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# New Orleans Regional Planning Commission

## Land Use and Traffic Conditions Analysis
## Greater Mandeville Area

RPC Task MC-1.17
State Project No. H.972163.1
Federal Project No. H.97216

# Table of Contents

# Table of Figures

# Table of Tables



# Appendices

Appendix A – Intersection Improvement Sketches

Appendix B - Intersection Sheets

Appendix C – Capacity Analysis

# Introduction

## Purpose & Need

MAP-21 puts an emphasis on improving transportation mobility and reducing congestion at major bottleneck locations. As a result, the project team was tasked by the New Orleans Regional Planning Commission (RPC) to conduct a land use and traffic conditions analysis of the Greater Mandeville Area.

### *Project Limits*

The project limits extend from Lake Pontchartrain to Interstate 12 and between Bayou Castine and the Tchefuncte River.

### *Project Coordination*

The project is being carried out in coordination with the City of Mandeville, St. Tammany Parish, LADOTD District 62 office and the Regional Planning Commission.

### *Project Focus*

The study will focus on traffic data collection and analysis to alleviate traffic congestion at both existing and proposed land use development nodes within the study area.

## Project Management Committee

The RPC developed a Project Management Committee (PMC) to guide the technical work effort and to review the consultant's work products. The PMC consisted of the RPC, St. Tammany Parish, City of Mandeville, and LADOTD District 62 and other stakeholders, as appropriate. The necessary agendas, handouts and exhibits in advance of PMC meetings for RPC review and approval were distributed and prepared summary minutes of the meetings.

The PMC met multiple times during the course of the study effort. In addition, the consultant assisted RPC in the conduct of meetings with other stakeholder organizations in the area to discuss the project's purpose and need and project-related concerns. The RPC initiated these contacts and the consultant prepared summary meeting minutes for review and discussion with the PMC.

# Demographics

## Population

According to the US Census Bureau, the population of the City of Mandeville was estimated to be 12,236 as of 2014. While experiencing a boom between 1990 and 2000, the City's population growth rate has settled more in line with national averages since 2000. The City of Mandeville accounts for about 5% of the total St. Tammany Parish population.

### *Population Change*

Between 1990 and 2000, Mandeville's growth rate outpaced that of St. Tammany Parish, as well as the state and national growth rates. The rate at which Mandeville's population increased between 2000 and 2010 was slower than that of the Parish, but was still in line with the national average. The city population has continued to increase from 2010 to 2014. During this period, the growth rate has outpaced the parish, state, and national averages. From April 2010 to July 2015, the population percent change was a positive 3.5% growth.

### *Population Concentrations*

The western portion is the largest in terms of population, as shown in the following map. The northeastern portion of the project area is most sparsely populated while the area centered near the intersection of LA-22 and US-190 contains the highest density of the populace.

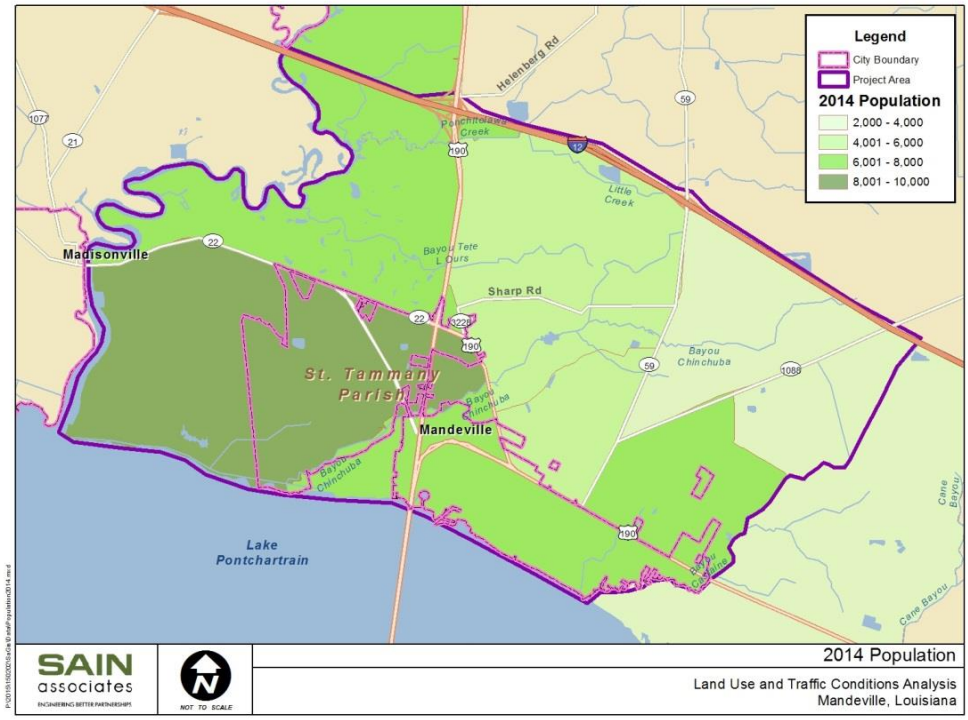


**Figure 1: Population Concentrations (Source US Census Bureau 2014)**

## *Population Growth Concentrations*

While the population change appears to be scattered around the project area, the greatest growth appears to have occurred where there is geographically room to expand. Conversely, the areas that saw decline in population were in more built-out areas. Meanwhile, the northwest portion of the project area experienced relatively little change in population.

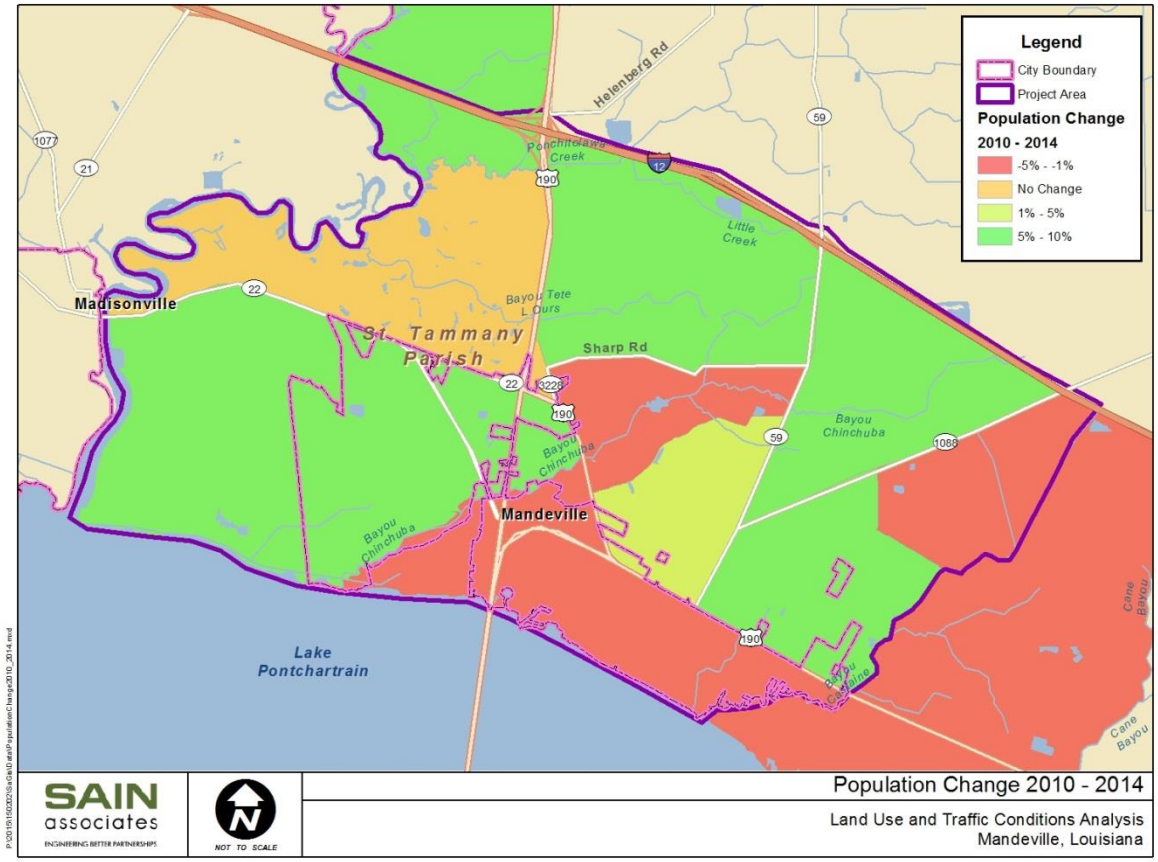


**Figure 2: Population Growth Map (Source US Census Bureau)**

# Proposed Area Developments

There are two large planned developments in the study area which are known to the PMC at this time. Information regarding both developments was provided to the Team by the PMC. These planned developments include *Port Marigny* and *Mariner's Village*. Both developments were considered in this analysis as stated in each section.

## Port Marigny

The Port Marigny site is located on Lake Pontchartrain, east of the Causeway. The 52.4-acre site is currently vacant after serving as the location for prefabrication of components used to build the 24-mile Causeway. Conventional suburban development exists to the east, west, and north of this site. The development site is located at the southwest corner of Massena Street and Monroe Street. The proposed mixed use development includes residential, commercial, hotel, and marina type land uses. The site plan shared with the PMC has proposed site access at four (4) locations on Monroe Street and five (5) locations on Massena Street.

## Mariner's Village

The Mariner's Village site is located on Lake Pontchartrain, east of the Causeway. This 15-acre existing development on land that is currently vacant. The site is planned for infill with multi-family housing units. The Mariner's Village site includes mulit-family residential, single-family residential, commercial, and marina-type land uses. This site has existing access at two (2) locations on East Causeway and three (3) locations on Monroe Street.

# Data Collection

## Methods

In coordination with the PMC, 2015 base traffic volumes for the study area were established. The consultant collected three (3) day twenty-four (24) hour machine traffic counts and peak period turning movement counts for selected routes and intersections in the study area.

The manual turning movement counts and machine counts included FHWA Vehicle Classifications 1-14. Hours for the manual turning movement counts were determined from the data collected in the tube counts. Counts were taken in accordance with standard procedures (peak hour counts were taken Tuesday through Thursday, all counts were taken when schools were in session, no counts were taken during holiday weeks). In all, 72-hour counts (bi-directional) were collected at the 43 study locations and am/pm turning movement counts were collected at 35 intersections many of which are signalized.

Additional data was obtained from the Port Marigny traffic analysis document. Supplemental data was provided by RPC (i.e., recent traffic counts and speed data) to populate the study network and to establish an existing conditions benchmark for future comparisons.

## Locations

The following table summarizes the locations for turning movement counts for both the AM and PM peak hours.

| | TMC Location | | AM Peak Period | PM Peak Period |
|---|---|---|---|---|
| TMC # | Mainline | Side Street | Peak Hour | Peak Hour |
| 1 | US-190 | Carondelet Street | 7:00 | 4:45 |
| 2 | US-190 | East Causeway Approach | 7:00 | 4:45 |
| 3 | US-190 | LA-3228 (Asbury Drive) | 8:00 | 4:30 |
| 4 | LA-22 | East Service Road | 8:30 | 4:15 |
| 5 | LA-22 | West Service Road | 7:15 | 4:00 |
| 6 | LA-22 | US-190 NB Ramp | 7:15 | 4:15 |
| 7 | LA-22 | US-190 SB Ramp | 8:00 | 3:15 |
| 8 | LA-22 | West Causeway Approach | 7:45 | 4:30 |
| 9 | LA-59 | US-190 | 7:00 | 4:30 |
| 10 | Monroe Street | Girod Street | 7:00 | 4:45 |
| 11 | US-190 | Lafitte Street | 7:15 | 4:30 |
| 12 | Monroe Street | Lafitte Street | 7:00 | 4:45 |
| 13 | US-190 | Lamarque Street | 7:00 | 4:30 |
| 14 | US-190 | Soult Street | 7:00 | 4:30 |
| 15 | US-190 | Jackson Avenue | 7:00 | 4:30 |
| 16 | Monroe Street | Lambert Street | 7:00 | 4:15 |
| 17 | East Causeway Approach | Cheron Drive/N Lake Pkwy | 6:45 | 4:00 |
| 18 | Causeway Boulevard | Florida Street | 7:00 | 4:30 |
| 19 | West Causeway Approach | Florida Street | 7:00 | 4:45 |
| 20 | West Causeway Approach | U-turn/Lovers Lane | 7:00 | 4:45 |
| 21 | West Causeway Approach | Sandra Lee Drive | 7:00 | 4:30 |
| 22 | LA-59 | LA-1088 | 7:30 | 4:15 |
| 23 | N Causeway Boulevard | Desoto Street | 7:45 | 2:45 |
| 24 | LA-3228 (Asbury Drive) | LaSalle Street | 8:15 | 4:15 |
| 25 | LA-3228 (Asbury Drive) | Desoto Street/Sharp Road | 8:00 | 2:45 |
| 26 | US-190 | Greenleaves Street | 7:00 | 4:45 |
| 27 | LA-22 | Beau West | 7:00 | 4:15 |
| 28 | LA-22 | Cedarwood Drive | 7:45 | 4:30 |
| 29 | West Causeway Approach | Dalwill Drive | 6:45 | 3:15 |
| 30 | LA-22 | Dalwill Drive | 7:15 | 4:30 |
| 31 | East Causeway Approach | Lambert Street | 7:45 | 3:00 |
| 32 | East Causeway Approach | Massena Street | 7:15 | 2:45 |
| 33 | Monroe St | Antibes Street West | 6:30 | 2:45 |
| 34 | Monroe St | Antibes Street East | 6:45 | 2:45 |
| 35 | East Causeway Approach | Kleber Street | 6:45 | 4:45 |
| 36* | Monroe Street | Massena Street | 7:00 | 4:30 |
| 37* | East Causeway Approach | Monroe Street | 7:00 | 5:00 |

- **Volumes utilized were provided in the Port Marigny Traffic Study**

**Table 1: Study Area Peak Hours**

# Intersection Analyses

Each intersection identified in the scope of this study was evaluated for geometry, posted speed limit, intersection control type, signage, school zone proximity, curb and/or median type, sidewalks and crosswalks, and other pertinent features. Intersection inventory sheets were developed for each of the 37 intersections, which can be found in Appendix B. Details of each intersection evaluations follows including, if applicable, the existing conditions, any expected impacts from known developments, future year 2040 conditions, and recommendations for improvements. A growth rate of 1.92% per annum was applied to the 2016 traffic volumes to obtain 2040 volumes for analysis purposes.

# 1. US-190 at Carondelet Street

## *Existing Conditions*

Figure 3: US-190 at Carondelet Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Carondelet Street). US-190 is an east-west principal urban arterial with two lanes in each direction separated by a raised median west of Carondelet Street and a two-way left turn lane east of Carondelet Street. The speed limit on US-190 is 40 MPH. Carondelet is a north-south local road with one lane in each direction. The speed limit on Carondelet Street is 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north and south sides of US-190. There are existing ADA sidewalk ramps on all corners. This intersection is located at the beginning of the school zone for Mandeville Junior High School which is located south of US-190 on Carondelet Street.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 4. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

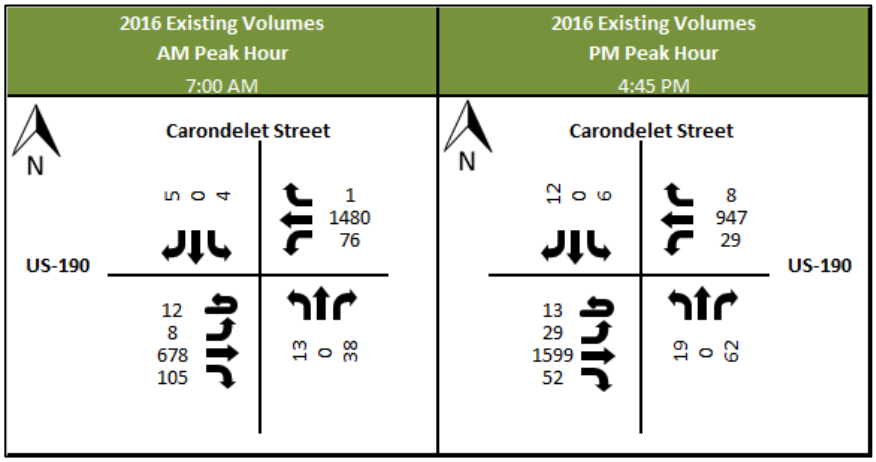


Figure 4: US-190 at Carondelet Street 2016 Existing Volumes

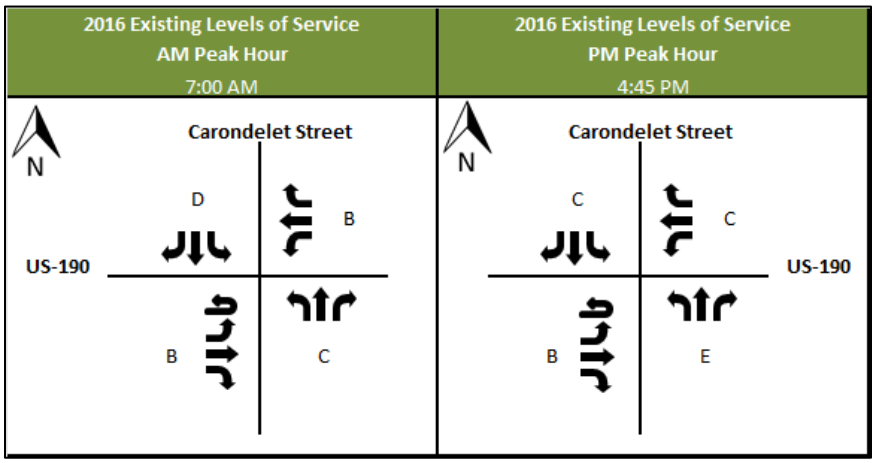


Figure 5: US-190 at Carondelet Street 2016 Existing Levels of Service

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 5. The existing levels of service during the AM Peak Hour do not exceed LOS-D, and do not exceed LOS-E during the PM Peak Hour. These are acceptable levels of service and delay for a two-way stop-controlled

intersection. The existing intersection operates without any observed issues.

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 6.

