	0	186	7	46	10	4	67	1	338	4	0	343	42	27	41	1	111	707
% App. Total	5.4	92.5	2.2	0		10.4	68.7	14.9	6		0.3	98.5	1.2	0		37.8	24.3	36.9	0.9		
PHF	.625	.811	.500	.000	.788	.875	.767	.833	.500	.838	.250	.782	.333	.000	.773	.750	.675	.932	.250	.896	.842



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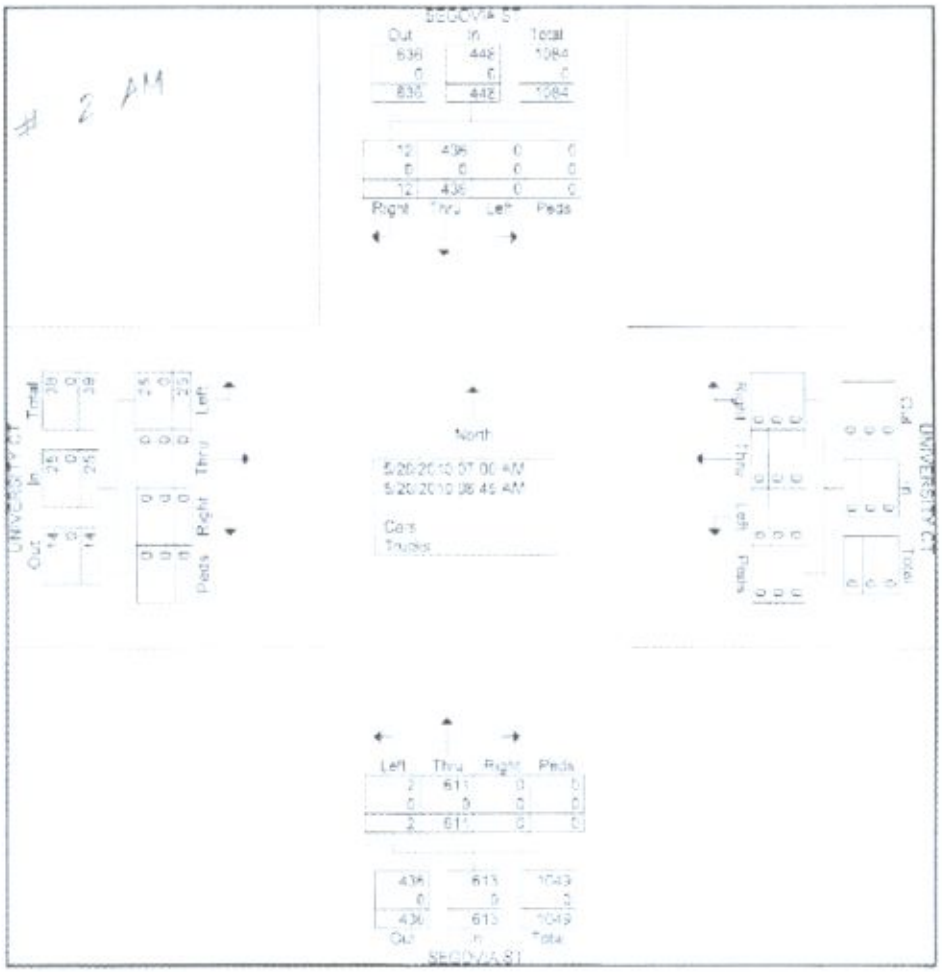
File Name : SEGOVIA ST & UNIVERSITY CTAM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					UNIVERSITY CT Westbound					SEGOVIA ST Northbound					UNIVERSITY CT Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
07:00 AM	1	69	0	0	70	0	0	0	0	0	0	57	0	0	57	0	0	3	0	3	130
07:15 AM	3	64	0	0	67	0	0	0	0	0	0	91	1	0	92	0	0	4	0	4	163
07:30 AM	0	40	0	0	40	0	0	0	0	0	0	68	0	0	68	0	0	3	0	3	111
07:45 AM	2	45	0	0	47	0	0	0	0	0	0	66	0	0	66	0	0	1	0	1	114
Total	6	218	0	0	224	0	0	0	0	0	0	282	1	0	283	0	0	11	0	11	518
08:00 AM	1	31	0	0	32	0	0	0	0	0	0	58	0	0	58	0	0	3	0	3	93
08:15 AM	3	57	0	0	60	0	0	0	0	0	0	66	0	0	66	0	0	2	0	2	128
08:30 AM	0	70	0	0	70	0	0	0	0	0	0	99	0	0	99	0	0	4	0	4	173
08:45 AM	2	60	0	0	62	0	0	0	0	0	0	106	1	0	107	0	0	5	0	5	174
Total	6	218	0	0	224	0	0	0	0	0	0	329	1	0	330	0	0	14	0	14	568
Grand Total	12	436	0	0	448	0	0	0	0	0	0	611	2	0	613	0	0	25	0	25	1086
Apprch %	2.7	97.3	0	0		0	0	0	0		0	99.7	0.3	0		0	0	100	0		
Total %	1.1	40.1	0	0	41.3	0	0	0	0	0	0	56.3	0.2	0	56.4	0	0	2.3	0	2.3	
Cars	12	436	0	0	448	0	0	0	0	0	0	611	2	0	613	0	0	25	0	25	1086
% Cars	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	0	0	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



2 AM

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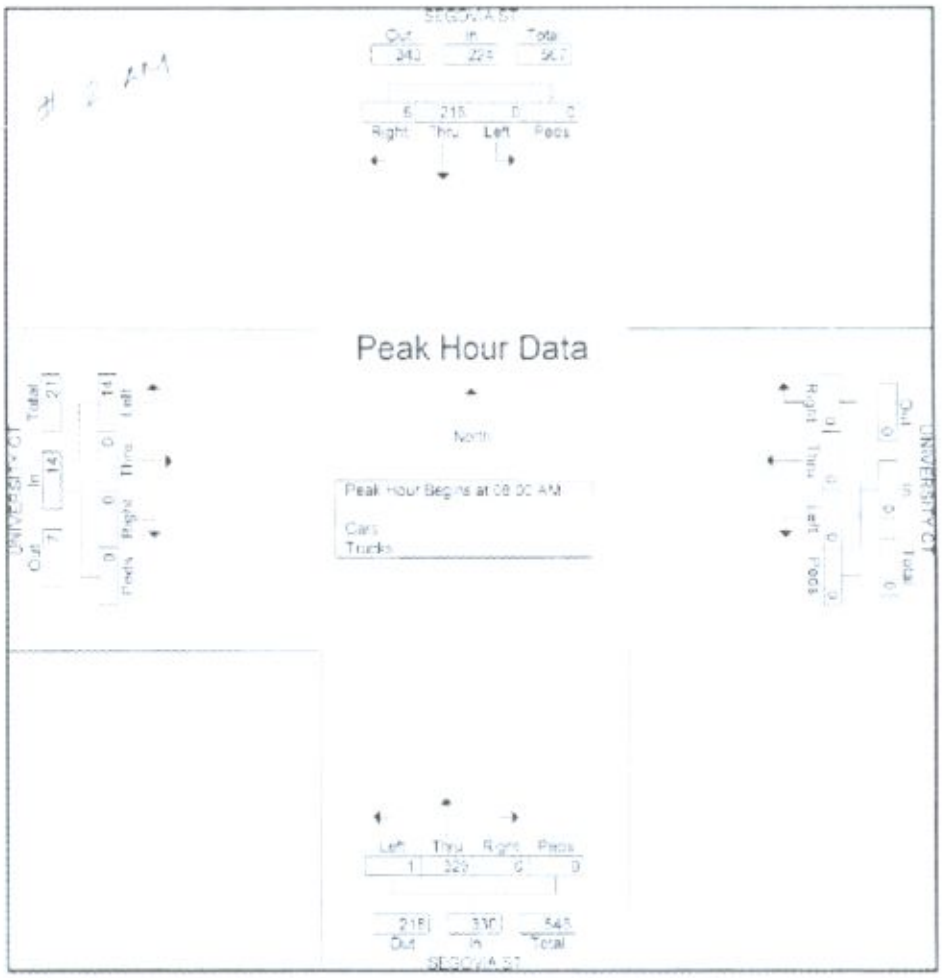
File Name : SEGOVIA ST & UNIVERSITY CTAM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

	SEGOVIA ST Southbound					UNIVERSITY CT Westbound					SEGOVIA ST Northbound					UNIVERSITY CT Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	1	31	0	0	32	0	0	0	0	0	0	58	0	0	58	0	0	3	0	3	93
08:15 AM	3	57	0	0	60	0	0	0	0	0	0	66	0	0	66	0	0	2	0	2	128
08:30 AM	0	70	0	0	70	0	0	0	0	0	0	99	0	0	99	0	0	4	0	4	173
08:45 AM	2	60	0	0	62	0	0	0	0	0	0	106	1	0	107	0	0	5	0	5	174
Total Volume	6	218	0	0	224	0	0	0	0	0	0	329	1	0	330	0	0	14	0	14	568
% App. Total	2.7	97.3	0	0		0	0	0	0		0	99.7	0.3	0		0	0	100	0		
PHF	.500	.779	.000	.000	.800	.000	.000	.000	.000	.000	.000	.776	.250	.000	.771	.000	.000	.700	.000	.700	.816



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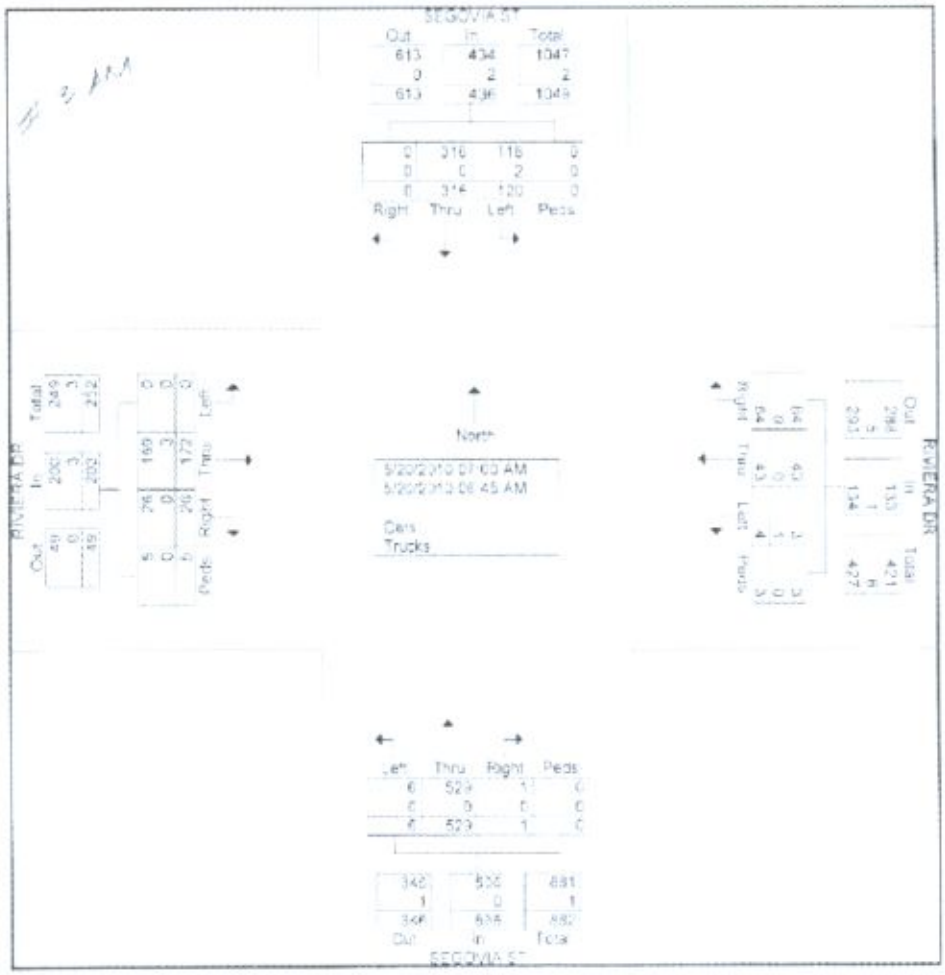
File Name : SEGOVIA ST & RIVIERA DR AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					RIVIERA DR Westbound					SEGOVIA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	Int. Tot.
07:00 AM	0	48	21	0	69	17	8	1	0	26	0	40	0	0	40	2	14	0	3	19	154
07:15 AM	0	46	18	0	64	16	6	0	1	23	0	76	0	0	76	4	16	0	2	22	185
07:30 AM	0	29	11	0	40	6	3	1	0	10	0	62	1	0	63	2	26	0	0	28	141
07:45 AM	0	27	18	0	45	4	6	0	0	10	0	62	1	0	63	3	13	0	0	16	134
Total	0	150	68	0	218	43	23	2	1	69	0	240	2	0	242	11	69	0	5	85	614
08:00 AM	0	24	7	0	31	8	6	1	2	17	0	50	1	0	51	3	34	0	0	37	136
08:15 AM	0	42	15	0	57	7	4	0	0	11	0	59	1	0	60	2	32	0	0	34	162
08:30 AM	0	55	15	0	70	11	3	1	0	15	0	88	1	0	89	4	18	0	0	22	196
08:45 AM	0	45	15	0	60	15	7	0	0	22	1	92	1	0	94	6	19	0	0	25	201
Total	0	166	52	0	218	41	20	2	2	65	1	289	4	0	294	15	103	0	0	118	695
Grand Total	0	316	120	0	436	84	43	4	3	134	1	529	6	0	536	26	172	0	5	203	1309
Apprch %	0	72.5	27.5	0		62.7	32.1	3	2.2		0.2	98.7	1.1	0		12.8	84.7	0	2.5		
Total %	0	24.1	9.2	0	33.3	6.4	3.3	0.3	0.2	10.2	0.1	40.4	0.5	0	40.9	2	13.1	0	0.4	15.5	
Cars	0	316	118	0	434	84	43	3	3	133	1	529	6	0	536	26	169	0	5	200	1303
% Cars	0	100	98.3	0	99.5	100	100	75	100	99.3	100	100	100	0	100	100	98.3	0	100	98.5	99.5
Trucks	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	6
% Trucks	0	0	1.7	0	0.5	0	0	25	0	0.7	0	0	0	0	0	0	1.7	0	0	1.5	0.5



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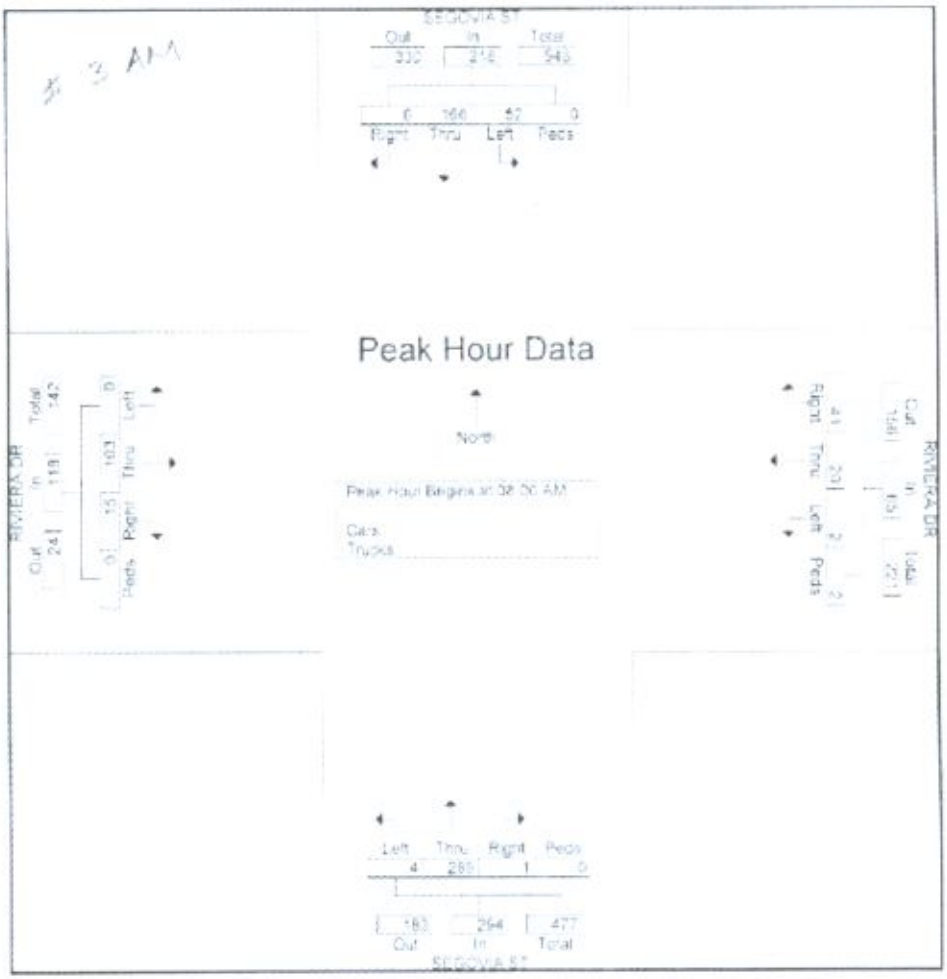
File Name : SEGOVIA ST & RIVIERA DR AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

	SEGOVIA ST Southbound					RIVIERA DR Westbound					SEGOVIA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	24	7	0	31	8	6	1	2	17	0	50	1	0	51	3	34	0	0	37	136
08:15 AM	0	42	15	0	57	7	4	0	0	11	0	59	1	0	60	2	32	0	0	34	162
08:30 AM	0	65	15	0	70	11	3	1	0	15	0	88	1	0	89	4	18	0	0	22	196
08:45 AM	0	45	15	0	60	15	7	0	0	22	1	92	1	0	94	6	19	0	0	25	201
Total Volume	0	166	52	0	218	41	20	2	2	65	1	289	4	0	294	15	103	0	0	118	695
% App. Tot.	0	76.1	23.9	0		63.1	30.8	3.1	3.1		0.3	98.3	1.4	0		12.7	87.3	0	0		
PHF	.000	.756	.867	.000	.779	.683	.714	.500	.250	.739	.250	.785	.100	.000	.782	.625	.757	.000	.000	.797	.864



