ATLANTIC AVENUE ROAD DIET PROJECT

Traffic Analysis Methodology Report

Prepared for: City of Margate Municipal Building 9001 Winchester Avenue Margate City, NJ 08402



ATLANTIC COUNTY, NEW JERSEY

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1.0 INTRODUCTION

1.1 PROJECT PURPOSE

To improve network mobility, the City of Margate has retained Remington & Vernick Engineers (RVE) for engineering services for the Atlantic Avenue Road Diet Project. The purpose of this project is to enhance multimodal transportation for all roadway users by working within the existing footprint of the roadway, to enhance safety and reduce speeding along Atlantic Avenue. This Road Diet Project includes the investigation of the feasibility of converting the existing four-lane roadway to a three-lane roadway with a center median, center turn lane and left turn lanes. This report summarizes the traffic analysis completed for a road diet concept.

2.0 TRAFFIC ANALYSIS

2.1 TRAFFIC ANALYSIS OBJECTIVE

The objective of this Traffic Analysis Methodology Report (TAMR) is to outline the project limits, assumptions, and methodologies that will be employed for the investigation of a Road Diet for the Atlantic Avenue corridor. This TAMR will evaluate existing traffic volumes and traffic operations for Existing Conditions and will evaluate forecasted traffic volumes for Future Years as a three-lane roadway with bike lanes and pedestrian facilities.

2.2 TRAFFIC ANALYSIS ASSUMPTIONS

2.2.1 Project Location & Study Area

This project is in the City of Margate, Atlantic County, New Jersey. The study area for this project includes all Atlantic Avenue within the City's Right-of-Way (ROW). For purposes of this report and analysis, the traffic analysis is comprised of eight key signalized intersection that span approximately 1.71 miles of roadway. The eight-key signalized intersection are listed below. The intersection numbers correspond with the numbered circles shown on **Exhibit 1**.

- 100 Atlantic Avenue at Coolidge Avenue
- 105 Atlantic Avenue at Washington Avenue
- 110 Atlantic Avenue at Cedar Grove Avenue
- 115 Atlantic Avenue at Mansfield Avenue
- 120 Atlantic Avenue at Huntington Avenue
- 125 Atlantic Avenue at Essex Avenue
- 130 Atlantic Avenue at Douglass Avenue
- 135 Atlantic Avenue at Fredericksburg Avenue









2.2.1 Analysis Years, Scenarios, & Periods

The existing year for the traffic analysis in this study will be Base Year 2020, while the future years will be Future Year 2025 (assumed Opening Year) and Future Year 2045 (assumed Design Year).

Three scenarios will be investigated, existing four-lane operations, and two future year operations as a three-lane roadway with bike lanes and pedestrian facilities. In the future year scenarios, the difference is the bike lanes will be adjacent to the through traffic, and in the other scenario the bike lanes will be projected from traffic (adjacent to the sidewalk and parking). For illustrative purposes, these scenarios are show below in **Exhibit 2, 3, & 4**.

Peak periods will include daily, AM peak, and PM peak traffic conditions as well as weekend Saturday (SAT) peak traffic conditions for the analysis years listed above. The data collected will be adjusted as necessary to reflect any seasonal variations in traffic.









Exhibit 3 – Road Diet Option 1 Cross-Section











2.2.1 Traffic Analysis Tools

The operational performance of the study area segments and intersections will be analyzed according to methodologies provided in the Highway Capacity Manual, 6th Edition (HCM). For the study area segments and intersections, daily and peak hour traffic volumes will be evaluated using Synchro and SimTraffic 10 software. Synchro is a macroscopic capacity analysis and signal optimization computer program. SimTraffic is a microscopic traffic simulation computer program capable of modeling individual driver behavior and traffic flow on roadway networks. Performance measures selected for this project include delay per vehicle, Level of Service (LOS), and the volume to capacity (v/c) ratio for vehicles. Pedestrians and bikes were also evaluated and include LOS for Bikes or BLOS and LOS for Pedestrians or PLOS.

3.0 DATA COLLECTION

3.1 EXISTING LAND USE & ROADWAY CONFIGURATIONS

In general, the land use in the project study area is a mix of commercial, residential, shopping, restaurants, and other businesses. The Atlantic Avenue corridor is a coastal destination town with a strong emphasis on tourism during the summer months, and a high seasonal variation in traffic volume. To the north of Margate City is the municipality of Ventnor City and to the south is the Borough of Longport. The Atlantic Ocean borders the study area to the southeast and the bay serves as the border to the northwest. Margate City has a strong emphasis on both walking and biking.

3.1.1 Atlantic Avenue Characteristics

- Atlantic Avenue is a four-lane undivided roadway with no exclusive turn lanes present. Both Eastbound and Westbound Atlantic Avenue are comprised of a shared left/Thru lane and a shared Thru/Right lane.
- Bike lanes and pedestrian facilities (crosswalks, sidewalks, pedestrian signals, etc.) are generally present along the corridor.





- The traffic signals run in Stop & Go mode, with fixed timed operation during the summer months and mostly operate in Flash mode during other parts of the year.
- The roadway's functional classification is listed as an Urban Minor Arterial of Region 4 by the New Jersey's Department of Transportation (NJDOT);
 - https://www.state.nj.us/transportation/refdata/roadway/traffic.shtm
- The current posted speed limit is 25 Miles Per Hour (MPH), however prior to May of 2017, the posted speed limit was 35 MPH.
- The corridor topography is mostly level.

3.1.2 Base Data Inventory

The data collection efforts included an inventory of base data which included photos and intersection timings (**Appendix A**). Other items inventoried included:

- Lane configurations
- Lane widths
- Turn lane storage
- Approach grades
- Speed limits
- Signal Timings
- Signal Equipment

3.1.3 Traffic Count Data

Traffic counts were collected throughout the corridor and included midblock road volume counts and intersection turning movement counts (TMCs) (**Appendix B**).

3.1.4 Midblock Road Volume Counts

Four midblock road volume counts were collected at two locations (Eastbound and Westbound directions were counted separately) along Atlantic Avenue for a typical weekday (Tuesday, Wednesday, or Thursday), and for a typical weekend (Saturday).

The midblock road volume count data was collected using BLACK CAT II RADAR in lieu of traditional automatic traffic recorder tube counts across the roadway.

The counts occurred in the first two weeks of July 2020, after the Fourth of July holiday weekend. The midblock road volume count data was summarized by total two-way traffic volumes by hour (Exhibits 5 & 6), by direction for an average weekday (Exhibits 7 & 8) and Saturday (Exhibits 9 & 10). In addition, the count locations also collected average speed data at the fixed count locations. The vehicular speed data is summarized in Exhibits 11 & 12.

This information was used to investigate the various peak traffic periods that may occur throughout any given weekday or weekend.

Based on the traffic volumes collected at the various locations, the Average Annual Daily Traffic (AADT) along Atlantic Avenue Location #1 (near Cedar Grove Avenue) and along Atlantic Avenue Location #2





(near Huntington Avenue) is 6,764 and 4,907 vehicles per day, respectively. The AADT considers seasonal adjustments for fluctuations in traffic volumes throughout the entire year.

The unadjusted Average Daily Traffic (ADT) for the peak summer season at Locations #1 & #2 are 7,433 and 5,392 vehicles per day, respectively.



Exhibit 5: Atlantic Ave ADT #1 - Two-Way Hourly Volumes









Exhibit 7: Atlantic Ave ADT #1- Average Weekday Directional Traffic























Exhibit 11: Atlantic Ave ADT #1 – Weekday Speed Data Summary

Speed Studies Summary (Weekdays 9 am to 4 pm) - 2020								
Atlantic Avenue near Cedar Grove Avenue								
Movement	EB Through	Movement	WB Through					
Time Period	Weekdays 9 am to 4 pm	Time Period	Weekdays 9 am to 4 pm					
Posted Speed Limit	25 MPH	Posted Speed Limit	25 MPH					
Average Speed	25.9 MPH	Average Speed	27.0 MPH					
10 mph Pace	19 to 28 MPH	10 mph Pace	19 to 28 MPH					
% in Pace	60%	% in Pace	72%					
85% Speed	32.4 MPH	85% Speed	32.3 MPH					

Exhibit 12: Atlantic Ave ADT #2 - Weekday Speed Data Summary

Speed Studies Summary (Weekdays 9 am to 4 pm) - 2020								
Atlantic Avenue near Huntington Avenue								
Movement	WB Through							
Time Period	Weekdays 9 am to 4 pm	Time Period	Weekdays 9 am to 4 pm					
Posted Speed Limit	25 MPH	Posted Speed Limit	25 MPH					
Average Speed	25.9 MPH	Average Speed	27.3 MPH					
10 mph Pace	19 to 28 MPH	10 mph Pace	19 to 28 MPH					
% in Pace	57%	% in Pace	75%					
85% Speed	32.4 MPH	85% Speed	32.4 MPH					







3.1.5 Turning Movement Counts (TMCs)

TMCs were conducted for six hours at each of the key study intersections, two hours for each of the three peak periods using Miovision video recorders and manual counts. After the TMCs were collected and processed, the highest peak hour was determined by calculating each intersection's local peak hour. This peak hour volume was then used to determine an overall study area peak hour to be used in the traffic analysis models and for TMC balancing purposes. The existing peak hours are as follows:

- AM Peak 8:00 am to 9:00 am
- PM Peak 5:00 pm to 6:00 pm
- SAT Peak 12:00 am to 01:00 pm

The peak hour data (traffic volume, number of pedestrian and bicycles and percent trucks and buses) for each intersection was used in the traffic models. Due to non-key intersections not being counted that are between the key study intersections, the volumes were not adjusted or balanced. However, the volume differences between intersections reflects the change in traffic because of turning movements at other local intersecting roadways. The existing TMC data is included in. **Appendix B**.

4.0 CRASH ANALYSIS

Historical crash data for the Atlantic Avenue corridor was provided by the Margate City Police Department. The data represents all reported crashes for the five-year period between January 1, 2015 to present (July of 2019). This section summarizes the crash data. The individual crash reports used for this analysis contain personal information of those involved and therefore are not provided in this report. All crash data will remain on file with RVE for the duration of the project and used for engineering purposes only. Public access to the crash reports will not be provided.

It is important to note that only the reportable crashes were reviewed as part of this project. A "reportable crash" is defined by NJDOT as "a crash resulting in a death within 30 days of the crash; or injury in any degree, to any person involved; or crashes resulting in damage to any vehicle serious enough to require towing". Based on anecdotal evidence, there may be additional minor, "non-reportable", or unreported crashes that have occurred. If so, it would be expected that those crashes have or follow the characteristics of the reportable data that was reviewed.

The crash analysis involved assessing all crash data received for the study corridor and identifying patterns that may be susceptible to mitigation through signal timing optimization, and/or change in pavement markings and lane arrangements.

At the study intersections and along Atlantic Avenue from Ventnor City to the north, and to the City of Longport to the south, there were a total of 88 crashes in a 67-month period, which averages to approximately 15.8 crashes per year. 16% of the crashes occurred in midblock sections (between intersections), and the reaming 84% were considered intersection related. The crash data is summarized in **Exhibit 13** & **14** and is also discussed in further detail below.

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Maan	Total	Time of	Severity		
Year	Crashes	Peak Season (June to Aug)	Off-Season	Injury Crash	Fatal Crash
2015	16	6	10	4	0
2016	26	23	3	5	0
2017	20	10	10	2	0
2018	15	12	3	4	0
2019	10	4	6	4	0
2020**	1	1	0	1	0
67 Month Totals	88	56	32	20	0
% Summary	100.0%	63.6%	36.4%	22.7%	0.0%
**Denotes les	s than 12 n	nonths of data/	COVID 19 peri	od.	

Exhibit 13: Crash Summary (1 of 2)

Exhibit 14: Crash Summary (2 of 2)

Voor	Total		Crash Type					
rear	Crashes	Vehicular	Pedestrian	Bicycle				
		Only	Involved	Involved				
2015	16	15	1	0				
2016	26	25	1	0				
2017	20	16	1	3				
2018	15	14	1	0				
2019	10	10	0	0				
2020*	1	0	0	1				
67 Month			4	4				
Totals	88	80	4	4				
Summary	100.0%	90.9%	4.5%	4.5%				
(/0)								
**Denotes less than 12 months of data/COVID 19 period.								