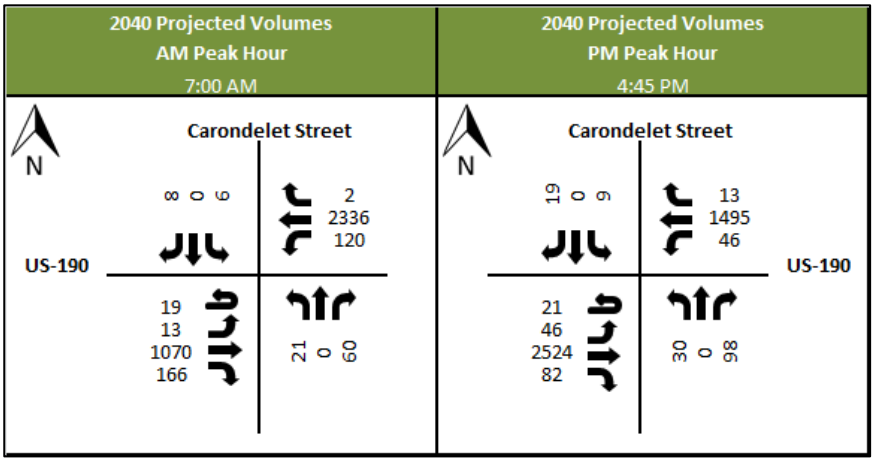


Figure 6: US-190 at Carondelet Street 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 7. The levels of service for US-190 at this intersection fall to LOS-E in the PM Peak hour. The levels of service for Carondelet Street are projected to be LOS-E or LOS-F for the year 2040. This is attributed to the stop-controlled traffic on the minor roadway (Carondelet Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

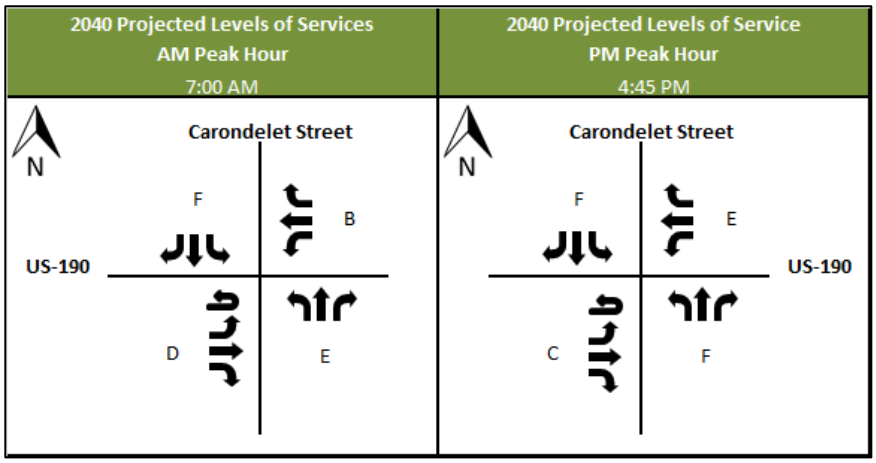


Figure 7: US-190 at Carondelet Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific current recommended improvements for the US-190 at Carondelet Street intersection. It is, however, recommended that the conditions be periodically monitored.

# 2. US-190 at East Causeway Approach

## *Existing Conditions*

Figure 8: US-190 at East Causeway Approach

The existing intersection is a three-legged signalized t-intersection. US-190 is north-south principal urban arterial with two lanes in each direction separated by a raised median. The speed limit on US-190 is 40 MPH. East Causeway Approach is a minor arterial with two lanes in each direction. The speed limit on East Causeway Approach is 45 MPH.

There are marked crosswalks equipped with ADA ramps and pedestrian signals across US-190 on the north side of East Causeway Approach. There are existing sidewalks along both sides of US-190, but not along East Causeway Approach. This intersection is not located within the limits of a school zone.

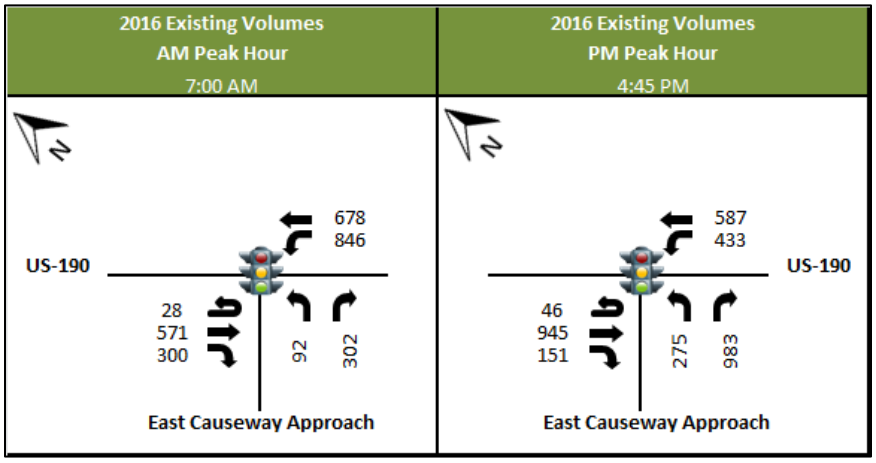


Figure 9: US-190 at East Causeway Approach 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 9. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 10.

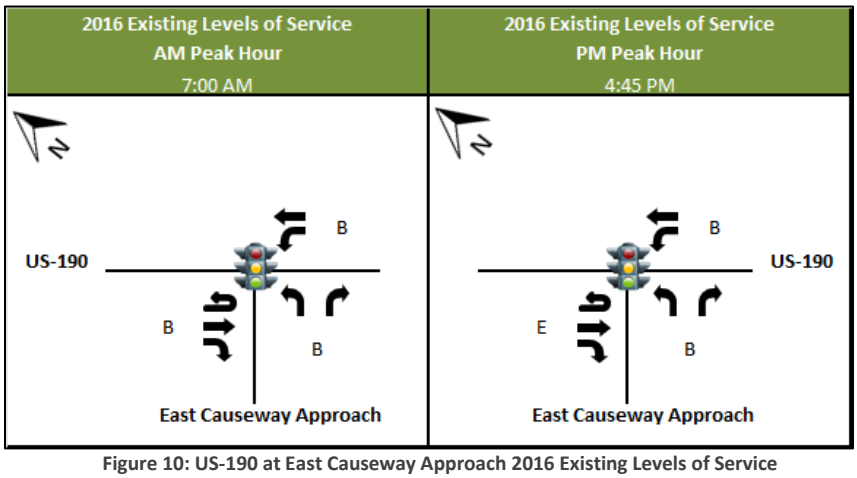


Figure 10: US-190 at East Causeway Approach 2016 Existing Levels of Service

The existing levels of service during the AM Peak Hour do not exceed LOS-B, and do not exceed LOS-E during the PM Peak Hour. These are acceptable levels of service and delay for a signalized intersection. The existing intersection operates without any observed issues.

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 11.

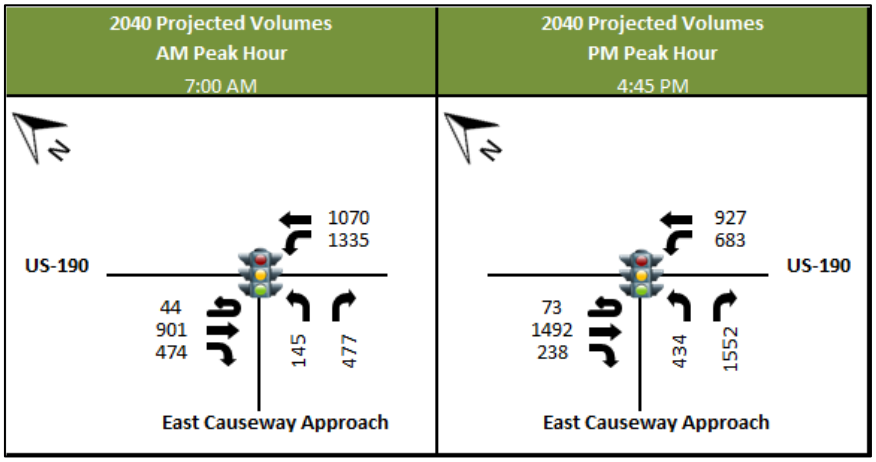


Figure 11: US-190 at East Causeway Approach 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 12. The levels of service predicted in the year 2040 during the AM Peak Hour are LOS-D or better. During the PM Peak Hour, the eastbound and southbound approaches are predicted to result in LOS-E and LOS-F respectively. There are high volumes of left turns, and the exiting geometry at the intersection includes dual-left turns and dual right-turns.

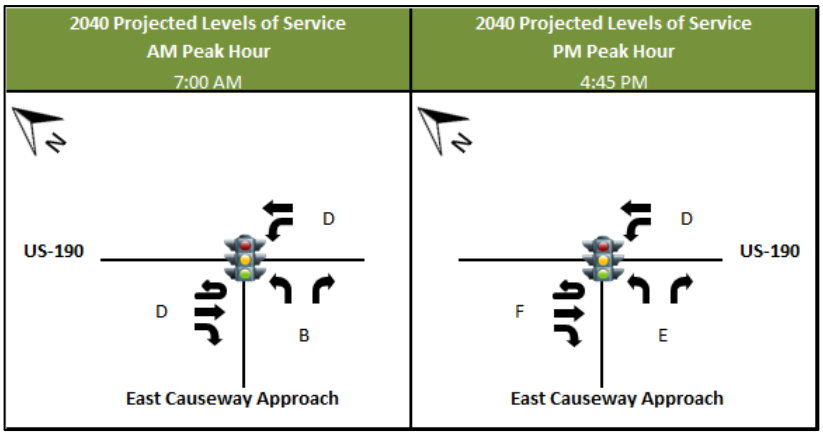


Figure 12: US-190 at East Causeway Approach 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, the intersection fails (LOS-F) in the projected year 2040 conditions. This is attributable to the US-190 southbound U-turn and through movements. The 2040 projections indicate that signal timing modifications may not adequately improve operations at the intersection. Some options to consider may include a roundabout, or geometric improvements that would allow for more efficient signal operations. There are other potential projects currently under consideration which may change or improve the operations of this intersection; however, within the scope of this study and the information provided, this is not a quantifiable result. It is recommended that the traffic volumes and operations at this location continue to be reevaluated on a regular basis so that any degradation in level of service can be anticipated and addressed as is appropriate. In addition, it is recommended that the pedestrian cross-walk be re-striped.

# 3. US-190 at LA- 3228 (Asbury Drive)

## *Existing Conditions*

Figure 13: US-190 at LA-3228 (Asbury Drive)

The existing intersection is signalized. US-190 is an east-west principal urban arterial with two lanes in each direction separated by a raised median. The speed limit on US-190 is 45 MPH. Asbury LA-3228 (Asbury Drive) is a minor arterial with one lane in each direction. The speed limit on LA-3228 (Asbury Drive) is 40 MPH.

There are marked crosswalks equipped with ADA ramps and pedestrian signals across US-190 on the north side of LA-3228 (Asbury Drive). There are existing sidewalks along both sides of US-190, but not along LA-3228 (Asbury Drive). This intersection is not located within the limits of a school zone.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 14. The observed AM Peak Hour occurred from 8:00 – 9:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

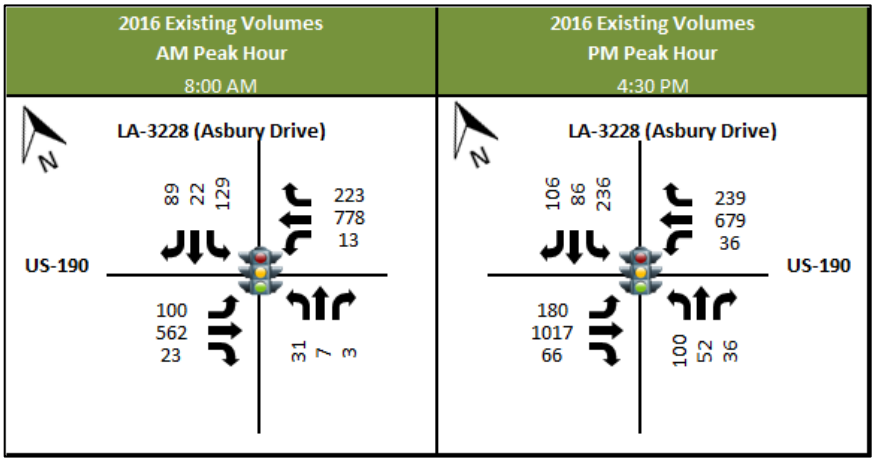


Figure 14: US-190 at LA-3228 (Asbury Drive) 2016 Existing Volumes

The existing volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 15. The existing levels of service during the AM Peak Hour do not exceed LOS-E, and do not exceed LOS-D during the PM Peak Hour. These are acceptable levels of service and delay for a signalized intersection. This intersection does currently exhibit long queue lengths during peak periods on the side streets. This is due in part to the traffic signal phasing. It currently operates as

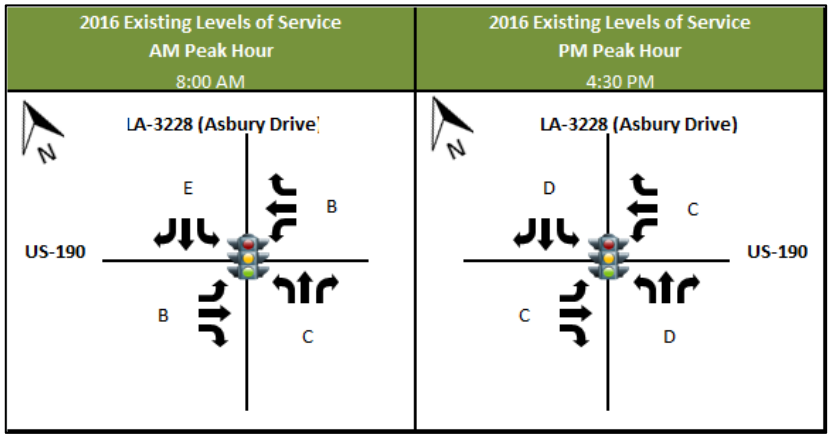


Figure 15: US-190 at LA-3228 (Asbury Drive) 2016 Existing Levels of Service

a split phase intersection due to the alignment of the north and south legs.

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 16.

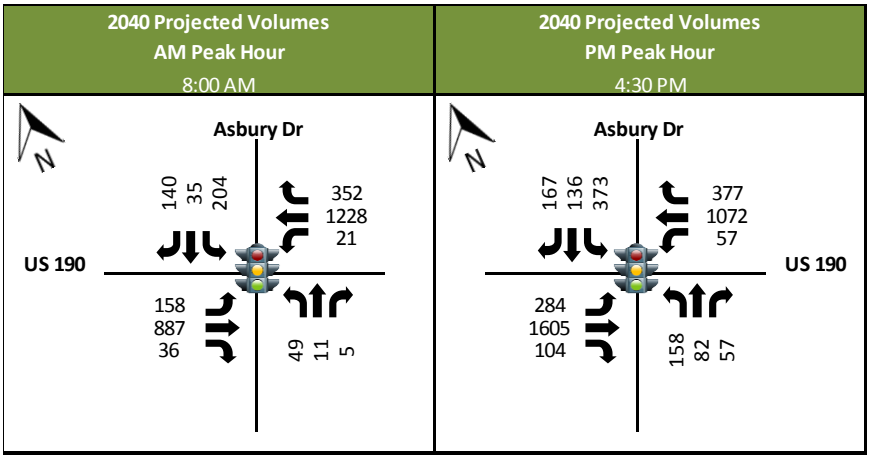


Figure 16: US-190 at LA-3228(Asbury Drive) 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 17. The levels of service predicted in the year 2040 during the AM Peak Hour are LOS-C or better except for the southbound movement which is predicted to result in LOS-F. During the PM Peak Hour, the eastbound and southbound approaches are predicted to result in LOS-F, while the northbound is predicted to result in LOS-E. Current signal operations include split-phase signal phasing, therefore the future conditions were evaluated with a similar timing scheme. This may be a contributing factor to the delay in 2040.

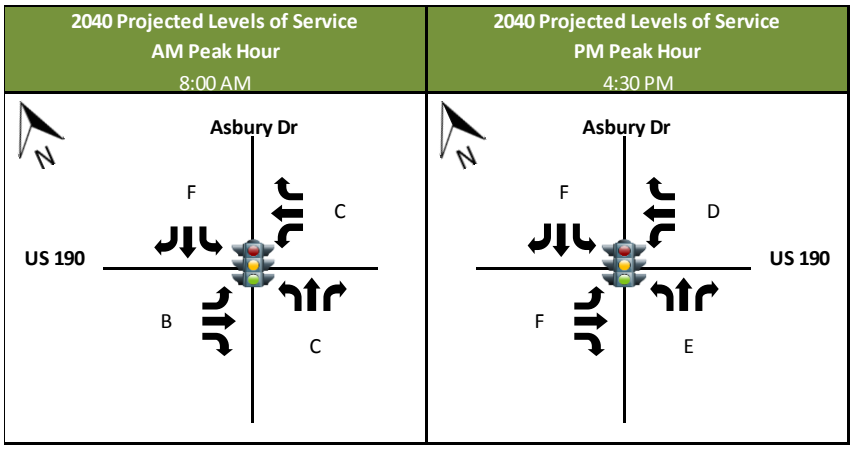


Figure 17: US-190 atLA-3228 (Asbury Drive) 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, this intersection is expected to fall below acceptable levels of service for most movements during the PM Peak Hour and the southbound movement in the AM Peak Hour. Consideration should be given to improving the geometry for the side-street approaches however there is limited right-of-way which would need to be considered. This would improve the existing queue conditions and would improve operations in the 2040 scenario. In addition, traffic signal

timings and corridor coordination improvements should be evaluated based on existing conditions and periodically during the study timeframe.

In addition, St. Tammany Parish is currently negotiating with the LADOTD to receive ownership of LA-3228 (Asbury Drive). The Regional Planning Commission anticipates this will be turned over in the next two years. (SP H012379)

# 4. LA-22 at East Service Road

## *Existing Conditions*

Figure 18: LA-22 at East Service Road

The existing intersection is signalized. LA-22 is an east-west principal urban arterial with two lanes in each direction separated by a raised median with various auxiliary lanes. The speed limit on US-190 is 45 MPH. East Service Road is a major urban collector with one lane in each direction. East Service Road is a service drive to Tammany Parkway, an urban freeway. The speed limit on East Service Road is 45 MPH.

There are no marked crosswalks or sidewalks at this intersection. This intersection is not located within the limits of a school zone. There is an advisory speed for a curve on both legs of East Service Road for 15 MPH.

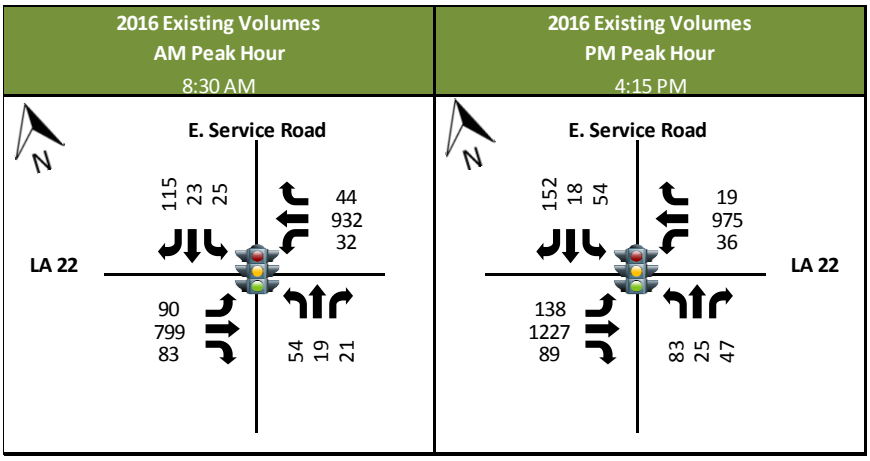


Figure 19: LA-22 at East Service Road 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 19. The observed AM Peak Hour occurred from 8:30 – 9:30 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 20.