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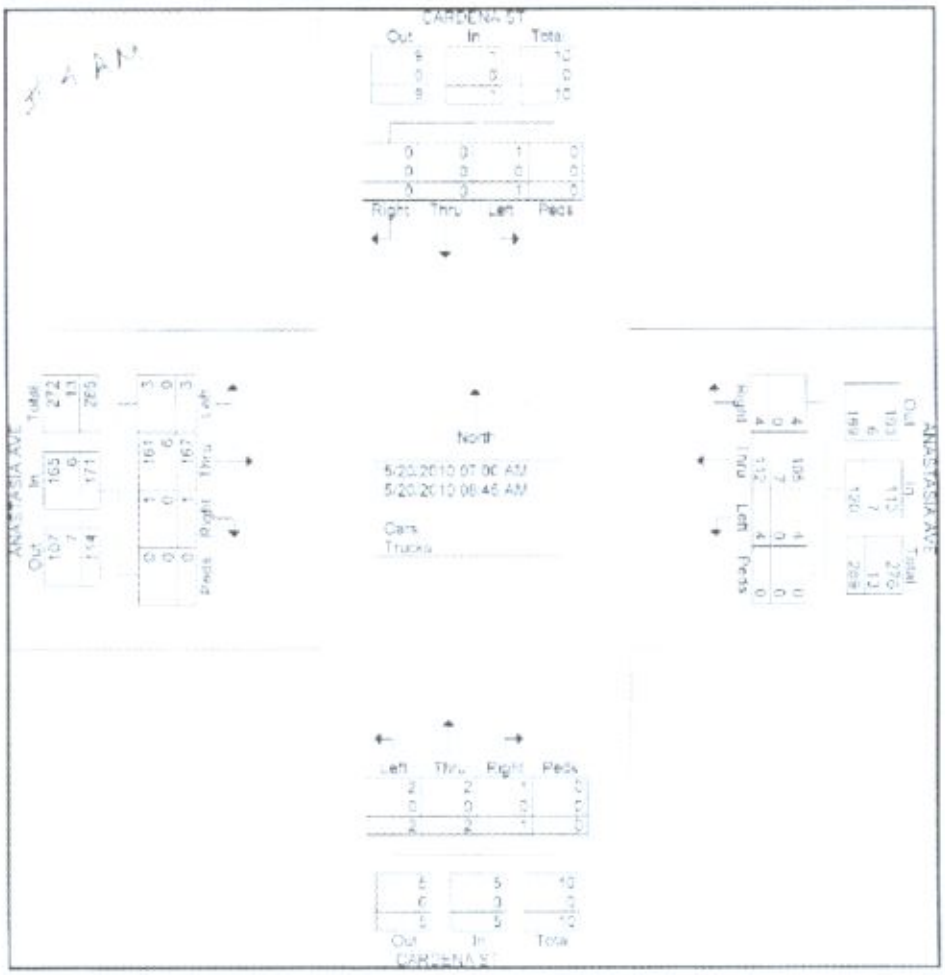
File Name : CARDENA ST & ANASTASIA AV AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	CARDENA ST Southbound					ANASTASIA AVE Westbound					CARDENA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Total
07:00 AM	0	0	0	0	0	0	10	3	0	13	0	0	0	0	0	0	11	0	0	11	24
07:15 AM	0	0	1	0	1	0	13	0	0	13	0	1	1	0	2	0	16	0	0	16	32
07:30 AM	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	15	0	0	15	33
07:45 AM	0	0	0	0	0	0	12	0	0	12	0	0	1	0	1	0	24	1	0	25	38
Total	0	0	1	0	1	0	53	3	0	56	0	1	2	0	3	0	66	1	0	67	127
08:00 AM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	24	0	0	24	44
08:15 AM	0	0	0	0	0	2	9	0	0	11	0	0	0	0	0	0	27	1	0	28	39
08:30 AM	0	0	0	0	0	2	15	0	0	17	1	1	0	0	2	1	21	0	0	22	41
08:45 AM	0	0	0	0	0	0	15	1	0	16	0	0	0	0	0	0	29	1	0	30	46
Total	0	0	0	0	0	4	59	1	0	64	1	1	0	0	2	1	101	2	0	104	170
Grand Total	0	0	1	0	1	4	112	4	0	120	1	2	2	0	5	1	167	3	0	171	297
Apprch %	0	0	100	0		3.3	93.3	3.3	0		20	40	40	0		0.6	97.7	1.8	0		
Total %	0	0	0.3	0	0.3	1.3	37.7	1.3	0	40.4	0.3	0.7	0.7	0	1.7	0.3	56.2	1	0	57.6	
Cars	0	0	1	0	1	4	105	4	0	113	1	2	2	0	5	1	161	3	0	165	284
% Cars	0	0	100	0	100	100	93.8	100	0	94.2	100	100	100	0	100	100	96.4	100	0	96.5	95.6
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	13
% Trucks	0	0	0	0	0	0	6.2	0	0	5.8	0	0	0	0	0	0	3.6	0	0	3.5	4.4



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File Name : CARDENA ST & ANASTASIA AV AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

	CARDENA ST Southbound					ANASTASIA AVE Westbound					CARDENA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	24	0	0	24	44
08:15 AM	0	0	0	0	0	2	9	0	0	11	0	0	0	0	0	0	27	1	0	28	39
08:30 AM	0	0	0	0	0	2	15	0	0	17	1	1	0	0	2	1	21	0	0	22	41
08:45 AM	0	0	0	0	0	0	15	1	0	16	0	0	0	0	0	0	29	1	0	30	46
Total Volume	0	0	0	0	0	4	59	1	0	64	1	1	0	0	2	1	101	2	0	104	170
% App. Total	0	0	0	0		6.2	92.2	1.6	0		50	50	0	0		1	97.1	1.9	0		
PHF	.000	.000	.000	.000	.000	.500	.738	.250	.000	.800	.250	.250	.000	.000	.250	.250	.871	.500	.000	.867	.924

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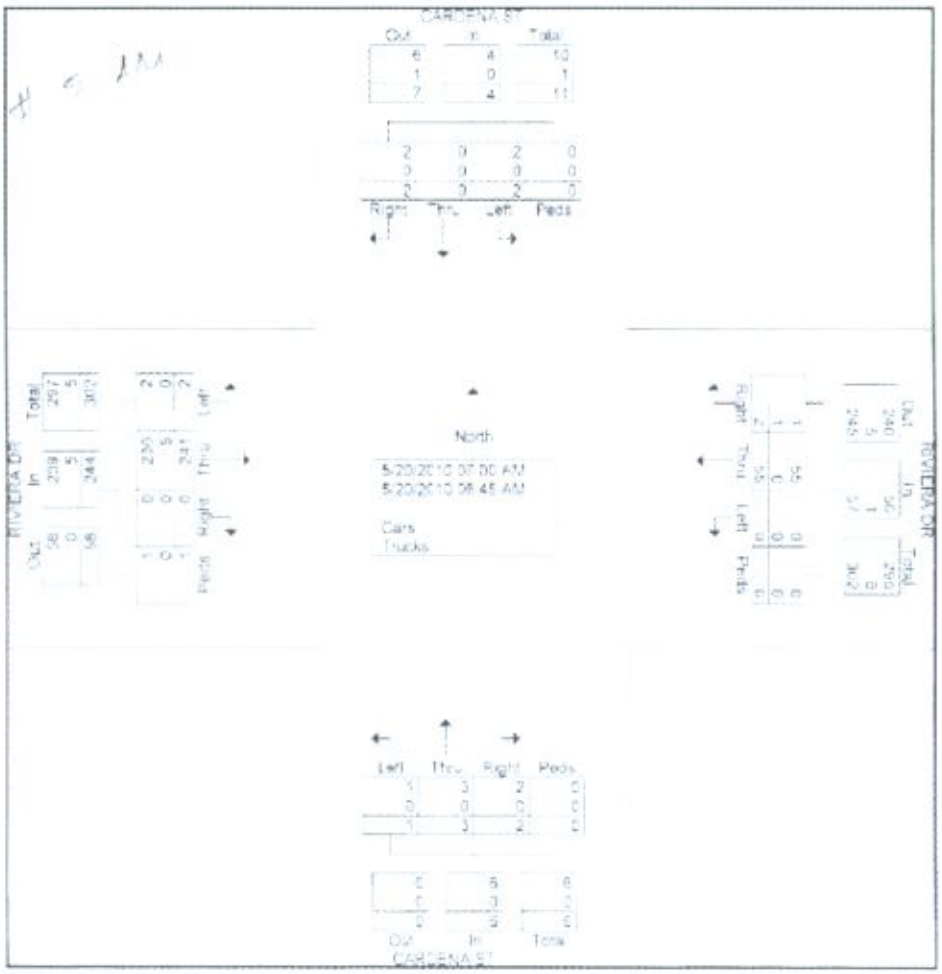
File Name : CARDENA ST & RIVIERA DR AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	CARDENA ST Southbound					RIVIERA DR Westbound					CARDENA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	In Tot.
07:00 AM	0	0	1	0	1	1	8	0	0	9	0	0	0	0	0	0	22	0	0	22	32
07:15 AM	0	0	0	0	0	0	8	0	0	8	0	2	0	0	2	0	30	0	1	31	41
07:30 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	37	0	0	37	42
07:45 AM	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	0	19	0	0	19	29
Total	0	0	1	0	1	2	30	0	0	32	0	2	0	0	2	0	108	0	1	109	144
08:00 AM	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	0	40	0	0	40	47
08:15 AM	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	35	1	0	36	45
08:30 AM	1	0	1	0	2	0	4	0	0	4	1	1	0	0	2	0	29	1	0	30	38
08:45 AM	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	29	0	0	29	37
Total	2	0	1	0	3	0	25	0	0	25	2	1	1	0	4	0	133	2	0	135	167
Grand Total	2	0	2	0	4	2	55	0	0	57	2	3	1	0	6	0	241	2	1	244	311
Apprch %	50	0	50	0		3.5	96.5	0	0		33.3	50	16.7	0		0	98.8	0.8	0.4		
Total %	0.6	0	0.6	0	1.3	0.6	17.7	0	0	18.3	0.6	1	0.3	0	1.9	0	77.5	0.6	0.3	78.5	
Cars	2	0	2	0	4	1	55	0	0	56	2	3	1	0	6	0	239	2	1	239	305
% Cars	100	0	100	0	100	50	100	0	0	98.2	100	100	100	0	100	0	97.9	100	100	98	98.1
Trucks	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5	0	0	5	6
% Trucks	0	0	0	0	0	50	0	0	0	1.8	0	0	0	0	0	0	2.1	0	0	2	1.9



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File Name : CARDENA ST & RIVIERA DR AM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

	CARDENA ST Southbound					RIVIERA DR Westbound					CARDENA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	0	40	0	0	40	47
08:15 AM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	35	1	0	36	45
08:30 AM	1	0	1	0	2	0	4	0	0	4	1	1	0	0	2	0	29	1	0	30	38
08:45 AM	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	29	0	0	29	37
Total Volume	2	0	1	0	3	0	25	0	0	25	2	1	1	0	4	0	133	2	0	135	167
% App. Total	66.7	0	33.3	0		0	100	0	0		50	25	25	0		0	98.5	1.5	0		
PHF	.500	.000	.250	.000	.375	.000	.781	.000	.000	.781	.500	.250	.250	.000	.500	.000	.831	.500	.000	.844	.888

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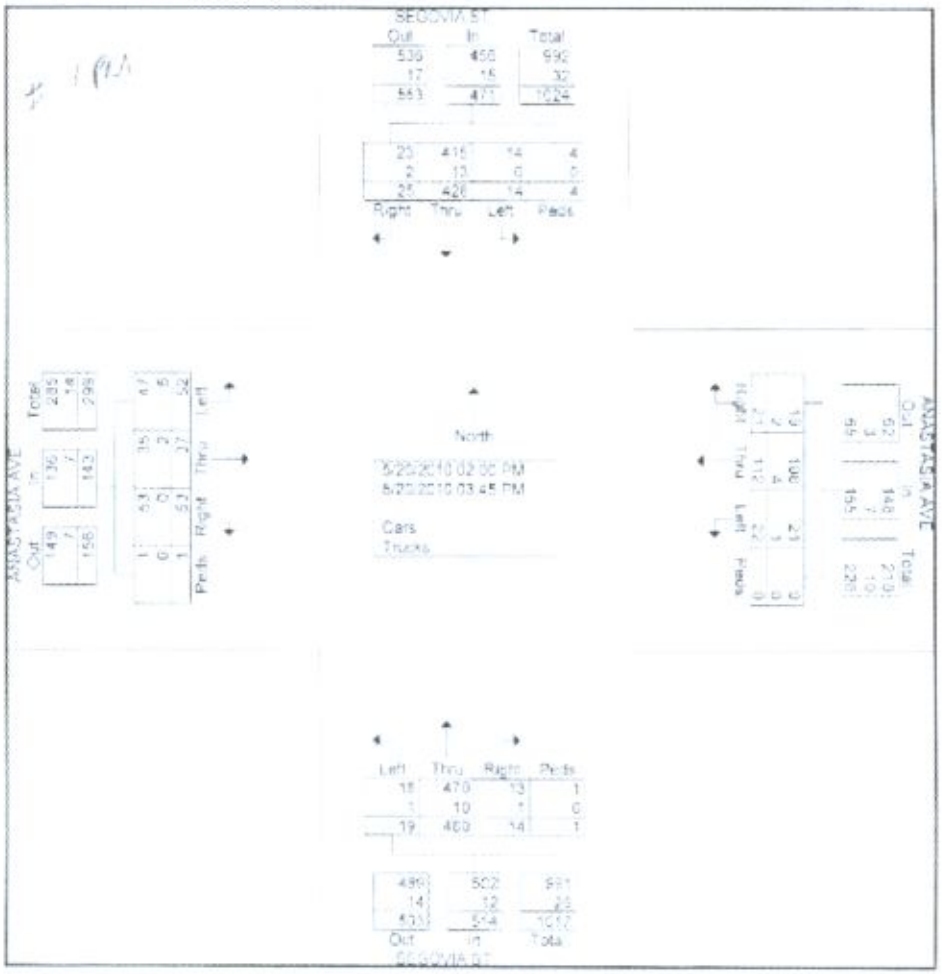
File Name : SEGOVIA ST & ANASTASIA AV PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					ANASTASIA AVE Westbound					SEGOVIA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Total
02:00 PM	5	45	1	0	51	2	6	2	0	10	0	52	1	0	53	4	8	5	0	17	131
02:15 PM	4	49	0	0	53	6	14	4	0	24	1	56	3	0	60	3	4	8	1	14	151
02:30 PM	3	61	1	0	65	2	23	3	0	28	3	93	1	0	97	6	4	6	0	16	206
02:45 PM	3	51	3	0	57	3	19	1	0	23	3	79	5	0	87	9	4	12	0	25	192
Total	15	206	5	0	226	13	62	10	0	85	7	280	10	0	297	22	20	29	1	72	680
03:00 PM	3	50	2	0	55	3	11	1	0	15	1	42	3	0	46	11	5	9	0	25	151
03:15 PM	1	55	1	2	59	2	8	3	0	13	2	60	3	0	65	10	6	4	0	20	157
03:30 PM	4	57	3	1	65	1	21	3	0	25	0	47	2	0	49	7	1	5	0	13	152
03:45 PM	2	50	3	1	56	2	10	5	0	17	4	51	1	1	57	3	5	5	0	13	143
Total	10	222	9	4	245	8	50	12	0	70	7	200	9	1	217	31	17	23	0	71	603
Grand Total	25	428	14	4	471	21	112	22	0	155	14	480	19	1	514	53	37	52	1	143	1283
Apprch %	5.3	90.9	3	0.8		13.5	72.3	14.2	0		2.7	93.4	3.7	0.2		37.1	25.9	36.4	0.7		
Total %	1.9	33.4	1.1	0.3	36.7	1.6	8.7	1.7	0	12.1	1.1	37.4	1.5	0.1	40.1	4.1	2.9	4.1	0.1	11.1	
Cars	23	415	14	4	456	19	108	21	0	148	13	470	18	1	502	53	35	47	1	136	1242
% Cars	92	97	100	100	96.8	90.5	96.4	95.5	0	95.5	92.9	97.9	94.7	100	97.7	100	94.6	90.4	100	95.1	96.8
Trucks	2	13	0	0	15	2	4	1	0	7	1	10	1	0	12	0	2	5	0	7	41
% Trucks	8	3	0	0	3.2	9.5	3.6	4.5	0	4.5	7.1	2.1	5.3	0	2.3	0	5.4	9.6	0	4.9	3.2



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File Name : SEGOVIA ST & ANASTASIA AV PM
Site Code : 00000000
Start Date : 5/20/2010
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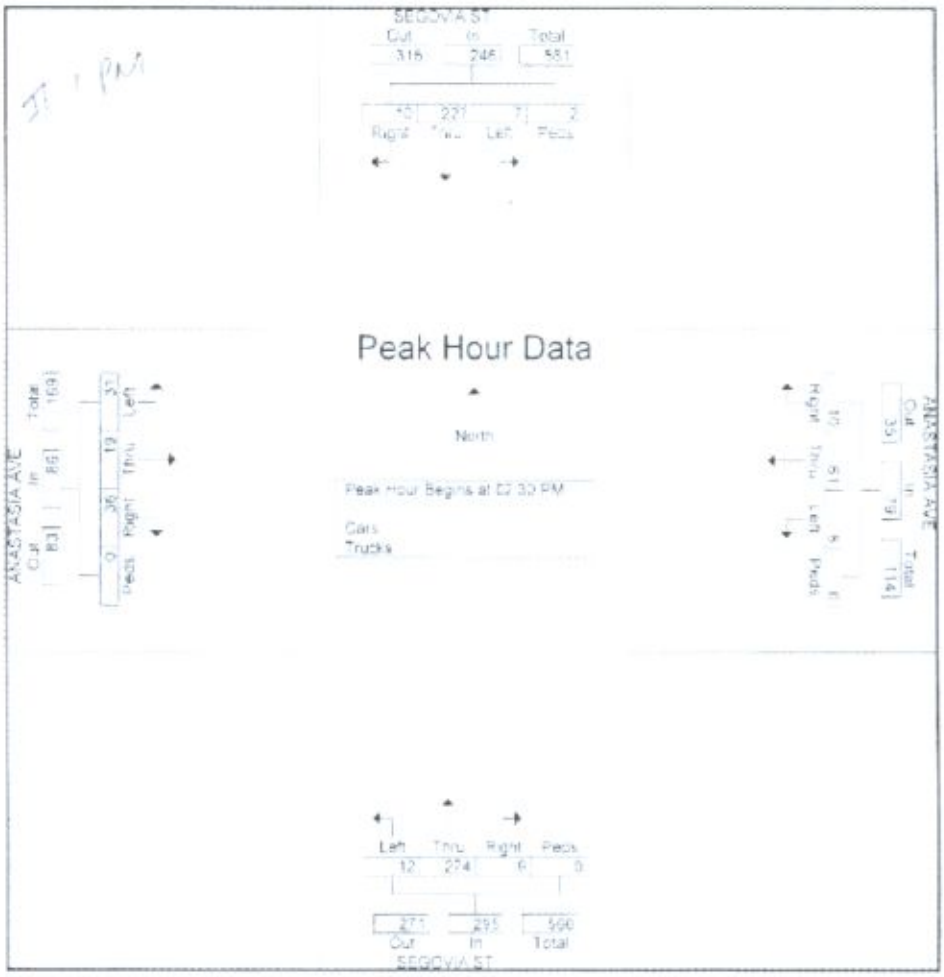
	SEGOVIA ST Southbound					ANASTASIA AVE Westbound					SEGOVIA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 03:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	**3**	**61**	1	0	**65**	2	**23**	**3**	0	**28**	**3**	**93**	1	0	**97**	6	4	6	0	16	**206**
02:45 PM	3	51	**3**	0	57	**3**	19	1	0	23	3	76	**6**	0	87	9	4	**12**	0	**25**	192
03:00 PM	3	60	2	0	65	3	11	1	0	15	1	42	3	0	46	**11**	5	8	0	25	151
03:15 PM	1	55	1	**2**	59	2	8	3	0	13	2	60	3	0	65	10	**6**	4	0	20	157
Total volume	10	227	7	2	246	10	61	8	0	79	9	274	12	0	295	36	19	31	0	86	706
% App. Total	4.1	92.3	2.8	0.8		12.7	77.2	10.1	0		3.1	92.9	4.1	0		41.9	22.1	36	0		
PHF	.833	.930	.583	.250	.940	.833	.663	.667	.000	.706	.750	.737	.600	.000	.760	.818	.792	.646	.000	.860	.857