The four intersections with the highest number of crashes were:

- Atlantic Avenue at Granville Avenue (13 crashes)
- Atlantic Avenue at Adams Avenue (7 crashes)
- Atlantic Avenue at Essex Avenue (4 crashes)
- Atlantic Avenue at Gladstone Avenue (4 crashes)

Other characteristics of the crash data are as follows:





- Of the 88 crashes, most of the crashes (64%) occurred during the summer season (June, July, and August).
- None of the crashes were fatal.
- 23% of the crashes resulted in injuries.
- 91% of the crashes involved vehicles only, while the remaining 9% involved pedestrians and/or bicycles.

The data also shows a downward trend of total crashes from 2018 to the present. This change in the rate of crashes is in line with the change to the posted speed limit from 35 MPH to 25 MPH, which occurred after May of 2017. It appears evident that the lower speed limit has contributed to a lower number of reportable crashes along the corridor.

Based on the proposed road diet concept of reducing Atlantic Avenue from four to three lanes, it can be expected that the revised cross-sections would further help to control vehicular speeds and provide an added level of crash mitigation along the corridor.

5.0 BASE YEAR 2020 TRAFFIC ANALYSIS

5.1 MODEL DEVELOPMENT

The base models of existing conditions were developed using field inventory data (lane widths, turn bay lengths, approach grades, speed limits, etc.) obtained from field inspections, Google Earth, and traffic signal plans. Using the existing data, weekday models were developed for the AM and PM peak hour traffic scenarios for the study intersections, and for the weekend (SAT] peak hour. All analysis scenarios reflect summertime conditions.

Traffic Signal Timings

Signal timings were inputted into the traffic model from the provided signal plans controller timing sheets and field verified. The following bullet points describe existing signal timing operations within the study area:

- All the traffic signals along Atlantic Avenue are fixed time and include two phases that run together in a pretimed mode.
- Left turn movements are permissive only with no exclusive left-turn phasing.
- Offset reference phase is set the beginning of green of the coordinated phases, which is the mainline 2+6 phase for all intersections.
 - o Offsets were field measured from observations.
- Pedestrian signal indications are only provided at the intersection of Atlantic Avenue at Washington Avenue.
 - The other seven intersections have pedestrians crossing with concurrent vehicular signal indications.





Modified Synchro Parameters

Various parameters in Synchro were modified in accordance with guidance provided by the *NJDOT* and *HCM 6*th *Edition* recommended practices. Modified Synchro parameters for this project included the following:

• Using the recommended base saturation flow rate of 1,850 vehicles per hour per lane for all movements, in accordance with guidance.

5.2 ANALYSIS RESULTS

Again, Synchro and SimTraffic software were utilized to perform capacity analyses for the study area intersections. Performance measures selected for this project include delay per vehicle, Level of Service (LOS), and the volume to capacity (v/c) ratio for vehicles. Pedestrians and bikes were also evaluated and include LOS for Bikes or BLOS and LOS for Pedestrians or PLOS.

The Capacity Manual 6th Edition (HCM) results were obtained from Synchro reports and are reported in the tables below. These results are also included in **Appendix C**. The summary tables are followed by the detailed output reports from the analysis software. **Exhibits 15 & 16** below provide a legend for reference of the LOS letter grades and how they correspond to delay. Overall intersection delay and LOS for the Base 2020 analysis are summarized in **Exhibits 17** to **25**.

Exhibit 15: Delay & LOS Legend (Vehicles)

Level of Service Letter Grade (based on average delay per vehicle in seconds)						
Sig	nalized Inters	ections				
А	=	0.0 - 9.9				
В	B = 10.0 - 19.9					
С	=	20.0 - 34.9				
D	= 35.0 - 54.					
E	=	55.0 - 79.9				
F	=	80.0 & Above				
	V/C Ratios	S				
	Intersection	ns				
=	< 0.85					
=	0.85	5 - 0.95				
=	0.96	5 - 1.00				
=	>	1.00				

Exhibit 16: Delay & LOS Legend (Bikes/Peds)

Bike & Pedestrian Scores							
Signalized Intersections							
А	<=	1.50					
В	>	1.50 - 2.50					
С	>	2.50 - 3.50					
D	>	3.50 - 4.50					
E	>	4.50 - 5.50					
F	>	5.50					





Exhibit 17: AM Peak Base 2020 Measures of Effectiveness [MOEs] (Vehicles) [1/2]

S	Base Conditions/2020										
PEAK HOUR				AM Peak (08:00 AM to 09:00 AM)							
			Vehicular Performance Measures								
(HCM 6th Edition)				DELAY (seconds) & LOS (Letter Grade) Volume to v/c Ratio					Volume to Ca v/c Ratio (de	to Capacity Ratio o (decimal ratio)	
Intersection Name(s)	Approach	Lane Configuration	By Lane Configuration By Approach By C		By Ov Inters	verall ection	By Lane Configuration	Мах			
		Left	8.9	Α					0.18		
	Eastbound	Thru	0.0	Α	9.0	А			0.00		
		Right	9.0	Α					0.18		
		Left	0.4	Α					0.15		
e @ Ave	Westbound	Thru	0.0	Α	0.4	А			0.00		
c Av Ige		Right	0.4	Α			6.3	Α	0.16	0.18	
antic		Left	23.1	С			0.0		0.03		
Atl	Northbound	Thru	0.0	Α	23.1	С			0.00		
		Right	0.0	Α					0.00		
		Left	25.7	С					0.13		
	Southbound	Thru	0.0	Α	25.7	С			0.00		
		Right	0.0	Α					0.00		
		Left	0.6	Α					0.22		
	Eastbound	Thru	0.0	Α	0.7	Α	А		0.00		
		Right	0.7	Α					0.23		
	Westbound	Left	0.5	Α	0.6				0.22		
e @		Thru	0.0	Α		А			0.00		
Atlantic Av Washington		Right	0.7	А			2.7	Α	0.24	0.26	
		Left	23.8	С					0.04		
	Northbound	Thru	0.0	A	23.8	С	С		0.00		
		Right	0.0	A					0.00		
		Left	30.8	С					0.26		
		Thru	0.0	A	30.8	С	С		0.00		
		Right	0.0	Α					0.00		
	Eastbound	Left	0.6	Α		A			0.23		
		Thru	0.0	A	0.7			.8 A	0.00		
		Right	0.8	A					0.24		
e		Left	8.8	A					0.22		
e Av	Westbound	Thru	0.0	A	8.9	A			0.00		
c Av		Right	9.0	A			5.8		0.23	0.24	
lanti łar G		Left	24.2	С					0.05		
At Ced	Northbound	Thru	0.0	A	24.2	С			0.00		
		Right	0.0	A					0.00		
		Left	23.9	C					0.04		
	Southbound	Thru	0.0	A	23.9	С			0.00		
		Right	0.0	A					0.00		
		Left	0.5	A					0.20		
	Eastbound	Thru	0.0	A	0.6	A			0.00		
6 9		Right	0.7	A					0.21		
Ave Id A		Left	0.7	A					0.24		
ntic	Westbound	Thru	0.0	A	0.7	A	1.1	A	0.00	0.25	
Atla		Right	0.8	A					0.25		
		Left	24.1	С					0.12		
	Northbound	Thru	0.0	A	24.1	С			0.00		
		Right	0.0	Α					0.00		





Exhibit 18: AM Peak Base 2020 MOEs (Vehicles) [2/2]

SCENARIO/ANALYSIS YEAR		Base Conditions/2020								
PEAK HOUR			AM Peak (08:00 AM to 09:00 AM)							
		Vehicular Performance Measures								
	HUM 6th Ealt	10N		DELAY (s	seconds) &	LOS (Lett	er Grade)		Volume to C	apacity Ratio
Intersection Name(s)	Approach	Lane Configuration	By Lane Configuration		By Approach		By Overall Intersection		By Lane Configuration	Мах
		Left	0.6	А					0.21	
	Eastbound	Thru	0.0	А	0.6	А			0.00	
0. U		Right	0.7	А					0.22	
ve @ n Av		Left	10.5	В					0.25	
itic A ingto	Westbound	Thru	0.0	А	10.6	В	6.4	А	0.00	0.26
Atlar Hunt		Right	10.7	В					0.26	
		Left	23.6	С					0.12	
	Northbound	Thru	0.0	А	23.6	С			0.00	
		Right	0.0	А					0.00	
	Factbourd	Left	0.7	А	0.7	٨			0.24	
©	EldStDOutifu	Thru	0.7	А	0.7	A			0.24	0.24
Ave K Ave	Masthound	Thru	19.6	В	10.4	D	11 /	В	0.23	
antic (sse)	westbound	Right	19.7	В	19.0	D	11.0		0.23	
Atl	Southbound	Left	25.4	С	2E 4	C			0.16	
		Right	0.0	А	25.4	C			0.00	
		Left	0.5	А					0.21	0.28
	Eastbound	Thru	0.0	А	0.6	А			0.00	
8		Right	0.7	А					0.22	
ve @	Westbound	Left	0.7	А			1.2		0.26	
ntic A glass		Thru	0.0	А	0.8	А		А	0.00	
Atlar Dou		Right	0.9	А				0.28		
		Left	25.2	С					0.15	
	Northbound	Thru	0.0	А	25.2	С			0.00	
		Right	0.0	А					0.00	
		Left	0.6	А					0.23	
	Eastbound	Thru	0.0	А	0.7	А	A		0.00	
		Right	0.7	А					0.24	
0		Left	10.8	В					0.27	
B Ave	Westbound	Thru	0.0	А	10.9	В			0.00	
: Ave sburg		Right	11.0	В			7 1	٨	0.28	0.29
lantic erick		Left	21.3	С			1.1	A	0.05	0.20
At Fred	Northbound	Thru	0.0	А	21.3	С			0.00	
		Right	0.0	А					0.00	
		Left	21.2	С					0.05	
	Southbound	Thru	0.0	А	21.2	С			0.00	
		Right	0.0	А					0.00	





Exhibit 19: PM Peak Base 2020 MOEs (Vehicles) [1/2]

SCENA	RIO/ANALYS	IS YEAR	Base Conditions/2020						20	o			
PEAK HOUR			PM Peak (05:00 PM to 06:00 PM)										
			Vehicular Performance Measures										
(HCM 6th Edition)			DELAY (seconds) & LOS (Letter Grade)					Volume to Capacity Ratio					
.		,							v/c Ratio (de	cimal ratio)			
Intersection Approach Lane		Lane	By Lane By Approach		By Ov	verall	By Lane	Max					
Name(s)	••	Configuration	Config	uration	• • •		Inters	ection	Configuration				
	Faath a und	Left	8.8	A		Δ			0.17				
	Eastbound	I nru Biadat	0.0	A	0.0	~			0.00				
		Right	8.9	A					0.17				
(C)	Westbound	Thru	0.4	Δ	05	Δ			0.19				
e A	Webebound	Right	0.0	Δ	0.0	~			0.00				
tic /		Left	24.3	C			5.8	Α	0.09	0.20			
ool	Northbound	Thru	0.0	A	24.3	С			0.00				
0 ¥		Right	0.0	A	-				0.00				
		Left	27.3	С					0.19				
	Southbound	Thru	0.0	А	27.3	С			0.00				
		Right	0.0	А					0.00				
		Left	37.3	D					0.44				
	Eastbound	Thru	0.0	А	37.8	D			0.00				
		Right	38.3	D					0.47				
e (9)		Left	20.0	С		С			0.51				
ve (Westbound	Thru	0.0	А	20.9		27.2	с	0.00	0.56			
c A		Right	22.0	С					0.56				
hing	Northbound	Left	8.3	A	8.3				0.07				
Atla Vas		Thru	0.0	A		A			0.00				
. >		Right	0.0	A					0.00				
		Left	9.9	A		А			0.16				
	Southbound	I nru Biaht	0.0	A	9.9				0.00				
		Kigni Loft	0.0	A					0.00				
	Eastbound	Thru	0.5	A 	05	Δ			0.22				
		Right	0.0	Δ	0.5				0.00				
e, e		Left	9.0	A					0.25				
₿ ¥	Westbound	Thru	0.0	A	9.2	А			0.00				
Ave		Right	9.2	Α					0.26				
g, tic		Left	24.6	С			6.2	A	0.08	0.26			
tlar dar	Northbound	Thru	0.0	А	24.6	С			0.00				
Ce A		Right	0.0	Α					0.00				
		Left	24.2	С					0.07				
	Southbound	Thru	0.0	А	24.2	С			0.00				
		Right	0.0	А					0.00				
		Left	6.6	А					0.22				
A	Eastbound	Thru	0.0	A	6.6	A			0.00				
e @		Right	6.7	A					0.23				
A A Pi	Weath	Left	0.5	A			2.0		0.23	0.24			
ntic	westbound	I hru	0.0	A	0.6	A	3.8	A	0.00	0.24			
tlar 1an		Right	0.7	A					0.24				
<	Northbound		24.1		24.1	C			0.12				
	Druodiniovi	I nru Bight	0.0	A	24.1	U			0.00				
		night	0.0	A					0.00				