The existing levels of service during the AM Peak Hour do not exceed LOS-D, and during the PM Peak Hour operate at acceptable levels except for the northbound and southbound approaches operate at an LOS-E. The existing intersection operates without any observed issues.

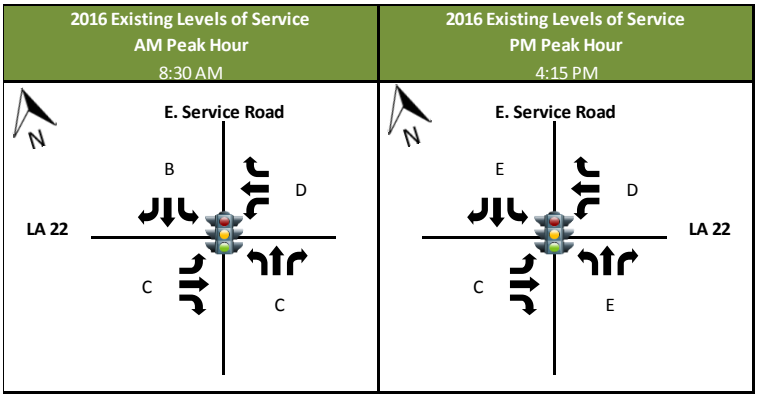


Figure 20: LA-22 at East Service Road 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 21.

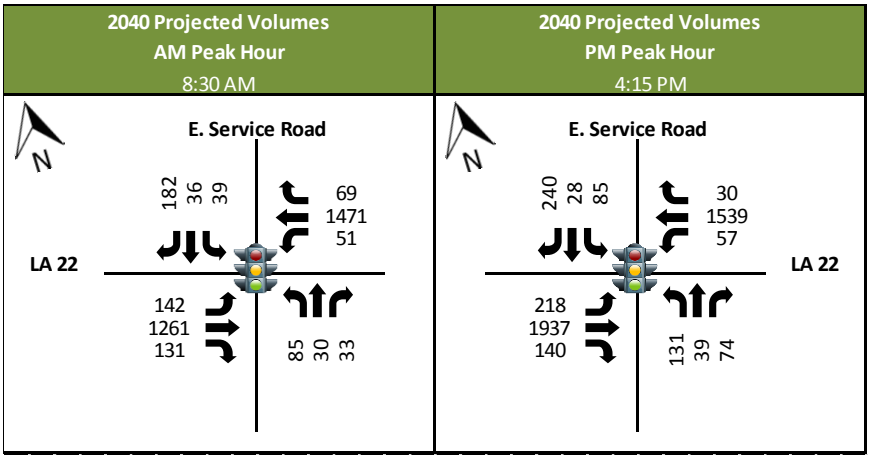


Figure 21: LA-22 at East Service Road 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 22. The levels of service predicted in the year 2040 during the AM Peak Hour are LOS-D for both East Service Road approaches, and LOS-F for the eastbound and westbound LA-22 approaches, respectively. During the PM Peak Hour, the eastbound, westbound and southbound approaches are predicted to result in LOS-F while the northbound approach is predicted at LOS-E.

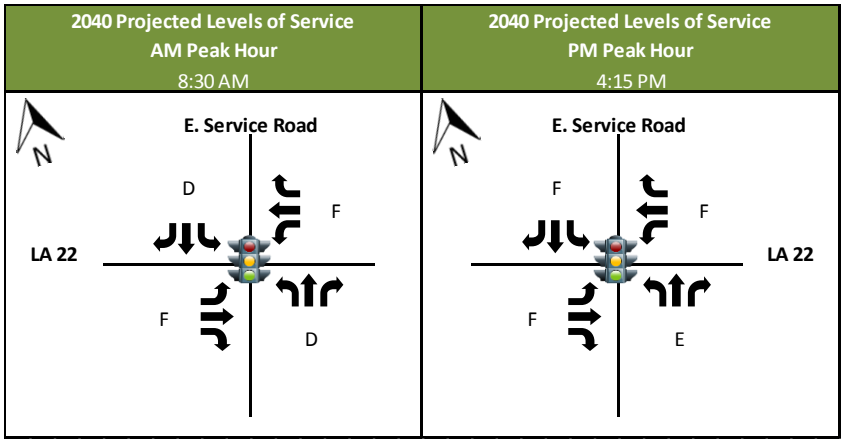


Figure 22: LA-22 at East Service Road 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, the intersection is currently experiencing failure in the PM Peak Hour on the northbound and southbound Service Road approaches. In 2040, all approaches of LA-22 are expected to fail in the PM. At the time this report was prepared, the LADOTD is designing a project to improve the intersection as well as those immediately to the west (LA-22 at West Service Road, LA-22 at US-190 Northbound Ramp and LA-22 at US-190 Southbound Ramp)(SP H011721). This project proposes improvements to traffic signal timings as well as turn lane improvements in the segment.

An important deficiency in the LA-22 corridor is the lane reduction just west of the W. Service Road when traveling in the westbound direction. This reduction results in lane utilization issues from its location through the LA-3228 (Asbury Drive) intersection. The lane utilization results in the inefficient

ability of vehicles to utilize provided green time and results in increased delays. While these proposed improvements (SP H011721) are important and are expected to improve the operations, it is recommended in the long term the segment of LA-22 from west of the West Service road to Dalwill Drive be widened in the westbound direction to eliminate the lane drop. This would provide for improved lane utilization which in turn would reduce the required green time to service the movements and result in improved delays and operations. Further study is needed to determine the impacts and feasibility of this recommendation.

# 5. LA-22 at West Service Road

Figure 23: LA-22 at West Service Road

## *Existing Conditions*

The existing intersection is signalized. LA-22 is an east-west principal urban arterial with two lanes in each direction separated by a raised median. The speed limit on LA-22 is 45 MPH. West Service Road is a major urban collector with one lane in each direction. West Service Road is a service drive to Tammany Parkway, an urban freeway. The speed limit on West Service Road is 45 MPH.

There are no marked crosswalks or sidewalks at this intersection. This intersection is not located within the limits of a school zone. There is an advisory speed for a curve on both legs of East Service Road for 15 MPH.

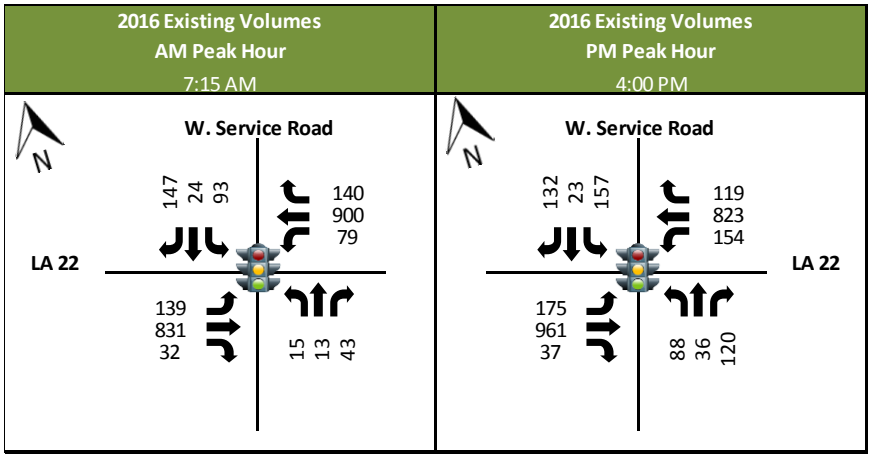


Figure 24: LA-22 at West Service Road 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 24. The observed AM Peak Hour occurred from 7:15 – 8:15 AM. The observed PM Peak Hour occurred from 4:00 – 5:00 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 25.

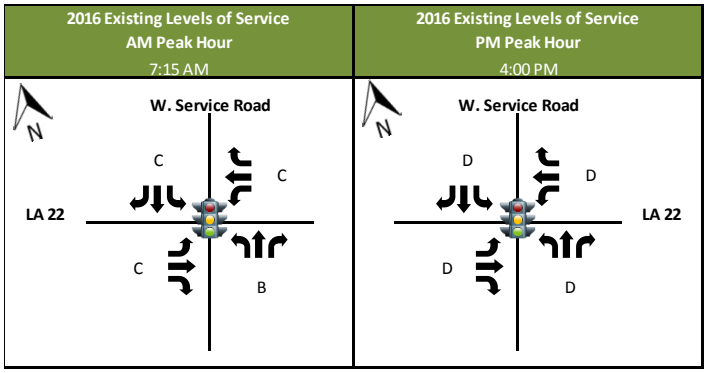


Figure 25: LA-22 at West Service Road 2016 Existing Levels of Service

The existing levels of service during the AM Peak Hour do not exceed LOS-C, and during the PM Peak Hour do not exceed LOS-D. The existing intersection is observed to have queues extending to the SB US-190 exit ramp. This is due to lane utilization caused by the lane drop just west of this intersection.

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 26.

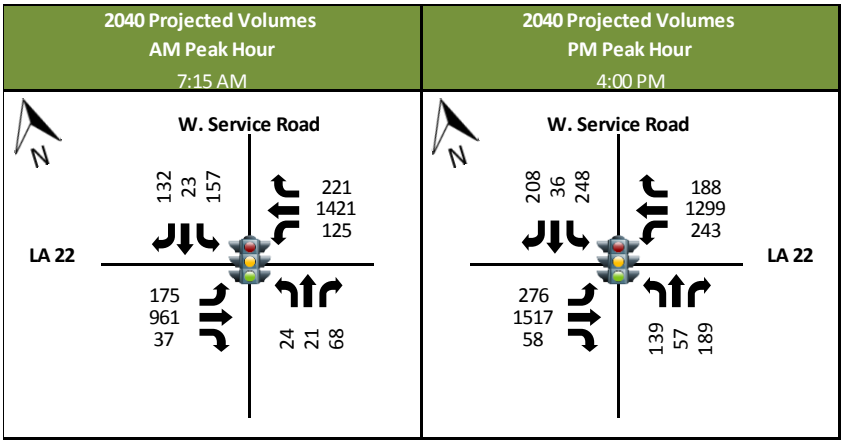


Figure 26: LA-22 at West Service Road 2040 Projected Volumes

These volumes were then were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 27. The levels of service predicted in the year 2040 during the AM Peak Hour are LOS-D for both LA-22 approaches. During the PM Peak Hour, all approaches are predicted to operate below acceptable levels of service.

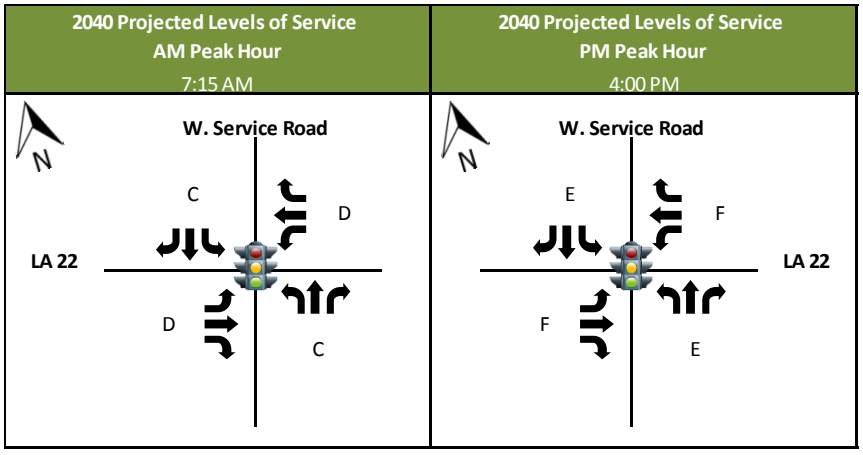


Figure 27: LA-22 at West Service Road 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, the intersection currently operates at acceptable levels of service in the AM and PM Peak Hours. Field observations indicate significant queues during the peak hour due to the lane utilization caused by the lane drop just to the west. In 2040, all approaches of LA-22 are predicted to fail.

At the time this report was prepared, the LADOTD is designing a project to improve this intersection as well as LA-22 at the East Service Road, LA-22 at US-190 Northbound Ramp and LA-22 at US-190

Southbound Ramp (SP H011721). This project proposes improvements to traffic signal timings as well as turn lane improvements in the segment.

An important deficiency in the LA-22 corridor is the lane reduction just west of the W. Service Road when traveling in the westbound direction. This reduction results in lane utilization issues from its location through the LA-3228 (Asbury Drive) intersection. The lane utilization results in the inefficient ability of vehicles to utilize provided green time and results in increased delays. While these proposed improvements (SP H011721) are important and are expected to improve the operations, it is recommended in the long term the segment of LA-22 from west of the West Service road to Dalwill Drive be widened in the westbound direction to eliminate the lane drop. This would provide for improved lane utilization which in turn would reduce the required green time to service the movements and result in improved delays and operations. Further study is needed to determine the impacts and feasibility of this recommendation.

# 6. LA-22 at US-190 Northbound Ramp

## *Existing Conditions*

Figure 28: LA-22 at US-190 Northbound Ramp

The existing intersection is signalized. LA-22 is an east-west principal urban arterial with two lanes in each direction separated by a raised median. The speed limit on LA-22 is 45 MPH. US-190 Northbound ramp provides access to US-190, an urban freeway/expressway. The speed limit on the US-190 Northbound ramp is posted at 45 MPH.

There are no marked crosswalks or sidewalks at this intersection. This intersection is not located within the limits of a school zone.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 29. The observed AM Peak Hour occurred from 7:15 – 8:15 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

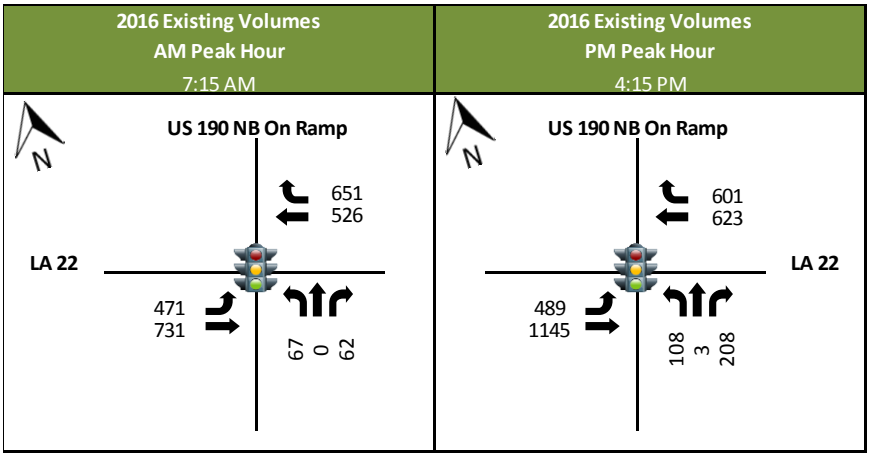


Figure 29: LA-22 at US-190 Northbound Ramp 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 30.

The existing levels of service during the AM Peak Hour do not exceed LOS-D, and do not exceed LOS-C during the PM Peak Hour. These are acceptable levels of service and delay for a signalized intersection. The existing intersection experiences queues during peak periods, this is due in part to a lane drop to the west which impacts lane utilization through the series of signals.

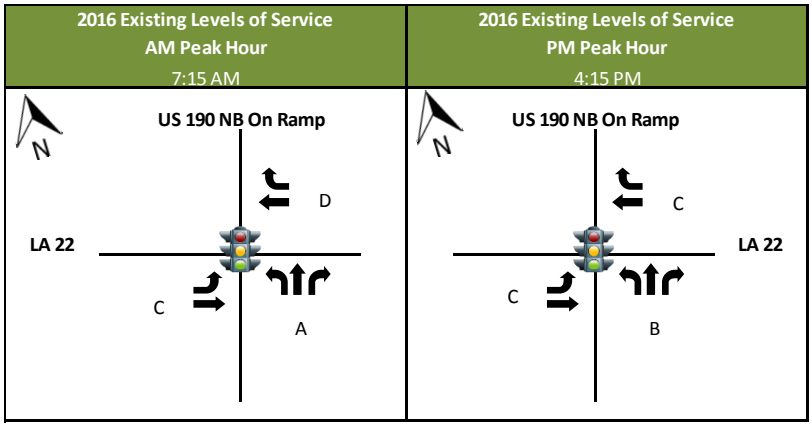


Figure 30: LA-22 at US-190 Northbound Ramp 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 31.

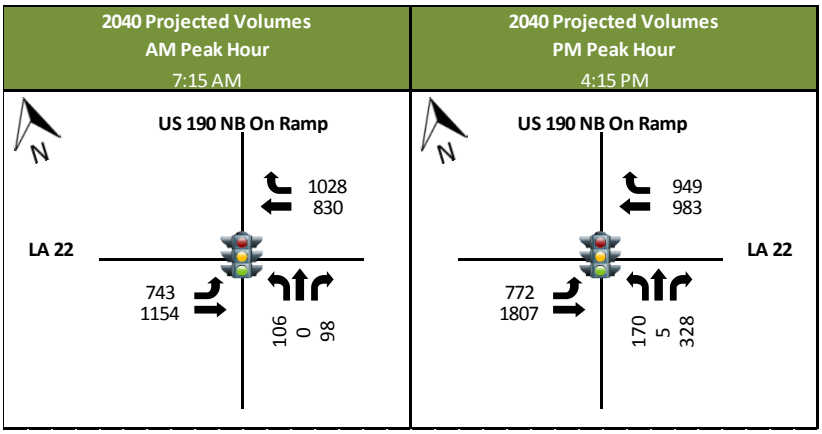


Figure 31: LA-22 at US-190 Northbound Ramp 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 32. The levels of service predicted in the year 2040 during the AM and PM Peak Hours are LOS-F for both LA-22 approaches.