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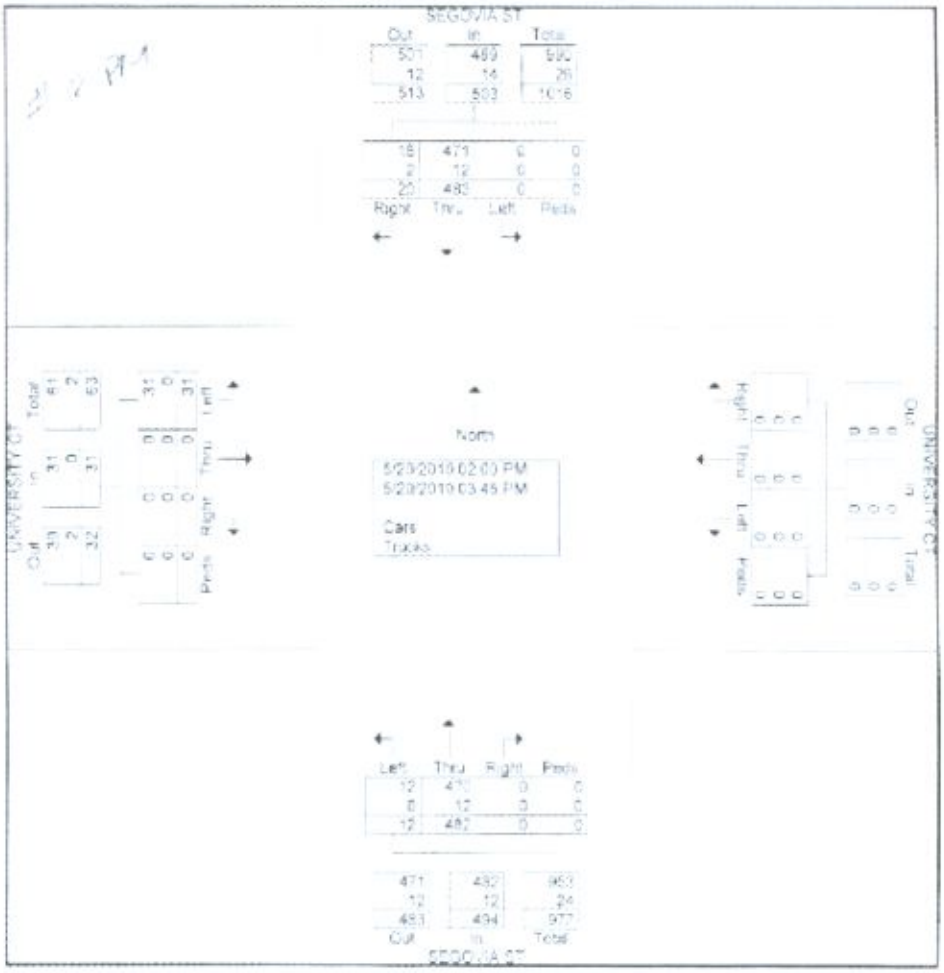
File Name : SEGOVIA ST & UNIVERSITY CT PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					UNIVERSITY CT Westbound					SEGOVIA ST Northbound					UNIVERSITY CT Eastbound					
Start Time	Right	Thru	Left	Peds	Ap. Tot.	Right	Thru	Left	Peds	Ap. Tot.	Right	Thru	Left	Peds	Ap. Tot.	Right	Thru	Left	Peds	Ap. Tot.	Int. Total
02:00 PM	2	49	0	0	51	0	0	0	0	0	0	49	2	0	51	0	0	4	0	4	106
02:15 PM	2	54	0	0	56	0	0	0	0	0	0	55	1	0	56	0	0	5	0	5	117
02:30 PM	5	65	0	0	70	0	0	0	0	0	0	91	2	0	93	0	0	6	0	6	169
02:45 PM	5	56	0	0	61	0	0	0	0	0	0	85	0	0	85	0	0	2	0	2	148
Total	14	224	0	0	238	0	0	0	0	0	0	280	5	0	285	0	0	17	0	17	540
03:00 PM	1	71	0	0	72	0	0	0	0	0	0	42	0	0	42	0	0	4	0	4	118
03:15 PM	3	65	0	0	68	0	0	0	0	0	0	65	1	0	66	0	0	0	0	0	134
03:30 PM	0	67	0	0	67	0	0	0	0	0	0	45	2	0	47	0	0	4	0	4	118
03:45 PM	2	56	0	0	58	0	0	0	0	0	0	50	4	0	54	0	0	6	0	6	118
Total	6	259	0	0	265	0	0	0	0	0	0	202	7	0	209	0	0	14	0	14	488
Grand Total	20	483	0	0	503	0	0	0	0	0	0	482	12	0	494	0	0	31	0	31	1028
Apprch %	4	96	0	0		0	0	0	0		0	97.6	2.4	0		0	0	100	0		
Total %	1.9	47	0	0	48.9	0	0	0	0	0	0	46.9	1.2	0	48.1	0	0	3	0	3	
Cars	18	471	0	0	489	0	0	0	0	0	0	470	12	0	482	0	0	31	0	31	1002
% Cars	90	97.5	0	0	97.2	0	0	0	0	0	0	97.5	100	0	97.6	0	0	100	0	100	97.5
Trucks	2	12	0	0	14	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	26
% Trucks	10	2.5	0	0	2.8	0	0	0	0	0	0	2.5	0	0	2.4	0	0	0	0	0	2.5



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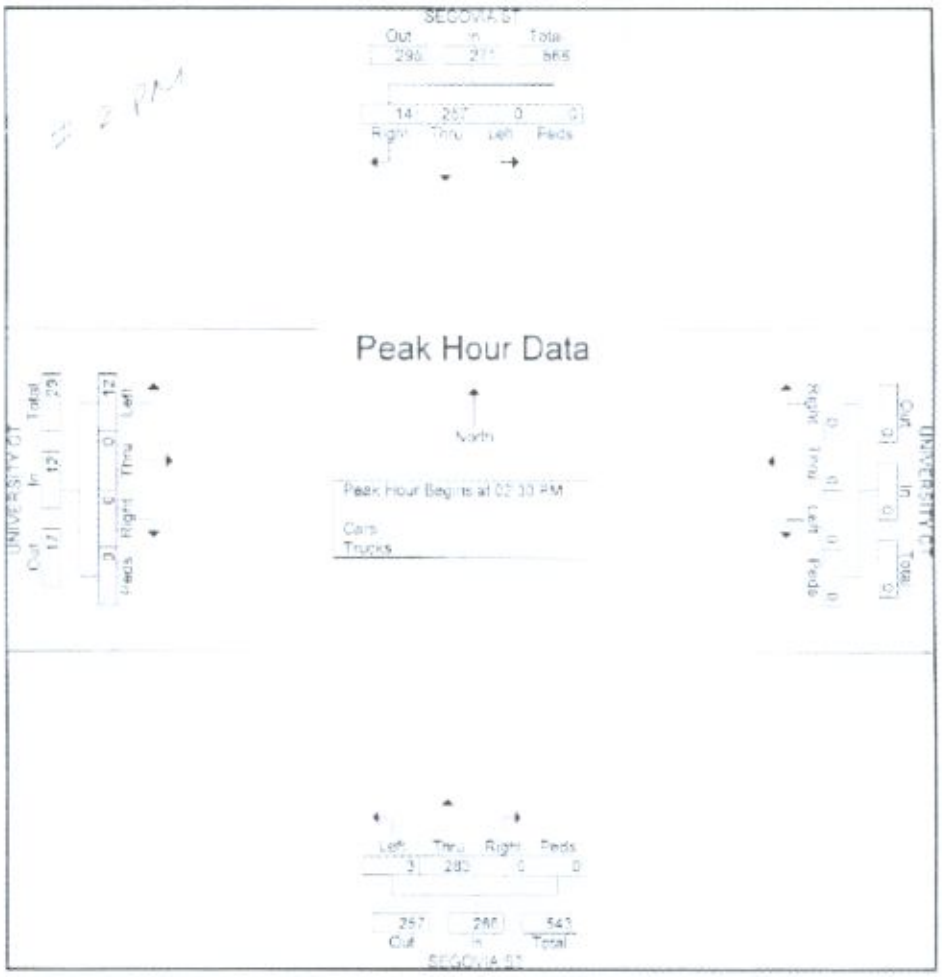
File Name : SEGOVIA ST & UNIVERSITY CT PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 2

Start Time	SEGOVIA ST Southbound					UNIVERSITY CT Westbound					SEGOVIA ST Northbound					UNIVERSITY CT Eastbound					
	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	6	65	0	0	70	0	0	0	0	0	0	91	2	0	93	0	0	6	0	6	169
02:45 PM	5	56	0	0	61	0	0	0	0	0	0	85	0	0	85	0	0	2	0	2	148
03:00 PM	1	71	0	0	72	0	0	0	0	0	0	42	0	0	42	0	0	4	0	4	118
03:15 PM	3	65	0	0	68	0	0	0	0	0	0	65	1	0	66	0	0	0	0	0	134
Total Volume	14	257	0	0	271	0	0	0	0	0	0	283	3	0	286	0	0	12	0	12	569
% App. Total	5.2	94.8	0	0		0	0	0	0		0	99	1	0		0	0	100	0		
PHF	.700	.905	.000	.000	.941	.000	.000	.000	.000	.000	.000	.777	.375	.000	.769	.000	.000	.500	.000	.500	.842



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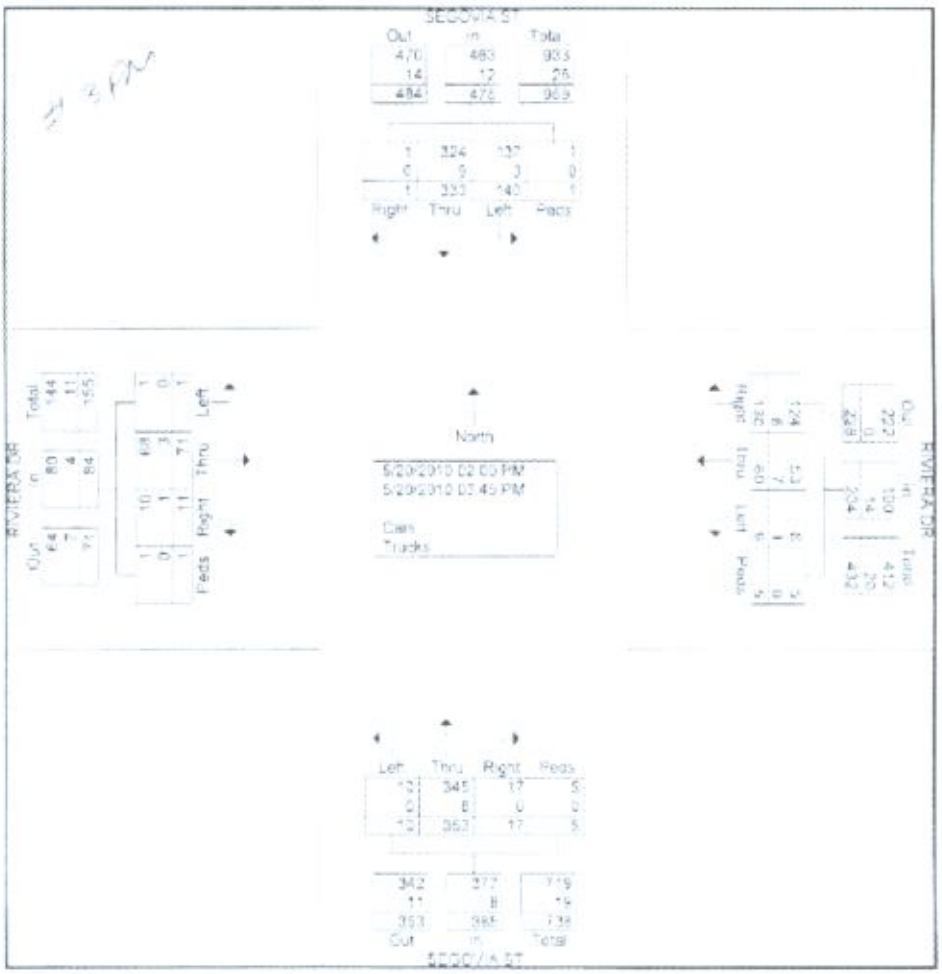
File Name : SEGOVIA ST & RIVIERA DR PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	SEGOVIA ST Southbound					RIVIERA DR Westbound					SEGOVIA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Total
02:00 PM	0	34	14	0	48	10	8	0	1	19	2	41	1	0	44	2	6	0	0	8	119
02:15 PM	0	36	15	0	51	12	5	0	0	17	4	45	2	0	51	2	11	0	0	13	132
02:30 PM	1	46	17	0	64	27	6	1	0	34	2	65	0	1	68	0	7	0	0	7	173
02:45 PM	0	36	21	0	57	33	11	0	3	47	1	46	0	1	48	1	11	0	0	12	164
Total	1	152	67	0	220	82	30	1	4	117	9	197	3	2	211	5	36	0	0	40	588
03:00 PM	0	50	23	0	73	6	2	1	0	9	0	36	1	1	37	2	9	0	0	11	130
03:15 PM	0	39	24	1	64	21	12	2	1	36	2	46	0	1	49	2	8	0	0	10	159
03:30 PM	0	50	14	0	64	7	13	0	0	20	2	37	2	0	41	1	9	0	1	11	136
03:45 PM	0	42	12	0	54	14	3	5	0	22	4	38	4	1	47	1	10	1	0	12	135
Total	0	181	73	1	255	48	30	8	1	87	8	156	7	3	174	6	36	1	1	44	560
Grand Total	1	333	140	1	475	130	60	9	5	204	17	353	10	5	385	11	72	1	1	84	1148
Apprch %	0.2	70.1	29.6	0.2		63.7	29.4	4.4	2.5		4.4	91.7	2.6	1.3		13.1	85.7	1.2	1.2		
Total %	0.1	29	12.2	0.1	41.4	11.3	5.2	0.8	0.4	17.8	1.5	30.7	0.9	0.4	33.5	1	6.2	0.1	0.1	7.3	
Cars	1	324	137	1	463	124	53	8	5	190	17	345	10	5	377	10	68	1	1	80	1110
% Cars	100	97.3	97.9	100	97.5	95.4	88.3	88.9	100	93.1	100	97.7	100	100	97.9	90.9	94.4	100	100	95.2	96.7
Trucks	0	9	3	0	12	6	7	1	0	14	0	8	0	0	8	1	4	0	0	4	38
% Trucks	0	2.7	2.1	0	2.5	4.6	11.7	11.1	0	6.9	0	2.3	0	0	2.1	9.1	5.6	0	0	4.8	3.3



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File Name : SEGOVIA ST & RIVIERA DR PM
Site Code : 00000000
Start Date : 5/20/2010
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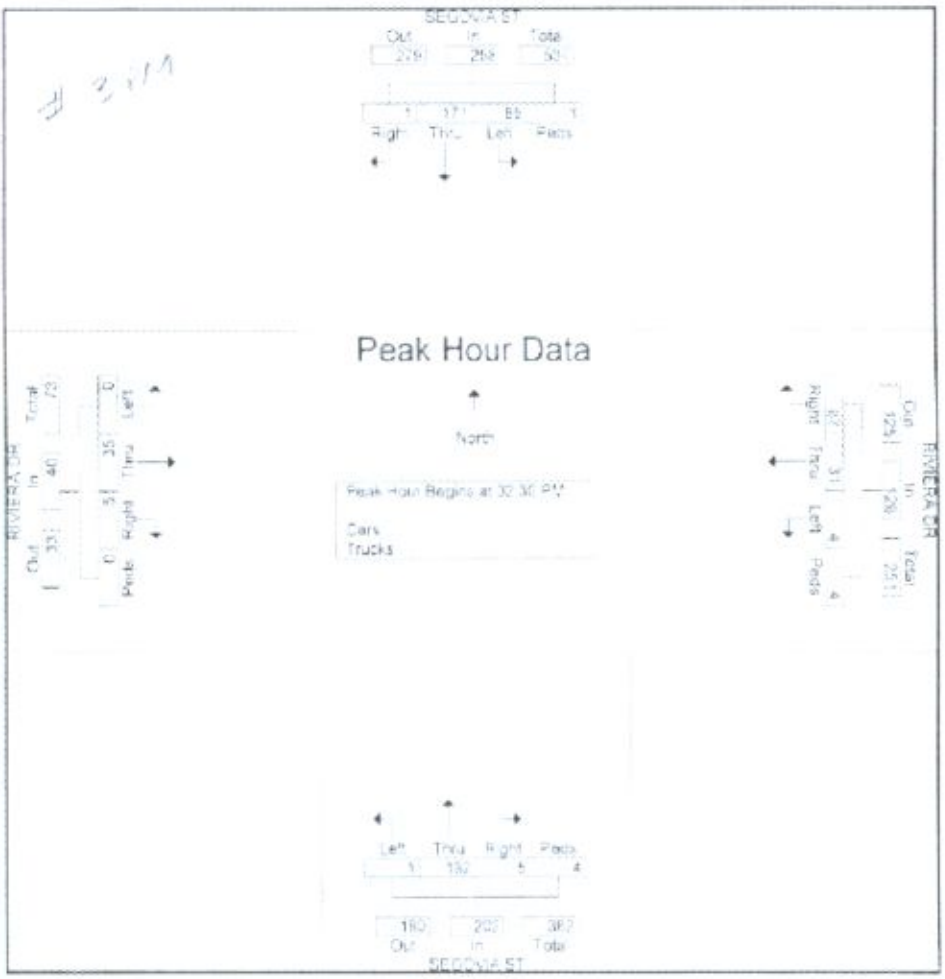
	SEGOVIA ST Southbound					RIVIERA DR Westbound					SEGOVIA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	1	46	17	0	64	27	6	1	0	34	2	65	0	1	68	0	7	0	0	7	173
02:45 PM	0	36	21	0	57	33	11	0	3	47	1	46	0	1	48	1	11	0	0	12	164
03:00 PM	0	50	23	0	73	6	2	1	0	9	0	35	1	1	37	2	9	0	0	11	130
03:15 PM	0	39	24	1	64	21	12	2	1	36	2	46	0	1	49	2	8	0	0	10	159
Total Volume	1	171	85	1	258	87	31	4	4	126	5	192	1	4	202	5	35	0	0	40	626
% App. Total	0.4	66.3	32.9	0.4		69	24.6	3.2	3.2		2.5	95	0.5	2		12.5	87.5	0	0		
PHF	.250	.855	.885	.250	.884	.659	.646	.500	.333	.870	.625	.736	.250	.500		.625	.795	.000	.000	.833	.905