SCENARIO/ANALYSIS YEAR Base Conditions/2020 PEAK HOUR PM Peak (05:00 PM to 06:00 PM) Vehicular Performance Measures HCM 6th Edition DELAY (seconds) & LOS (Letter Grade) Volume to Capacity Ratio By Lane By By Overall By Lane Max Intersection Approach Lane Config Config. Intersection Config Approach Left 0.5 А Eastbound Thru А 0.5 0.00 0.0 А Right 0.6 А Huntington Ave Atlantic Ave @ Left 10.4 В 0.24 Westbound Thru 0.0 А 10.4 В 6.0 А 0.00 0.25 Right 10.5 В 0.25 21.0 0.04 Left Northbound Thru 0.0 А 21.0 0.00 Right 0.0 А 0.00 Left 1.2 А Eastbound 1.0 А Atlantic Ave @ Thru 0.9 А 0.29 Essex Ave Thru 19.2 В Westbound 19.2 В В 10.6 19.3 Right В 25.9 Left 0.20 25.9 Southbound Right 0.0 А 0.00 Left 0.7 А 0.26 Eastbound 0.0 А 0.7 А 0.00 Thru А Right 0.7 Atlantic Ave @ Douglass Ave Left 0.6 А 0.25 Westbound 0.7 Thru 0.0 А А А 1.0 0.00 0.7 0.26 Right А Left 21.6 0.0 А 0.00 Northbound Thru 21.6 А 0.00 Right 0.0 0.24 0.6 А Left Eastbound 0.6 А Thru 0.0 А 0.00 0.7 Right 0.25 А 10.5 Left 0.25 ⁻redericksburg Ave Atlantic Ave @ Westbound 0.0 Thru А 10.6 0.00 10.7 0.26 Right 0.26 А 6.3 Left 22.6 0.09 Northbound Thru 0.0 А 22.6 0.00 А 0.00 0.0 Right Left 23.4 0.00 Southbound Thru 0.0 А 23.4 0.0 А 0.00 Right

Exhibit 20: PM Peak Base 2020 MOEs (Vehicles) [2/2]





Exhibit 21: SAT Peak Base 2020 MOEs (Vehicles) [1/2]

SCEN	IARIO/ANALYSI	NALYSIS YEAR Base Conditions/2020								
	PEAK HOUR				SA	T Peak	(12:00	PM to	01:00 PM)	
DED					V	ehicula	r Perfo	rmance	Measures	
(HCM 6th Editio	on)	DELA	AY (seco	onds) &	LOS (L	etter G	rade)	Volume to Capacity Ratio v/c Ratio (decimal ratio)	
Intersection Name(s)	Approach	Lane Configuration	By I Config	.ane uration	Ву Арр	broach	By Overall Intersection		By Lane Configuration	Max
		Left	11.7	В					0.40	
	Eastbound	Thru	0.0	Α	11.9	В			0.00	
		Right	12.1	В					0.42	
® a		Left	1.4	Α					0.38	
e (Westbound	Thru	0.0	Α	1.5	А			0.00	
Av ge		Right	1.7	Α			77	Δ	0.40	0.42
ntic		Left	23.6	С			7.7		0.06	0.42
vtlai Coc	Northbound	Thru	0.0	Α	23.6	С			0.00	
4 •		Right	0.0	Α					0.00	
Southbound		Left	23.9	С					0.11	
	Southbound	Thru	0.0	Α	23.9	С			0.00	
	Right	0.0	A					0.00		
		Left	1.7	А					0.41	
	Eastbound	Thru	0.0	Α	1.8	A			0.00	
		Right	1.9	A					0.43	
© ♀ ♀ Westbound	Left	1.6	A					0.43		
	Westbound	Thru	0.0	A	1.9	A			0.00	0.45
c A gto		Right	2.2	A			3.9	А	0.45	
hin	N I I	Left	24.2	C	24.2				0.06	
Atla Vas	Northbound	Thru	0.0	A	24.2	C			0.00	
		Right	0.0	A					0.00	
	-	Left	36.5	D	36.5	_			0.41	
	Southbound	Thru	0.0	A		D			0.00	
		Right	0.0	A					0.00	
	Es eth sound	Left	1.5	A	1.0				0.41	
	Eastbound	I hru Di what	0.0	A	1.6	A			0.00	
0		Right	1.8	A					0.43	
Ave Bve	Wasthound	Len	11.5		11.0	D			0.44	
ve	westbound	Pight	12.0	A	11.0	В			0.00	
ic A Gro		Left	24.4	C			7.9	Α	0.46	0.46
ant ar (Northbound	Thru	24.4	Δ	24.4	C			0.08	
Atl	rtortingeding	Right	0.0	Δ		Ŭ			0.00	
Ũ		l eft	24.8	C					0.12	
	Southbound	Thru	0.0	A	24.8	С			0.00	
	courisound	Right	0.0	A	2	Ŭ			0.00	
		l eft	75	Δ					0.33	
	Eastbound	Thru	0.0	A	7.6	А			0.00	
@ é		Right	7.7	A					0.35	
Av		Left	1.4	Α					0.40	
c A	Westbound	Thru	0.0	A	1.6	А	4.5	А	0.00	0.42
anti		Riaht	1.7	A	-				0.42	
Atle Ma		Left	21.5	С	21.5				0.04	-
	Northbound	Thru	0.0	Α		5 C	С		0.00	
	Northbound	Right	0.0	Α					0.00	





Exhibit 22: SAT Peak Base 2020 MOEs (Vehicles) [2/2]

SCENA	RIO/ANALYSIS	YEAR	Base Conditions/2020									
	PEAK HOUR					SAT	Peak (12:0	00 PM to ()1:00 PM)			
	CM 6th Edition					Vehi	cular Perf	ormance	Measures			
			l	DELAY (s	econds) &	k LOS (Le	tter Grade)	Volume to (Capacity Ratio		
Intersection	Approach	Lane Con.	By Lan	ie Con.	Ву Ар	proach	ch By Overall Intersection		By Lane Con.	Мах		
		Left	0.9	А					0.30			
	Eastbound	Thru	0.0	А	1.0	А			0.00			
R) U		Right	1.1	А					0.32			
ve @ n Av		Left	12.4	В					0.40	0.42		
Atlantic A Huntingto	Westbound	Thru	0.0	А	12.7	В	7.8	А	0.00			
		Right	13.1	В					0.42			
		Left	21.3	С					0.06			
	Northbound	Thru	0.0	А	21.3	С			0.00			
		Right	0.0	А					0.00			
	Feetheuned	Left	1.9	А	1 Г	٨			0.35			
8	Easibound	Thru	1.1	А	1.5	A			0.32			
Ave Ave	Maatha u wad	Thru	20.9	С	20.0	C	7.0	^	0.28	0.25		
Intic	vvestbound	Right	20.9	С	20.9	C	7.8	A	0.29	0.35		
Atla Es	Coutbleound	Left	27.9	С	27.0	C			0.34			
	Souribouria	Right	0.0	А	27.9	C			0.00			
		Left	0.9	А	0.9				0.31			
	Eastbound	Thru	0.0	А		A			0.00	0.34		
®) ()		Right	1.0	А					0.32			
ve @		Left	0.9	А					0.32			
lic A Ilass	Westbound	Thru	0.0	А	1.0	А	1.2	А	0.00			
tlant		Right	1.1	А					0.34			
A D		Left	21.9	С					0.05			
	Northbound	Thru	0.0	А	21.9	С			0.00			
		Right	0.0	А					0.00			
		Left	0.8	А					0.28			
	Eastbound	Thru	0.0	А	0.9	А			0.00			
		Right	0.9	А					0.29			
Φ		Left	11.3	В					0.32			
@ A	Westbound	Thru	0.0	А	11.5	В			0.00			
Ave.		Right	11.6	В					0.34	0.04		
antic		Left	0.0	А			0.0	A	0.00	0.34		
Atle	Northbound	Thru	0.0	А	0.0	А			0.00			
		Right	0.0	А	1				0.00			
		Left	0.0	А			1		0.00			
	Southbound	Thru	0.0	А	0.0	А			0.00			
	Southbound	Right	0.0	А					0.00			





SCENARIO/ANA	LYSIS YEAR	Base Conditions/2020								
PEAK H	OUR		AM Peak	(08:00 AM to 0	9:00 AM)					
HCM 6thEdition	Bike Pe	rformance Me	asures	Pedestrian	Performance	Measures				
Intersection	Approach	Score	LOS	Crosswalk	Score	LOS				
e Ø	Eastbound	1.52	В	Southbound	2.28	B				
c Ave	AMI Peak (08:00 AMBike Performance MeasuresPedestApproachScoreLOSCrosswaEastbound1.52BSouthbourWestbound1.62BEastboundNorthbound1.62BEastboundSouthbound1.62BSouthbourWestbound1.55BSouthbourWestbound1.58BNorthbourNorthbound1.62BEastbounSouthbound1.66BWestbourSouthbound1.66BWestbourSouthbound1.63BNorthbourWestbound1.62BEastbourSouthbound1.63BNorthbourNorthbound1.62BEastbourSouthbound1.63BWestbourVestbound1.63BSouthbourWestbound1.64BSouthbourWestbound1.61BEastbourSouthbound1.62BEastbourNorthbound1.61BEastbourNorthbound1.62BEastbourNorthbound1.62BEastbourNorthbound1.62BEastbourNorthbound1.62BEastbourSouthbound1.62BEastbourNorthbound1.62BEastbourNorthbound1.62BEastbourNorthbound1.62BEastbourSouthbound <td< td=""><td>Northbound</td><td>2.28</td><td>В</td></td<>	Northbound	2.28	В						
Coolic	Northbound	1.62	В	Eastbound	1.74	В				
At	Southbound	1.62	В	Westbound	1.75	В				
Ave @	Eastbound	1.55	В	Southbound	2.33	В				
: Ave gton	Westbound	1.58	В	Northbound	2.33	В				
Iantic	Northbound	1.62	В	Eastbound	1.80	В				
Atl	Southbound	1.66	В	Westbound	1.80	В				
a a a	Eastbound	1.57	В	Southbound	2.33	В				
Ave ove,	Westbound	1.58	В	Northbound	2.33	В				
antic ar Gr	Northbound	1.62	В	Eastbound	1.75	В				
Atl	Southbound	1.63	В	Westbound	1.75	В				
e ø	Eastbound	1.52	В	Southbound	2.32	В				
Ave eld Ar	Westbound	1.42	А	Northbound	2.31	В				
antic	Northbound	1.61	В	Eastbound	1.74	В				
Atl	Southbound	N/A	N/A	Westbound	1.46	А				
e @	Eastbound	1.54	В	Southbound	2.31	В				
Ave Jon A	Westbound	1.43	А	Northbound	2.32	В				
antic	Northbound	1.62	В	Eastbound	1.71	В				
Atl	Southbound	N/A	N/A	Westbound	1.43	А				
Ave	Eastbound	1.90	В	Southbound	2.35	В				
ntic . @ sex A	Westbound	1.58	В	Northbound	2.32	В				
Atla Ess	Southbound	1.70	В	Westbound	1.78	В				
e ø	Eastbound	1.56	В	Southbound	2.33	В				
Ave Ss Av	Westbound	1.46	А	Northbound	2.34	В				
antic Jugla	Northbound	1.62	В	Eastbound	1.73	В				
Atl	Southbound	N/A	N/A	Westbound	1.45	А				
ම වූ	Eastbound	1.56	В	Southbound	2.35	В				
Ave ksbu e	Westbound	1.65	В	Northbound	2.35	В				
antic ederic Av	Northbound	1.63	В	Eastbound	1.72	В				
Atlk Fre	Southbound	1.64	В	Westbound	1.74	В				

Exhibit 23: AM Peak Base 2020 MOEs (Bikes/Peds) [1/1]