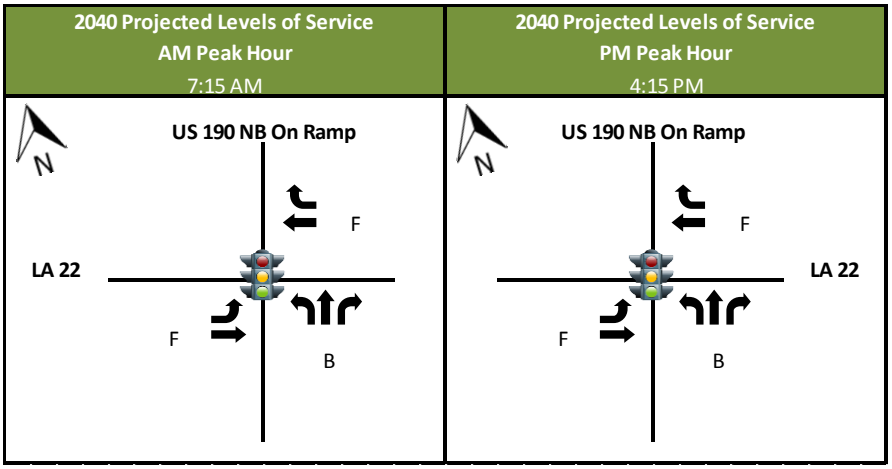


Figure 32: LA-22 at US-190 Northbound Ramp 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, the intersection currently operates at acceptable levels of service in the AM and PM Peak Hours. Field observations indicate significant queues during the peak hour due to the lane utilization caused by the lane drop to the west. In 2040, all approaches of LA-22 are predicted to fail.

At the time this report was prepared, the LADOTD is designing a project to improve this intersection as well as LA-22 at West Service Road, LA-22 at East Service Road, and LA-22 at US-190 Southbound Ramp (SP H011721). This project proposes improvements to traffic signal timings as well as turn lane improvements in the segment.

An important deficiency in the LA-22 corridor is the lane reduction just west of the W. Service Road when traveling in the westbound direction. This reduction results in lane utilization issues from its

location through the LA-3228 (Asbury Drive) intersection. The lane utilization results in the inefficient ability of vehicles to utilize provided green time and results in increased delays. While these proposed improvements (SP H011721) are important and are expected to improve the operations, it is recommended in the long term the segment of LA-22 from west of the West Service road to Dalwill Drive be widened in the westbound direction to eliminate the lane drop. This would provide for improved lane utilization which in turn would reduce the required green time to service the movements and result in improved delays and operations. Further study is needed to determine the impacts and feasibility of this recommendation.

# 7. LA-22 at US-190 Southbound Ramp

## *Existing Conditions*

Figure 33: LA-22 at US-190 Southbound Ramp

The existing intersection is signalized. LA-22 is an east-west principal urban arterial with two lanes in each direction separated by a raised median. The speed limit on LA-22 is 45 MPH. US-190 Northbound ramp provides access to US-190, an urban freeway/expressway. The speed limit on the US-190 Northbound ramp is posted at 50 MPH.

There are no marked crosswalks or sidewalks at this intersection. This intersection is not located within the limits of a school zone.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 34. The observed AM Peak Hour occurred from 8:00 -9:00 AM. The observed PM Peak Hour occurred from 3:15 – 4:15 PM.

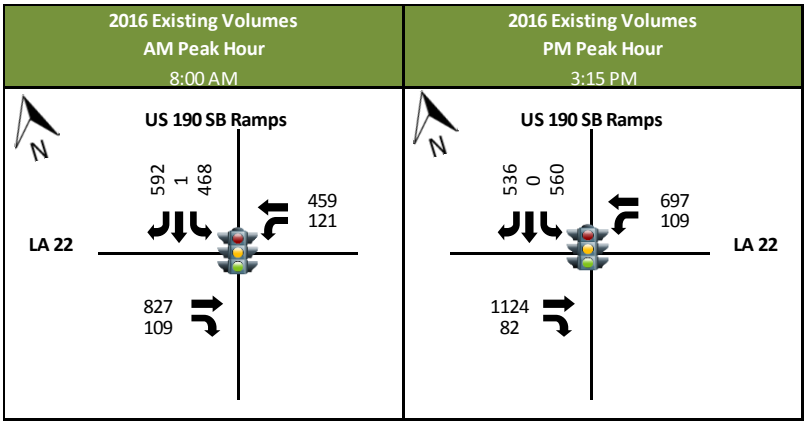


Figure 34: LA-22 at US-190 Southbound Ramp 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 35.

The existing levels of service during the AM Peak Hour do not exceed LOS-D. In the PM Peak Hour the southbound approach operates at a LOS-E. The existing intersection experiences queues during peak periods, this is due in part to a lane drop to the west which impacts lane utilization through the series of signals.

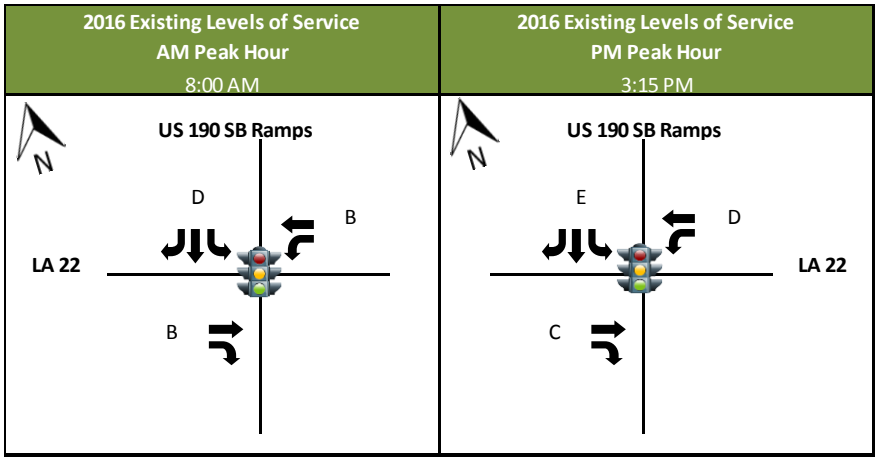


Figure 35: LA-22 at US-190 Southbound 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 36.

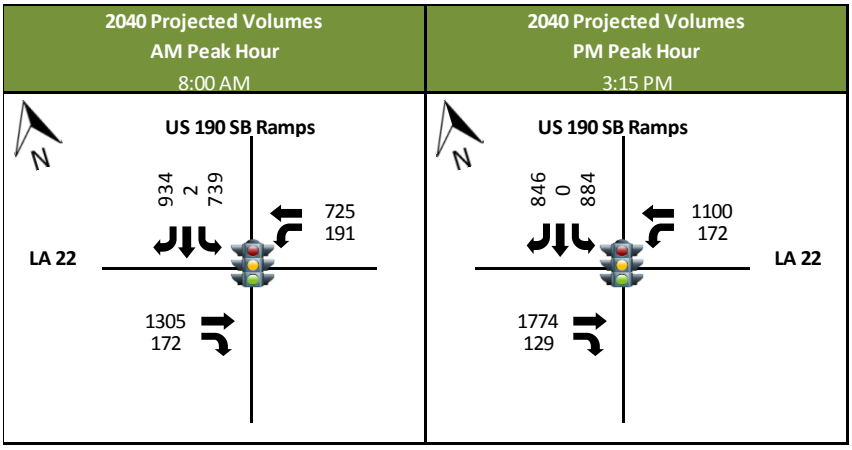


Figure 36: LA-22 at US-190 Southbound Ramp 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 37. The levels of service predicted in the year 2040 during the AM results in LOS-F for the US-190 Southbound Exit Ramp. In the PM Peak Hour all approaches are predicted to operate at LOS-F.

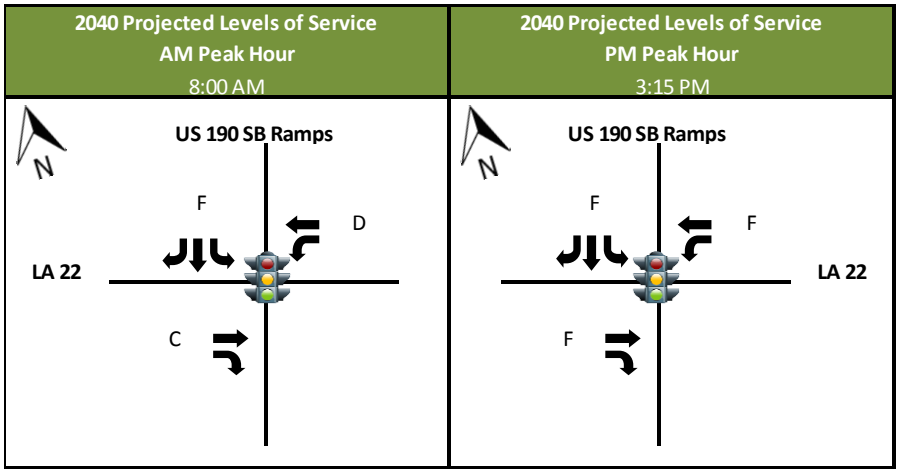


Figure 37: LA-22 at US-190 Southbound Ramp 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, the intersection currently operates at acceptable levels of service in the AM and PM Peak Hours. Field observations indicate significant queues during the peak hours due to the lane utilization caused by the lane drop to the west. In 2040, all approaches of LA-22 are predicted to fail.

At the time this report was prepared, the LADOTD is designing a project to improve this intersection as well as LA-22 at West Service Road, LA-22 at East Service Road, and LA-22 at US-190 Northbound Ramp (SP H011721). This project proposes improvements to traffic signal timings as well as turn lane improvements in the segment.

An important deficiency in the LA-22 corridor is the lane reduction just west of the W. Service Road when traveling in the westbound direction. This reduction results in lane utilization issues from its location through the LA-3228 (Asbury Drive) intersection. The lane utilization results in the inefficient

ability of vehicles to utilize provided green time and results in increased delays. While these proposed improvements (SP H011721) are important and are expected to improve the operations, it is recommended in the long term the segment of LA-22 from west of the West Service road to Dalwill Drive be widened in the westbound direction to eliminate the lane drop. This would provide for improved lane utilization which in turn would reduce the required green time to service the movements and result in improved delays and operations. Further study is needed to determine the impacts and feasibility of this recommendation.

# 8. LA-22 at West Causeway Approach

## *Existing Conditions*

The existing intersection is signalized. LA-22 is an east-west principal urban arterial with two lanes in the westbound direction and one in the eastbound direction. The speed limit on LA-22 is 45 MPH. West Causeway Approach is a minor urban arterial with two lanes in each direction. The speed limit on the West Causeway Approach is West Service Road is 45 MPH.

Figure 38: LA-22 at West Causeway Approach

There are no marked crosswalks or sidewalks at this intersection. This intersection is not located within the limits of a school zone.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 39. The observed AM Peak Hour occurred from 7:45 – 8:45 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

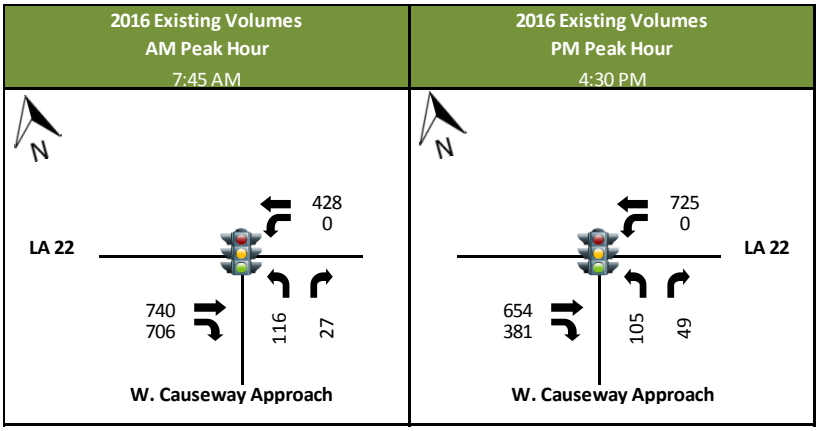


Figure 39: LA-22 at West Causeway Approach 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 40.

The existing levels of service during the AM and PM Peak Hours do not exceed LOS-B. These are acceptable levels of service and delay for a signalized intersection. The existing intersection operates without any observed issues. The traffic signal operates in free operation, vehicles from all approaches experience short green times. The short green times often result in driver frustration, as any hesitation upon your approach turning green often results in waiting through a second signal cycle.

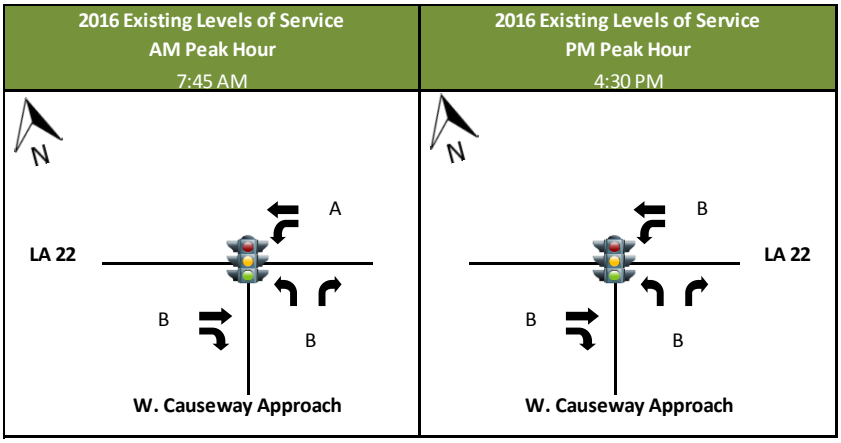


Figure 40: LA-22 at West Causeway Approach 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 41.

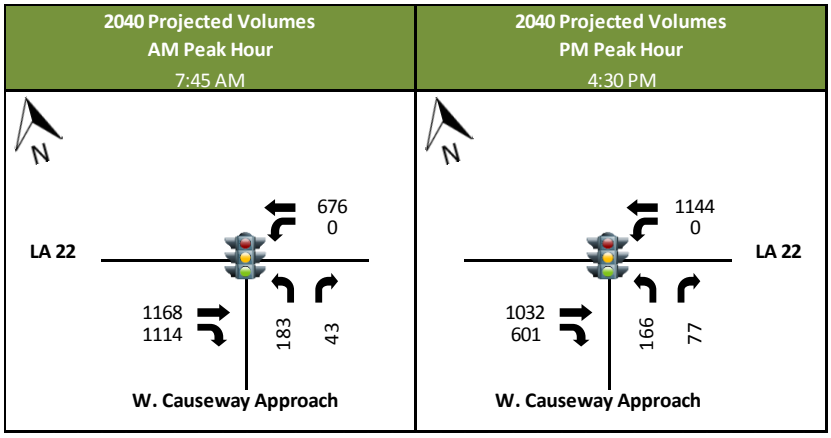


Figure 41: LA-22 at West Causeway Approach 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 42.

The levels of service predicted in the year 2040 during the AM results in LOS-F for the Eastbound LA-22 approach. In the PM Peak Hour all approaches are predicted to operate above LOS-C.

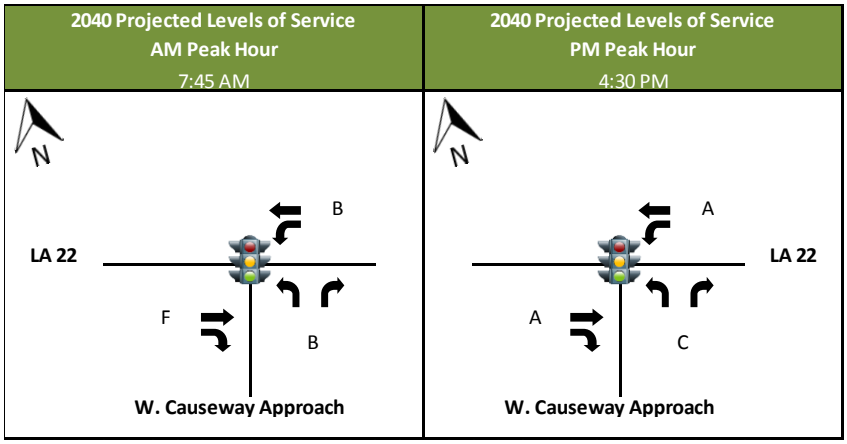


Figure 42: LA-22 at West Causeway Approach 2040 Projected Levels of Service

## *Recommendations*

Based on the information contained herein, the intersection currently operates at acceptable levels of service in the AM and PM Peak Hours. Field observations indicate a short cycle with each approach having small amounts of green time. In 2040, the eastbound approach is predicted to fail in the AM. Preliminary evaluations indicate that modifications to traffic signal timings and potential coordination with the intersection system to the east will improve the predicted levels of service to acceptable. It is recommended that this intersection be monitored periodically throughout the duration of this study period. In addition,

At the time this report was prepared there is a project being planned by several agencies that would include road-widening east of this intersection (SP H000506). This project would impact the flow of traffic past this intersection and therefore have the potential to impact its function. A timeframe on this project was not available at the time this report was prepared.

# 9. LA-59 at US-190

## *Existing Conditions*

Figure 43: LA-59 at US-190

The existing intersection is a four-legged signalized intersection. US-190 is an east-west principal urban arterial with two lanes in each direction separated by a reversible center turn lane west of LA-59 and a turn lane east of LA-59. The speed limit on US-190 is 40 MPH. LA-59 is a north-south minor urban arterial with a three lane cross section north of US-190 and a two lane cross section south of US-190. The speed limit on LA-59 is 35 MPH north of US-190 and 30 MPH south of US-190.

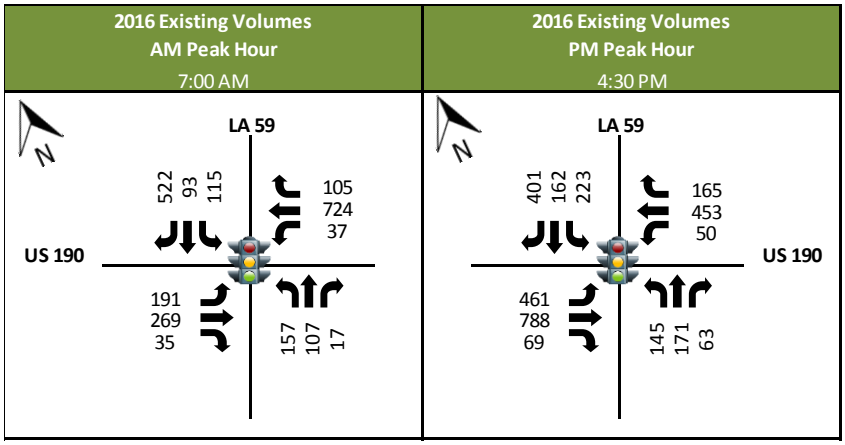


Figure 44: LA-59 at US-190 2016 Existing Volumes

There are designated crosswalks at this intersection. There are sidewalks along the north and south sides of US-190 as well as LA-59 south of US-190. There are existing ADA sidewalk ramps on all corners.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 44. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 45. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-D. These are acceptable levels of service and delay for a signalized intersection. The existing intersection operates without any observed issues.