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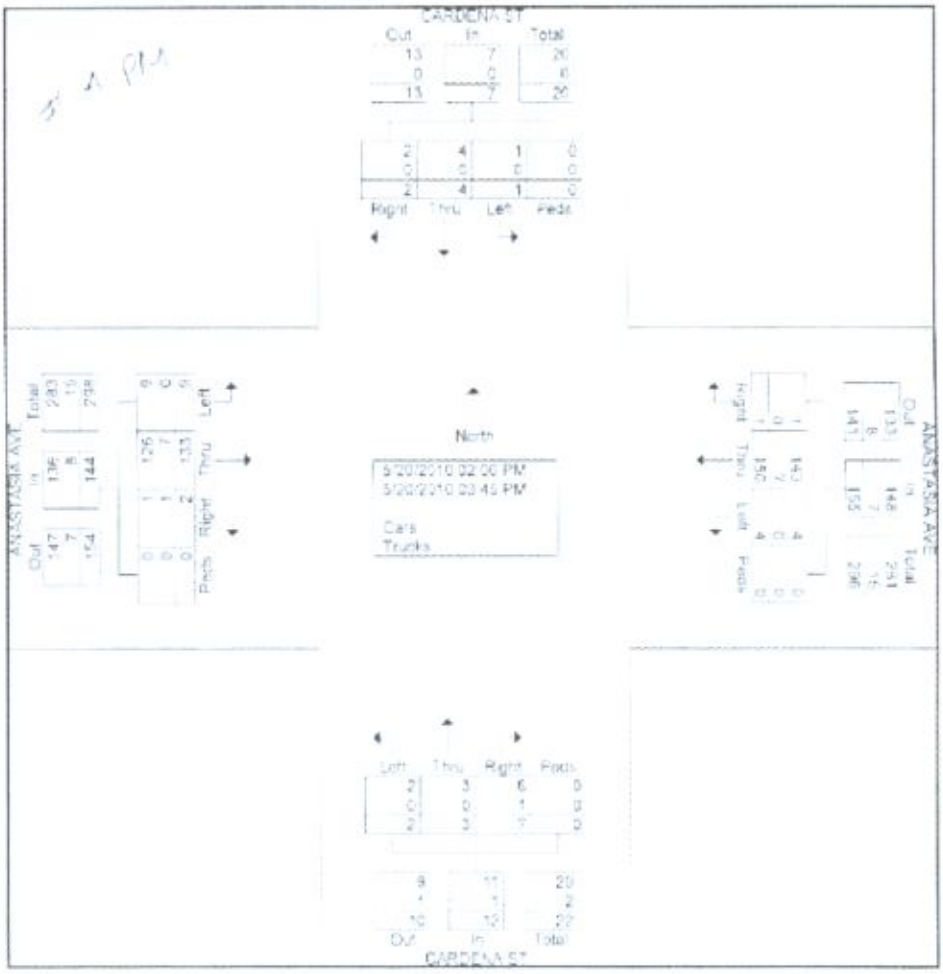
File Name : CARDENA ST & ANASTASIA AV PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	CARDENA ST Southbound					ANASTASIA AVE Westbound					CARDENA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	Int. Tot	Right	Thru	Left	Peds	Int. Tot	Right	Thru	Left	Peds	Int. Tot	Right	Thru	Left	Peds	Int. Tot	Int. Total
02:00 PM	1	0	0	0	1	0	10	1	0	11	1	0	1	0	2	0	16	1	0	17	31
02:15 PM	0	0	0	0	0	0	20	1	0	21	3	1	0	0	4	1	10	0	0	11	36
02:30 PM	0	0	0	0	0	0	27	0	0	27	0	0	1	0	1	1	15	2	0	18	46
02:45 PM	0	1	0	0	1	0	26	1	0	27	2	0	0	0	2	0	24	0	0	24	54
Total	1	1	0	0	2	0	83	3	0	86	6	1	2	0	9	2	65	3	0	70	167
03:00 PM	0	0	1	0	1	0	14	0	0	14	1	0	0	0	1	0	23	3	0	26	42
03:15 PM	0	2	0	0	2	1	12	0	0	13	0	0	0	0	0	0	19	0	0	19	34
03:30 PM	0	1	0	0	1	0	28	0	0	28	0	0	0	0	0	0	13	2	0	15	44
03:45 PM	1	0	0	0	1	0	13	1	0	14	0	2	0	0	2	0	13	1	0	14	31
Total	1	3	1	0	5	1	67	1	0	69	1	2	0	0	3	0	68	6	0	74	151
Grand Total	2	4	1	0	7	1	150	4	0	155	7	3	2	0	12	2	133	9	0	144	318
Apprch %	28.6	57.1	14.3	0		0.6	96.8	2.6	0		58.3	25	16.7	0		1.4	92.4	6.2	0		
Total %	0.6	1.3	0.3	0	2.2	0.3	47.2	1.3	0	48.7	2.2	0.9	0.6	0	3.8	0.6	41.8	2.8	0	45.3	
Cars	2	4	1	0	7	1	143	4	0	148	6	3	2	0	11	1	126	9	0	136	302
% Cars	100	100	100	0	100	100	95.3	100	0	95.5	85.7	100	100	0	91.7	50	94.7	100	0	94.4	95
Trucks	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	1	7	0	0	8	16
% Trucks	0	0	0	0	0	0	4.7	0	0	4.5	14.3	0	0	0	8.3	50	5.3	0	0	5.6	5



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File Name : CARDENA ST & ANASTASIA AV PM
Site Code : 00000000
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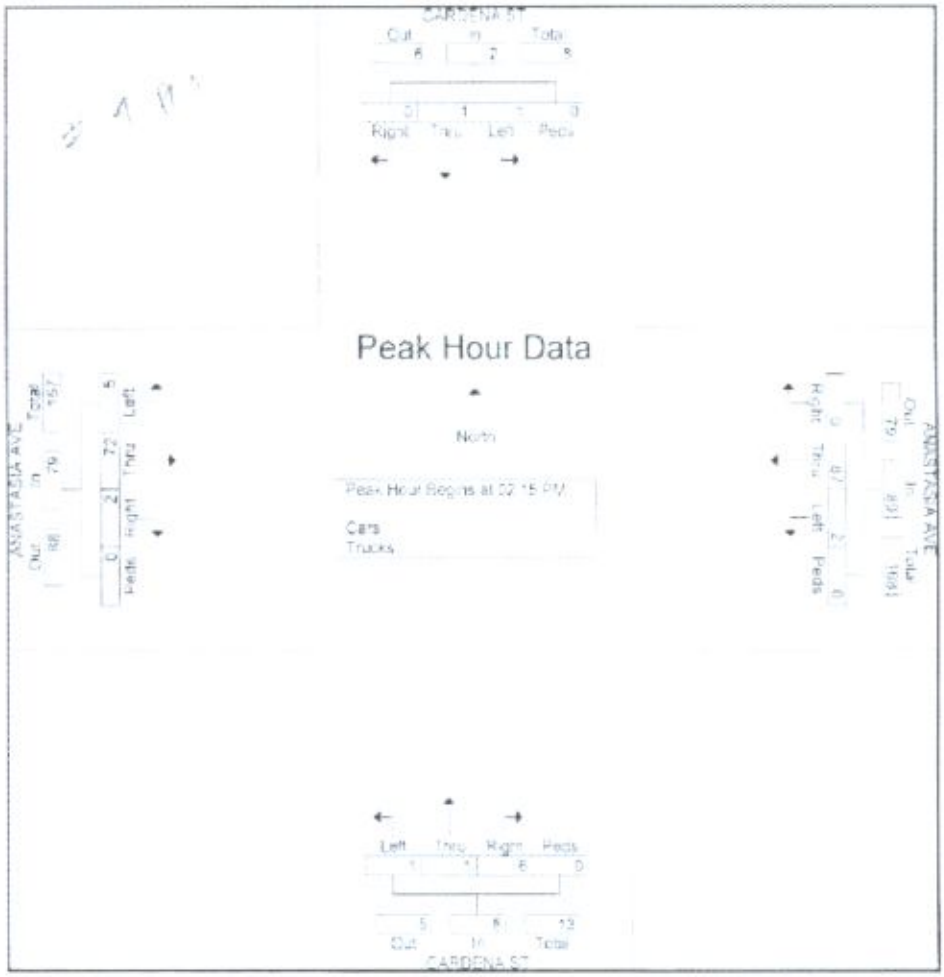
	CARDENA ST Southbound					ANASTASIA AVE Westbound					CARDENA ST Northbound					ANASTASIA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Total
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:15 PM																					
02:15 PM	0	0	0	0	0	0	20	1	0	21	3	1	0	0	4	1	10	0	0	11	36
02:30 PM	0	0	0	0	0	0	27	0	0	27	0	0	1	0	1	1	15	2	0	18	46
02:45 PM	0	1	0	0	1	0	26	1	0	27	2	0	0	0	2	0	24	0	0	24	54
03:00 PM	0	0	1	0	1	0	14	0	0	14	1	0	0	0	1	0	23	3	0	26	42
Total Volume	0	1	1	0	2	0	87	2	0	89	6	1	1	0	8	2	72	5	0	79	178
% App. Total	0	50	50	0		0	97.8	2.2	0		75	12.5	12.5	0		2.5	91.1	6.3	0		
PHF	.000	.250	.250	.000	.500	.000	.806	.500	.000	.824	.500	.250	.250	.000	.500	.500	.750	.417	.000	.760	.824



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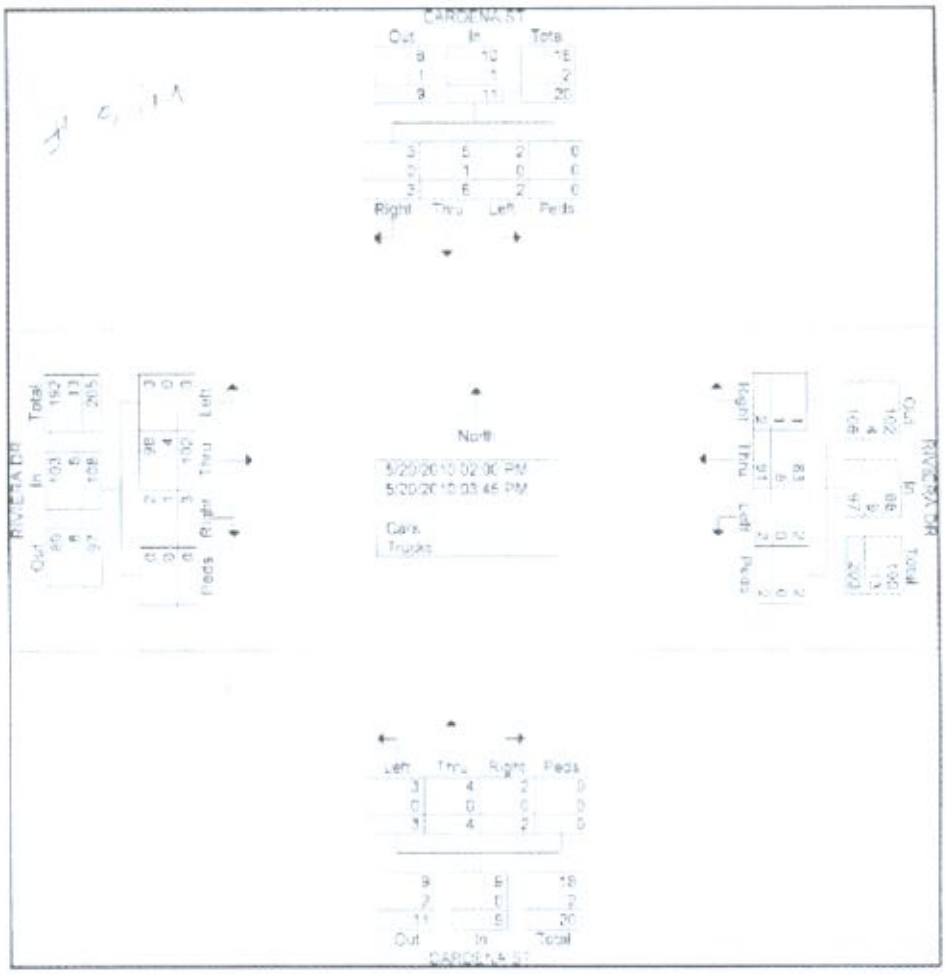
File Name : CARDENA ST & RIVIERA DR PM
Site Code : 00000000
Start Date : 5/20/2010
Page No : 1

Groups Printed- Cars - Trucks

	CARDENA ST Southbound					RIVIERA DR Westbound					CARDENA ST Northbound					RIVIERA DR Eastbound					
Start Time	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	Right	Thru	Left	Peds	Int. Tot.	App. Tot.
02:00 PM	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	13	2	0	15	24
02:15 PM	0	1	1	0	2	2	12	0	0	14	1	1	1	0	3	3	14	0	0	17	36
02:30 PM	0	1	0	0	1	0	11	1	0	12	0	0	0	0	0	0	11	1	0	12	25
02:45 PM	1	0	0	0	1	0	16	0	2	18	0	1	0	0	1	0	15	0	0	15	35
Total	2	2	1	0	5	2	47	1	2	52	1	2	1	0	4	3	53	3	0	59	120
03:00 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	13	0	0	13	17
03:15 PM	0	3	0	0	3	0	15	0	0	15	0	0	1	0	1	0	10	0	0	10	29
03:30 PM	0	1	1	0	2	0	14	1	0	15	0	0	0	0	0	0	13	0	0	13	30
03:45 PM	1	0	0	0	1	0	11	0	0	11	1	2	1	0	4	0	13	0	0	13	29
Total	1	4	1	0	6	0	44	1	0	45	1	2	2	0	5	0	49	0	0	49	105
Grand Total	3	6	2	0	11	2	91	2	2	97	2	4	3	0	9	3	102	3	0	108	225
Apprch %	27.3	54.5	18.2	0		2.1	93.8	2.1	2.1		22.2	44.4	33.3	0		2.8	94.4	2.8	0		
Total %	1.3	2.7	0.9	0	4.9	0.9	40.4	0.9	0.9	43.1	0.9	1.8	1.3	0	4	1.3	45.3	1.3	0	48	
Cars	3	5	2	0	10	1	83	2	2	88	2	4	3	0	9	2	98	3	0	103	210
% Cars	100	83.3	100	0	90.9	50	91.2	100	100	90.7	100	100	100	0	100	66.7	96.1	100	0	95.4	93.3
Trucks	0	1	0	0	1	1	8	0	0	9	0	0	0	0	0	1	4	0	0	5	15
% Trucks	0	16.7	0	0	9.1	50	8.8	0	0	9.3	0	0	0	0	0	33.3	3.9	0	0	4.6	6.7



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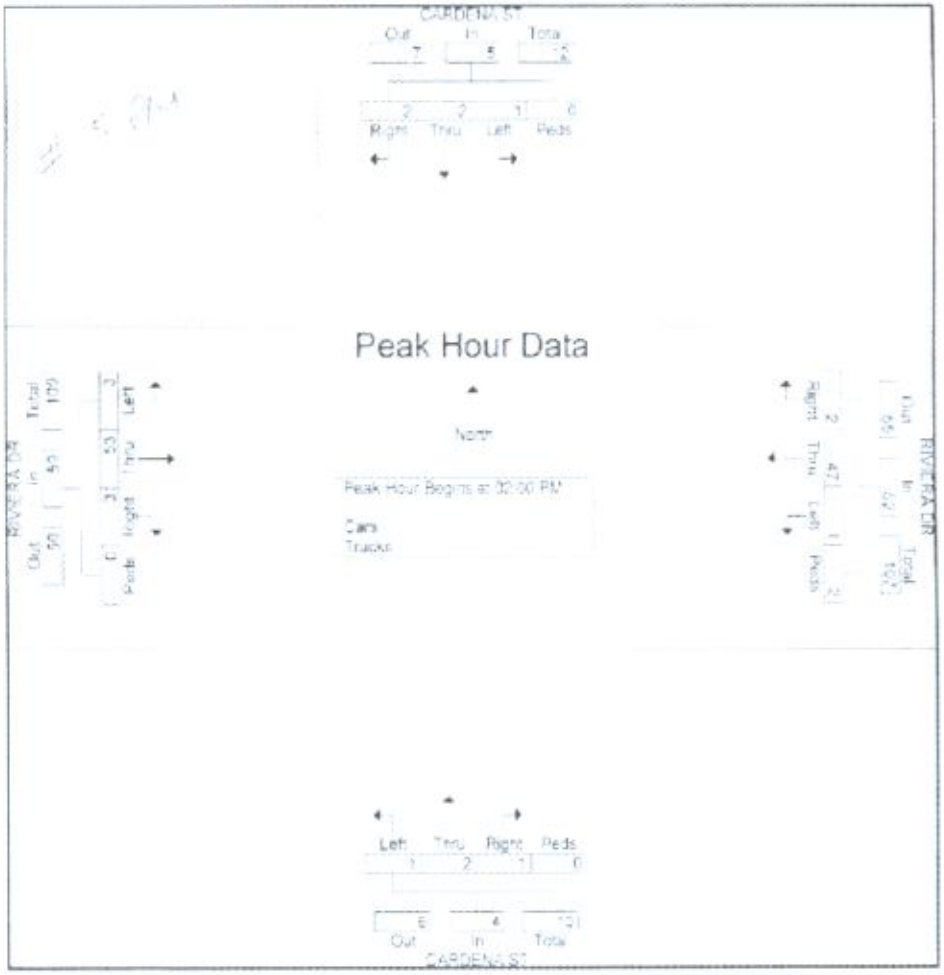
	CARDENA ST Southbound					RIVIERA DR Westbound					CARDENA ST Northbound					RIVIERA DR Eastbound				
Start Time	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Right	Thru	Left	Peds	App. Tot.	Int. Tot.
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:00 PM																					
02:00 PM	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	13	2	0	15	24
02:15 PM	0	1	1	0	2	2	12	0	0	14	1	1	1	0	3	3	14	0	0	17	36
02:30 PM	0	1	0	0	1	0	11	1	0	12	0	0	0	0	0	0	11	1	0	12	25
02:45 PM	1	0	0	0	1	0	16	0	2	18	0	1	0	0	1	0	15	0	0	15	35
Total Volume	2	2	1	0	5	2	47	1	2	52	1	2	1	0	4	3	53	3	0	59	120
% App. Total	40	40	20	0		3.8	90.4	1.9	3.8		25	50	25	0		5.1	89.8	5.1	0		
PHF	.500	.500	.250	.000	.625	.250	.734	.250	.250	.722	.250	.500	.250	.000	.333	.250	.883	.375	.000	.859	.833



Appendix F: Intersections & Driveway LOS

TABLE : A11

Somerset UBC Coral Gables

Intersection Level Of Service Summary - AM Peak Hour

AM Peak Hour			Existing Condition		Proposed Condition w/ School Traffic			
					Scenario A		Scenario B	
	Intersection	Intersection Control	LOS	Ave Veh Delay (s)	LOS	Ave Veh Delay (s)	LOS	Ave Veh Delay (s)
1	Segovia Street & Anastasia Avenue	Signalized	A	8.1	B	11.7	B	12.5
2	Segovia Street & University Court	Unsignalized	A	0.3	A	0.0	A	0.0
3	Segovia Street & Riviera Drive	Unsignalized	A	5.1	A	7.2	A	6.8
4	Cardena Street & Anastasia Avenue	Unsignalized	A	0.2	A	4.6	A	5.2
5	Cardena Street & Riviera Drive	Unsignalized	A	0.5	A	1.0	A	0.5
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	**N/A**	**N/A**	A	4.3	A	7.2
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	**N/A**	**N/A**	A	5.3	A	4.2
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	**N/A**	**N/A**	A	0.1	A	0.0

TABLE: A11-1

Somerset UBC Coral Gables

Approach LOS Summary (AM Peak Hour)