S CENARIO/ANA	ALYS IS YEAR	R Base Conditions/2020						
PEAK H	IOUR	P M	Peak	(05:00 PM to (6:00	PM)		
HCM 6thEdition	Bike Performan	ce Meas	sures	Pedestrian Pe	erforma	nce		
Intersection	Approach	Score	LOS	Crosswalk	Score	LOS		
e @	Eastbound	1.52	В	Southbound	2.32	В		
c Ave ge A	Westbound	1.56	В	Northbound	2.31	В		
antic	Northbound	1.63	В	Eastbound	1.75	В		
Atl	Southbound	1.64	В	Westbound	1.75	В		
ve on	Eastbound	1.59	В	Southbound	2.38	В		
ic A D ngt	Westbound	1.65	В	Northbound	2.36	В		
lant @ ashi	Northbound	1.64	В	Eastbound	1.81	В		
At W	Southbound	1.66	В	Westbound	1.80	В		
ve ve	Eastbound	1.61	В	Southbound	2.37	В		
ic A ø Gro /e	Westbound	1.66	В	Northbound	2.37	В		
lant @ dar Av	Northbound	1.63	В	Eastbound	1.77	В		
Atl	Southbound	1.64	В	Westbound	1.77	В		
d d	Eastbound	1.58	В	Southbound	2.34	В		
ic A ້ ອີ sfiel	Westbound	1.45	А	Northbound	2.34	В		
lant @ An A	Northbound	1.61	В	Eastbound	1.75	В		
At	Southbound	N/A	N/A	Westbound	1.46	А		
ve n	Eastbound	1.60	В	Southbound	2.34	В		
ic A گ ingc ve	Westbound	1.46	А	Northbound	2.34	В		
lant 6 An Ar	Northbound	1.62	В	Eastbound	1.71	В		
At H	Southbound	N/A	N/A	Westbound	1.43	А		
i x a gic	Eastbound	2.01	В	Southbound	2.41	В		
lant ve (isse Ave	Westbound	1.59	В	Northbound	2.46	В		
At A E	Southbound	1.73	В	Westbound	1.81	В		
ve ive	Eastbound	1.66	В	Southbound	2.37	В		
ic A ୭ SS A	Westbound	1.48	А	Northbound	2.36	В		
lant ه ugla	Northbound	1.61	В	Eastbound	1.75	В		
At Doi	Southbound	N/A	N/A	Westbound	1.47	А		
ve bu	Eastbound	1.64	В	Southbound	2.38	В		
ic A D icks icks g Ze	Westbound	1.65	В	Northbound	2.37	В		
lant 6 der r	Northbound	1.62	В	Eastbound	1.73	В		
Atl Fre	Southbound	1.63	В	Westbound	1.74	В		

Exhibit 24: PM Peak Base 2020 MOEs (Bikes/Peds) [1/1]





SCENARIO/ANA	LYSIS YEAR		Bas	e Conditions/2020				
HCM 6thEdition	JUR Bike Pe	erformance Me	SAT Peak	Pedestriar	DI:00 PM)	Measures		
Intersection	Approach	Score		Crosswalk	Score			
®	Eastbound	1.74	В	Southbound	2.45	В		
: Ave ge Av	Westbound	1.74	В	Northbound	2.44	В		
lantic	Northbound	1.63	В	Eastbound	1.78	В		
A O	Southbound	1.63	В	Westbound	1.78	В		
ave ave	Eastbound	1.77	В	Southbound	2.47	В		
: Ave gton /	Westbound	1.80	В	Northbound	2.46	В		
ashing	Northbound	1.63	В	Eastbound	1.83	В		
N A	Southbound	1.70	В	Westbound	1.84	В		
₿ A	Eastbound	1.81	В	Southbound	2.51	С		
Ave	Westbound	1.83	В	Northbound	2.49	В		
tlantic dar Gi	Northbound	1.64	В	Eastbound	1.79	В		
Cec	Southbound	1.69	В	Westbound	1.80	В		
ê ê	Eastbound	1.67	В	Southbound	2.41	В		
eld Av	Westbound	1.62	В	Northbound	2.42	В		
lantic	Northbound	1.62	В	Eastbound	1.78	В		
¥ ≥	Southbound	N/A	N/A	Westbound	1.48	А		
© e	Eastbound	1.67	В	Southbound	2.40	В		
: Ave gon A	Westbound	1.60	В	Northbound	2.40	В		
untinç	Northbound	1.63	В	Eastbound	1.73	В		
Ψ	Southbound	N/A	N/A	Westbound	1.45	А		
Ave	Eastbound	2.00	В	Southbound	2.47	В		
antic . @ sex A	Westbound	1.67	В	Northbound	2.47	В		
Atla Es	Southbound	1.83	В	Westbound	1.97	В		
je @	Eastbound	1.72	В	Southbound	2.41	В		
Ave Iss Au	Westbound	1.58	В	Northbound	2.41	В		
lantic	Northbound	1.62	В	Eastbound	1.76	В		
	Southbound	N/A	N/A	Westbound	1.48	А		
@ Ave	Eastbound	1.44	А	Southbound	2.41	В		
sburg	Westbound	1.52	В	Northbound	2.41	В		
erick:	Northbound	1.41	А	Eastbound	1.74	В		
AI AI	Southbound	1.44	А	Westbound	1.76	В		

Exhibit 25: SAT Peak Base 2020 MOEs (Bikes/Peds) [1/1]

The summary exhibits show that the intersections generally operate acceptable LOS [LOS D or better, and/or a v/c ratio of 0.85 or less], during all peak hours for vehicles, pedestrians, and bicyclists. No areas of recurring congestions were identified in the analysis.





6.0 FUTURE YEAR ANALYSIS

6.1 TRAFFIC FORECASTING

Again, the Build scenarios for Atlantic Avenue assumed a Future Year 2025 Scenario (assumed Opening Year) and a Future Year 2045 Scenario (assumed Design Year). These traffic forecasts are included in **Appendix B**.

The Base Year 2020 traffic volumes, pedestrian volumes, and bike volumes were grown to the respective future years 2025 and 2045.

The future 2025 and 2045 traffic volumes, pedestrian volumes, and bike volumes were derived by applying a linear growth rate to the existing traffic volumes at each study intersection. The linear traffic growth rate was 1.00% per year for the City of Margate. This growth rate was obtained from NJ DOT's website.

6.1.1 Future Years 2025 Analysis Results

The Build scenario assumes the conversion from four to three lanes to be completed for vehicles, while inclusion of bike lanes, parking, and pedestrian facilities. Due to limitations within the Synchro and SimTraffic software, the below results summarize Road Diets Options 1 & 2. The advantages and disadvantages of having protected bike lanes will be discussed later in the report.

Again, Synchro and SimTraffic software were utilized to perform capacity analyses for the study area intersections. Performance measures selected for this project include delay per vehicle, Level of Service (LOS), and the volume to capacity (v/c) ratio for vehicles. Pedestrians and bikes were also evaluated and include LOS for Bikes or BLOS and LOS for Pedestrians or PLOS.

Summary tables for future operations are summarized below in **Exhibits 26** to **34**. These summary tables are also included in **Appendix D** and are followed by the detailed output reports from the analysis software.







Exhibit 26: AM Peak Future Year 2025 MOEs (Vehicles) [1/2]

SCENAR	RIO/ANALYSI	S YEAR		•		Road	d Diet/Futu	ure Year 20	25			
	PEAK HOUR					AM Pea	ak (08:00 A	M to 09:00	AM)			
						Vehicul	ar Perform	nance Mea	sures			
п)		DELAY (seconds) &	k LOS (Lett	er Grade)		Volume to C	apacity Ratio		
Intersection	Approach	Lane Config.	By Lane	Config.	Ву Ар	proach	By Overall Intersection		By Lane Config.	Мах		
		Left	1.8	А					0.01			
	Eastbound	Thru	0.0	A	2.7	А			0.00			
		Right	2.7	A					0.26			
		Left	0.2	А					0.01			
9 Q	Westbound	Thru	0.0	А	0.4	А			0.00			
Ave le Ai		Right	0.4	А					0.23			
olidç		Left	39.3	D			4.3	A	0.11	0.28		
Atla Co	Northbound	Thru	0.0	А	39.3	D			0.00			
		Right	0.0	А					0.00			
	Left 42.9 D	0.28										
	Southbound	Thru	0.0	А	42.9	D			0.00			
		Right	0.0	А					0.00			
		Left	0.1	А					0.04			
	Eastbound	Thru	0.0	А	0.7	А			0.00			
		Right	0.8	А					0.32			
0		Left	0.0	А					0.01			
Atlantic Ave @ Washington Ave	Westbound	Thru	0.0	А	0.8	А			0.00	0.46		
		Right	0.8	А			4 0	А	0.36			
		Left	36.7	D					0.09			
	Northbound	Thru	0.0	А	36.7	D			0.00			
		Right	0.0	А				0.00				
		Left	44.7	D		44.7 D			0.46			
	Southbound	Thru	0.0	A	44.7				0.00			
		Right	0.0	A					0.00			
		Left	0.2	A					0.03			
	Easibound	l hru	0.0	A	0.8	A			0.00			
		Right	0.9	A					0.36			
© S	Wasthound	Leit	0.0	A	0.7	٨			0.01			
ve (Westbound	Diabt	0.0	A	0.7	A			0.00			
Grov		Rigili	0.7	A			2.8	А	0.33	0.36		
Atlan edar	Northbound	Thru	0.0	Δ	39.8	D			0.10			
Ce /	Hornbound	Right	0.0	Δ		D			0.00			
		Left	39.3	D					0.00			
	Southbound	Thru	0.0	Δ	39.3	D			0.14			
		Right	0.0	A		_			0.00			
		Left	0.0	A					0.01			
	Eastbound	Thru	0.0	A	0.7	А			0.00			
		Right	0.7	A					0.31			
/e @ Ave		Left	0.2	А					0.03			
ic Av	Westbound	Thru	0.0	А	0.8	А	2.0	А	0.00	0.50		
lanti ansf		Right	0.9	А					0.37			
At At		Left	46.6	D					0.50			
	Northbound	Thru	0.0	А	46.6	D			0.00			
		Right	0.0	А		D			0.00			
		. 0			•							





Exhibit 27: AM Peak Future Year 2025 MOEs (Vehicles) [2/2]

SCENAR	S YEAR	Road Diet/Future Year 2025										
	PEAK HOUR					AM Pea	ak (08:00 A	M to 09:00	AM)			
						Vehicu	lar Perform	nance Meas	sures			
HC	IVI 6IN EQITIC	in		DELAY (seconds) 8	LOS (Lett	er Grade)		Volume to C	apacity Ratio		
Intersection	Approach	Lane Config.	By Lane	Config.	Ву Ар	proach	By O	verall	By Lane	Max		
		5		0	5 1		Inters	ection	Config.			
		Left	0.0	А					0.02			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
& Ø		Right	0.7	А					0.31			
ave on A		Left	0.0	А					0.01			
ingto	Westbound	Thru	0.0	А	0.8	А	1.9	А	0.00	0.50		
Atlar		Right	0.7	А					0.37			
~ ±		Left	46.6	D					0.50			
	Northbound	Thru	0.0	А	46.6	D			0.00			
		Right	0.0	А					0.00			
Faathound		Left	0.1	А	0.4	^			0.04			
© Eastbound		Thru	0.7	А	0.0	A			0.31			
Allantic Ave Essex Ave Southbound	Thru	0.0	А	0.0	^	1.0	٨	0.00	0.51			
	vvestbound	Right	0.8	А	0.8	A	4.0	A	0.36	0.51		
		Left	41.9	D	41.0				0.51			
	Southbound	Right	0.0	А	41.9	D			0.00			
		Left	0.0	А					0.02			
	Eastbound	Thru	0.0	А	0.7	A			0.00	0.50		
		Right	0.7	А					0.32			
/e @ Ave		Left	0.0	А					0.01			
ic Av lass	Westbound	Thru	0.0	А	1.0	А	1.9	А	0.00			
lanti ougl		Right	1.0	А					0.41			
D		Left	46.6	D					0.50			
	Northbound	Thru	0.0	А	46.6	D			0.00			
		Riaht	0.0	А					0.00			
		Left	0.5	А					0.01			
	Eastbound	Thru	0.0	A	0.7	А			0.00			
		Right	0.7	A					0.33			
		Left	1.7	A					0.01			
@ Ave	Westbound	Thru	0.0	A	3.4	А			0.00			
Ave		Right	3.5	A					0.40			
ntic , cksk		l eft	39.2	D			4.4	А	0.17	0.40		
Atlar	Northbound	Thru	0.0	Α	39.2	D			0.00			
Fre		Right	0.0	Δ	07.2				0.00			
		L off	38.0				_		0.17			
	Southbound	Thru	0.7		38.0	D			0.00			
	Journourlu	Diabt	0.0	A	50.7				0.00			
		Right	U.U	A						0.00		