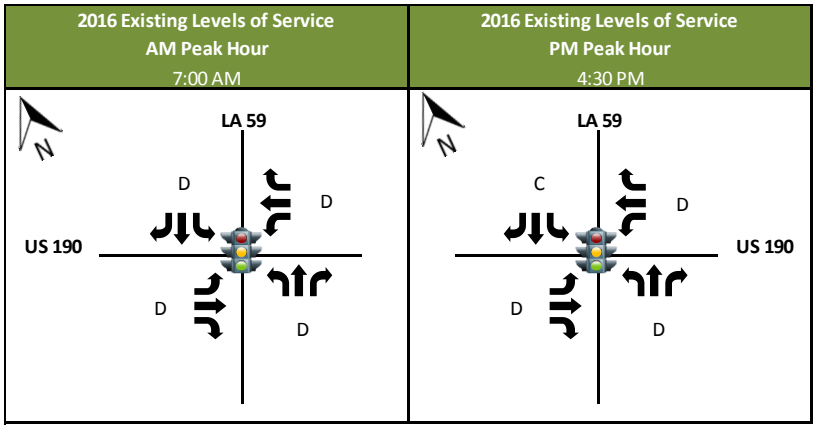


Figure 45: LA-59 at US-190 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 46.

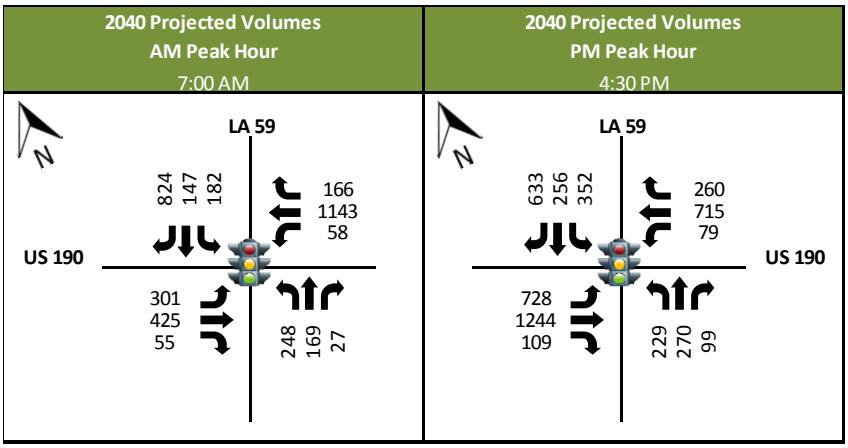


Figure 46: LA-59 at US-190 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 47. The levels of service for US-190 at this intersection falls to LOS-E in the PM Peak hour. The levels of service for this intersection are projected to fall to LOS-F for the year 2040. This is attributed to continual growth in the area.

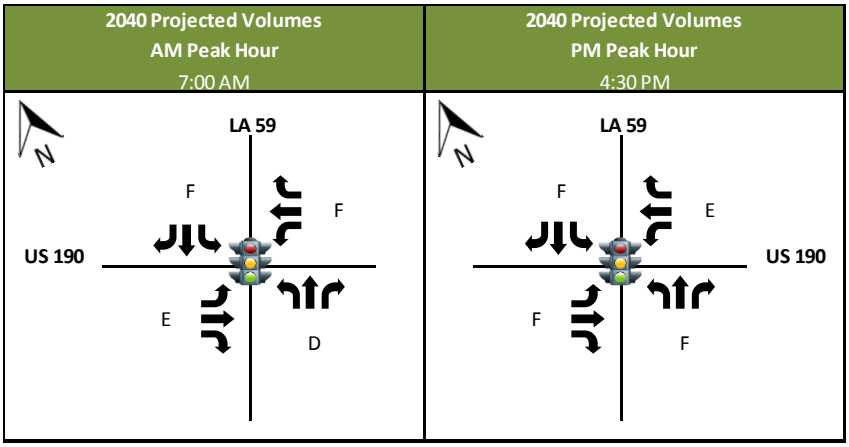


Figure 47: LA-59 at US-190 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at LA-59 intersection. There is a project planned referred to as the Mandeville Bypass that is expected to alleviate some traffic at this intersection. At the time this report was prepared the estimated diversion of traffic from this intersection was not available, and therefore the relief cannot be accurately quantified. However, in order to gauge the potential impact of the proposed Mandeville Bypass on this intersection, a 25% diversion was assumed for the intersection (Southbound LA-59 and Westbound US-190). The resulting reduced volumes were evaluated, and it was determined to have minimal improvements at this intersection. Alternate intersection control was explored as well as possible geometric improvements, it was determined that additional study of this intersection is needed to provide a long term solution. One option for consideration would be a restricted movement intersection with the necessary adjacent accommodations for u-turn maneuvers.

# 10. Monroe Street at Girod Street

## *Existing Conditions*

Figure 48: Monroe Street at Girod Street

The existing intersection is a four-legged intersection with stop control in all directions. Monroe Street is an east-west minor urban arterial with one lane in each direction. The speed limit on Monroe Street is 30 MPH. Girod Street is a north-south minor urban arterial with one lane in each direction. The speed limit on Girod Street is 20 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north and south sides of Monroe Street as well as Girod Street North of Monroe Street. There are existing ADA sidewalk ramps on all corners. Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 49. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

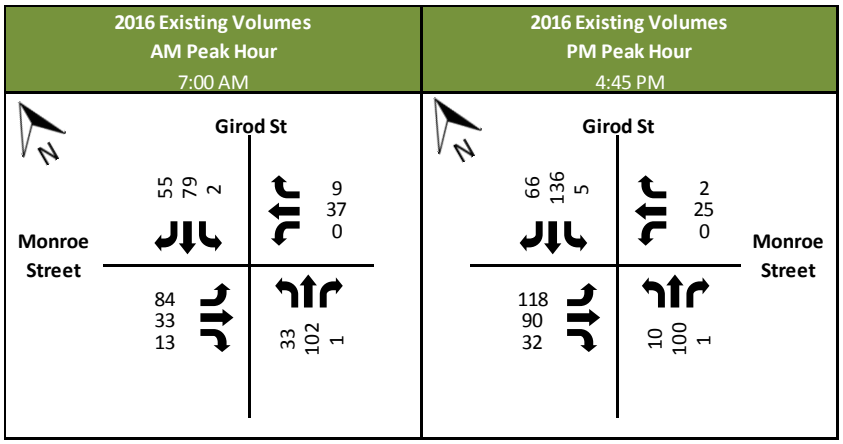


Figure 49: Monroe Street at Girod Street 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 50. The existing levels of service during the AM and PM Peak Hours do no exceed LOS-B. These are acceptable levels of service and delay for a two-way stop-controlled intersection.

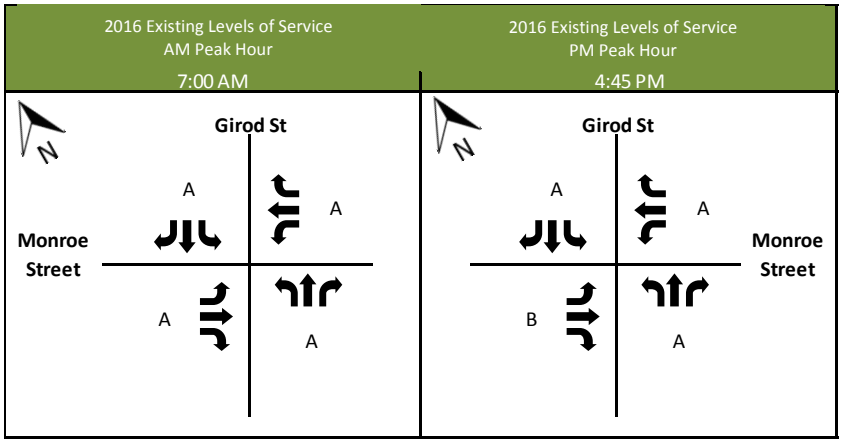


Figure 50: Monroe Street at Girod Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

Both evaluated developments, Port Marigny and Mariner's Village, are expected to have vehicles that arrive after passing this intersection. The impacts are not expected to be significant based on the information provided by the project developer.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 51.

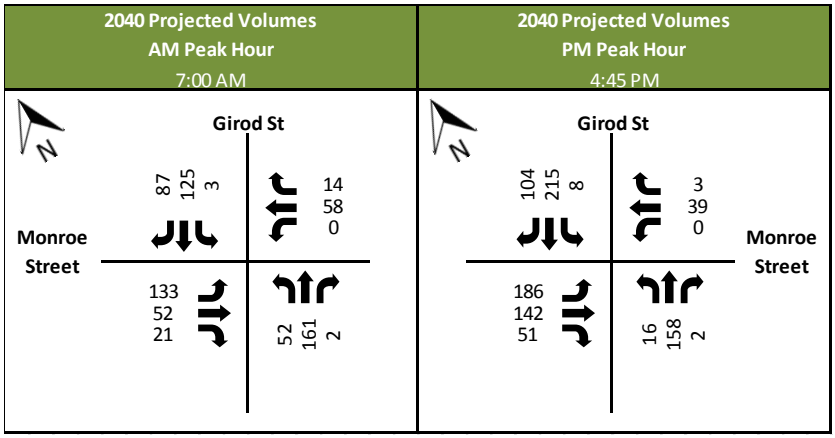


**Figure 51: Monroe Street at Girod Street 2040 Projected Volumes**

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 52. The levels of service are expected to remain above a LOS-B in both the AM and PM Peak Hours.

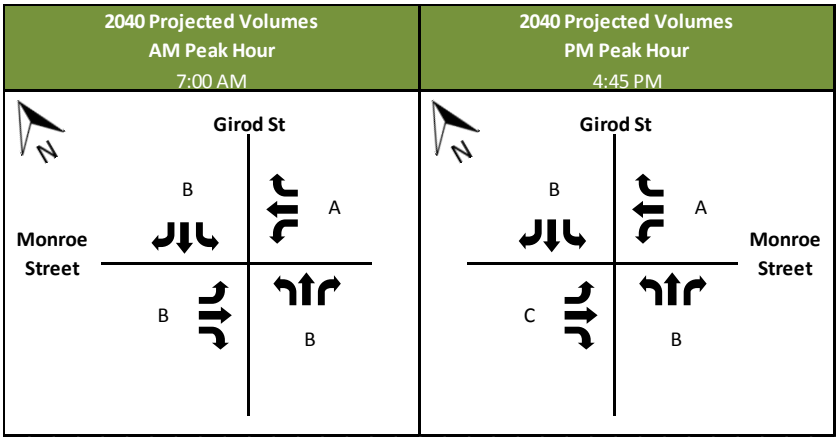


**Figure 52: Monroe Street at Girod Street 2040 Projected Levels of Service**

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended geometric improvements for the Monroe Street at Girod Street intersection. It is, however, recommended that the conditions be continually monitored throughout the study period and the cross walks across Girod Street be considered for striping.

# 11. US-190 at Lafitte Street

## *Existing Conditions*


Figure 53: US-190 at Lafitte Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Lafitte Street). US-190 is an east-west principal urban arterial with two lanes in each direction separated by a two-way left turn lane west of Lafitte. The speed limit on US-190 is 40 MPH. Lafitte Street is a north-south local road with one lane in each direction. The speed limit on Lafitte Street north of US-190 is 20 MPH and south of US-190 is 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north and south sides of US-190. There are existing ADA sidewalk ramps on all corners.

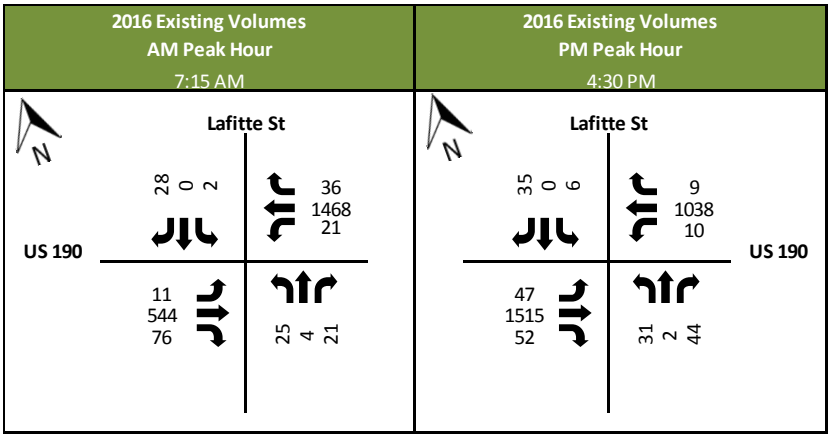


Figure 54: US-190 at Lafitte Street 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 54. The observed AM Peak Hour occurred from 7:15 – 8:15 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 55. The existing levels of service during the AM Peak Hour are estimated to be acceptable, however, during the PM Peak Hour LOS-F is experienced. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues. During peak times making a left from the side street can be difficult as observed.

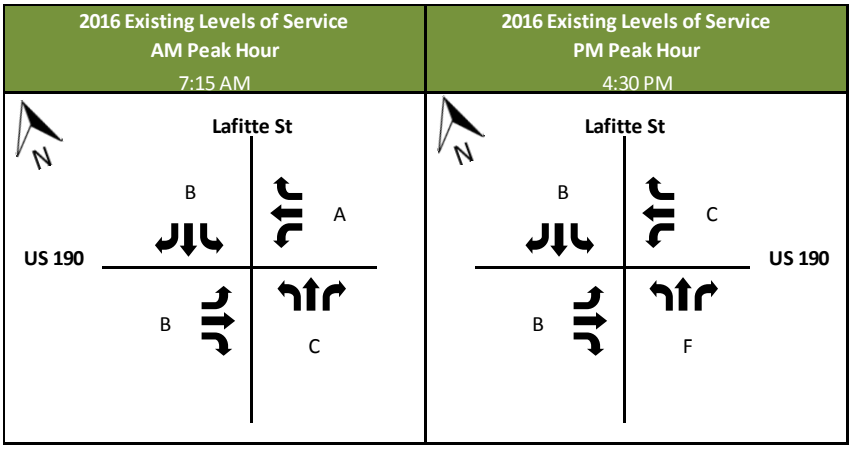


Figure 55: US-190 at Lafitte Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

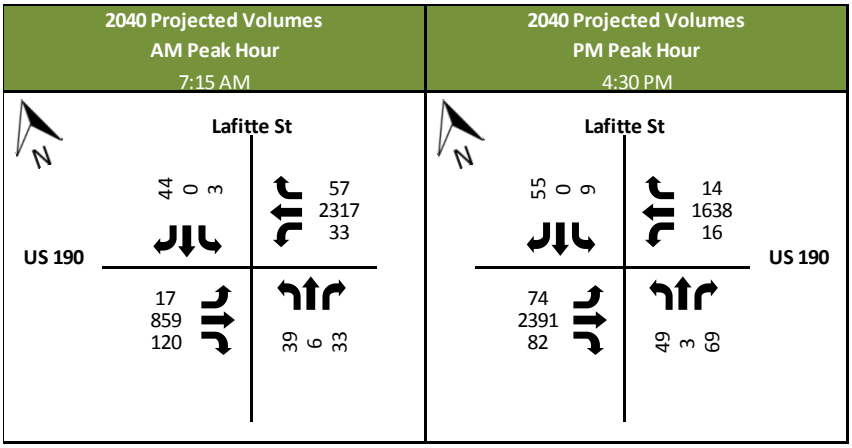


Figure 56: US-190 at Lafitte Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 56.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 57. The levels of service for US-190 at this intersection are predicted to remain acceptable, while the side streets are predicted to continue to operate below acceptable LOS. This is attributed to the stop-controlled traffic on the minor roadway (Lafitte Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

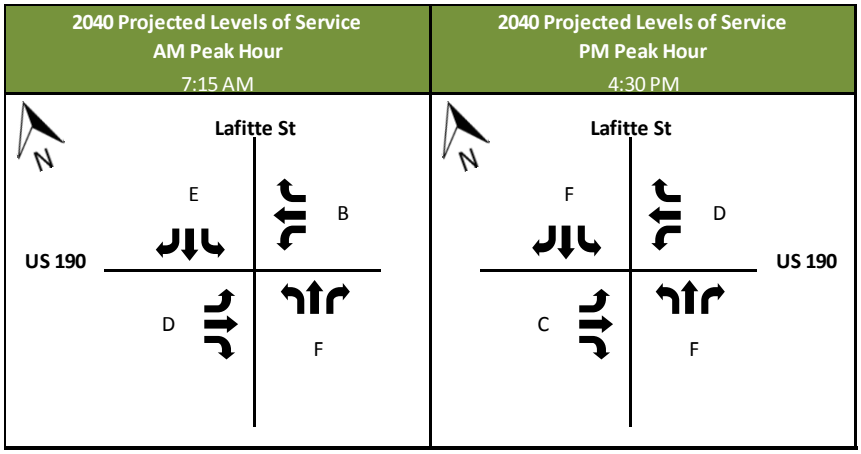


Figure 57: US-190 at Lafitte Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at Lafitte Street intersection. It is, however, recommended that the conditions be continually monitored throughout the study period and the cross walks across Lafitte Street be considered for striping.

# 12. Monroe Street at Lafitte Street

## *Existing Conditions*

Figure 58: Monroe Street at Lafitte Street

The existing intersection is a four-legged intersection with all way stop control. Monroe Street is an east-west minor urban arterial with one lane in each direction. The speed limit on Monroe Street is 30 MPH. Lafitte Street is a north-south local road with one lane in each direction. The speed limit on Lafitte Street is posted at 15 MPH south of Monroe Street and 25 MPH north of Monroe Street.

There are no designated crosswalks at this intersection. There are sidewalks along the north side of Monroe Street. There are existing ADA sidewalk ramps on the north side of Monroe Street.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 59. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

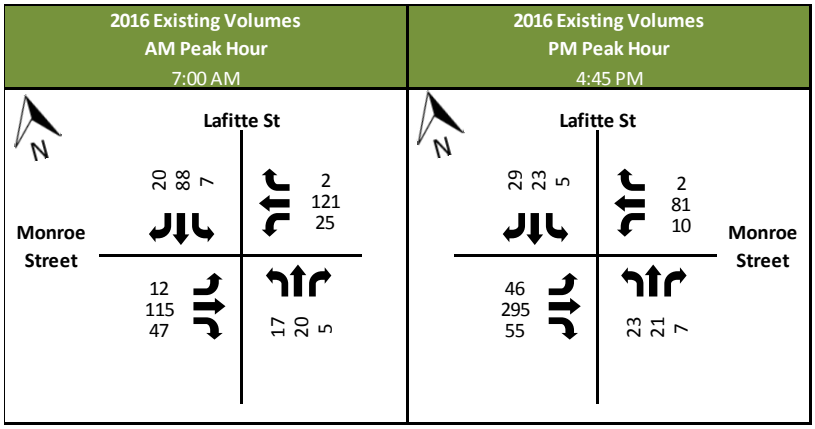


Figure 59: Monroe Street at Lafitte Street 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 60. The existing levels of service during the AM Peak Hour do not exceed LOS-A, and do not exceed LOS-B during the PM Peak Hour. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

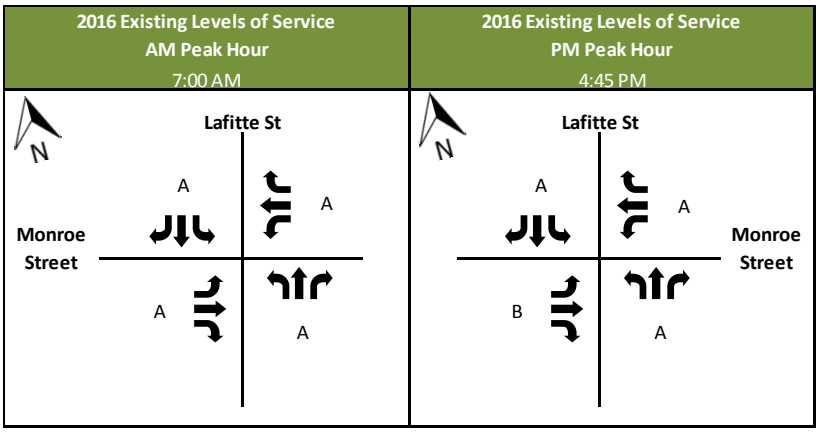


Figure 60: Monroe Street at Lafitte Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

Both evaluated developments, Port Marigny and Mariner's Village, are expected to have vehicles that arrive after passing this intersection. The impacts are not expected to be significant based on the information provided by the project developer.