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
Existing AM Peak Hour Condition												
1	Segovia Street & Anastasia Avenue	Signalized	23.9	C	22.8	C	3.2	A	3.0	A	8.1	A
2	Segovia Street & University Court	Unsignalized	12.2	B	N/A	N/A	0.0	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	19.4	C	12.4	B	0.1	A	2.1	A	5.1	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.2	A	0.1	A	9.5	A	0.0	A	0.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A
Proposed AM Peak Hour Condition with Project Traffic (Scenario A)												
1	Segovia Street & Anastasia Avenue	Signalized	26.7	C	20.0	C	5.7	A	4.9	A	11.7	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	27.8	D	15.6	C	0.5	A	2.0	A	7.2	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	3.7	A	10.2	B	11.4	B	4.6	A
5	Cardena Street & Riviera Drive	Unsignalized	0.7	A	0.1	A	10.3	B	9.1	A	1.0	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	4.3	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	5.3	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	9.0	A	0.1	A
Proposed AM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	29.1	C	19.3	B	6.0	A	5.3	A	12.5	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	28.5	D	14.5	B	0.1	A	1.9	A	6.8	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.1	A	5.3	A	9.5	A	0.0	A	5.2	A
5	Cardena Street & Riviera Drive	Unsignalized	0.1	A	0.0	A	9.5	A	8.9	A	0.5	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.3	A	7.2	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.8	A	0.0	A	0.0	A	4.2	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

TABLE : A12

Somerset UBC Coral Gables

Intersection Level Of Service Summary - PM Peak Hour

PM Peak Hour			Existing Condition		Proposed Condition w/ School Traffic			
					Scenario A		Scenario B	
	Intersection	Intersection Control	LOS	Ave Veh Delay (s)	LOS	Ave Veh Delay (s)	LOS	Ave Veh Delay (s)
1	Segovia Street & Anastasia Avenue	Signalized	A	7.8	B	10.3	B	10.8
2	Segovia Street & University Court	Unsignalized	A	0.3	A	0.0	A	0.0
3	Segovia Street & Riviera Drive	Unsignalized	A	4.5	A	5.4	A	5.0
4	Cardena Street & Anastasia Avenue	Unsignalized	A	0.8	A	4.5	A	5.0
5	Cardena Street & Riviera Drive	Unsignalized	A	1.0	A	1.4	A	0.9
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	**N/A**	**N/A**	A	3.6	A	6.5
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	**N/A**	**N/A**	A	5.4	A	4.4
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	**N/A**	**N/A**	A	0.2	A	0.0

TABLE: A12-1

Somerset UBC Coral Gables

Approach LOS Summary (PM Peak Hour)

	Location	Intersection Control	EB Approach		WB Approach		NB Approach		SB Approach		Overall	
			Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS	Ave Veh Delay (sec)	LOS
Existing PM Peak Hour Condition												
1	Segovia Street & Anastasia Avenue	Signalized	23.6	C	23.8	C	2.9	A	2.8	A	7.8	A
2	Segovia Street & University Court	Unsignalized	12.4	B	N/A	N/A	0.1	A	0.0	A	0.3	A
3	Segovia Street & Riviera Drive	Unsignalized	14.7	B	11.9	B	0.0	A	2.8	A	4.5	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	0.2	A	9.1	A	10.2	B	0.8	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.2	A	9.4	A	9.2	A	1.0	A
Proposed PM Peak Hour Condition with Project Traffic (Scenario A)												
1	Segovia Street & Anastasia Avenue	Signalized	24.1	C	21.4	C	4.6	A	4.5	A	10.3	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	18.9	C	14.0	B	0.5	A	2.6	A	5.4	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.4	A	2.5	A	10.0	B	11.7	B	4.5	A
5	Cardena Street & Riviera Drive	Unsignalized	1.2	A	0.2	A	10.0	B	9.5	A	1.4	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	6.8	A	3.6	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	5.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	8.9	A	0.2	A
Proposed PM Peak Hour Condition with Project Traffic (Scenario B)												
1	Segovia Street & Anastasia Avenue	Signalized	25.5	C	20.8	C	4.8	A	4.9	A	10.8	B
2	Segovia Street & University Court	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	0.0	A	0.0	A
3	Segovia Street & Riviera Drive	Unsignalized	19.3	C	13.5	B	0.1	A	2.5	A	5.0	A
4	Cardena Street & Anastasia Avenue	Unsignalized	0.5	A	4.2	A	9.4	A	14.1	B	5.0	A
5	Cardena Street & Riviera Drive	Unsignalized	0.4	A	0.1	A	9.4	A	9.3	A	0.9	A
6	Driveway 1 (Entrance Only) & Cardena Street	Unsignalized	N/A	N/A	N/A	N/A	0.0	A	7.0	A	6.5	A
7	Driveway 2 (Exit Only) & Cardena Street	Unsignalized	N/A	N/A	8.7	A	0.0	A	0.0	A	4.4	A
8	Driveway 3 (Exit Only) & Riviera Drive	Unsignalized	0.0	A	0.0	A	N/A	N/A	0.0	A	0.0	A

Somerset UBC Coral Gables

Existing AM Peak Hour TMCs

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	27	42	10	46	7	4	341	1	4	174	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frt		0.95			0.99			1.00			0.99	
Flt Protected		0.98			0.99			1.00			1.00	
Satd. Flow (prot)		1734			1821			3536			3507	
Flt Permitted		0.85			0.95			0.95			0.95	
Satd. Flow (perm)		1493			1739			3371			3333	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	49	32	50	12	55	8	5	406	1	5	207	12
RTOR Reduction (vph)	0	43	0	0	7	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	88	0	0	68	0	0	412	0	0	220	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.8			8.8			41.2			41.2	
Effective Green, g (s)		8.8			8.8			41.2			41.2	
Actuated g/C Ratio		0.15			0.15			0.70			0.70	
Clearance Time (s)		5.0			5.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		223			269			2354			2327	
v/s Ratio Prot												
v/s Ratio Perm		c0.06			0.04			c0.12			0.07	
v/c Ratio		0.40			0.26			0.17			0.09	
Uniform Delay, d1		22.7			22.2			3.1			2.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.2			0.6			0.2			0.1	
Delay (s)		23.9			22.8			3.2			3.0	
Level of Service		C			C			A			A	
Approach Delay (s)		23.9			22.8			3.2			3.0	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	32.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	131	75	412	224
v/c Ratio	0.49	0.28	0.17	0.10
Control Delay	21.1	22.0	3.7	3.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.1	22.0	3.7	3.3
Queue Length 50th (ft)	27	22	20	9
Queue Length 95th (ft)	58	45	39	21
Internal Link Dist (ft)	451	565	235	157
Turn Bay Length (ft)				
Base Capacity (vph)	417	448	2357	2332
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	0.31	0.17	0.17	0.10

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	14	0	1	332	220	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	17	0	1	405	268	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					315	
pX, platoon unblocked						
vC, conflicting volume	477	138	276			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	477	138	276			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	517	885	1284			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	17	136	270	179	97
Volume Left	17	1	0	0	0
Volume Right	0	0	0	0	7
cSH	517	1284	1700	1700	1700
Volume to Capacity	0.03	0.00	0.16	0.11	0.06
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	12.2	0.1	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	12.2	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.3	HCM LOS		A
Intersection Capacity Utilization	19.0%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
3: Riviera Dr & Segovia St

Existing AM Peak Hour TMCs
Somerset UBC Coral Gables

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	104	15	2	20	41	4	292	1	53	168	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	121	17	2	23	48	5	340	1	62	195	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	557	669	98	648	668	170	195			341		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	557	669	98	648	668	170	195			341		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	66	98	99	93	94	100			95		
cM capacity (veh/h)	355	357	939	247	357	844	1375			1215		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	138	73	174	171	159	98
Volume Left	0	2	5	0	62	0
Volume Right	17	48	0	1	0	0
cSH	387	558	1375	1700	1215	1700
Volume to Capacity	0.36	0.13	0.00	0.10	0.05	0.06
Queue Length 95th (ft)	40	11	0	0	4	0
Control Delay (s)	19.4	12.4	0.2	0.0	3.4	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	19.4	12.4	0.1		2.1	
Approach LOS	C	B				

Intersection Summary				
Average Delay	5.1	HCM LOS	A	
Intersection Capacity Utilization	30.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis — Existing AM Peak Hour TMCs

4: Anastasia Av & Cardena St — Somerset UBC Coral Gables

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Volume (veh/h)	2	102	1	1	60	4	0	1	1	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	111	1	1	65	4	0	1	1	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	70			112			185	188	111	187	186	67
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	70			112			185	188	111	187	186	67
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1531			1478			774	706	942	770	707	996

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	114	71	2	0
Volume Left	2	1	0	0
Volume Right	1	4	1	0
cSH	1531	1478	897	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.2	0.1	9.5	0.0
Lane LOS	A	A	A	A
Approach Delay (s)	0.2	0.1	9.5	0.0
Approach LOS			A	A

Intersection Summary				
Average Delay	0.2	HCM LOS	A	
Intersection Capacity Utilization	16.5%	ICU Level of Service	A	
Analysis Period (min)	15			

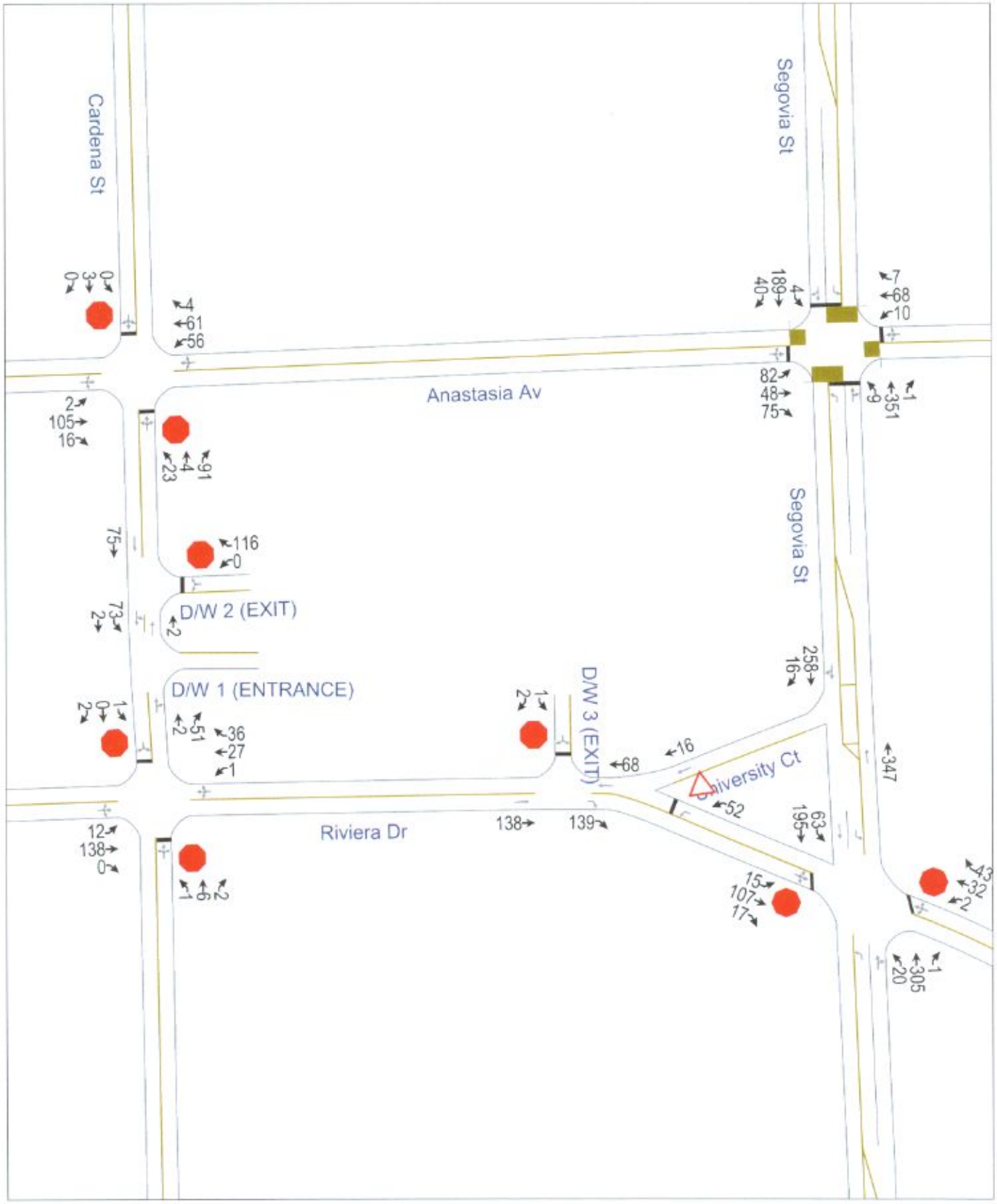
HCM Unsignalized Intersection Capacity Analysis
5: Riviera Dr & Cardena St

Existing AM Peak Hour TMCs
Somerset UBC Coral Gables

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	134	0	0	25	0	1	1	2	1	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	2	151	0	0	28	0	1	1	2	1	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	28			151			185	183	151	186	183	28
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	28			151			185	183	151	186	183	28
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1585			1431			773	710	899	771	710	1047

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	153	28	4	3
Volume Left	2	0	1	1
Volume Right	0	0	2	2
cSH	1585	1431	811	935
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.1	0.0	9.5	8.9
Lane LOS	A		A	A
Approach Delay (s)	0.1	0.0	9.5	8.9
Approach LOS			A	A

Intersection Summary				
Average Delay	0.5	HCM LOS	A	
Intersection Capacity Utilization	18.7%	ICU Level of Service	A	
Analysis Period (min)	15			


Cardena St
Segovia St
Anastasia Av
Segovia St
D/W 2 (EXIT)
D/W 1 (ENTRANCE)
D/W 3 (EXIT)
University Ct
Riviera Dr

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	48	75	10	68	7	9	351	1	4	189	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	1.00		1.00	0.97	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1736			1832		1770	1862		1770	1814	
Flt Permitted		0.85			0.96		0.59	1.00		0.48	1.00	
Satd. Flow (perm)		1511			1763		1102	1862		902	1814	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	98	57	89	12	81	8	11	418	1	5	225	48
RTOR Reduction (vph)	0	37	0	0	6	0	0	0	0	0	11	0
Lane Group Flow (vph)	0	207	0	0	95	0	11	419	0	5	262	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.2			12.2		37.8	37.8		37.8	37.8	
Effective Green, g (s)		12.2			12.2		37.8	37.8		37.8	37.8	
Actuated g/C Ratio		0.21			0.21		0.64	0.64		0.64	0.64	
Clearance Time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		312			365		706	1193		578	1162	
v/s Ratio Prot								c0.23			0.14	
v/s Ratio Perm		c0.14			0.05		0.01			0.01		
v/c Ratio		0.66			0.26		0.02	0.35		0.01	0.23	
Uniform Delay, d1		21.5			19.6		3.8	4.9		3.8	4.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.2			0.4		0.0	0.8		0.0	0.4	
Delay (s)		26.7			20.0		3.9	5.7		3.9	4.9	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		26.7			20.0			5.7			4.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	244	101	11	419	5	273
v/c Ratio	0.70	0.27	0.02	0.35	0.01	0.23
Control Delay	28.0	19.3	5.0	6.6	5.0	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	19.3	5.0	6.6	5.0	5.1
Queue Length 50th (ft)	63	27	1	61	1	31
Queue Length 95th (ft)	112	55	6	104	4	59
Internal Link Dist (ft)	451	565		199		252
Turn Bay Length (ft)			130		150	
Base Capacity (vph)	419	453	705	1194	578	1174
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.22	0.02	0.35	0.01	0.23

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↑	↑	
Volume (veh/h)	0	0	0	347	258	16
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	0	0	0	423	315	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					279	
pX, platoon unblocked	0.98	0.98	0.98			
vC, conflicting volume	748	324	334			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	732	301	311			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	380	724	1225			

Direction, Lane #	NB 1	SB 1
Volume Total	423	334
Volume Left	0	0
Volume Right	0	20
cSH	1700	1700
Volume to Capacity	0.25	0.20
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	21.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	107	17	2	32	43	20	305	1	63	195	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	17	124	20	2	37	50	23	355	1	73	227	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	843	776	227	857	775	355	227			356		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	843	776	227	857	775	355	227			356		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	59	98	99	88	93	98			94		
cM capacity (veh/h)	224	303	813	174	304	689	1342			1203		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	162	90	23	356	73	227
Volume Left	17	2	23	0	73	0
Volume Right	20	50	0	1	0	0
cSH	316	429	1342	1700	1203	1700
Volume to Capacity	0.51	0.21	0.02	0.21	0.06	0.13
Queue Length 95th (ft)	69	19	1	0	5	0
Control Delay (s)	27.8	15.6	7.7	0.0	8.2	0.0
Lane LOS	D	C	A		A	
Approach Delay (s)	27.8	15.6	0.5		2.0	
Approach LOS	D	C				

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	105	16	56	61	4	23	4	91	0	3	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	114	17	61	66	4	25	4	99	0	3	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	71			132			319	320	123	418	326	68
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	71			132			319	320	123	418	326	68
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			96	99	89	100	99	100
cM capacity (veh/h)	1530			1454			610	571	928	468	567	995

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	134	132	128	3
Volume Left	2	61	25	0
Volume Right	17	4	99	0
cSH	1530	1454	827	567
Volume to Capacity	0.00	0.04	0.16	0.01
Queue Length 95th (ft)	0	3	14	0
Control Delay (s)	0.1	3.7	10.2	11.4
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	3.7	10.2	11.4
Approach LOS			B	B

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	138	0	1	27	36	1	6	2	1	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	13	155	0	1	30	40	1	7	2	1	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	71			155			237	255	155	240	235	51
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	71			155			237	255	155	240	235	51
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	99	100	100	100	100
cM capacity (veh/h)	1530			1425			710	642	891	701	659	1018

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	169	72	10	3
Volume Left	13	1	1	1
Volume Right	0	40	2	2
cSH	1530	1425	693	884
Volume to Capacity	0.01	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	1	0
Control Delay (s)	0.7	0.1	10.3	9.1
Lane LOS	A	A	B	A
Approach Delay (s)	0.7	0.1	10.3	9.1
Approach LOS			B	A

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	2	51	73	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2	55	79	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	191	30			58	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191	30			58	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			95	
cM capacity (veh/h)	757	1045			1547	

Direction, Lane #	NB 1	SB 1
Volume Total	58	82
Volume Left	0	79
Volume Right	55	0
cSH	1700	1547
Volume to Capacity	0.03	0.05
Queue Length 95th (ft)	0	4
Control Delay (s)	0.0	7.3
Lane LOS		A
Approach Delay (s)	0.0	7.3
Approach LOS		

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	14.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	116	2	0	0	75
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	126	2	0	0	82
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	84	2			2	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	84	2			2	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			100	
cM capacity (veh/h)	918	1082			1620	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	126	2	82
Volume Left	0	0	0
Volume Right	126	0	0
cSH	1082	1700	1700
Volume to Capacity	0.12	0.00	0.05
Queue Length 95th (ft)	10	0	0
Control Delay (s)	8.8	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		⋔	
Volume (veh/h)	0	138	68	0	1	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	150	74	0	1	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	74				224	74
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	74				224	74
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1526				764	988

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	150	74	3
Volume Left	0	0	1
Volume Right	0	0	2
cSH	1700	1700	900
Volume to Capacity	0.09	0.04	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	9.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	9.0
Approach LOS			A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	17.3%	ICU Level of Service	A
Analysis Period (min)	15		