SCENARIO/ANALYSIS YEAR Road Diet/Future Year 2025												
	PEAK HOU	R	PM Peak (05:00 PM to 06:00 PM)									
		tion			V	/ehicula	Perfor	mance M	Measures			
		liuii	DEL	AY (sec	onds) &	LOS (L	etter Gr	ade)	Volume to C	apacity Ratio		
Intersection	Approach	Lane	By l	ane	By An	oroach	Ву О	verall	By Lane	Мах		
Intel Section	Арргоасн	Configuration	Config	uration	ру үр	JI Uden	Inters	ection	Configuration	Wax		
		Left	3.2	А					0.01			
	Eastbound	Thru	0.0	А	2.8	А			0.00			
		Right	2.7	А					0.25			
		Left	2.9	А					0.01			
e @ Ave	Westbound	Thru	0.0	А	2.9	А			0.00			
c Av Ige		Right	2.9	А			50	Λ	0.29	0.30		
antic		Left	42.8	D			J. 7		0.23	0.37		
Atl	Northbound	Thru	0.0	А	42.8	D			0.00			
		Right	0.0	А					0.00			
	Left 46.9 D 0.39	0.39										
	Southbound	Thru	0.0	А	46.9	D			0.00			
		Right 0.0 A		0.00								
		Left	0.1	А					0.04			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
		Right	0.7	А					0.33			
Ð	® \$ "	Left	0.0	А					0.01			
® ¥ Wes	Westbound	Thru	0.0	А	1.0	А			0.00	0.42		
c Av gtor		Right	1.0	А			3.0	Λ	0.41			
anti		Left	38.7	D			J. 7		0.25			
Atl Wa	Northbound	Thru	0.0	А	38.7	D			0.00			
		Right	0.0	А					0.00			
	Southbound	Left	43.5	D		D			0.42			
		Thru	0.0	А	43.5				0.00			
		Right	0.0	A					0.00			
		Left	0.0	А					0.01			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
		Right	0.6	А					0.33			
e		Left	0.0	А					0.02			
e Av	Westbound	Thru	0.0	А	0.8	А			0.00			
c Av		Right	0.8	А			3.2	Δ	0.38	0 38		
anti ar G		Left	41.9	D			0.2		0.23	0.00		
Atl	Northbound	Thru	0.0	А	41.9	D			0.00			
		Right	0.0	A					0.00			
		Left	41.1	D					0.19			
	Southbound	Thru	0.0	А	41.1	D			0.00			
		Right	0.0	А					0.00			
		Left	0.0	А					0.01			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
ke @		Right	0.6	А					0.32			
ave ld Av		Left	0.0	А					0.01			
sfiel	Westbound	Thru	0.0	А	0.7	А	1.6	А	0.00	0.45		
Atlar Man		Right	0.7	А					0.34			
		Left	47.8	D					0.45			
	Northbound	Thru	0.0	А	47.8	D			0.00			
	DI IDOUI DI IDOUI D	Right	0.0	А					0.00			

Exhibit 28: PM Peak Future Year 2025 MOEs (Vehicles) [1/2]

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Exhibit 29: PM Peak Future Year 2025 MOEs (Vehicles) [2/2]

SCENA	RIO/ANALYS	IS YEAR	Road Diet/Future Year 2025									
	PEAK HOUF	2				PM Peal	< (05:00	PM to 0	6:00 PM)			
	CM 4th Editi	0.0			V	/ehicula	r Perfor	mance l	Veasures			
П	CIVI OUT EUTU	UII	DEL	AY (sec	conds) 8	LOS (L	etter Gr	ade)	Volume to C	apacity Ratio		
Intercection	Approach	Lana Config	By l	ane	By An	nroach	By O	verall	By Lane	Мах		
IIIIEI Section	Арргоасн	Lane Conny.	Config.		Intersection		Config.	IVIAX				
		Left	0.1	А					0.02			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
g a		Right	0.6	А					0.31			
Ave on A		Left	0.0	А					0.01			
ingt-	Westbound	Thru	0.0	А	0.7	А	1.4	A	0.00	0.35		
Atlar Hunt		Right	0.7	А					0.35			
≪ ⊥ Northbour		Left	38.9	D					0.13			
	Northbound	Thru	0.0	А	38.9	D			0.00			
		Right	0.0	А					0.00			
~	Easthound	Left	0.3	А	0.9	Δ			0.11			
e e		Thru	0.9	А	0.7		A		0.42			
X X Westhound	Thru	0.0	А	0.7	Δ	1.6	Λ	0.00	0.65			
antio	VVCStbourid	Right	0.7	А	0.7		4.0		0.35	0.00		
Atl	Southbound	Left	45.8	D	15.9	D			0.65			
	50001000010	Right	0.0	А	43.0	D			0.00			
		Left	0.1	А					0.05			
	Eastbound	Thru	0.0	А	0.5	A			0.00	0.35		
B Đ		Right	0.5	А					0.33			
ave s Ai		Left	0.0	А					0.01			
ntic / glas	Westbound	Thru	0.0	А	0.6	А	1.4	А	0.00			
Atlar Dou		Right	0.6	А					0.35			
		Left	46.3	D					0.26			
	Northbound	Thru	0.0	А	46.3	D			0.00			
		Right	0.0	А					0.00			
		Left	0.3	А					0.01			
	Eastbound	Thru	0.0	А	0.6	А			0.00			
		Right	0.6	А					0.34			
e.		Left	1.5	А					0.01			
e B ∀	Westbound	Thru	0.0	А	2.8	А			0.00			
c Av sbu		Right	2.8	А			25	٨	0.36	0.26		
antic		Left	44.4	D			3.0	A	0.23	0.50		
Atl	Northbound	Thru	0.0	А	44.4	D			0.00			
LL.		Right	0.0	А					0.00			
		Left	45.7	D					0.30			
	Southbound	Thru	0.0	А	45.7	D			0.00			
		Right	0.0	А					0.00			





Exhibit 30: SAT Peak Future Year 2025 MOEs (Vehicles) [1/2]

SCENA	RIO/ANALYS	IS YEAR	Road Diet/Future Year 2025								
	PEAKHOUR				S	AT Pea	k (12:00	PM to 0)1:00 PM)		
					V	ehicula	r Perfor	mance M	l easures		
ŀ	ICM 6th Editi	on	DEL	AV (sec	snds) &	105/1	etter Gr	ade)	Volume to Car	acity Ratio	
				41 (3000		100 (1		auej			
Intersection	Approach	Lane Configuration	By Lane Configuration		By Approach		By Overall Intersection		By Lane Configuration	Max	
		Left	2.1	Α					0.03		
	Eastbound	Thru	0.0	Α	6.3	A			0.00		
		Right	6.4	A					0.60		
e (9)		Left	2.1	A					0.01		
Av	Westbound	Thru	0.0	A	1.7	A			0.00		
ic A dge	idge	Right	1.6	A			6.6	А	0.58	0.60	
anti	N a while be a constant	Left	45.4	D	45.4	_			0.18		
Atl	Northbound	Ihru	0.0	A	45.4	D			0.00		
		Right	0.0	A					0.00		
South	Southbound	Leπ	46.3		46.3	р			0.32		
	Southbound	I nru Bight	0.0	A	40.5	U			0.00		
			0.0	A					0.00		
	Eastbound	Thru	0.2	A	24	Δ			0.08		
	© % % K % V % C 0	Right	2.5	Δ	2.4	^			0.64		
		Left	2.5	Δ					0.04		
Ave B		Thru	0.0	Δ	3.7	А			0.00	0.74	
Ave		Right	37	Δ	•••				0.00		
tic		Left	36.9	D			6.1	A	0.11		
tlan	Northbound	Thru	0.0	A	36.9	D			0.00		
A A		Right	0.0	A					0.00		
	Southbound	Left	53.6	D	53.6	D			0.61		
		Thru	0.0	Α					0.00		
		Right	0.0	Α					0.00		
		Left	0.1	Α					0.02		
	Eastbound	Thru	0.0	Α	2.1	Α			0.00		
		Right	2.1	Α					0.63		
e e		Left	0.1	Α					0.03		
e A (Westbound	Thru	0.0	Α	2.7	А			0.00		
Lov A		Right	2.8	Α			52	Δ	0.67	0.67	
intio r G		Left	45.3	D			5.2		0.22	0.07	
Atla eda	Northbound	Thru	0.0	Α	45.3	D			0.00		
~ 0		Right	0.0	Α					0.00		
		Left	46.2	D					0.34		
	Southbound	Thru	0.0	Α	46.2	D			0.00		
		Right	0.0	Α					0.00		
		Left	0.0	Α					0.02		
0	Eastbound	Thru	0.0	Α	0.9	A			0.00		
e @ Ave		Right	0.9	Α					0.44		
Avi Id		Left	0.0	A					0.01	0.54	
ıtic sfie	Westbound	Thru	0.0	A	1.4	4 A 2.1	2.1	A	0.00	0.54	
tlar 1an		Right	1.4	A					0.54		
× ²	N and b 1	Left	50.4	D	50.4	-	D		0.29		
	Northbound	Thru	0.0	A		· D			0.00		
		Right	0.0	A					0.00		





Exhibit 31: SAT Peak Future Year 2025 MOEs (Vehicles) [2/2]

SCEN	ARIO/ANALYSI	S YEAR	AR Road Diet/Future Year 2025							• •
	PEAK HOUR					SAT Pe	ak (12:00	PM to 01	:00 PM)	
	HCM 6th Editic	ND .				Vehicul	ar Perfor	mance M	leasures	
		711	DE	ELAY (sec	conds) 8	LOS (L	etter Gra	de)	Volume to Capacity Ratio	
Interception	Approach	Lane	By I	Lane	Duche	nraaah	By O	verall	By Lane	Max
Intersection	Approach	Configuration	Config	uration	ву ар	proach	Inters	ection	Configuration	IVIAX
		Left	3.8	А					0.02	
	Eastbound	Thru	0.0	А	7.1	А			0.00	
© S		Right	7.1	А					0.48	
Ave Dn A		Left	1.6	А					0.03	
ngto	Westbound	Thru	0.0	А	2.2	А	5.1	А	0.00	0.61
unti		Right	2.3	А					0.61	
マゴ Northbound	Left	38.3	D					0.22		
	Northbound	Thru	0.0	А	38.3	D			0.00	
	Right	0.0	А					0.00		
© Easthound		Left	0.2	А	0.8	Δ			0.08	
	Thru	0.9	А	0.0	~~~~			0.39		
X AV	A Westhound	Thru	0.0	А	11	А	78	А	0.00	0.83
antic	Westbound	Right	1.1	А			7.0		0.45	
Att	Southbound	Left	54.0	D	54.0	D			0.83	
		Right	0.0	А		_			0.00	
		Left	0.1	A	0.8				0.05	
	Eastbound	Thru	0.0	A		А			0.00	
© e		Right	0.8	A					0.42	
Ave ss A		Left	0.0	A					0.01	
glas.	Westbound	Thru	0.0	A	1.1	A	1.6	A	0.00	0.48
vtlar Dou		Right	1.1	A					0.48	
4 -		Left	45.6	D					0.18	
	Northbound	Thru	0.0	A	45.6	D			0.00	
		Right	0.0	А					0.00	
		Left	1.0	A	0.0				0.01	
	Eastbound	Thru	0.0	A	0.9	A			0.00	
		Right	0.9	A					0.41	
© A		Left	1.9	A					0.01	
ve (Westbound	Thru	0.0	A	4.4	A			0.00	
ic A <sbu< td=""><td></td><td>Right</td><td>4.4</td><td>A</td><td></td><td></td><td>5.0</td><td>А</td><td>0.48</td><td>0.48</td></sbu<>		Right	4.4	A			5.0	А	0.48	0.48
erick	N Le utile 1	Left	43.7	D	40.7	~			0.10	
Atl	INORTINDOUND	l hru	0.0	A	43.7	D			0.00	
ц.		Right	0.0	A					0.00	
	Cauthleaund	Lett	45.3	D	45.3				0.26	
	Southbound	l hru	0.0	A		3 D			0.00	
		Right	0.0	A					0.00	