## *2040 Conditions*

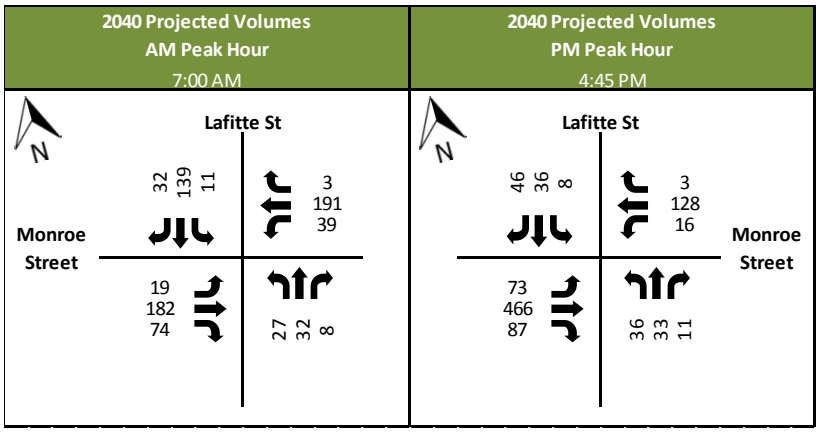


Figure 61: Monroe Street at Lafitte Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 61.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 62. The levels of service are projected to remain acceptable to the horizon year.

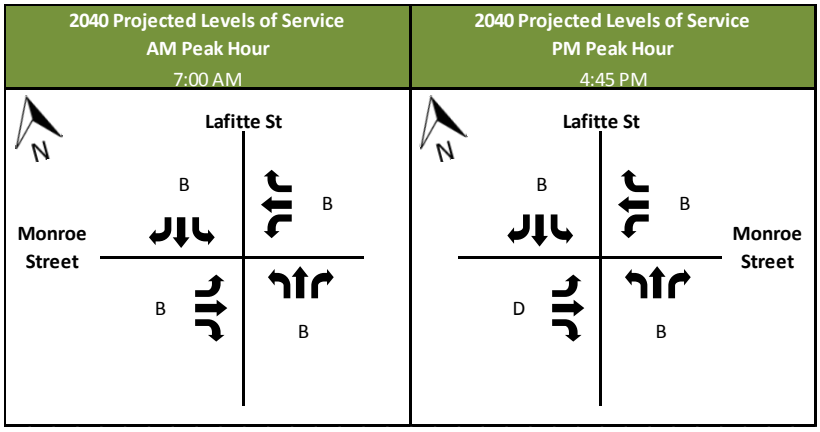


Figure 62: Monroe Street at Lafitte Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the Monroe Street at Lafitte Street intersection. It is, however, recommended that the conditions be continually monitored throughout the study period and the cross walks across Lafitte Street be considered for striping.

# 13. US-190 at Lamarque Street

## *Existing Conditions*

Figure 63: US-190 at Lamarque Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Lamarque Street). US-190 is an east-west principal urban arterial with two lanes in each direction separated by a two-way left turn lane. The speed limit on US-190 is 40 MPH. Lamarque Street is a north-south local road with one lane in each direction. The speed limit on Lamarque Street is 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north and south sides of US-190. There are existing ADA sidewalk ramps on all corners.

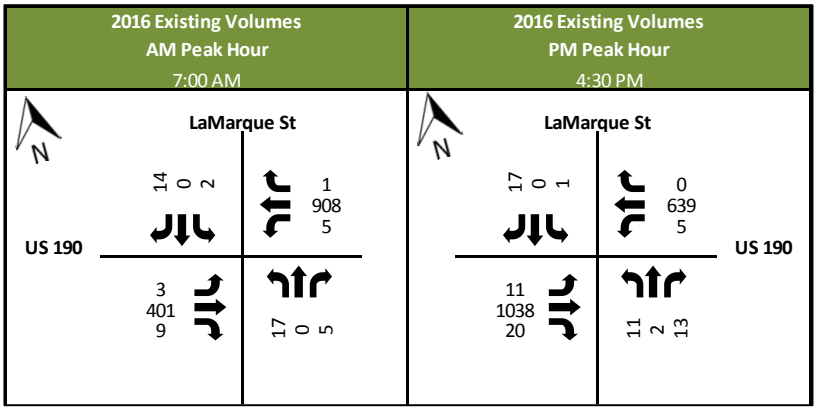


Figure 64: US-190 at Lamarque Street 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 64. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 65. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-B. The existing intersection operates without any observed issues.

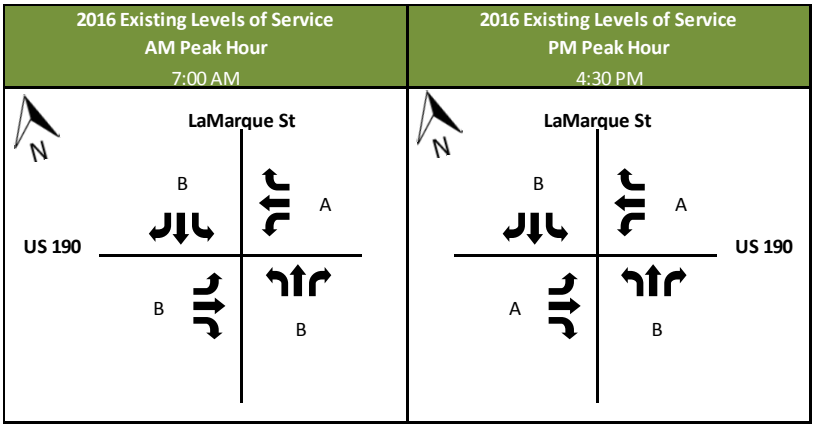


Figure 65: US-190 at Lamarque Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 66.

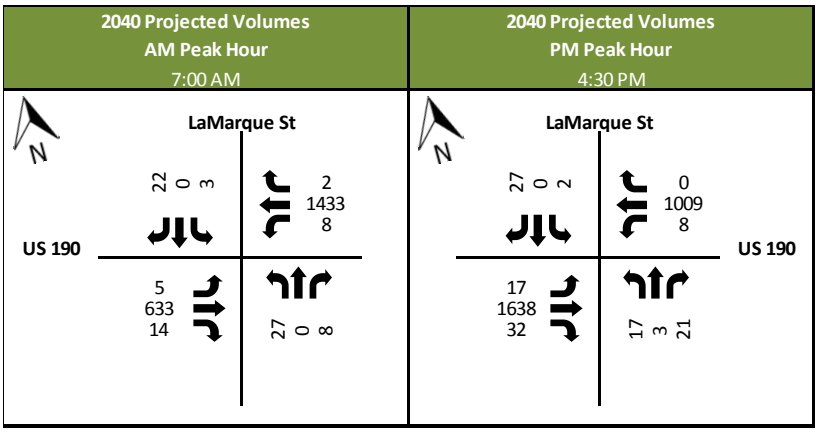


Figure 66: US-190 at Lamarque Street 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 67. The levels of service for US-190 at this intersection remain above a LOS-D. This is attributed to the stop-controlled traffic on the minor roadway (Carondelet) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

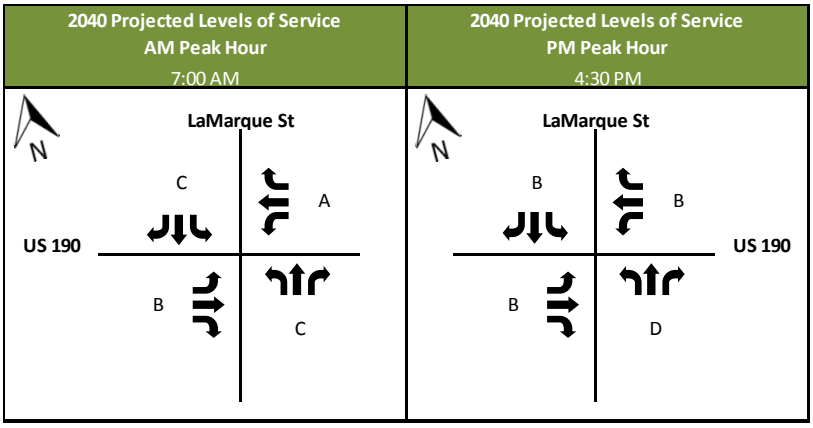


Figure 67: US-190 at Lamarque Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at Lamarque Street intersection. It is, however, recommended that the conditions be continually monitored throughout the study period and the cross walks across LaMarque Street be considered for striping.

# 14. US-190 at Soult Street

## *Existing Conditions*

The existing intersection is a four-legged intersection with stop control in the minor direction (Soult).

Figure 68: US-190 at Soult Street

US-190 is an east-west principal urban arterial with one lane in each direction separated by two-way left turn lane. The speed limit on US-190 is 50 MPH. Soult is a north-south local road with one lane in each direction. The speed limit on Soult Street is 30 MPH north of US-190 and no posted speed limit south of US-190.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 70. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 69. The existing levels of service during the AM Peak Hour do not exceed LOS-C, and do not exceed LOS-E during the PM Peak Hour. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

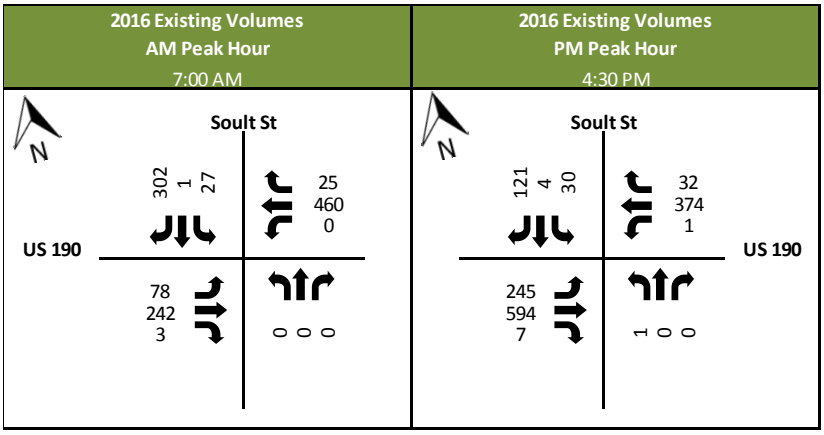


Figure 70: US-190 at Soult Street 2016 Existing Volumes

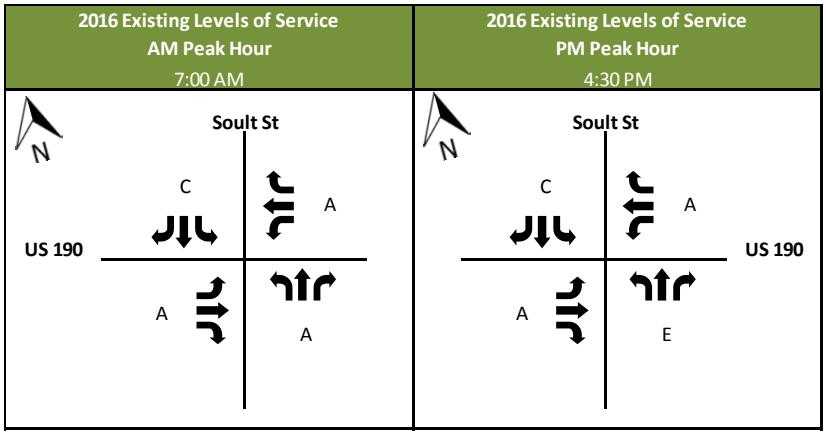


Figure 69: US-190 at Soult Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 71.

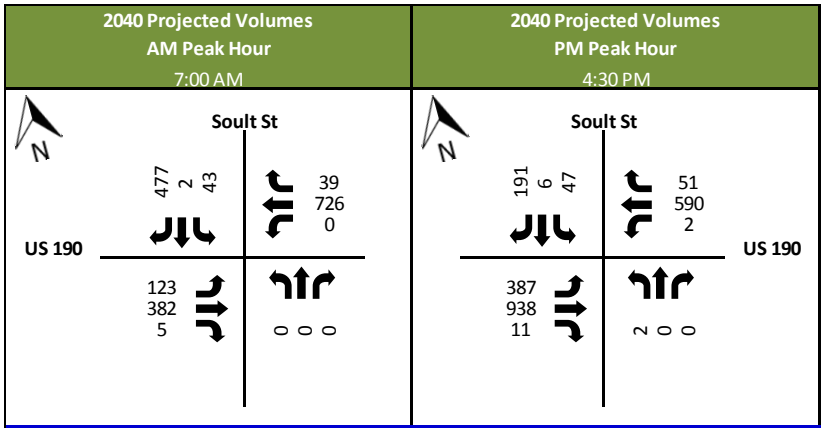


Figure 71: US-190 at Soult Street 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 72. The levels of service for US-190 at this intersection remain at acceptable levels of service while the side street falls to LOS-F in the AM and PM Peak hours. This is attributed to the stop-controlled traffic on the minor roadway (Soult Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

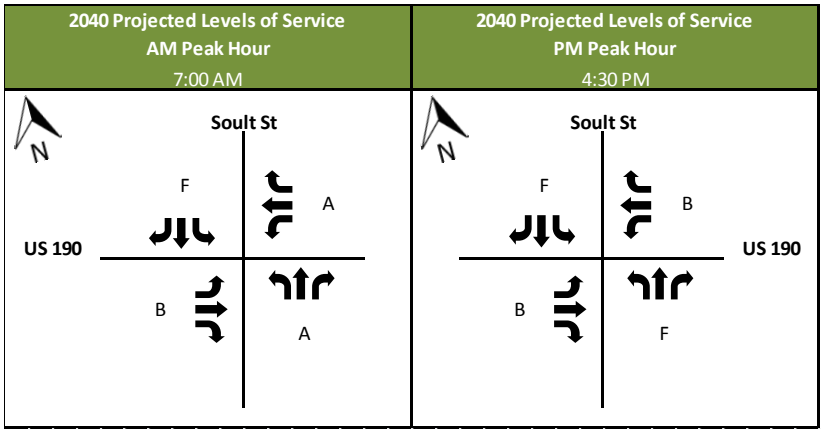


Figure 72: US-190 at Soult Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at Soult Street intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

At the time this report was prepared there is a capacity project being planned by the LADOTD from Little Bayou Castine to the entrance of Pelican Park (SP H000497). The Bypass is expected to affect the 2040 turn movement volumes by diverting volumes from this intersection.

# 15. US-190 at Jackson Avenue

## *Existing Conditions*

The existing intersection is a three-legged intersection with stop control in the minor direction (Jackson Avenue). US-190 is an east-west principal urban arterial with one lanes in each direction separated by a two-way left turn lane. The speed limit on US-190 is 50 MPH. Jackson Avenue is a north-south local road with one lane in each direction. The speed limit on Jackson Avenue is 25 MPH.

Figure 73: US-190 at Jackson Avenue

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of the intersection either.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 74. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

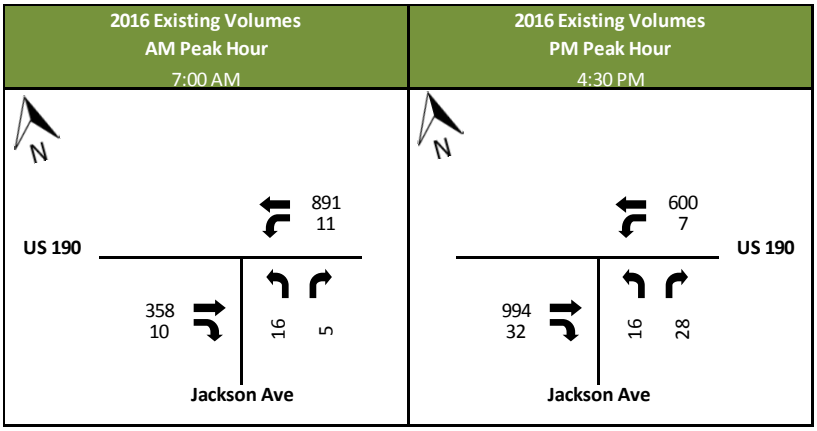


Figure 74: US-190 at Jackson Avenue 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 75. The existing levels of service during the AM Peak Hour do not exceed LOS-B, and do not exceed LOS-C during the PM Peak Hour. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

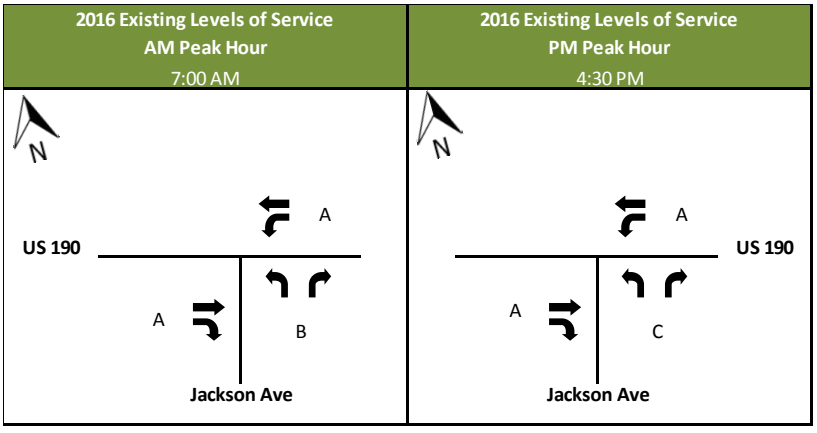


Figure 75: US-190 at Jackson Avenue 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

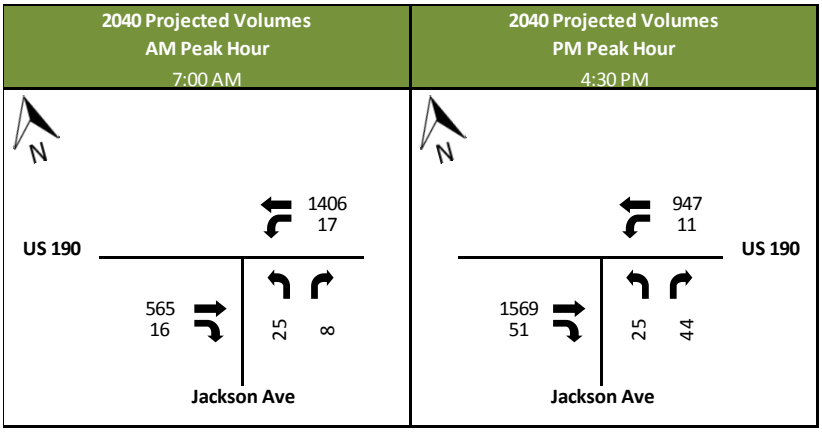


Figure 76: US-190 at Jackson Avenue 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 76.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 77. The levels of service for US-190 at this intersection remain at acceptable levels of service.