Somerset UBC Coral Gables

Proposed AM Peak Hour Condition (Scenario B)

HCM Signalized Intersection Capacity Analysis
1: Anastasia Av & Segovia St

Somerset UBC Coral Gables
Proposed AM Peak Hour Condition (Scenario B)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	97	48	89	10	68	7	52	351	1	4	179	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	1.00		1.00	0.96	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1731			1832		1770	1862		1770	1787	
Flt Permitted		0.85			0.95		0.58	1.00		0.48	1.00	
Satd. Flow (perm)		1494			1759		1075	1862		864	1787	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	115	57	106	12	81	8	62	418	1	5	213	79
RTOR Reduction (vph)	0	39	0	0	5	0	0	0	0	0	21	0
Lane Group Flow (vph)	0	239	0	0	96	0	62	419	0	5	271	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		13.0			13.0		37.0	37.0		37.0	37.0	
Effective Green, g (s)		13.0			13.0		37.0	37.0		37.0	37.0	
Actuated g/C Ratio		0.22			0.22		0.63	0.63		0.63	0.63	
Clearance Time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		329			388		674	1169		561	1121	
v/s Ratio Prot								c0.23			0.15	
v/s Ratio Perm		c0.16			0.05		0.06			0.01		
v/c Ratio		0.73			0.25		0.09	0.36		0.01	0.24	
Uniform Delay, d1		21.3			18.0		4.4	5.3		4.1	4.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		7.8			0.3		0.3	0.9		0.0	0.5	
Delay (s)		29.1			18.3		4.6	6.2		4.2	5.3	
Level of Service		C			B		A	A		A	A	
Approach Delay (s)		29.1			18.3			6.0			5.3	
Approach LOS		C			B			A			A	

Intersection Summary

HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	278	101	62	419	5	292
v/c Ratio	0.75	0.26	0.09	0.36	0.01	0.26
Control Delay	31.3	18.7	5.5	6.9	5.0	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.3	18.7	5.5	6.9	5.0	5.0
Queue Length 50th (ft)	72	26	8	67	1	34
Queue Length 95th (ft)	129	55	20	104	4	59
Internal Link Dist (ft)	451	565		199		252
Turn Bay Length (ft)			130		150	
Base Capacity (vph)	418	452	674	1168	560	1140
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.22	0.09	0.36	0.01	0.26

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↑	↑↓	
Volume (veh/h)	0	0	0	390	272	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	0	0	0	476	332	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					279	
pX, platoon unblocked	0.99	0.99	0.99			
vC, conflicting volume	811	335	339			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	805	325	330			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	349	710	1220			

Direction, Lane #	NB 1	SB 1
Volume Total	476	339
Volume Left	0	0
Volume Right	0	7
cSH	1700	1700
Volume to Capacity	0.28	0.20
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	23.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	107	16	2	21	54	5	337	1	63	209	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	17	124	19	2	24	63	6	392	1	73	243	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	868	784	243	874	794	392	243			393		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	858	784	243	874	794	392	243			393		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	58	98	99	92	93	100			94		
cM capacity (veh/h)	220	399	796	170	299	666	1323			1166		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	160	90	6	393	73	243
Volume Left	17	2	6	0	73	0
Volume Right	19	63	0	1	0	0
cSH	309	469	1323	1700	1166	1700
Volume to Capacity	0.52	0.19	0.00	0.23	0.06	0.14
Queue Length 95th (ft)	70	17	0	0	5	0
Control Delay (s)	28.5	14.5	7.7	0.0	8.3	0.0
Lane LOS	D	B	A		A	
Approach Delay (s)	28.5	14.5	0.1		1.9	
Approach LOS	D	B				

Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	45.4%	Ou Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis — Somerset UBC Coral Gables

4 Anastasia Av & Cardena St — Proposed AM Peak Hour Condition (Scenario B)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	105	1	125	61	4	0	1	120	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	114	1	136	66	4	0	1	130	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	71			115			459	461	115	590	460	68
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	71			115			459	461	115	590	460	68
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			91			100	100	88	100	100	100
cM capacity (veh/h)	1530			1474			475	457	938	334	452	995

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	117	207	132	0
Volume Left	2	136	0	0
Volume Right	1	4	130	0
cSH	1530	1474	930	1700
Volume to Capacity	0.00	0.09	0.14	0.00
Queue Length 95th (ft)	0	6	12	0
Control Delay (s)	0.1	5.3	9.5	0.0
Lane LOS	A	A	A	A
Approach Delay (s)	0.1	5.3	9.5	0.0
Approach LOS			A	A

Intersection Summary				
Average Delay		5.2		
Intersection Capacity Utilization		31.2%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
5: Riviera Dr & Cardena St

Somerset UBC Coral Gables
Proposed AM Peak Hour Condition (Scenario B)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	138	0	0	26	0	1	1	2	1	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	2	155	0	0	29	0	1	1	2	1	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	29			155			191	165	158	192	189	29
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	29			155			191	165	158	192	189	29
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1584			1425			765	795	891	765	795	1046

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	157	29	4	3
Volume Left	2	0	1	1
Volume Right	0	0	2	2
cSH	1584	1425	805	931
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.1	0.0	9.5	8.9
Lane LOS	A		A	A
Approach Delay (s)	0.1	0.0	9.5	8.9
Approach LOS			A	A

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↑
Volume (veh/h)	0	0	2	0	124	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2	0	135	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	274	2			2	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	274	2			2	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			93	
cM capacity (veh/h)	656	1082			1620	

Direction, Lane #	NB 1	SB 1
Volume Total	2	137
Volume Left	0	135
Volume Right	0	0
cSH	1700	1620
Volume to Capacity	0.00	0.08
Queue Length 95th (ft)	0	7
Control Delay (s)	0.0	7.3
Lane LOS		A
Approach Delay (s)	0.0	7.3
Approach LOS		

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	17.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	119	2	0	0	126
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	129	2	0	0	137
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	139	2			2	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	139	2			2	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			100	
cM capacity (veh/h)	854	1082			1620	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	129	2	137
Volume Left	0	0	0
Volume Right	129	0	0
cSH	1082	1700	1700
Volume to Capacity	0.12	0.00	0.08
Queue Length 95th (ft)	10	0	0
Control Delay (s)	8.8	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	20.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Volume (veh/h)	0	141	32	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	153	35	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	35				188	35
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	35				188	35
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1577				801	1038

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	153	35	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.09	0.02	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay		0.0	
Intersection Capacity Utilization		10.8%	ICU Level of Service A
Analysis Period (min)		15	

Existing PM Peak Hour TMCs

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	19	36	8	62	10	12	277	9	7	229	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frt		0.94			0.98			1.00			0.99	
Flt Protected		0.98			1.00			1.00			1.00	
Satd. Flow (prot)		1726			1821			3517			3512	
Flt Permitted		0.88			0.96			0.94			0.96	
Satd. Flow (perm)		1554			1766			3322			3332	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	36	22	42	9	72	12	14	322	10	8	266	12
RTOR Reduction (vph)	0	35	0	0	10	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	64	0	0	83	0	0	343	0	0	283	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.2			8.2			41.8			41.8	
Effective Green, g (s)		8.2			8.2			41.8			41.8	
Actuated g/C Ratio		0.14			0.14			0.71			0.71	
Clearance Time (s)		5.0			5.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		216			244			2354			2351	
v/s Ratio Prot												
v/s Ratio Perm		0.04			c0.05			c0.10			0.08	
v/c Ratio		0.30			0.34			0.15			0.12	
Uniform Delay, d1		22.9			23.0			2.6			2.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			0.8			0.1			0.1	
Delay (s)		23.6			23.8			2.9			2.8	
Level of Service		C			C			A			A	
Approach Delay (s)		23.6			23.8			2.9			2.8	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	100	93	346	286
v/c Ratio	0.40	0.37	0.15	0.12
Control Delay	19.3	24.0	3.2	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.3	24.0	3.2	3.1
Queue Length 50th (ft)	19	27	15	12
Queue Length 95th (ft)	49	56	30	25
Internal Link Dist (ft)	451	585	235	157
Turn Bay Length (ft)				
Base Capacity (vph)	427	455	2358	2364
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	0.23	0.20	0.15	0.12

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	0	3	286	260	14
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	14	0	4	340	310	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					315	
pX, platoon unblocked						
vC, conflicting volume	435	163	326			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	435	163	326			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	502	853	1230			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	14	117	227	206	120
Volume Left	14	4	0	0	0
Volume Right	0	0	0	0	17
cSH	502	1230	1700	1700	1700
Volume to Capacity	0.03	0.00	0.13	0.12	0.07
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	12.4	0.3	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	12.4	0.1		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3	HCM LOS	A
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	35	5	4	31	88	1	194	5	86	173	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	38	5	4	34	97	1	213	5	95	190	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	602	601	96	527	598	109	191			219		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	602	601	96	527	598	109	191			219		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	90	99	99	91	90	100			93		
cM capacity (veh/h)	303	384	942	377	385	923	1380			1348		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	44	135	108	112	190	96
Volume Left	0	4	1	0	95	0
Volume Right	5	97	0	5	0	1
cSH	414	650	1380	1700	1348	1700
Volume to Capacity	0.11	0.20	0.00	0.07	0.07	0.06
Queue Length 95th (ft)	9	19	0	0	6	0
Control Delay (s)	14.7	11.9	0.1	0.0	4.2	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	14.7	11.9	0.0		2.8	
Approach LOS	B	B				

Intersection Summary				
Average Delay	4.5	HCM LOS	A	
Intersection Capacity Utilization	33.5%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis — Existing PM Peak Hour TMCs

4: Anastasia Av & Cardena St — Somerset UBC Coral Gables

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	73	2	2	88	0	1	1	6	1	1	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	6	89	2	2	107	0	1	1	7	1	1	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	107			91			215	215	90	223	216	107
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	107			91			215	215	90	223	216	107
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	99	100	100	100
cM capacity (veh/h)	1483			1503			737	679	967	723	678	947

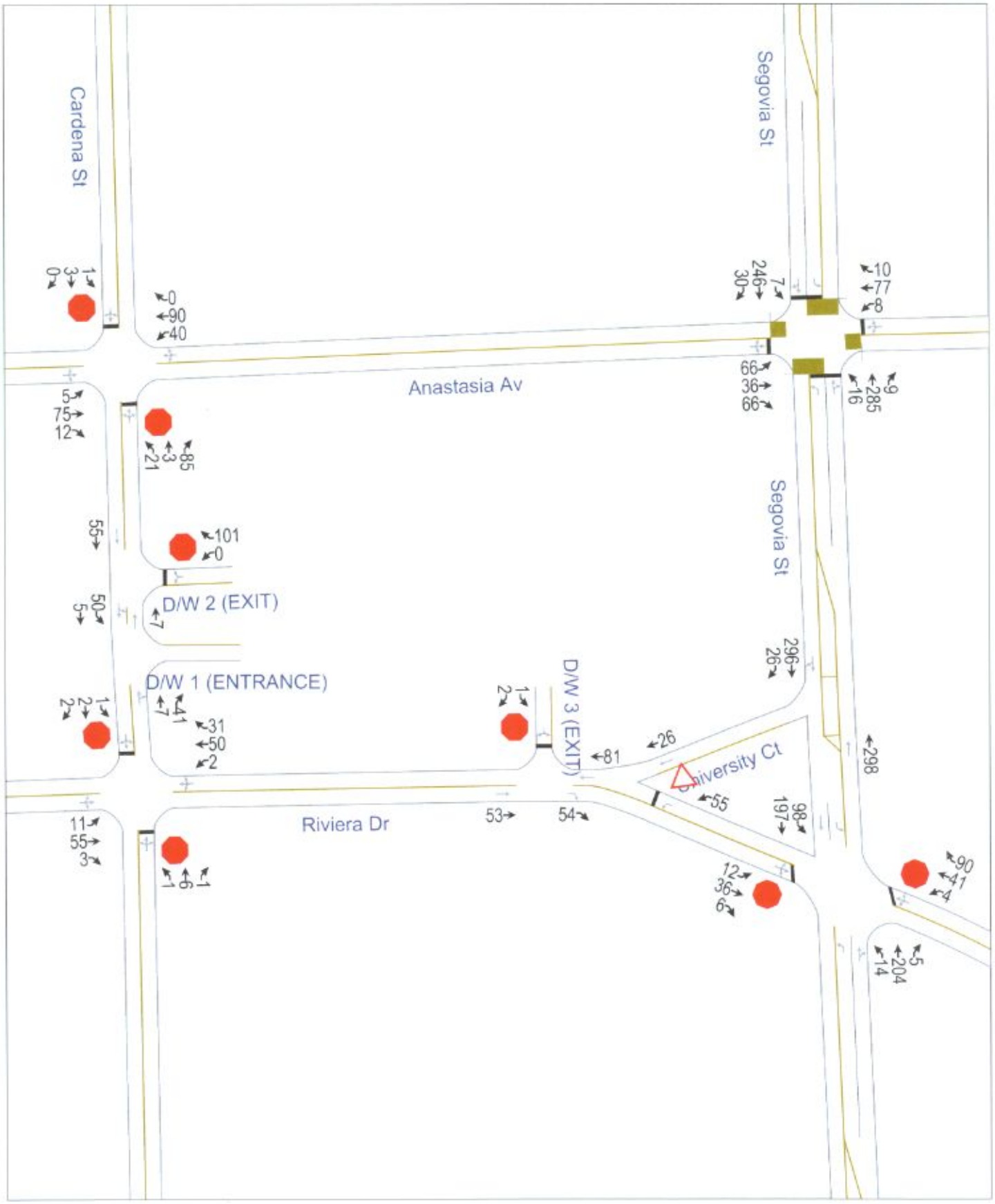
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	98	110	10	2
Volume Left	6	2	1	1
Volume Right	2	0	7	0
cSH	1483	1503	865	700
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	0.5	0.2	9.1	10.2
Lane LOS	A	A	A	B
Approach Delay (s)	0.5	0.2	9.1	10.2
Approach LOS			A	B

Intersection Summary				
Average Delay	0.8	HCM LOS	A	
Intersection Capacity Utilization	16.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	54	3	1	47	2	1	2	1	1	2	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	4	65	4	1	57	2	1	2	1	1	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	59			69			138	136	67	137	136	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	59			69			138	136	67	137	136	58
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1545			1532			827	753	997	829	752	1008

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	72	60	5	6
Volume Left	4	1	1	1
Volume Right	4	2	1	2
cSH	1545	1532	821	855
Volume to Capacity	0.00	0.00	0.01	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.4	0.2	9.4	9.2
Lane LOS	A	A	A	A
Approach Delay (s)	0.4	0.2	9.4	9.2
Approach LOS			A	A

Intersection Summary				
Average Delay	1.0	HCM LOS	A	
Intersection Capacity Utilization	14.6%	ICU Level of Service	A	
Analysis Period (min)	15			


Cardena St
Segovia St
Anastasia Av
Segovia St
D/W 2 (EXIT)
D/W 1 (ENTRANCE)
D/W 3 (EXIT)
Riviera Dr
1
3
0
0
90
40
7
246
30
10
77
8
66
36
66
9
285
16
5
75
12
21
3
85
55
101
0
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296
26
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81
298
55
98
197
53
54
11
55
3
1
6
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12
36
6
90
41
4
5
204
14

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	36	66	8	77	10	16	285	9	7	246	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	1.00		1.00	0.98	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1730			1828		1770	1855		1770	1832	
Flt Permitted		0.86			0.97		0.56	1.00		0.55	1.00	
Satd. Flow (perm)		1522			1786		1046	1855		1019	1832	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	77	42	77	9	90	12	19	331	10	8	286	35
RTOR Reduction (vph)	0	43	0	0	8	0	0	2	0	0	6	0
Lane Group Flow (vph)	0	153	0	0	103	0	19	339	0	8	315	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		10.8			10.8		39.2	39.2		39.2	39.2	
Effective Green, g (s)		10.8			10.8		39.2	39.2		39.2	39.2	
Actuated g/C Ratio		0.18			0.18		0.66	0.66		0.66	0.66	
Clearance Time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		279			327		695	1232		677	1217	
v/s Ratio Prot								c0.18			0.17	
v/s Ratio Perm		c0.10			0.06		0.02			0.01		
v/c Ratio		0.55			0.31		0.03	0.28		0.01	0.26	
Uniform Delay, d1		21.9			20.9		3.4	4.1		3.3	4.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.2			0.6		0.1	0.6		0.0	0.5	
Delay (s)		24.1			21.4		3.5	4.6		3.4	4.5	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		24.1			21.4			4.6			4.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	196	111	19	341	8	321
v/c Ratio	0.61	0.33	0.03	0.28	0.01	0.26
Control Delay	23.5	20.6	4.8	5.4	4.7	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.5	20.6	4.8	5.4	4.7	5.1
Queue Length 50th (ft)	46	31	2	40	1	36
Queue Length 95th (ft)	88	60	9	84	5	76
Internal Link Dist (ft)	451	565		199		252
Turn Bay Length (ft)			130		150	
Base Capacity (vph)	426	461	695	1234	677	1224
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.24	0.03	0.28	0.01	0.26

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↑	↑	
Volume (veh/h)	0	0	0	298	296	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	0	0	355	352	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					279	
pX, platoon unblocked	0.96	0.96	0.96			
vC, conflicting volume	723	368	383			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	687	317	333			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	395	693	1173			

Direction, Lane #	NB 1	SB 1
Volume Total	355	383
Volume Left	0	0
Volume Right	0	31
cSH	1700	1700
Volume to Capacity	0.21	0.23
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	20.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	36	6	4	41	90	14	204	5	98	197	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	13	40	7	4	45	99	15	224	5	108	216	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	808	692	216	716	690	227	216			230		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	808	692	216	716	690	227	216			230		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	88	99	98	87	88	99			92		
cM capacity (veh/h)	220	334	823	290	335	812	1353			1338		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	59	148	15	230	108	216
Volume Left	13	4	15	0	108	0
Volume Right	7	99	0	5	0	0
cSH	318	547	1353	1700	1338	1700
Volume to Capacity	0.19	0.27	0.01	0.14	0.08	0.13
Queue Length 95th (ft)	17	27	1	0	7	0
Control Delay (s)	18.9	14.0	7.7	0.0	7.9	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	18.9	14.0	0.5		2.6	
Approach LOS	C	B				

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	75	12	40	90	0	21	3	85	1	3	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	6	91	15	49	110	0	26	4	104	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	110			106			320	318	99	424	326	110
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	110			106			320	318	99	424	326	110
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			96	99	89	100	99	100
cM capacity (veh/h)	1480			1485			612	576	957	466	571	944

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	112	159	133	5
Volume Left	6	49	26	1
Volume Right	15	0	104	0
cSH	1480	1485	849	540
Volume to Capacity	0.00	0.03	0.16	0.01
Queue Length 95th (ft)	0	3	14	1
Control Delay (s)	0.4	2.5	10.0	11.7
Lane LOS	A	A	B	B
Approach Delay (s)	0.4	2.5	10.0	11.7
Approach LOS			B	B

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	55	3	2	50	31	1	6	1	1	2	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	13	66	4	2	60	37	1	7	1	1	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	98			70			182	197	68	183	180	79
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	98			70			182	197	68	183	180	79
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	99	100	100	100	100
cM capacity (veh/h)	1496			1531			769	691	995	765	706	982