SCENARIO/ANAL	YS IS YEAR		Road Die	et/Future Yea	r 2025	
PEAK HO	UR		AMPeak (0	8:00 AM to 0	9:00 AM)	
(HCM6th Edition)	Bike Perfe	ormance Me	a su re s	Pedestri N	an Performa Measures	апсе
In tersection	Approach	Score	LOS	Crosswalk	Score	LOS
e e	Eastbound	1.82	В	Southbound	2.16	В
jic A D lidg ve	Westbound	1.72	В	Northbound	2.16	В
ant © 00 An	Northbound	1.46	А	Eastbound	1.75	В
Atl	Southbound	1.46	А	Westbound	1.75	В
ve on	Eastbound	1.88	В	Southbound	2.22	В
aic A a ingt ve	Westbound	1.94	В	Northbound	2.2.2	В
ant 6 An An	Northbound	1.46	А	Eastbound	1.83	В
Atl Wa	Southbound	1.50	А	Westbound	1.81	В
ve	Eastbound	1.93	В	Southbound	2.23	В
jc A p Gro <i>re</i>	Westbound	1.95	В	Northbound	2.22	В
ant @ Av	Northbound	1.46	А	Eastbound	1.76	В
Atl	Southbound	1.46	А	Westbound	1.76	В
ve d	Eastbound	1.82	В	Southbound	2.19	В
ic A D sfiel ve	Westbound	1.79	В	Northbound	2.19	В
lant 6 A	Northbound	1.45	А	Eastbound	1.76	В
At	Southbound	N/A	N/A	Westbound	1.47	А
on	Eastbound	1.86	В	Southbound	2.20	В
aic A a ingo ve	Westbound	1.81	В	Northbound	2.21	В
lant 0 A	Northbound	1.46	А	Eastbound	1.77	В
At H	Southbound	N/A	N/A	Westbound	1.48	А
a a a a a a a a a a a a a a a a a a a	Eastbound	2.07	В	Southbound	2.24	В
lan ve (sse Ave	Westbound	1.93	В	Northbound	2.12	В
At A F	Southbound	1.53	В	Westbound	1.84	В
ive	Eastbound	1.89	В	Southbound	2.2.2	В
itic∔ @ glas ve	Westbound	1.88	В	Northbound	2.23	В
lant () A	Northbound	1.46	А	Eastbound	1.77	В
At I	Southbound	N/A	N/A	Westbound	1.49	А
Ave ¢sb e	Eastbound	1.91	В	Southbound	2.25	В
tic / @ Ave	Westbound	2.08	В	Northbound	2.25	В
lant (ede urg	Northbound	1.47	А	Eastbound	1.76	В
At Fr	Southbound	1.48	А	Westbound	1.76	В

Exhibit 32: AM Peak Future Year 2025 MOEs (Bikes/Peds) [1/1]





Exhibit 33: PM Peak Future Year 2025 MOEs (Bikes/Peds) [1/1]

S CENARIO/AN	ALYSIS YEAR	•	Road Diet/Future Year 2025						
PEAK	HOUR		P M P e a k	05:00 PM to 06:00 PM)					
HCM 6 th Ed itio n	Bike Perfo	rmance Me	a s u re s	Pedestrian Performance Measures					
In tersection	Approach	S c o re	LOS	Crosswalk	S c o re	LOS			
Ive	Eastbound	1.82	В	Southbound	2.20	В			
tic A @ ge A	Westbound	1.89	В	Northbound	2.20	В			
tlant 0	Northbound	1.46	А	Eastbound	1.76	В			
Ai	Southbound	1.48	А	Westbound	1.76	В			
ve on	Eastbound	1.97	В	Southbound	2.27	В			
cic A ه ingt ve	Westbound	2.09	В	Northbound	2.26	В			
lant (Ash A	Northbound	1.48	А	Eastbound	1.85	В			
At W	Southbound	1.50	А	Westbound	1.82	В			
ve ve	Eastbound	2.00	В	Southbound	2.28	В			
jic A D Gro Ve	Westbound	2.10	В	Northbound	2.28	В			
lant @ dar A	Northbound	1.47	А	Eastbound	1.78	В			
At Ce	Southbound	1.48	А	Westbound	1.78	В			
ve Ave	Eastbound	1.95	В	Southbound	2.23	В			
iic A ഉ eld <i>i</i>	Westbound	1.84	В	Northbound	2.23	В			
lant (6 nsfi	Northbound	1.45	А	Eastbound	1.76	В			
At Ma	Southbound	N/A	N/A	Westbound	1.47	А			
ve in	Eastbound	1.97	В	Southbound	2.23	В			
ic A அ ingc ve	Westbound	1.87	В	Northbound	2.24	В			
lant (unt A	Northbound	1.46	А	Eastbound	1.77	В			
At H	Southbound	N/A	N/A	Westbound	1.48	А			
tic @ Ave	Eastbound	2.47	В	Southbound	2.36	В			
tlant ve (sex <i>H</i>	Westbound	2.00	В	Northbound	2.26	В			
At A Ess	Southbound	1.58	В	Westbound	1.96	В			
ve ve	Eastbound	2.12	В	Southbound	2.27	В			
iic A D ISS A	Westbound	1.92	В	Northbound	2.28	В			
llant ((ugla	Northbound	1.45	А	Eastbound	1.81	В			
At Do	Southbound	N/A	N/A	Westbound	1.51	В			
ve sbu	Eastbound	2.06	В	Southbound	2.29	В			
iic A Ø iicks Ave	Westbound	2.09	В	Northbound	2.28	В			
llant (eder rg,	Northbound	1.46	А	Eastbound	1.76	В			
At Fre	Southbound	1.46	А	Westbound	1.76	В			





S CENARIO/A	NALYSIS		Road Diet/Future Year 2025							
РЕАК Н	OUR		SAT Peak	(12:00 PM to	01:00 PM)					
HCM 6 th Ed itio n	Bike Perf	formance M	e a s u re s	Pedest	trian Perforn Measures	nance				
In tersection	Approach	S c o re	LOS	Crosswalk	S c o re	LOS				
e @	Eastbound	2.27	В	Southbound	2.37	В				
c Av Ige A	Westbound	2.27	В	Northbound	2.37	В				
lantio	Northbound	1.46	А	Eastbound	1.77	В				
Atl	Southbound	1.52	В	Westbound	1.80	В				
e @	Eastbound	2.33	В	Southbound	2.40	В				
: Ave ingte ve	Westbound	2.40	В	Northbound	2.40	В				
antic /ashi A	Northbound	1.47	A	Eastbound	1.85	В				
Atl	Southbound	1.70	В	Westbound	1.86	В				
© e a A	Eastbound	2.43	В	Southbound	2.45	В				
S Ave Grov	Westbound	2.47	В	Northbound	2.44	В				
antic edar A	Northbound	1.48	А	Eastbound	1.79	В				
Atl Cć	Southbound	1.53	В	Westbound	1.81	В				
e @	Eastbound	2.12	В	Southbound	2.34	В				
c Ave	Westbound	2.18	В	Northbound	2.35	В				
antic	Northbound	1.47	A	Eastbound	1.78	В				
Atl Mé	Southbound	N/A	N/A	Westbound	1.50	А				
e @	Eastbound	2.28	В	Southbound	2.32	В				
c Ave	Westbound	2.14	В	Northbound	2.34	В				
antic	Northbound	1.68	В	Eastbound	1.78	В				
Atl Hu	Southbound	N/A	N/A	Westbound	1.51	В				
aic ave	Eastbound	2.24	В	Southbound	2.39	В				
tlant tve (¢ sex≜	Westbound	2.12	В	Northbound	2.30	В				
Ai A Es:	Southbound	1.45	A	Westbound	2.00	В				
e @	Eastbound	1.72	В	Southbound	2.34	В				
z Ave ass A	Westbound	1.58	В	Northbound	2.34	В				
antic ouglé	Northbound	1.62	В	Eastbound	1.82	В				
Dc	Southbound	N/A	N/A	Westbound	1.53	В				
e an	Eastbound	2.11	В	Southbound	2.34	В				
Ave cksb ve	Westbound	2.27	В	Northbound	2.34	В				
antic deric An	Northbound	1.46	А	Eastbound	1.78	В				
Atla Fre	Southbound	1.49	А	Westbound	1.78	В				

Exhibit 34: SAT Peak Future Year 2025 MOEs (Bikes/Peds) [1/1]

The summary exhibits show that the intersections generally operate acceptable LOS [LOS D or better, and/or a v/c ratio of 0.85 or less], during all peak hours for vehicles, pedestrians, and bicyclists for the Future Year 2025 with a Road Diet. No areas of recurring congestions were identified in the analysis.

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6.1.2 Future Years 2045 Analysis Results

Similarly, to the Future Year 2025 results, the Future Year 2045 results used the same methodology for analysis and are summarized in the below summary tables for Future Year 2045 operations (Exhibits 35 to 43).

These summary tables are also included in **Appendix E** and are followed by the detailed output reports from the analysis software.

SCENA	RIO/ANALYS	IS YEAR			Road Diet/Future Year 2045							
	PEAKHOUR				AM Pe Vehice	ak (08:	to rman	to 09:0	O AM)			
Н	CM 6th Editio) n	DELA	V (seconds	Venicu	(Lette	r Grade	ce Mea	Volume to Car	nacity Ratio		
Intersection	Appro a c h	Lane Configuration	By I Config	Lane uration	B Appro	y Dach	B y Overall Intersection		By Lane Configuration	Max		
	Eastbound	Left Thru Right	<u>1.8</u> 0.0 2.9	A A A	2.9	А			0.01 0.00 0.31			
Ave @ ge Ave	Westbound	Left Thru Right	0.3 0.0 0.5	A A A	0.5	А			0.01 0.00 0.27	0.04		
Atlantic Coolid	Northbound	Left Thru Right	43.7 0.0 0.0	D A A	43.7	D	4.6	A	0.13 0.00 0.00	0.34		
	Southbound	Left Thru Right	48.6 0.0 0.0	D A A	48.6	D			0.34 0.00 0.00			
0	Eastbound	<u>Left</u> Thru Right	0.1 0.0 1.1	A A A	1.0	А			0.05 0.00 0.40			
c Ave @ gton Ave	Westbound	Left Thru Right	0.0 0.0 1.0	A A A	1.0	А	43	۸	0.01 0.00 0.39	0.48		
Atlanti Washing	Northbound	Left Thru Right	36.7 0.0 0.0	D A A	36.7	D	7.5	п	0.08 0.00 0.00	0.40		
	Southbound	Left Thru Right	45.8 0.0 0.0	D A A	45.8	D			0.48 0.00 0.00			
0	Eastbound	Left Thru Right	0.6 0.0 1.1	A A A	1.1	А			0.03 0.00 0.42			
c Ave @ ove Ave	Westbound	Left Thru Right	1.8 0.0 3.1	A A A	3.1	А	42.0	D	0.01 0.00 0.35	0.42		
Atlanti Cedar Gr	Northbound	Left Thru Right	<u>44.4</u> 0.0 0.0	D A A	44.4	D	43.0	U	0.19 0.00 0.00	0.42		
	Southbound	Left Thru Right	43.8 0.0 0.0	D A A	43.8	D			0.16 0.00 0.00			
re @ Ave	Eastbound	Left Thru Right	2.0 0.0 0.8	A A A	0.8	А			0.01 0.00 0.33			
antic Av ınsfield .	Westbound	Left Thru Right	5.9 0.0 10.2	A A B	10.2	В	7.2	А	0.03 0.00 0.35	0.63		
Atl: Ma	Northbound	Left Thru Right	59.5 0.0 0.0	E A A	59.5	Е			0.63 0.00 0.00			

Exhibit 35: AM Peak Future Year 2045 MOEs (Vehicles) [1/2]





Exhibit 36: AM Peak Future Year 2045 MOEs (Vehicles) [2/2]