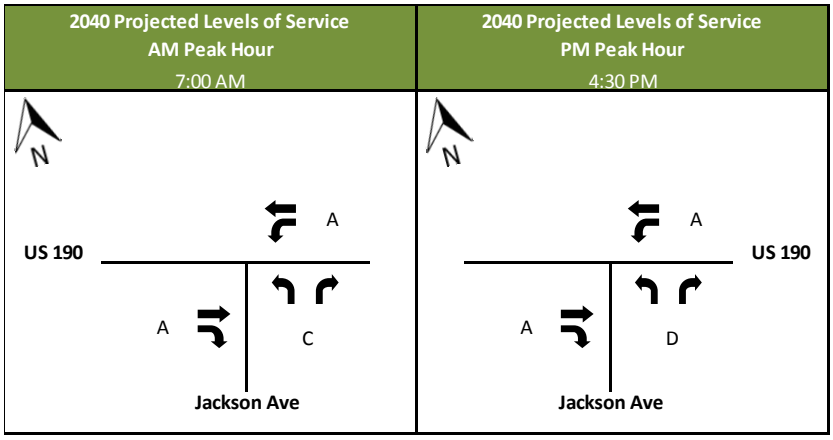


Figure 77: US-190 at Jackson Avenue 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at Jackson Avenue intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

At the time this report was prepared there is a capacity project being planned by the LADOTD from Little Bayou Castine to the entrance of Pelican Park (SP H000497).

# 16. Monroe Street at Lambert Street

## *Existing Conditions*

Figure 78: Monroe Street at Lambert Street

The existing intersection is a three-legged intersection with stop control in the minor direction (Lambert Street). Monroe Street is an east-west minor urban arterial with one lane in each direction. The speed limit on Monroe Street is 30 MPH. Lambert Street is a north-south local road with one lane in each direction. The speed limit on Carondelet is 25 MPH. Note that Lambert Street is very narrow.

There are no designated crosswalks at this intersection. There are sidewalks along the north side of Monroe Street. There are existing ADA sidewalk ramps to cross Lambert Street. This intersection is located just outside of the school zone for Mandeville Elementary School which is located just to the east of this intersection.

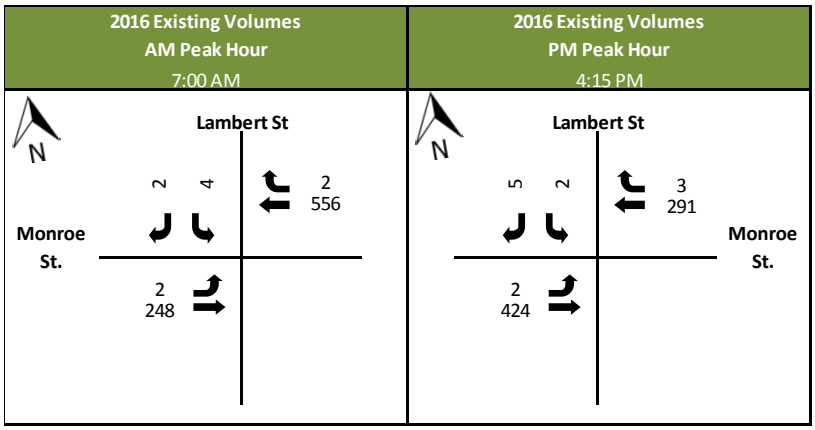


Figure 79: Monroe Street at Lambert Street 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 79. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 80. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-C. The existing intersection operates without any observed issues.

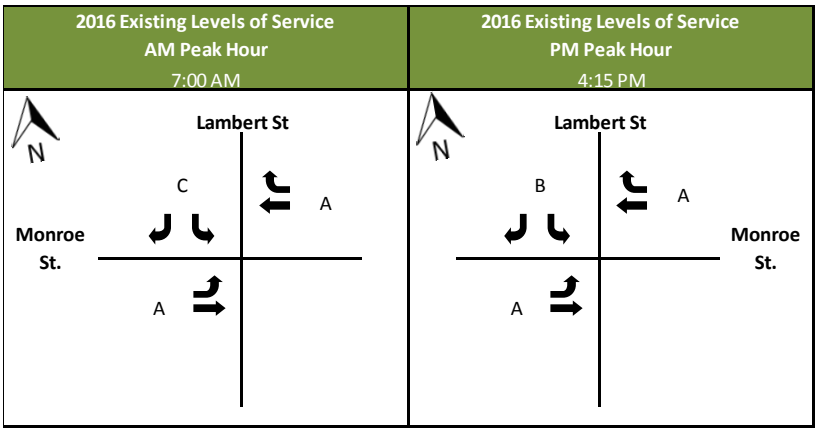


Figure 80: Monroe Street at Lambert Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

This intersection is in the immediate vicinity of both developments evaluated in this analysis, Port Marigny and Mariner's Village. This intersection is expected to be impacted directly by both developments. If the connection from Port Marigny is made at this location, the volumes traveling northbound or southbound on Lambert Street would be expected to increase significantly.

Several options were explored under projected development level volumes. This included the widening of Monroe Street to accommodate both right and left turn lanes into the Port Marigny site as well as a potential round-a-bout at the intersection of Monroe Street and Lambert Street. (This assumed the primary Port Marigny connection aligns with Lambert Street and additional improvements on Lambert Street through to the East Causeway Approach would be required.) At this time the exact location of the Port Marigny connections were not yet finalized. The conceptual options explored for the intersection are included in Appendix A.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. These volumes do not include the projected volumes that would be generated by the study developments. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 81.

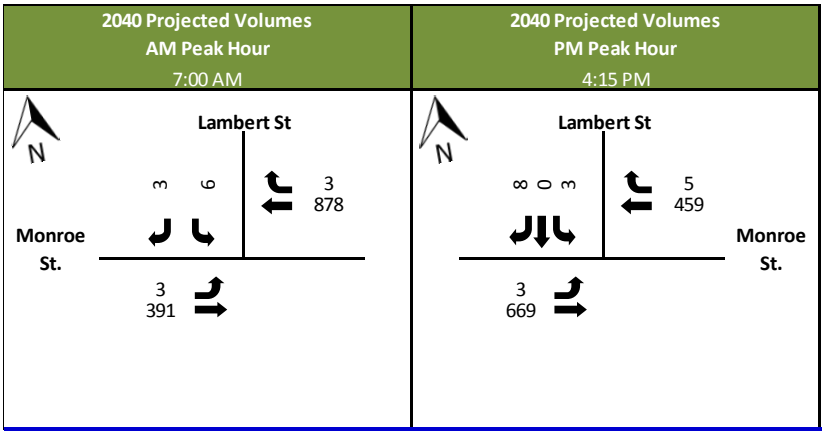


Figure 81: Monroe Street at Lambert Street 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 82. The levels of service for US-190 at this intersection remain at acceptable levels of service during both peak hours.

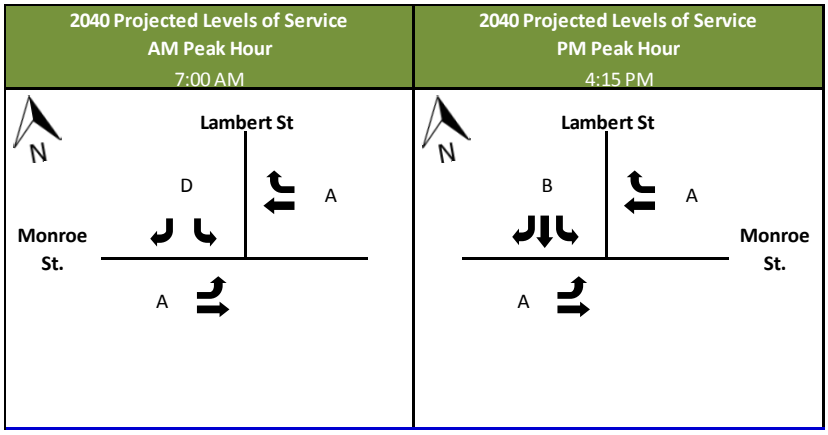


Figure 82: Monroe Street at Lambert Street 2040 Projected Levels of Service

## *Recommendations*

It is recommended that this location be monitored very closely as the proposed developments come online. This intersection was evaluated in this report for improvements into the future that could include widening, potential roundabout and improvements to Lambert Street. At the time of this study the development plan has not been finalized. It is recommended that as the development plan finalizes, this intersection be further evaluated and improvement s chosen if needed.

# 17. East Causeway Approach at Cheron Drive/N Lake Parkway

## *Existing Conditions*

Figure 83: East Causeway Approach at Cheron Drive/N Lake Parkway

The existing intersection is a four-legged intersection with stop control in the minor direction (Cheron Drive/N Lake Parkway). US-190 is an east-west minor urban arterial with two lanes in each direction separated by a raised median. The speed limit on East Causeway Approach is 45 MPH. Cheron Drive and N Lake Parkway are both local roads with one lane in each direction. Cheron Drive also has a raised median and a posted speed limit of 25 MPH. N Lake Parkway has no posted speed limit.

There are no sidewalks or crosswalks around this intersection.

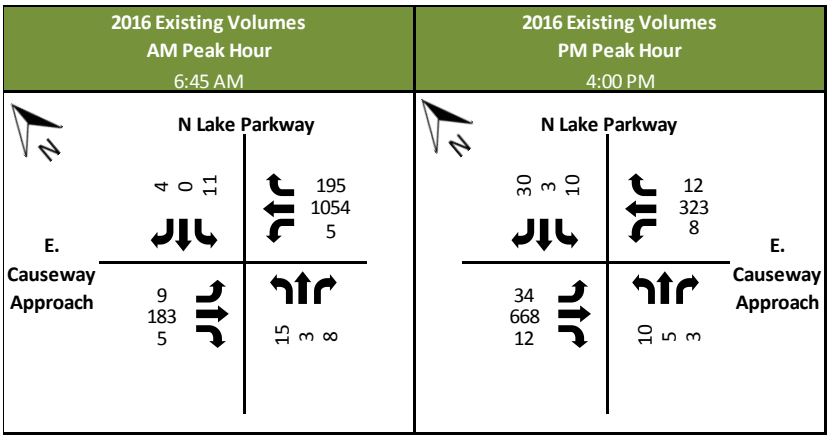


Figure 84: East Causeway Approach at Cheron Drive/N Lake Parkway 2016 Existing Volumes

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 84. The observed AM Peak Hour occurred from 6:45 – 7:45 AM. The observed PM Peak Hour occurred from 4:00 – 5:00 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 85. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-C. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

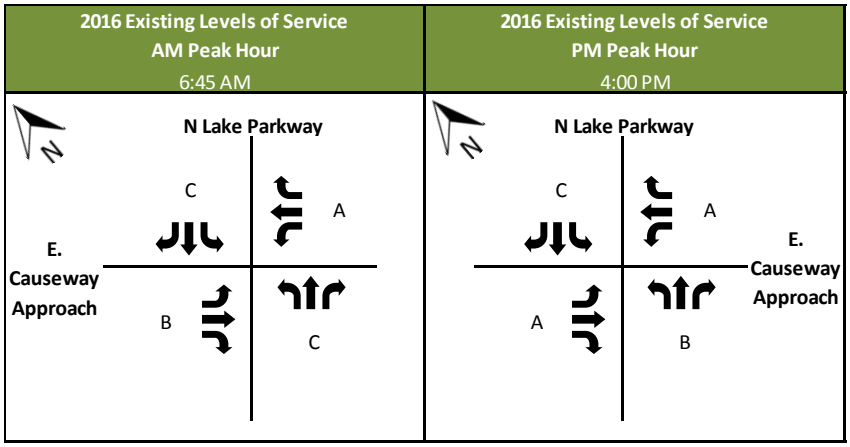


Figure 85: East Causeway Approach at Cheron Drive/N Lake Parkway 2016 Existing Levels of Service

## *Impacts of Known Developments*

Not direct but intersection will be impacted by the developments proposed by Port Marigny and Mariner's Village.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 86.

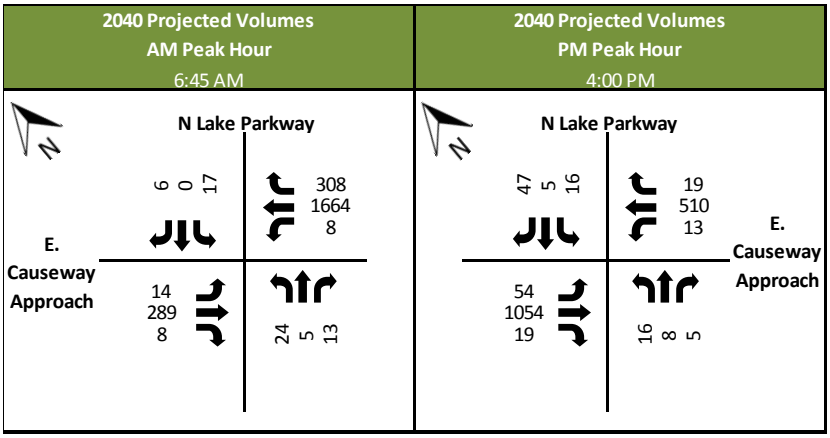


Figure 86: East Causeway Approach at Cheron Drive/N Lake Parkway 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 87. The levels of service for East Causeway Approach remain acceptable at this intersection while the side street is projected to fall to LOS-F in the AM Peak hour and LOS-E in the

PM Peak Hour. This is attributed to the stop-controlled traffic on the minor roadway (Cheron Drive/N Lake Parkway) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

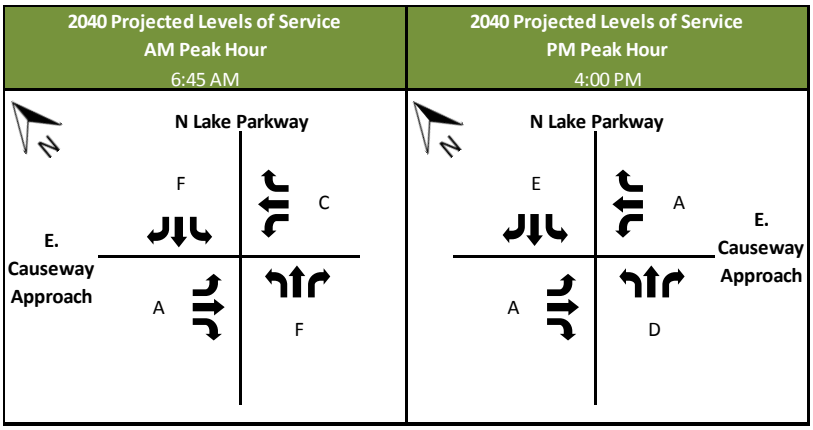


Figure 87: East Causeway Approach at Cheron Drive/N Lake Parkway 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the East Causeway Approach at Cheron Drive/N Lake Parkway. It is, however, recommended that the sight distance be monitored due to the vegetation along the roadway in the curve.

# 18. Causeway Boulevard at Florida Street

## *Existing Conditions*

Figure 88: Causeway Boulevard at Florida Street

The existing intersection is a four-legged signalized intersection. Causeway Boulevard is a median divided, north-south Urban Freeway/Expressway with 3 lanes in each direction. The posted speed limit is 45 MPH. Florida Street is an east-west urban major collector with one lane in each direction on the east side of Causeway Boulevard with a posted speed limit of 25 MPH and three eastbound lanes west of Causeway Boulevard.

There are no designated crosswalks or sidewalks at this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 89. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 90. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-D.

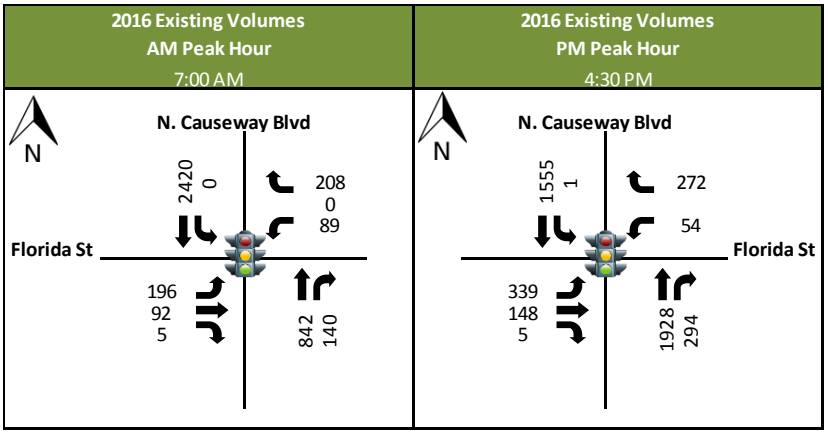


Figure 89: N Causeway Boulevard at Florida Street 2016 Existing Volumes

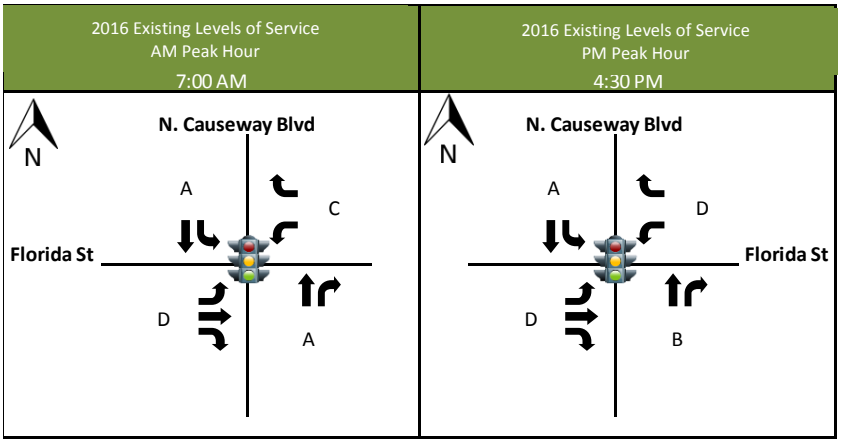


Figure 90: N Causeway Boulevard at Florida Street 2016 Existing Levels of Service

The existing intersection operates without any observed issues.