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	83	100	10	6
Volume Left	13	2	1	1
Volume Right	4	37	1	2
cSH	1496	1531	728	809
Volume to Capacity	0.01	0.00	0.01	0.01
Queue Length 95th (ft)	1	0	1	1
Control Delay (s)	1.2	0.2	10.0	9.5
Lane LOS	A	A	B	A
Approach Delay (s)	1.2	0.2	10.0	9.5
Approach LOS			B	A

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	7	41	50	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	8	45	54	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	144	30			52	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	144	30			52	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			97	
cM capacity (veh/h)	819	1045			1554	

Direction, Lane #	NB 1	SB 1
Volume Total	52	60
Volume Left	0	54
Volume Right	45	0
cSH	1700	1554
Volume to Capacity	0.03	0.03
Queue Length 95th (ft)	0	3
Control Delay (s)	0.0	6.8
Lane LOS		A
Approach Delay (s)	0.0	6.8
Approach LOS		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	13.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	101	7	0	0	55
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	110	8	0	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	67	8			8	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	67	8			8	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	90			100	
cM capacity (veh/h)	938	1075			1613	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	110	8	60
Volume Left	0	0	0
Volume Right	110	0	0
cSH	1075	1700	1700
Volume to Capacity	0.10	0.00	0.04
Queue Length 95th (ft)	9	0	0
Control Delay (s)	8.7	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.7	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	16.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		⋎	
Volume (veh/h)	0	53	81	0	1	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	58	88	0	1	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	88				146	88
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	88				146	88
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1508				847	970

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	58	88	3
Volume Left	0	0	1
Volume Right	0	0	2
cSH	1700	1700	925
Volume to Capacity	0.03	0.05	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	8.9
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.9
Approach LOS			A

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		

Anastasia Av
Anastasia Av
Anastasia Av
Segovia St
D/W 2 (EXIT)
D/W 1 (ENTRANCE)
D/W 3 (EXIT)
Riviera Dr
Riviera Dr

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	37	77	8	77	10	48	285	9	7	236	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	1.00		1.00	0.97	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1727			1828		1770	1855		1770	1813	
Flt Permitted		0.86			0.97		0.55	1.00		0.54	1.00	
Satd. Flow (perm)		1508			1785		1025	1855		1014	1813	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	92	43	90	9	90	12	56	331	10	8	274	59
RTOR Reduction (vph)	0	44	0	0	8	0	0	2	0	0	11	0
Lane Group Flow (vph)	0	181	0	0	103	0	56	339	0	8	322	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		11.5			11.5		38.5	38.5		38.5	38.5	
Effective Green, g (s)		11.5			11.5		38.5	38.5		38.5	38.5	
Actuated g/C Ratio		0.19			0.19		0.65	0.65		0.65	0.65	
Clearance Time (s)		5.0			5.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		294			348		669	1210		662	1183	
v/s Ratio Prot								c0.18			0.18	
v/s Ratio Perm		c0.12			0.05		0.05			0.01		
v/c Ratio		0.61			0.30		0.08	0.28		0.01	0.27	
Uniform Delay, d1		21.7			20.3		3.8	4.4		3.6	4.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		3.8			0.5		0.2	0.6		0.0	0.5	
Delay (s)		25.5			20.8		4.0	4.9		3.6	4.8	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		25.5			20.8			4.8			4.9	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	225	111	56	341	8	333
v/c Ratio	0.66	0.31	0.08	0.28	0.01	0.28
Control Delay	25.6	19.7	5.2	5.8	4.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	19.7	5.2	5.8	4.9	5.3
Queue Length 50th (ft)	54	30	6	44	1	38
Queue Length 95th (ft)	102	60	19	84	5	76
Internal Link Dist (ft)	451	585		199		252
Turn Bay Length (ft)			130		150	
Base Capacity (vph)	424	461	668	1211	660	1192
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.24	0.08	0.28	0.01	0.28

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↑	↑	
Volume (veh/h)	0	0	0	330	307	16
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	0	0	393	365	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					279	
pX, platoon unblocked	0.96	0.96	0.96			
vC, conflicting volume	768	375	385			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	738	329	339			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	378	685	1172			

Direction, Lane #	NB 1	SB 1
Volume Total	393	385
Volume Left	0	0
Volume Right	0	19
cSH	1700	1700
Volume to Capacity	0.23	0.23
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	20.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis — Somerset UBC Coral Gables

3: Riviera Dr & Segovia St — Proposed PM Peak Hour Condition (Scenario 6)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	36	5	4	32	99	4	227	5	97	209	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	13	40	5	4	35	109	4	249	5	107	230	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											413	
pX, platoon unblocked												
vC, conflicting volume	627	707	230	729	704	252	230			255		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	627	707	230	729	704	252	230			255		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	88	99	98	89	86	100			92		
cM capacity (veh/h)	215	330	810	266	331	786	1333			1310		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	58	148	4	258	107	230
Volume Left	13	4	4	0	107	0
Volume Right	5	109	0	5	0	0
cSH	310	571	1338	1700	1310	1700
Volume to Capacity	0.19	0.26	0.00	0.15	0.08	0.14
Queue Length 95th (ft)	17	26	0	0	7	0
Control Delay (s)	19.3	13.5	7.7	0.0	8.0	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	19.3	13.5	0.1		2.5	
Approach LOS	C	B				

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	36.0%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	75	2	93	90	0	1	1	110	1	1	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	6	91	2	113	110	0	1	1	134	1	1	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					531							
pX, platoon unblocked												
vC, conflicting volume	110			94			442	441	93	575	443	110
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	110			94			442	441	93	575	443	110
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			100	100	86	100	100	100
cM capacity (veh/h)	1480			1500			493	470	964	346	469	944

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	100	223	137	2
Volume Left	6	113	1	1
Volume Right	2	0	134	0
cSH	1480	1500	947	598
Volume to Capacity	0.00	0.08	0.14	0.01
Queue Length 95th (ft)	0	6	13	0
Control Delay (s)	0.5	4.2	9.4	14.1
Lane LOS	A	A	A	B
Approach Delay (s)	0.5	4.2	9.4	14.1
Approach LOS			A	B

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	30.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	55	3	1	49	2	1	2	1	1	2	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	4	66	4	1	59	2	1	2	1	1	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	61			70			142	139	68	140	140	60
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	61			70			142	139	68	140	140	60
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1542			*93*			822	749	995	825	749	1005

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	73	63	5	5
Volume Left	4	1	1	1
Volume Right	4	2	1	2
cSH	1542	1531	819	851
Volume to Capacity	0.00	0.00	0.01	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.4	0.1	9.4	9.3
Lane LOS	A	A	A	A
Approach Delay (s)	0.4	0.1	9.4	9.3
Approach LOS			A	A

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	14.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑			↓
Volume (veh/h)	0	0	7	0	91	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	8	0	99	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	211	8			8	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	211	8			8	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			94	
cM capacity (veh/h)	730	1075			1613	

Direction, Lane #	NB 1	SB 1
Volume Total	8	104
Volume Left	0	99
Volume Right	0	0
cSH	1700	1613
Volume to Capacity	0.00	0.06
Queue Length 95th (ft)	0	5
Control Delay (s)	0.0	7.0
Lane LOS		A
Approach Delay (s)	0.0	7.0
Approach LOS		

Intersection Summary			
Average Delay	6.5		
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	104	7	0	0	96
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	113	8	0	0	104
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	112	8			8	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112	8			8	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			100	
cM capacity (veh/h)	885	1075			1613	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	113	8	104
Volume Left	0	0	0
Volume Right	113	0	0
cSH	1075	1700	1700
Volume to Capacity	0.11	0.00	0.06
Queue Length 95th (ft)	9	0	0
Control Delay (s)	8.7	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.7	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	18.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Volume (veh/h)	0	53	52	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	58	57	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	57				114	57
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	57				114	57
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1548				882	1010

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	58	57	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.03	0.03	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix G: Accumulation Assessment

TABLE A13

Somerset UBC Coral Gables

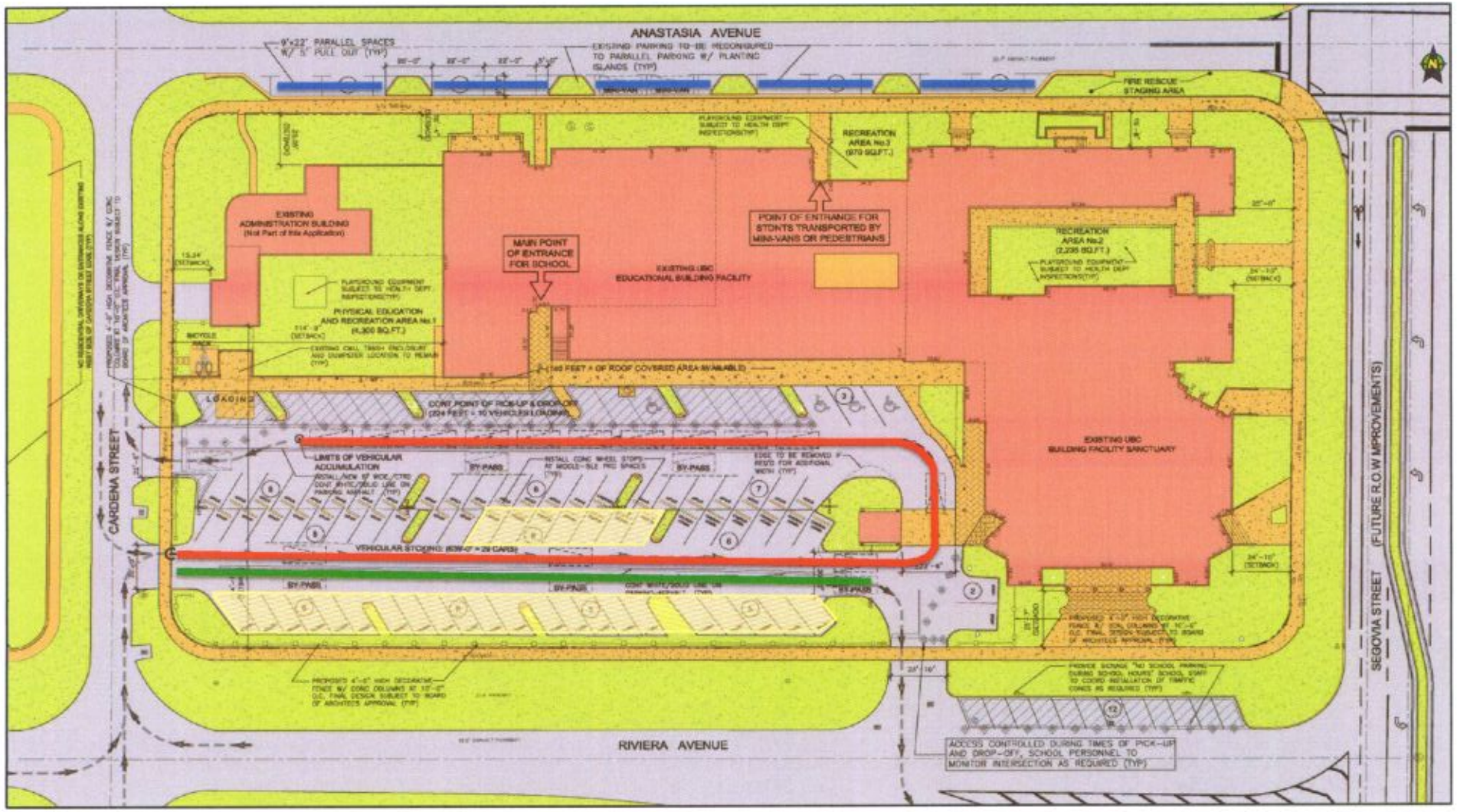
Vehicular Stacking Capacity

Zone	Location Description	Distance	Units	Vehicle Type	Vehicle Length (ft)	Vehicles Accommodated
1	Vehicle Stacking Area	639	LF	Car/Van	22	29
2	Van Stacking Area (9 Provided, None Utilized)	200	LF	Car/Van	22	0
3	Visitor Parking Spaces (29 Provided, None Utilized)					0
					Total Stacking Capacity	29

FIGURE A1

Somerset UBC Coral Gables

Vehicle Accumulation Graph



ZONE 1 Stacking Area for Passenger Vehicles (Capacity for 29 Vehicles)

ZONE 2 Stacking Area for Vans (Not utilized in the analysis)

ZONE 3 Visitors Parking Spaces (Not utilized in the analysis)

ZONE 4 Double Stacking (Capacity for 10 vehicles) (Not utilized in the analysis)

TABLE: A14

Somerset UBC Coral Gables

Accumulation Analysis Summary - Three Arrivals & Three Dismissals

Description	Stacking Spaces	Projected Vehicle Accumulation			Percent Accommodated		
		Phase I	Phase II	Phase III	Phase I	Phase II	Phase III
Max. Arrival	29	3.82	5.09	6.80	760%	570%	427%
Max. Dismissal	29	16.26	21.68	28.97	178%	134%	100%

Notes: Phase I consists of 260 total students.
Phase II consists of 348 total students.
Phase III consists of 436 total students.

AM PEAK ACCUMULATION ASSESSMENT (Phase I - 260 Students)

for a New Public School (Countywide)

New School Name	[illegible]	Somerset UBC Coral Gables	
Surrogate School Name	[illegible]	Doral Academy Elementary	
Date / Day / Time of Data Collection		2/9/2010 7:00 AM - 9:00 AM	[illegible]
Surrogate Enrollment		798	Total number of students, E
Capacity of New School		87	Student Stations, C (**Based on three (3) Arrivals. Max. Arrival of 87 Students of 260 Students**)
Multiplier	[illegible]	0.11	[C / E]
Surrogate Accumulations	[illegible]	35	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		3.82	passenger vehicles
		0.11	large school buses
		N/A	student vehicles
Provided Spaces	[illegible]	29	passenger vehicles (**See Table A14**)
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	[illegible]	760%	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

[illegible]

Please print data collector name, title, mailing address, and phone number

Signature of Data Collector

AM PEAK ACCUMULATION ASSESSMENT (Phase II - 348 Students)

for a New Public School (Countywide)

	Notes		
New School Name		Somerset UBC Coral Gables	
Surrogate School Name		Doral Academy Elementary	
Date / Day / Time of Data Collection		2/9/2010 7:00 AM - 9:00 AM	Collected based on accumulation of student loading vehicles at the surrogate school on Tuesday, Wednesday or Thursday for elementary, middle and/or high schools
Surrogate Enrollment		798	Total number of students, E
Capacity of New School		116	Student Stations, C (**Based on three (3) Arrivals. Max. Arrival of 116 Students of 348 Students**)
Multiplier	2	0.15	[C / E]
Surrogate Accumulations	3	35	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		5.09	passenger vehicles
		0.15	large school buses
		N/A	student vehicles
Provided Spaces	5	29	passenger vehicles (**See Table A14**)
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	6	570%	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

1. [illegible]

2. [illegible]

3. [illegible]

[illegible]

4. [illegible]

Please print data collector name, title, mailing address, and phone number:

Signature of Data Collector

HLB 2001

AM PEAK ACCUMULATION ASSESSMENT (Phase III - 436 Students)

for a New Public School (Countywide)

	Notes		
New School Name		**Somerset UBC Coral Gables**	
Surrogate School Name	1	**Doral Academy Elementary**	
Date / Day / Time of Data Collection		**2/9/2010 7:00 AM - 9:00 AM**	(collect maximum accumulation of staged loading vehicles at or around dismissal time on Tuesday, Wednesday or Thursday for elementary, middle, and/or high schools)
Surrogate Enrollment		**798**	Total number of students, E
Capacity of New School		**155**	Student Stations, C **(Based on three (3) Arrivals. Max. Arrival of 155 Students of 436 Students)**
Multiplier	2	**0.19**	[C / E]
Surrogate Accumulations	3	**35**	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		**6.80**	passenger vehicles
		0.19	large school buses
		N/A	student vehicles
Provided Spaces	4	**29**	passenger vehicles **(See Table A13)**
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	5	**427%**	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

1 The facility to be used as a surrogate school will be determined by MDPWD staff. The surrogate school data is used to form the basis for the projected accumulations.

2 This figure is used to determine projected accumulations at the new school by applying it to existing surrogate school accumulations. It is calculated by dividing the new school student station capacity by the surrogate school student enrollment at the time of accumulation data collection.

3 These are all the school related loading vehicles which are, legally or illegally, staged or parked, on or neighboring the school.

4 Information must be obtained from a field survey or proposed site plan indicating the total spaces to be provided for each vehicle type at 22 linear feet per passenger vehicle and/or commercial van, and 50 linear feet per large school bus. Credit may be taken for legal parking in paved swale areas along school property frontage. A sketch or site plan (maximum 40 scale) showing the location of these spaces, the type of spaces in each area, and linear footage provided for each area including the width of bus bays is required. On-street bus loading bays are required to have a minimum 14 foot width, on-street passenger vehicle loading bays are required to have a minimum of 10 foot width, and on-street passenger vehicle parking areas are required to have a minimum 8 foot width, unless otherwise allowed.

5 This is calculated as: [(Provided Spaces / Projected Accumulations) x 100], for each vehicle type. MDPWD requires all of the large school bus and student vehicle (if applicable) accumulations to be accommodated. The Department also expects 100 % of the passenger vehicle accumulation to be accommodated depending on adjacent roadway design and classification, and limitations of the school site.

Please print data collector name, title, mailing address, and phone number:

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Signature of Data Collector

HLB 2001

PM PEAK ACCUMULATION ASSESSMENT (Phase I - 260 Students)

for a New Public School (Countywide)

New School Name	Notes	Somerset UBC Coral Gables	
Surrogate School Name		Doral Academy Elementary	
Date / Day / Time of Data Collection		2/8/2010 1:30 PM - 4:00 PM	collect maximum accumulation of vehicle loading vehicles at or around dismissal time on Tuesday, Wednesday or Thursday for elementary, middle and high schools
Surrogate Enrollment		519	Total number of students, E
Capacity of New School		87	Student Stations, C (**Based on three (3) Dismissals. Max. Dismissal of 87 Students of 260 Students**)
Multiplier	2	0.17	[C / E]
Surrogate Accumulations	3	97	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		16.26	passenger vehicles
		0.17	large school buses
		N/A	student vehicles
Provided Spaces	4	29	passenger vehicles (**See Table A14**)
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	5	178%	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

1. [illegible]

2. [illegible]

3. [illegible]

[illegible]

[illegible]

Please print data collector name, title, mailing address, and phone number

Signature of Data Collector

H.R. 2003

PM PEAK ACCUMULATION ASSESSMENT (Phase II - 348 Students)

for a New Public School (Countywide)

	Notes		
New School Name		Somerset UBC Coral Gables	
Surrogate School Name	1	Doral Academy Elementary	
Date / Day / Time of Data Collection		2/8/2010 1:30 PM - 4:00 PM	[illegible]
Surrogate Enrollment		519	Total number of students, E
Capacity of New School		116	Student Stations, C (Based on three (3) Dismissals. Max. Dismissal of 116 Students of 348 Students)
Multiplier	2	0.22	[C ÷ E]
Surrogate Accumulations	3	97	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		21.68	passenger vehicles
		0.22	large school buses
		N/A	student vehicles
Provided Spaces	4	29	passenger vehicles (See Table A14)
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	5	134%	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]

Please print data collector name, title, mailing address, and phone number

Signature of Data Collector

PM PEAK ACCUMULATION ASSESSMENT (Phase III - 436 Students)

for a New Public School (Countywide)

	Notes		
New School Name		Somerset UBC Coral Gables	
Surrogate School Name	1	Doral Academy Elementary	
Date / Day / Time of Data Collection		2/8/2010 1:30 PM - 4:00 PM	(collect maximum accumulation of staged loading vehicles at or around dismissal time on Tuesday, Wednesday or Thursday for elementary, middle, and/or high schools)
Surrogate Enrollment		519	Total number of students, E
Capacity of New School		155	Student Stations, C **(Based on three (3) Dismissals. Max. Dismissal of 155 Students of 436 Students)**
Multiplier	2	0.30	[C / E]
Surrogate Accumulations	3	97	passenger vehicles (including commercial vans)
		1	large school buses
		N/A	student vehicles (for high schools only)
Projected Accumulations		28.97	passenger vehicles
		0.30	large school buses
		N/A	student vehicles
Provided Spaces	4	29	passenger vehicles **(See Table A13)**
		N/A	large school buses
		N/A	student vehicles
Percent Accommodated	5	100%	passenger vehicles
		N/A	large school buses
		N/A	student vehicles

1 The facility to be used as a surrogate school will be determined by MDPWD staff. The surrogate school data is used to form the basis for the projected accumulations.