SCENA	RIO/ANALYS	SIS YEAR	Road Diet/Future Year 2045									
	PEAK HOUF	2	AM Peak (08:00 AM to 09:00 AM)									
		~ ~				Vehicu	lar Perf	orman	ce Measures			
Н	CIVI 6IN EQITI	ON	DELA	AY (seco	nds) &	LOS (L	.etter Gr	ade)	Volume to C	apacity Ratio		
			By l	_ane	B	Sy	By Overall		By Lane	N4		
Intersection	Approach	Lane Config.	Cor	nfig.	Appr	oach	Inters	ection	Config.	Max		
		Left	0.0	А					0.02			
	Eastbound	Thru	0.0	А	0.8	А			0.00			
Ave		Right	0.8	А					0.36			
AV.(Left	0.0	А					0.01			
ngt	Westbound	Thru	0.0	А	0.8	А	2.3	А	0.00	0.63		
Ian		Right	0.9	A					0.38			
At HL		Left	59.5	E		_			0.63			
	Northbound	Thru	0.0	A	59.5	E			0.00			
		Riaht	0.0	A					0.00			
8	Eastbound	Left	0.1	A	0.8	А			0.05			
Ave		l hru	0.9	A					0.37			
Westbound	<u>I hru</u>	0.0	A	0.8	А	4.2	А	0.00	0.50			
		Right	0.8	A					0.37			
	Southbound	Left	45.2	D	45.2	D			0.50			
		Right	0.0	A					0.00			
	Factbound	Leil	0.0	A	0.0	۸			0.02			
(C) (D)	Easibouriu	<u> </u>	0.0	A	0.8	A			0.00			
Av Av		Right	0.8	A					0.01			
ISS ISS	Westhound	Thru	0.0	A	1.0	Λ	2.2	٨	0.01	0.40		
ntic	viesibouriu	Diabt	0.0	A	1.0	A	2.3	A	0.00	0.05		
vtla			1.U 50.5						0.41			
A L	Northbound	Thru	0.0		50 5	F			0.00			
	Northbound	Piaht	0.0	A A	57.5	L			0.00			
		l eft	0.0	Δ					0.01			
	Fastbound	Thru	0.0	A	0.9	А			0.00			
	Eastbound	Right	0.0	Δ	0.7				0.38			
R		Left	17	Δ					0.01			
g /	Westbound	Thru	0.0	Δ	3.5	А			0.00			
Av		Right	35	Δ					0.41			
itic cks		Left	43.9	D			4.8	A	0.21	0.41		
erick	Northbound	Thru	0.0	A	43.9	D			0.00			
At		Right	0.0	A					0.00			
L.		Left	43.4	D			1		0.20			
S	Southbound	Thru	0.0	A	43.4	D			0.00			
		Right	0.0	A					0.00			





Exhibit 37: PM Peak Future Year 2045 MOEs (Vehicles) [1/2]

SCENA	RIO/ANALY	SIS YEAR	Road Diet/Futur						uture Year 2045				
	PEAKHOU	R			PI	/ Peak	(05:00 P	M to 06	:00 PM)				
					Ve	hicular	Perform	ance M	easures				
H	ICM 6th Edit	ion	DEL	AY (sec	onds)&	LOS (Le	etter Gra	ade)	Volume to Capacity Ratio				
Intersection	Approach	Lane	By L	ane	ВуАрр	broach	By O	verall	By Lane	Max			
			3.2	Δ			Inters	ection					
	Eastbound	Thru	0.0	Δ	2.8	А			0.01				
		Right	2.7	A					0.30				
		Left	2.9	A					0.01				
e @	Westbound	Thru	0.0	A	2.9	А			0.00				
Ave 3e <i>P</i>		Right	2.9	А					0.35				
ntic lidg		Left	42.8	D			5.9	A	0.25	0.42			
tlar. Coo	Northbound	Thru	0.0	А	42.8	D			0.00				
A -		Right	0.0	А					0.00				
		Left	46.9	D					0.42				
	Southbound	Thru	0.0	А	46.9	D			0.00				
		Right	0.0	А					0.00				
		Left	0.1	А					0.04				
	Eastbound	Thru	0.0	А	0.6	А			0.00				
		Right	0.7	А					0.39				
e e	© P	Left	0.0	А					0.01				
c Ave @ gton Av	Westbound	Thru	0.0	А	1.0	А			0.01 0.00 0.44 0.26 0.00 0.00				
		Right	1.0	А			3 9	Δ		0.44			
hing		Left	38.7	D			5.5			0.44			
Atla Vasl	Northbound	Thru	0.0	А	38.7	D							
		Right	0.0	А					0.00				
		Left	43.5	D	43.5	D			0.44				
	Southbound	Thru	0.0	A					0.00				
		Right	0.0	A					0.00				
		Left	0.0	Α					0.02				
	Eastbound	Thru	0.0	<u>A</u>	0.8	A			0.00				
		Right	0.9	<u>A</u>					0.40				
@ Ave		Left	0.0	<u>A</u>	0.0				0.02				
tve /	westbound	Ihru	0.0	<u>A</u>	0.8	A			0.00				
iic A Gro		Right	0.9	A			3.4	А	0.40	0.40			
lar (Northbound	Thru	41.0		11 G	D			0.24				
Atl	Northbound	Dight	0.0	A	41.0	U			0.00				
			41.0						0.00				
	Southbound	Thru	41.0	Δ	<i>4</i> 1 0	р			0.23				
	Southbound	Right	0.0	Δ	41.0	U			0.00				
		Loft	0.0	<u> </u>					0.00				
	Fastbound	Thru	0.0	Δ	0.6	Δ			0.01				
(G) a		Right	0.6	Δ	0.0				0.28				
ve @ Ave		left	0.0	A					0.01				
c A	Westbound	Thru	0.0	A	0.6	А	14	Α	0.00	0.45			
anti nsfi		Right	0.6	A			<u> </u>		0.30	0.45			
Atla Mai		Left	45.4	D			,		0.45	-			
₽≥	Northbound	Thru	0.0	A	45.4	D			0.00				
		Right	0.0	A					0.00				
		····ð···	0.0						0.00				





SCEN	ARIO/ANALYS	SIS YEAR	Road Diet/Future Year 2045									
	PEAK HOUP	2				PM Peak	< (05:00 P	'M to 06:0	0 PM)			
		0.0				Vehicula	r Perform	nance Me	asures			
	HCIVI OLITI EUTLI	011	D	ELAY (se	conds) &	LOS (Le	tter Grad	e)	Volume to Ca	pacity Ratio		
Interception	Approach	Lane	By l	ane	Ry An	proach	By O	verall	By Lane	Мах		
IIItel Section	Арргоасн	Configuration	Configuration By Approac		proach	Inters	ection	Configuration	IVIAA			
		Left	0.1	А					0.02			
	Eastbound	Thru	0.0	А	0.7	А			0.00			
ß D		Right	0.7	А					0.31			
we o		Left	0.0	А					0.01			
tic ⊿ ngto	Westbound	Thru	0.0	А	0.7	А	1.6	А	0.00	0.35		
Ntlan		Right	0.7	А					0.35			
~ 1		Left	39.0	D					0.13			
	Northbound	Thru	0.0	А	39.0	D			0.00			
		Right	0.0	А					0.00			
	Fasthound	Left	0.3	А	0.0	Λ			0.11			
®	Lasibouriu	Thru	1.0	А	0.9	~			0.42			
Ave Ave	Westhound	Thru	0.0	А	0.7	Δ	4.4	Δ	0.00	0.65		
antic sse)	Ssex ic	Right	0.7	А	0.7		7.7	73	0.35	0.00		
Atte	Southbound	Left	44.1	D	44.1	D			0.65			
	Sodalboaria	Right	0.0	А	11.1	D			0.00			
		Left	0.2	А	0.8				0.05			
	Eastbound	Thru	0.0	А		А			0.00			
(G) U		Right	0.9	А					0.33	0.35		
We (Left	0.1	А		А	1.6		0.01			
ttic A glass	Westbound	Thru	0.0	А	0.8			А	0.00			
Atlan Dou		Right	0.9	А					0.35			
4		Left	38.9	D					0.26			
	Northbound	Thru	0.0	А	38.9	D			0.00			
		Right	0.0	А					0.00			
		Left	0.4	А					0.01			
	Eastbound	Thru	0.0	А	0.8	А			0.00			
		Right	0.8	А					0.34			
ē		Left	1.6	А					0.01			
e @ ₫ ₩	Westbound	Thru	0.0	А	3.1	А			0.00			
sbur		Right	3.1	А			37	Δ	0.36	0.36		
Atlantic Atl		Left	44.6	D			5.7	73	0.23	0.00		
	Northbound	Thru	0.0	А	44.6	D			0.00			
		Right	0.0	А					0.00			
		Left	45.9	D					0.30			
	Southbound	Thru	0.0	А	45.9	D			0.00			
		Right	0.0	А					0.00			

Exhibit 38: PM Peak Future Year 2045 MOEs (Vehicles) [2/2]





SCENA	RIO/ANALYS	SIS YEAR	Road Diet/Future Year 2045							
	PEAKHOUP	2			SA	T Peal	k (12:00	PM to	01:00 PM)	
					Ve	hicular	Perfor	mance	Measures	
1	HCM 6th Editi	on	DELA	Y (seco	nds)&	LOS (L	etter Gı	ade)	Volume to Capacity Ratio	
Intersection	Approach	Lane Configuration	By L Config	.ane uration	B Appr	y oach	By Overall Intersection		By Lane Configuration	Max
		Left	2.1	Α					0.03	
	Eastbound	Thru	0.0	Α	8.5	Α			0.00	
		Right	8.6	Α					0.71	
8		Left	4.4	Α					0.02	
le (Westbound	Thru	0.0	Α	2.5	A			0.00	
: Av ge		Right	2.4	Α			81	Δ	0.68	0.71
ntic		Left	47.9	D			0.1		0.21	0.71
Coc	Northbound	Thru	0.0	Α	47.9	D			0.00	
4		Right	0.0	Α					0.00	
		Left	49.1	D					0.37	
	Southbound	Thru	0.0	Α	49.1	D			0.00	
		Right	0.0	Α					0.00	
		Left	0.2	Α					0.10	
	Eastbound	Thru	0.0	Α	3.3	Α			0.00	
		Right	3.5	Α					0.74	
a e		Left	0.0	Α					0.02	
c Ave @ jton Av	Westbound	Thru	0.0	Α	3.9	Α			0.00	
		Right	3.9	Α					0.76	0.70
ing	Northbound	Left	39.6	D	39.6		6.9	A	0.13	0.76
tlar ash		Thru	0.0	Α		D			0.00	
× %		Right	0.0	Α					0.00	
		Left	63.0	E					0.67	
	Southbound	Thru	0.0	Α	63.0	Е			0.00	
		Right	0.0	Α					0.00	
		Left	0.1	А					0.03	
	Eastbound	Thru	0.0	Α	2.9	Α			0.00	
		Right	3.0	Α					0.74	
a e		Left	0.1	Α					0.03	
e e	Westbound	Thru	0.0	Α	2.9	Α			0.00	
Av		Right	3.0	Α					0.69	0.74
Gr		Left	47.9	D			5.8	А	0.24	0.74
tlar	Northbound	Thru	0.0	Α	47.9	D			0.00	
% ◄		Right	0.0	Α					0.00	
		Left	48.9	D			1		0.37	
	Southbound	Thru	0.0	Α	48.9	D			0.00	
		Right	0.0	Α					0.00	
		Left	0.0	Α					0.02	
	Eastbound	Thru	0.0	Α	1.0	Α			0.00	
@ §	Construction Construction Construction	Right	1.0	А					0.53	
4 Å		0.0	А			1		0.01		
ic A ïelc	Westbound	Thru	0.0	А	1.5	Α	2.2	А	0.00	0.57
anti ınsf		Right	1.5	Α		A 2.2			0.57	
Atli Ma		Left	52.4	D			D		0.31	
	Northbound	Thru	0.0	А	52.4	4 D			0.00	
		Right	0.0	А					0.00	

Exhibit 39: SAT Peak Future Year 2045 MOEs (Vehicles) [1/2]





SCENA	RIO/ANALY	SIS YEAR	Road Diet/Future Year 2045								
	PEAK HOU	R				SAT Pea	ak (12:00) PM to (01:00 PM)		
					\	Vehicula	ar Perfor	mance	Measures		
F	ICM 6th Edit	ion	DEL	AY (seco	onds) &	LOS (Le	etter Gra	ide)	Volume to Capacity Ratio		
Intersection	Approach	Lane Config			By:				By		
	Approach	Earle Connig.	Lane C	Config.	Appr	oach	Overa	ill Int.	Lane Config.	Max	
		Left	0.2	А					0.02		
	Eastbound	Thru	0.0	А	1.8	А			0.00		
@ Ave		Right	1.9	А					0.56		
Ave on /		Left	0.1	А					0.03		
ngto	Westbound	Thru	0.0	А	2.3	А	3.0	А	0.00	0.63	
unti		Right	2.3	А					0.63		
< ⊥		Left	41.3	D					0.26		
	Northbound	Thru	0.0	А	41.3	D			0.00		
		Right	0.0	А					0.00		
0.	Easthound	Left	0.3	А	11	Λ			0.10		
e @	Lasibouriu	Thru	1.2	А	1.1	~			0.47		
A W	₩esthound	Thru	0.0	А	1 2	Λ	8.0	٨	0.00	0.95	
Essey Odisem	WESIDUUIU	Right	1.2	А	1.2	A	0.0	~	0.47	0.05	
	Southbound	Left	57.1	E	571	E			0.85		
	JULIIDUUIIU	Right	0.0	А	57.1				0.00		
		Left	0.1	А					0.06		
	Eastbound	Thru	0.0	А	0.9	А		A	0.00	0.48	
B D		Right	0.9	А					0.47		
Av		Left	0.0	А					0.01		
ic A lass	Westbound	Thru	0.0	А	1.0	А	1.9		0.00		
lant oug		Right	1.0	А					0.47		
D		Left	58.3	E					0.48		
	Northbound	Thru	0.0	А	58.3	E			0.00		
		Right	0.0	А					0.00		
		Left	1.0	А					0.02		
	Eastbound	Thru	0.0	А	1.1	А			0.00		
		Right	1.2	А					0.48		
)e		Left	1.7	А					0.01		
@ \{	Westbound	Thru	0.0	А	4.0	А			0.00		
Ave		Right	4.1	А			5.4		0.49	0.10	
Atlantic A dericksbi		Left	47.5	D			5.1	A	0.14	0.49	
	Northbound	Thru	0.0	А	47.5	D			0.00		
Fre		Right	0.0	А		U			0.00		
		Left	49.5	D					0.32		
S	Southbound	Thru	0.0	А	49.5	D			0.00		
		Right	0.0	А	1				0.00		

Exhibit 40: SAT Peak Future Year 2045 MOEs (Vehicles) [2/2]





Exhibit 41: AM Peak Future Year 2045 MOEs (Bikes/Peds) [1/1]

SCENARIO/ANAL	YSIS YEAR	Road Diet/Future Year 2045								
PEAK HO	UR		AM Peak	(08:00 AM to 09	:00 AM)					
HCM 6th Edition	Bike Performa	ance Mea	asures	Pedestrian I Mea	Performa	nce				
Intersection	Approach	Score	LOS	Crosswalk	Score	LOS				
	Eastbound	1.93	В	Southbound	2.20	В				
Atlantic Ave @	Westbound	1.80	В	Northbound	2.20	В				
Coolidge Ave	Northbound	1.46	А	Eastbound	1.76	В				
_	Southbound	1.47	А	Westbound	1.76	В				
	Eastbound	2.34	В	Westbound	2.42	В				
Atlantic Ave @	Westbound	1.98	В	Northbound	2.25	В				
Washington Ave	Northbound	1.46	А	Eastbound	1.85	В				
	Southbound	1.51	В	Westbound	1.82	В				
	Eastbound	2.05	В	Southbound	2.27	В				
Atlantic Ave @	Westbound	1.99	В	Northbound	2.26	В				
Cedar Grove Ave	Northbound	1.46	А	Eastbound	1.77	В				
	Southbound	1.47	А	Westbound	1.77	В				
	Eastbound	1.93	В	Southbound	2.22	В				
Atlantic Ave @	Westbound	1.83	В	Northbound	2.23	В				
Mansfield	Northbound	1.46	А	Eastbound	1.77	В				
	Southbound	N/A	N/A	Westbound	1.49	А				
	Eastbound	1.98	В	Southbound	2.23	В				
Atlantic Ave @	Westbound	1.85	В	Northbound	2.24	В				
Huntingon Ave	Northbound	1.46	А	Eastbound	1.78	В				
	Southbound	N/A	N/A	Westbound	1.49	А				
Atlantic Ave @	Eastbound	2.19	В	Southbound	2.24	В				
FSSAV AVA	Westbound	1.97	В	Northbound	2.18	В				
	Southbound	1.54	В	Westbound	1.88	В				
	Eastbound	2.01	В	Southbound	2.25	В				
Atlantic Ave @	Westbound	1.92	В	Northbound	2.27	В				
Douglass Ave	Northbound	1.46	А	Eastbound	1.78	В				
	Southbound	N/A	N/A	Westbound	1.50	А				
	Eastbound	2.04	В	Southbound	2.29	В				
Atlantic Ave @	Westbound	2.12	В	Northbound	2.29	В				
Fredericksburg Ave	Northbound	1.47	А	Eastbound	1.77	В				
	Southbound	1.48	А	Westbound	1.77	В				





SCENARIO/ANALYSIS YEAR	Road Diet/Future Year 2045									
PEAK HOUR	Road Diet/Future Year 2045 PM Peak (05:00 PM to 06:00 PM)									
HCM 6th Edition	PM Peak (05:00 PM to 06:00 PM)Bike Performance MeasuresPedestrian Performance									
Intersection	Approach	Score	LOS	Crosswalk	Score	LOS				
	Eastbound	1.92	В	Southbound	2.25	В				
Atlantic Ave @	Westbound	2.01	В	Northbound	2.25	В				
Coolidge Ave	Northbound	1.47	А	Eastbound	1.77	В				
	Southbound	1.48	А	Westbound	1.77	В				
	Eastbound	2.10	В	Southbound	2.31	В				
Atlantic Ave @	Westbound	2.13	В	Northbound	2.30	В				
Washington Ave	Northbound	1.48	А	Eastbound	1.87	В				
	Southbound	1.51	В	Westbound	1.83	В				
	Eastbound	2.14	В	Southbound	2.32	В				
Atlantic Ave @	Westbound	2.15	В	Northbound	2.32	В				
Cedar Grove Ave	Northbound	1.47	А	Eastbound	1.79	В				
	Southbound	1.49	А	Westbound	1.79	В				
	Eastbound	1.92	В	Southbound	2.22	В				
Atlantic Ave @	Westbound	1.81	В	Northbound	2.22	В				
Mansfield Ave	Northbound	1.44	А	Eastbound	1.76	В				
	Southbound	N/A	N/A	Westbound	1.47	А				
	Eastbound	2.11	В	Southbound	2.27	В				
Atlantic Ave @	Westbound	1.91	В	Northbound	2.28	В				
Huntingon Ave	Northbound	1.46	А	Eastbound	1.78	В				
	Southbound	N/A	N/A	Westbound	1.49	А				
Atlantic Avo @	Eastbound	2.47	В	Southbound	2.37	В				
	Westbound	2.00	В	Northbound	2.27	В				
LSSEX AVE	Southbound	1.58	В	Westbound	1.98	В				
	Eastbound	2.29	В	Southbound	2.32	В				
Atlantic Ave @	Westbound	1.97	В	Northbound	2.32	В				
Douglass Ave	Northbound	1.46	А	Eastbound	1.83	В				
	Southbound	N/A	N/A	Westbound	1.53	В				
	Eastbound	2.21	В	Southbound	2.33	В				
Atlantic Ave @	Westbound	2.13	В	Northbound	2.32	В				
Fredericksburg Ave	Northbound	1.46	А	Eastbound	1.77	В				
	Southbound	1.47	А	Westbound	1.76	В				

Exhibit 42: PM Peak Future Year 2045 MOEs (Bikes/Peds) [1/1]





SCENARIO / ANALYSIS YEAR	Road Diet/Future Year 2045									
PEAK HOUR	SAT Peak (12:00 PM to 01:00 PM)									
HCM 6th Edition	Bike Performance Measures Pedestrian Performance M									
Intersection	Approach	Score	LOS	Crosswalk	Score	LOS				
	Eastbound	2.46	В	Southbound	2.47	В				
Atlantic Ave @	Westbound	2.46	В	Northbound	2.46	В				
Coolidge Ave	Northbound	1.47	А	Eastbound	1.81	В				
	Southbound	1.54	В	Westbound	1.81	В				
	Eastbound	2.54	С	Southbound	2.46	В				
Atlantic Ave @	Westbound	2.46	В	Northbound	2.46	В				
Washington Ave	Northbound	1.48	А	Eastbound	1.90	В				
	Southbound	1.54	В	Westbound	1.87	В				
	Eastbound	2.53	С	Southbound	2.53	С				
Atlantic Ave @	Westbound	2.51	С	Northbound	2.51	С				
Cedar Grove Ave	Northbound	1.82	В	Eastbound	1.82	В				
	Southbound	1.83	В	Westbound	1.83	В				
	Eastbound	2.30	В	Southbound	2.38	В				
Atlantic Ave @	Westbound	2.26	В	Northbound	2.39	В				
Mansfield Ave	Northbound	1.46	А	Eastbound	1.79	В				
	Southbound	N/A	N/A	Westbound	1.51	В				
	Eastbound	2.28	В	Southbound	2.36	В				
Atlantic Ave @	Westbound	2.23	В	Northbound	2.39	В				
Huntingon Ave	Northbound	1.47	А	Eastbound	1.79	В				
	Southbound	N/A	N/A	Westbound	1.52	В				
Atlantia Avia	Eastbound	2.44	В	Southbound	2.44	В				
Fssey Ave	Westbound	2.18	В	Northbound	2.36	В				
	Southbound	1.69	В	Westbound	2.03	В				
	Eastbound	2.43	В	Southbound	2.39	В				
Atlantic Ave @	Westbound	2.18	В	Northbound	2.39	В				
Douglass Ave	Northbound	1.46	А	Eastbound	1.84	В				
	Southbound	N/A	N/A	Westbound	1.54	В				
	Eastbound	2.27	В	Southbound	2.38	В				
Atlantic Ave @	Westbound	2.32	В	Northbound	2.39	В				
Fredericksburg Ave	Northbound	1.47	А	Eastbound	1.78	В				
	Southbound	1.50	А	Westbound	1.79	В				

Exhibit 43: SAT Peak Future Year 2045 MOEs (Bikes/Peds) [1/1]

The summary exhibits show that the intersections generally operate acceptable LOS [LOS D or better, and/or a v/c ratio of 0.85 or less], during all peak hours for vehicles, pedestrians, and bicyclists for the Future Year 2045 with a Road Diet. No areas of recurring congestions were identified in the analysis. However, there are a few movements where the operation has degraded to a LOS E. These movement will experience longer delays and vehicle queues but should operate acceptably.





7.0 CONCLUSIONS & RECOMMENDATIONS

7.1 CONCLUSIONS

The traffic analysis completed for both the Future Year 2025 and Future Year 2045 show the Road Diet will work for all users of the corridor and intersections. No significant degradation in operations is expected for vehicles, while the corridor will be more pedestrian and bike friendly.

Some of the community benefits include:

- ENHANCED SAFETY Road diets lead to greater safety by slowing down through movement and redistributing space. These safety outcomes have a direct impact on people on foot and bicycles, patrons of a sidewalk business, and those behind the wheel. When redesigning a street, it is vital to prioritize designs that enable safe mobility for particularly vulnerable users, such as children and elderly pedestrians.
- **MULTIMODALITY** Not all transportation modes are created equal. Each has its own advantages in terms of safety, cost, efficiency, speed, and inclusivity. Safety accommodations for people on bicycles and on foot require a significantly less amount of space than single occupancy vehicles. By freeing up space and balancing the needs of different types of users, road diets create the opportunity for truly multimodal streets.
- **INCREASED PEDESTRIAN ACCESSIBILITY** One prominent benefit of a road diet is expanding the increased walkability of the corridor, directly impacting the current and future businesses that front on to them. Sidewalk businesses—like cafe's, that contribute spillover activity to other business and spaces contribute to an areas' economic vitality, walkability, perceived safety, and overall appeal.
- LOCAL ECONOMY BOOST Pedestrians and cyclists spend more money on local businesses than motorists. An unsurprising revelation from several research studies supports the case for better infrastructure to improve the experience of these users, which in turn improves the local economy.

7.2 **RECOMMENDATIONS**

- RVE recommends the City of Margate moves forward with a Road Diet concept that reduces Atlantic Avenue from a four to three-lane vehicular option.
- Two Road Diet Alternatives were evaluated for this report as a uniform operation along the Atlantic Avenue corridor and at each intersection. This included protected bike lanes versus non-protected bike lanes. Based on analysis of the corridor RVE recommends implementing the cross-section listed in Road Diet Option 1 (Exhibit 3). Plans showing the typical pavement marking scheme are included in Appendix F. Please note, the typical plans shown in the appendix slightly vary with the typical sections of the options presented in this report.
- However, variations at some intersections should be considered. For example, at the intersection of Atlantic Avenue at Washington Avenue, there is a high volume of westbound





right-turners, and an exclusive right turn lane would be beneficial, while other signalized locations include higher left turn movements and would warrant exclusive left turn lanes.

- Other ideas for enhanced safety include, evaluation of right turns on red, restricting parking near intersections, and adding pedestrian bulb-outs to reduce the crossing width of the crosswalk for pedestrians. Please note, the pedestrian bulb-outs may have to be initially completed with gore stripping, as additional drainage structures and pipes will likely conflict with the existing signal conduits and foundations.
- Future upgrades to the existing traffic signals from the current fixed pre-timed operation to an actuated and coordinated system would also provide an added level of efficiency to the corridor operation. It is recommended that the City include this signal technology upgrade for future consideration.