2 This figure is used to determine projected accumulations at the new school by applying it to existing surrogate school accumulations. It is calculated by dividing the new school student station capacity by the surrogate school student enrollment at the time of accumulation data collection.

3 These are all the school related loading vehicles which are, legally or illegally, staged or parked, on or neighboring the school.

4 Information must be obtained from a field survey or proposed site plan indicating the total spaces to be provided for each vehicle type at 22 linear feet per passenger vehicle and/or commercial van, and 50 linear feet per large school bus. Credit may be taken for legal parking in paved swale areas along school property frontage. A sketch or site plan (maximum 40 scale) showing the location of these spaces, the type of spaces in each area, and linear footage provided for each area including the width of bus bays is required. On-street bus loading bays are required to have a minimum 14 foot width, on-street passenger vehicle loading bays are required to have a minimum of 10 foot width, and on-street passenger vehicle parking areas are required to have a minimum 8 foot width, unless otherwise allowed.

5 This is calculated as, [(Provided Spaces / Projected Accumulations) x 100], for each vehicle type. MDPWD requires all of the large school bus and student vehicle (if applicable) accumulations to be accommodated. The Department also expects 100 % of the paseenger vehicle accumulation to be accommodated depending on adjacent roadway design and classification, and limitations of the school site.

Please print data collector name, title, mailing address, and phone number:

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Signature of Data Collector

HLB 2001

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/9/2010
Location:	Parent & Bus Drop-Off	Technician:	CV

AM: On-Site Queuing Observations

Time	Car In	Car Out	Cars Parked	Cars Queued	Bus In	Bus Out	Bus Queued
7:00 AM	1	0	2	1	0	0	0
7:01 AM	0	0	1	1	0	0	0
7:02 AM	1	0	0	2	0	0	0
7:03 AM	0	0	0	2	0	0	0
7:04 AM	0	2	0	0	0	0	0
7:05 AM	1	0	1	1	0	0	0
7:06 AM	1	1	0	1	0	0	0
7:07 AM	1	1	1	1	0	0	1
7:08 AM	1	1	0	1	0	0	0
7:09 AM	1	0	1	1	0	0	0
7:10 AM	1	0	1	1	0	0	0
7:11 AM	1	1	1		1	0	0
7:12 AM	1	0	0	1	0	0	0
7:13 AM	1	1	0	1	0	0	1
7:14 AM	0		1	1	0	0	0
7:15 AM	1	0	1	1	0	0	0
7:16 AM	1	1	0	1	0	0	0
7:17 AM	0	0	1	1	0	0	0
7:18 AM	1	0	1	1	0	0	1
7:19 AM	0	1	1	1	0	0	1
7:20 AM	1	1	1	1	0	0	0
7:21 AM	1	1	0	1	0	0	0
7:22 AM	1	1	0	1	0	0	1
7:23 AM	1	1	0	1	0	0	0
7:24 AM	1	1	1	1	0	0	0
7:25 AM	1	1	1	1	0	0	1
7:26 AM	1	1	1	1	0	0	0
7:27 AM	1	1	1	1	0	0	0
7:28 AM	1	1	0	1	1	0	0
7:29 AM	1	1	1	1	0	0	0
7:30 AM	1	1	0	1	1	1	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	[illegible]
Location:	Parent & Bus Drop-Off	Technician:	CV

AM: On-Site Queuing Observations

Time	Car In	Car Out	Cars Parked	Cars Queued	Bus In	Bus Out	Bus Queued
7:31 AM	0	1	1	6	0	0	0
7:32 AM	1	0	2	1	0	0	0
7:33 AM	2	2	4	1	0	0	0
7:34 AM	3	2	5	4	0	0	0
7:35 AM	2	4	3	8	0	0	0
7:36 AM	2	1	5	7	0	0	0
7:37 AM	2	1	6	8	0	0	0
7:38 AM	2	1	4	7	0	0	0
7:39 AM	3	2	5	8	0	0	0
7:40 AM	2	3	6	8	0	0	0
7:41 AM	4	2	8	9	0	0	0
7:42 AM	3	1	9	8	0	0	0
7:43 AM	3	3	9	8	0	0	0
7:44 AM	4	3	7	4	0	0	0
7:45 AM	4	4	8	4	1	0	1
7:46 AM	2	3	9	3	0	0	1
7:47 AM	2	3	8	7	1	0	1
7:48 AM	3	4	7	8	0	0	1
7:49 AM	2	3	6	11	0	0	1
7:50 AM	5	4	6	12	0	0	1
7:51 AM	4	2	8	12	0	0	1
7:52 AM	4	6	6	13	0	0	1
7:53 AM	5	6	5	13	0	0	1
7:54 AM	6	5	5	14	0	0	1
7:55 AM	2	2	5	15	0	0	1
7:56 AM	4	4	5	14	0	0	1
7:57 AM	3		6	13	0	0	1
7:58 AM	3	1	8	11	0	0	1
7:59 AM	1	4	9	11	0	0	
8:00 AM	4	3	9	12	0	0	1

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/9/2010
Location:	Parent & Bus Drop-Off	Technician:	CV

AM: On-Site Queuing Observations

Time	Cars In	Car Out	Cars Parked	Cars Queued	Bus In	Bus Out	Bus Queued
8:01 AM	8	6	2	14	0	0	0
8:02 AM	6	5	2	15	0	0	1
8:03 AM	5	6	1	9	0	0	1
8:04 AM	1	3	1	12	0	0	0
8:05 AM	6	6	0	12	0	1	0
8:06 AM	5	9	0	11	0	0	0
8:07 AM	5	3	0	14	0	0	0
8:08 AM	2	7	1	14	0	0	0
8:09 AM	5	3	2	16	0	0	0
8:10 AM	12	7	1	20	0	0	0
8:11 AM	5	0	1	25	0	0	0
8:12 AM	9	8	0	26	0	0	0
8:13 AM	7	9	0	24	0	0	0
8:14 AM	7	5	2	26	0	0	0
8:15 AM	7	9	1	24	0	0	0
8:16 AM	9	9	0	24	1	0	0
8:17 AM	7	9	0	25	0	0	0
8:18 AM	10	7	0	29	0	0	0
8:19 AM	8	7	0	30	0	0	0
8:20 AM	4	4	0	30	0	0	0
8:21 AM	5	8	1	26	0	0	0
8:22 AM	8	8	0	30	0	0	0
8:23 AM	11	8	0	33	0	0	0
8:24 AM	8	8	0	30	0	0	1
8:25 AM	10	9	0	32	0	0	0
8:26 AM	9	5	0	34	0	0	0
8:27 AM	4	7	0	31	0	1	0
8:28 AM	10	6	4	33	0	0	0
8:29 AM	5	10	0	31	0	0	0
8:30 AM	3	4	1	31	0	0	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/9/2012
Location:	Parent & Bus Drop-Off	Technician:	CV

AM: On-Site Queuing Observations

Time	Car In	Car Out	Cars Parked	Cars Queued	Bus In	Bus Out	Bus Queued
8:31 AM	10	1	0	29	0	0	0
8:32 AM	12	12	0	27	0	0	0
8:33 AM	5	5	0	27	0	0	0
8:34 AM	1	4	4	24	0	0	0
8:35 AM	6	4	0	20	0	0	0
8:36 AM	2	8	0	14	0	0	0
8:37 AM	4	7	0	10	0	0	0
8:38 AM	4	6	0	8	1	1	1
8:39 AM	2	2	0	8	0	0	0
8:40 AM	1	2	0	7	0	1	0
8:41 AM	4	3	0	7	0	0	0
8:42 AM	1	3	0	5	0	0	0
8:43 AM	2	6	0	5	0	0	0
8:44 AM	1	3	0	3	0	0	0
8:45 AM	0	2	0	1	0	0	0
8:46 AM	0	1	0	0	0	0	0
8:47 AM	0	0	0	0	0	0	0
8:48 AM	0	0	0	0	0	0	0
8:49 AM	0	0	0	0	0	0	0
8:50 AM	1	1	0	0	0	0	0
8:51 AM	0	0	0	0	0	0	0
8:52 AM	0	0	0	0	0	0	0
8:53 AM	0	0	0	0	0	0	0
8:54 AM	0	0	0	0	0	0	0
8:55 AM	0	0	0	0	0	0	0
8:56 AM	0	0	0	0	0	0	0
8:57 AM	0	0	0	0	0	0	0
8:58 AM	0	0	0	0	0	0	0
8:59 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/8/2010
Location:	Parent & Bus Drop-Off	Technician:	CV

PM: On-Site Queuing Observations

Time	Car In	Car Out	Car Queued	Bus In	Bus Out	Bus Queued
1:30 PM	0	0	0	0	0	0
1:31 PM	0	0	0	0	0	0
1:32 PM	0	0	0	0	0	0
1:33 PM	0	0	0	0	0	0
1:34 PM	0	0	0	0	0	0
1:35 PM	1	1	0	0	0	0
1:36 PM	0	0	0	0	0	0
1:37 PM	0	0	0	0	0	0
1:38 PM	0	0	0	0	0	0
1:39 PM	1	0	0	0	0	0
1:40 PM	1	0	1	0	0	0
1:41 PM	4	1	4	0	0	0
1:42 PM	1	1	4	0	0	0
1:43 PM	0	0	4	0	0	0
1:44 PM	1	1	4	0	0	0
1:45 PM	1	0	4	0	0	0
1:46 PM	0	0	4	0	0	0
1:47 PM	0	0	4	0	0	0
1:48 PM	1	0	4	0	0	0
1:49 PM	0	1	4	0	0	0
1:50 PM	4	0	8	0	0	0
1:51 PM	0	0	8	0	0	0
1:52 PM	0	0	8	0	0	0
1:53 PM	0	0	8	0	0	0
1:54 PM	0	0	8	0	0	0
1:55 PM	4	0	12	0	0	0
1:56 PM	4	0	16	0	0	0
1:57 PM	0	0	16	0	0	0
1:58 PM	0	0	16	0	0	0
1:59 PM	1	1	16	0	0	0
2:00 PM	0	0	16	0	0	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/8/2010
Location:	Parent & Bus Drop-Off	Technician:	CV

PM: On-Site Queuing Observations

Time	Car In	Car-Out	Car Queued	Bus In	Bus Out	Bus Queued
2:01 PM	3	2	30	0	0	0
2:02 PM	1	1	30	0	0	0
2:03 PM	2	1	31	0	0	0
2:04 PM	1	2	30	1	0	1
2:05 PM	2	2	30	0	0	1
2:06 PM	3	3	30	0	1	0
2:07 PM	3	1	31	0	0	0
2:08 PM	2	1	32	0	0	0
2:09 PM	3	3	32	0	0	0
2:10 PM	4	3	33	0	0	0
2:11 PM	1	2	32	0	0	0
2:12 PM	1	1	32	0	0	0
2:13 PM	2	5	29	0	0	0
2:14 PM	0	2	28	0	0	0
2:15 PM	2	3	28	0	0	0
2:16 PM	0	2	26	0	0	0
2:17 PM	0	2	24	1	0	0
2:18 PM	2	1	25	0	0	0
2:19 PM	0	0	25	0	0	0
2:20 PM	0	3	22	0	0	0
2:21 PM	4	1	25	0	0	0
2:22 PM	0	3	22	0	0	0
2:23 PM	0	0	22	0	0	0
2:24 PM	1	2	21	0	0	0
2:25 PM	2	1	22	0	0	0
2:26 PM	1	0	23	0	0	0
2:27 PM	2	1	24	0	0	0
2:28 PM		0	24	0	0	0
2:29 PM	5	2	27	0	0	0
2:30 PM	2	1	28	0	0	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/8/2010
Location:	Parent & Bus Drop-Off	Technician:	CV

PM: On-Site Queuing Observations

Time	Cars In	Car-Out	Cars Queued	Bus In	Bus Out	Bus Queued
2:31 PM	1	1	29	0	0	0
2:32 PM	1	3	27	0	0	0
2:33 PM	2	1	28	1	2	0
2:34 PM	3	1	30	0	0	0
2:35 PM	4	2	32	0	0	0
2:36 PM	3	2	32	1	0	0
2:37 PM	2	1	33	2	0	0
2:38 PM	0	1	32	0	0	0
2:39 PM	0	1	36	0	0	0
2:40 PM	7	1	42	0	0	0
2:41 PM	0	1	46	0	0	0
2:42 PM	1	0	47	0	0	0
2:43 PM	1	0	48	0	0	0
2:44 PM	1	0	47	0	0	0
2:45 PM	4	1	50	0	0	0
2:46 PM	2	0	52	0	0	0
2:47 PM	5	0	57	0	0	0
2:48 PM	1	0	58	0	0	0
2:49 PM	6	0	64	0	0	0
2:50 PM	2	0	66	0	0	0
2:51 PM	1		65	0	0	0
2:52 PM	0	2	63	1	0	1
2:53 PM	1	0	65	0	0	0
2:54 PM	2	0	67	1	0	1
2:55 PM	3	2	68	1	0	1
2:56 PM	1	1	68	0	0	1
2:57 PM	1	2	67	1	0	1
2:58 PM	1	0	67	1	0	1
2:59 PM	1	2	66	1	0	1
3:00 PM	1	2	65	0	0	1

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	[illegible]
Location:	Parent & Bus Drop-Off	Technician:	[illegible]

PM: On-Site Queuing Observations

Time	Cars In	Car Out	Cars Queued	Bus In	Bus Out	Bus Queued
2:01 PM	0	6	55	0	0	1
2:02 PM	0	2	58	0	0	1
2:03 PM	2	2	58	0	0	1
2:04 PM	1	11	48	0	0	1
2:05 PM	3	4	47	0	0	1
2:06 PM	0	10	37	0	1	0
2:07 PM	1	4	34	1	2	1
2:08 PM	3	1	36	0	1	1
2:09 PM	6	6	36	0	0	0
2:10 PM	1	10	27	0	0	0
2:11 PM	2	3	26	0	0	0
2:12 PM	1	1	27	0	0	0
2:13 PM	4	1	30	1	0	0
2:14 PM	3	1	32	0	0	0
2:15 PM	5	1	37	0	0	0
2:16 PM	1	6	32	1	0	0
2:17 PM	0	6	32	0	0	0
2:18 PM	2	2	32	0	0	0
2:19 PM	0	1	31	0	0	0
2:20 PM	1	5	27	0	0	0
2:21 PM	1	6	22	0	0	0
2:22 PM	0	4	18	1	0	0
2:23 PM	0	1	16	0	0	0
2:24 PM	0	1	15	0	0	0
2:25 PM	0	4	11	0	0	0
2:26 PM	0	0	11	0	0	0
2:27 PM	0	3	8	0	0	1
2:28 PM	0	3	5	0	0	0
2:29 PM	0	1	4	1	0	1
2:30 PM	0	1	3	0	0	0

Surrogate School

Queuing and Parking Data Collection Sheet

School Name:	Doral Academy Elementary	Weather:	Clear
School Address:	2450 NW 97 Avenue, Doral FL	Date:	2/8/2018
Location:	Parent & Bus Drop-Off	Technician:	CV

PM: On-Site Queuing Observations

Time	Car In	Car Out	Cars Queued	Bus In	Bus Out	Bus Queued
3:31 PM	1	0	4	0	0	0
3:32 PM	1	1	4	0	0	0
3:33 PM	2	2	4	0	0	0
3:34 PM	1	2	3	0	0	0
3:35 PM	0	0	3	0	0	0
3:36 PM	0	1	2	0	0	0
3:37 PM	1	1	2	0	0	0
3:38 PM	2	2	2	0	0	0
3:39 PM	2	2	2	0	0	0
3:40 PM	0	0	2	0	0	0
3:41 PM	0	0	2	0	0	0
3:42 PM	2	0	2	0	0	0
3:43 PM	2	2	2	0	0	0
3:44 PM	2	2	2	0	0	0
3:45 PM	3	3	2	0	0	0
3:46 PM	0	0	0	0	0	0
3:47 PM	0	0	0	0	0	0
3:48 PM	0	0	0	0	0	0
3:49 PM	1	1	0	0	0	0
3:50 PM	0	0	0	0	0	0
3:51 PM	0	0	0	0	0	0
3:52 PM	0	0	0	0	0	0
3:53 PM	0	0	0	0	0	0
3:54 PM	0	0	0	0	0	0
3:55 PM	0	0	0	0	0	0
3:56 PM	0	0	0	0	0	0
3:57 PM	0	0	0	0	0	0
3:58 PM	0	0	0	0	0	0
3:59 PM	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0

DORAL ACADEMY ELEMENTARY SCHOOL

2450 NW 97 Ave, Doral, FL 33172 PH: 305-597-9999 FAX: 305-591-2669

Eleonora Cuesta
Principal

Elizabeth Simon
Assistant Principal

July 20, 2011

Please allow this letter to serve as a description of Doral Academy Elementary School's dismissal numbers by grade level as of February 2010. Please note that these numbers reflect the total enrollment by grade level. Also note that our school provides after care services and the average enrollment in the aftercare program is 150 students daily.

Our school has three dismissal periods as follows:

Dismissal Time	Grade Level	Enrollment by grade level	Total number of students dismissed at each dismissal time.
2:00 pm	Kindergarten 1st Grade	125 124	249
2:30 pm	Pre-Kinder	30	30
3:00 pm	2nd Grade 3rd Grade 4th Grade 5th Grade	127 135 135 122	519

Should you have any questions, please do not hesitate to contact me.

Sincerely

Eleonora Cuesta

Principal

Richard

From: Cuesta, Eleonora [ecuesta@dadeschools.net]
Sent: Wednesday, July 20, 2011 2:10 PM
To: Rolando Llanes; Richard
Subject: Doral Academy Elementary
Attachments: Letter about dismissal on 2010.docx

Greetings,

Please find attached a letter detailing Doral Academy's dismissal.

Best Regards,

Eleonora Cuesta
Principal
Doral Academy Elementary
2450 Nw 97 Ave
Doral, FL 33172
305-597-9999 Fax: 305-591-2669
Email: ecuesta@dadeschools.net <mailto:ecuesta@dadeschools.net> School webpage:
http://doralacademyes.org <http://doralacademyes.org>

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