## *Impacts of Known Developments*

Not direct but intersection will be impacted by the developments proposed by Port Marigny and Mariner's Village.

## *2040 Conditions*

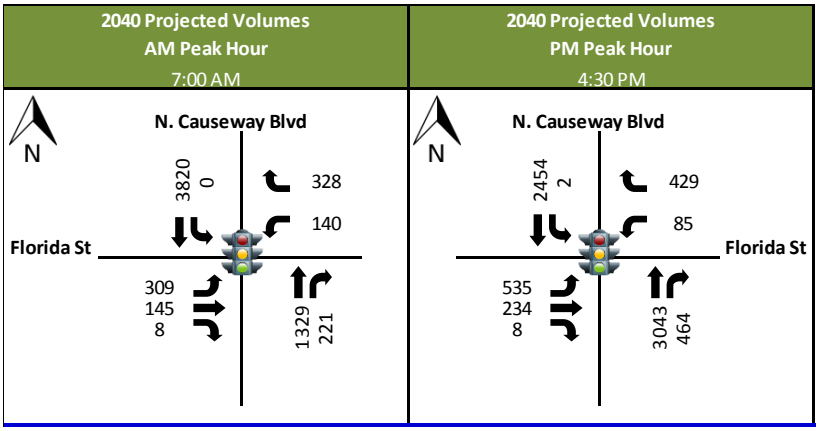


Figure 91: N Causeway Boulevard at Florida Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 91.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 92. The levels of service for Westbound Florida Street and Northbound N Causeway Boulevard at this intersection are projected to fall to LOS-F in the PM Peak hour.

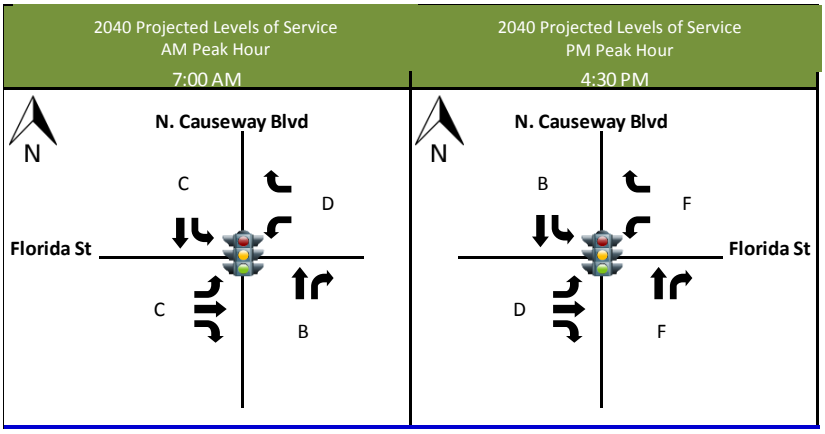


Figure 92: N Causeway Boulevard at Florida Street 2040 Predicted Levels of Service

## *Recommendations*

At this time, the City has a plan to modify the segment of Florida Street west of N Causeway Boulevard to return it to bi-directional operations. It is recommended that if a detailed study has not been performed, one should be considered as adding additional movements and/or phases to the intersection could result in decreased levels of service and increased delays for the intersection. This intersection should be monitored after the modification is in place and further projection scenarios evaluated if they have not already been done as part of the evaluation of the modification.

# 19. West Causeway Approach at Florida Street

## *Existing Conditions*

The existing intersection is a three-legged signalized intersection. West Causeway Approach is a north-south urban minor arterial with two lanes in each direction separated by a raised median. The speed limit on West Causeway is 45 MPH. Florida Street is an east-west urban major collector with two lanes in the eastbound direction. The speed limit on Florida Street is 25 MPH.

Figure 93: East Causeway Approach at Florida Street

There are no designated crosswalks at this intersection. There are sidewalks along the west side of the West Causeway Approach. This intersection is located south of the Mandeville High school zone.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 94. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

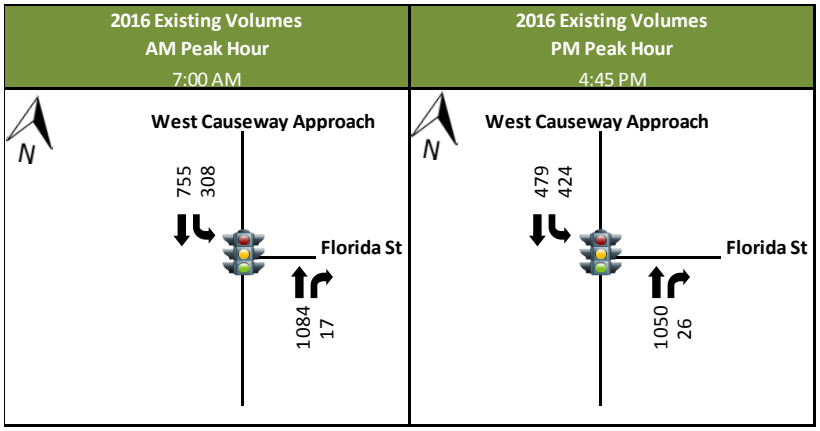


Figure 94: West Causeway Approach at Florida Street 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 95. The existing levels of service during the Peak Hours do not exceed LOS-B. The existing intersection operates without any observed issues.

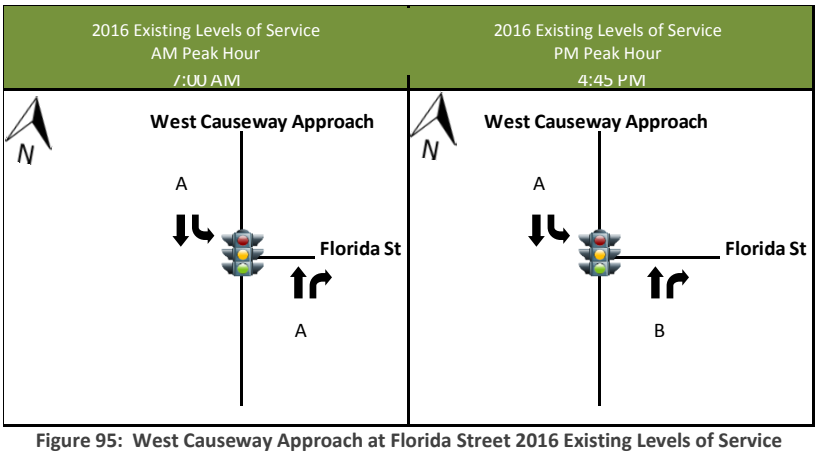


Figure 95: West Causeway Approach at Florida Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

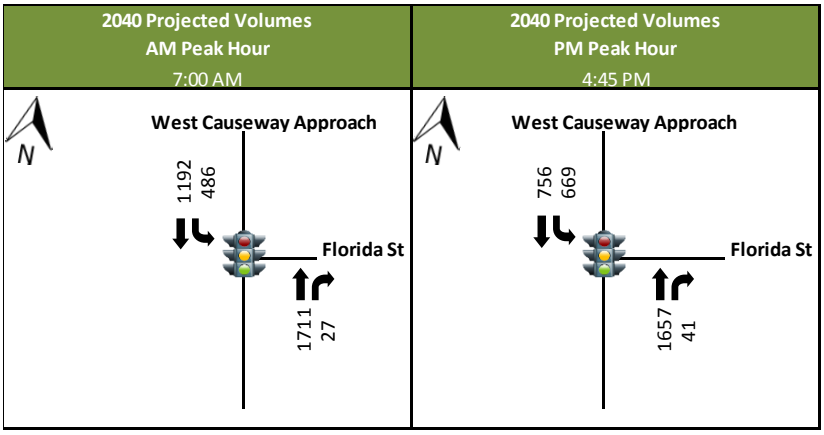


Figure 96: West Causeway Approach at Florida Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 96.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 97. The levels of service for all approaches to this intersection remain at or above LOS-B.

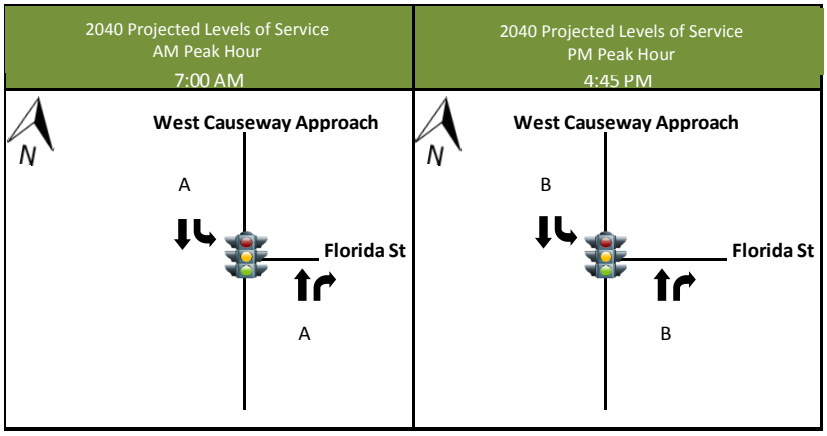


Figure 97: West Causeway Approach at Florida Street 2040 Projected Levels of Service

## *Recommendations*

This intersection will be impacted by the modification of Florida Street between West Causeway Approach and N Causeway Boulevard. This intersection should be monitored after the improvements are installed and the future conditions further evaluated at that time if they were not part of the planning document for the proposed improvement.

# 20. West Causeway Approach at U-Turn/Lovers Lane

## *Existing Conditions*

The existing intersection has four approaches with stop control in the minor direction. West Causeway Approach is a north-south urban minor arterial with two lanes in each direction separated by a raised median. There is no median break for this intersection. The speed limit on West Causeway is 45 MPH. The U-turn segment is classified as a local roadway with no posted speed limit. The Lovers Lane segment is considered an urban minor collector for the segment immediately adjacent to the West Causeway Approach with a posted speed limit of 25 MPH.

Figure 98: West Causeway Approach at U-Turn

There are no designated crosswalks at this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 99. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

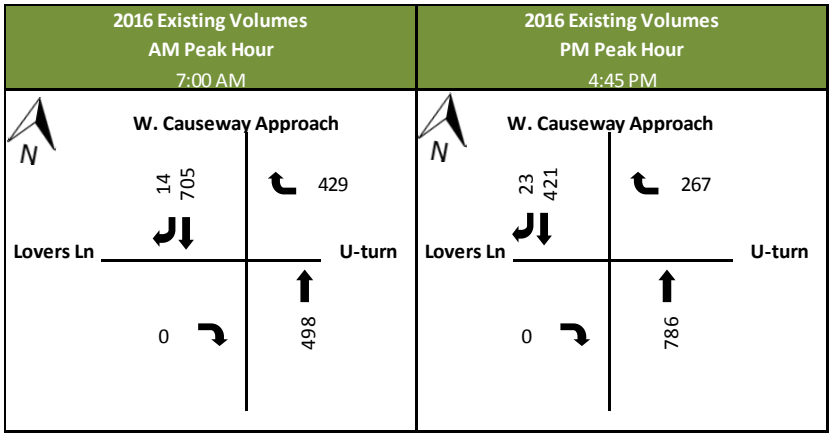


Figure 99: West Causeway Approach at U-Turn 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 100. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-B. The existing intersection operates without any observed issues.

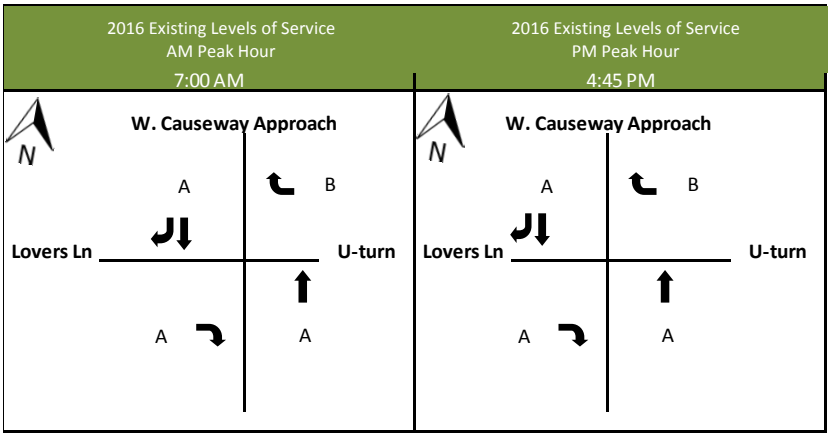


Figure 100: West Causeway Approach at U-Turn 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known impacts to this location from the developments reviewed in this study.

## *2040 Conditions*

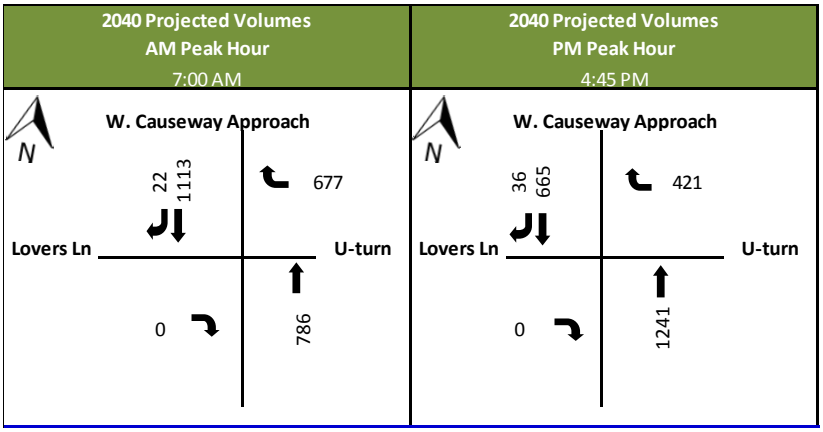


Figure 101: W Causeway Approach at U-Turn 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 101.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 102. The levels of service this intersection remain at acceptable levels of service in the design year evaluation

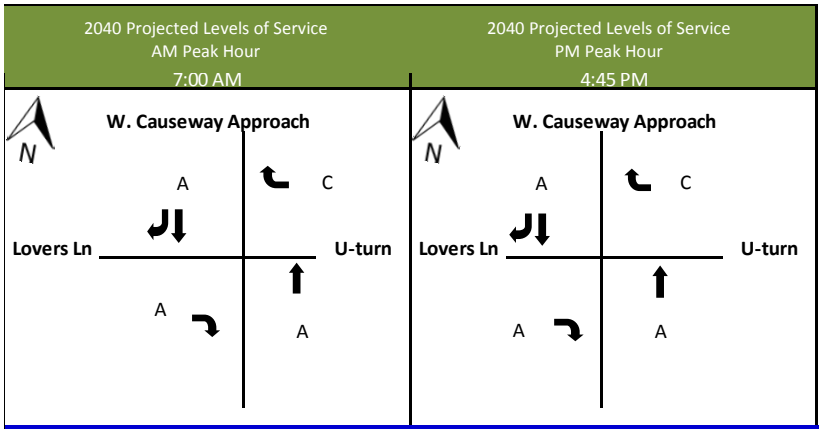


Figure 102: W Causeway Approach at U-Turn 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the West Causeway Approach at U-Turn/Lovers Lane intersection. It is however noted that the modification proposed by the City of Mandeville to the segment of Florida Street between the West Causeway Approach and North Causeway Boulevard has the potential to modify the volumes utilizing the U-turn movement. This intersection operation should be monitored after the changes to Florida Street are implemented.

# 21. West Causeway Approach at Sandra Lee

## *Existing Conditions*

Figure 103: West Causeway Approach at Sandra Lee

The existing intersection is a three-legged signalized intersection. It operates in conjunction with the intersection of West Causeway Approach at Florida Street. The spacing between the two side street connections is approximately 120 feet. West Causeway Approach is an urban minor arterial in the north-south direction with a posted speed limit of 45 MPH and two lanes in each direction divided by a median. Sandra Lee is classified as a local roadway with a posted speed limit of 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the west side of the West Causeway Approach north of Sandra Lee Drive.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 104. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

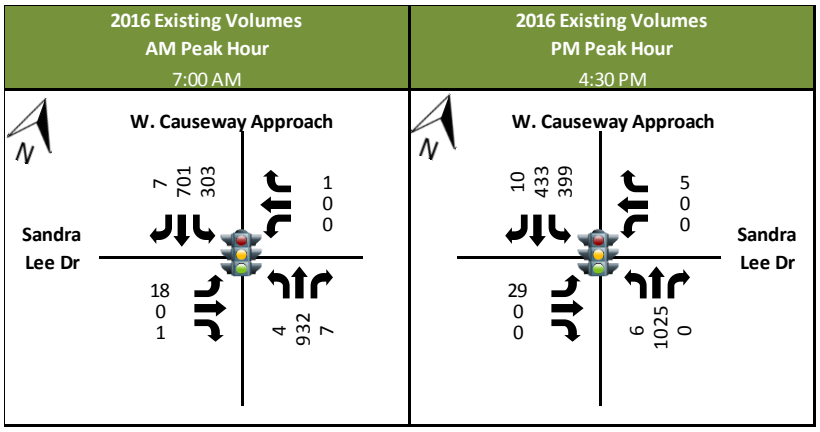


Figure 104: W Causeway Approach at Sandra Lee Drive 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 105. The existing levels of service during the Peak Hours do not exceed LOS-D. The existing intersection operates without any observed issues.

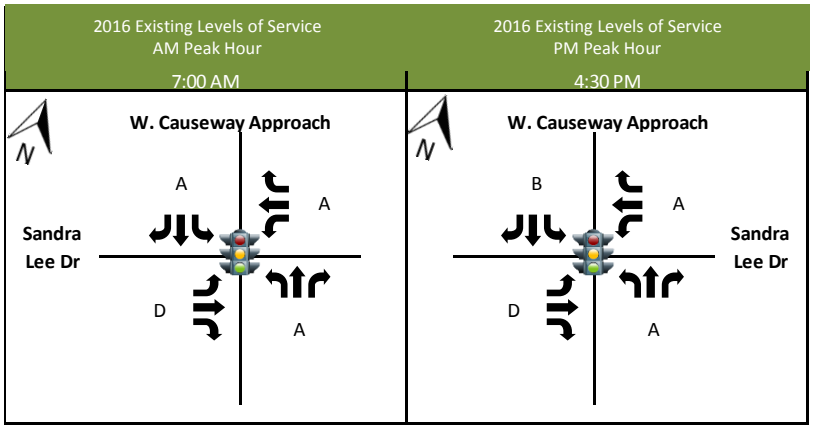


Figure 105: W Causeway Approach at Sandra Lee Drive 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

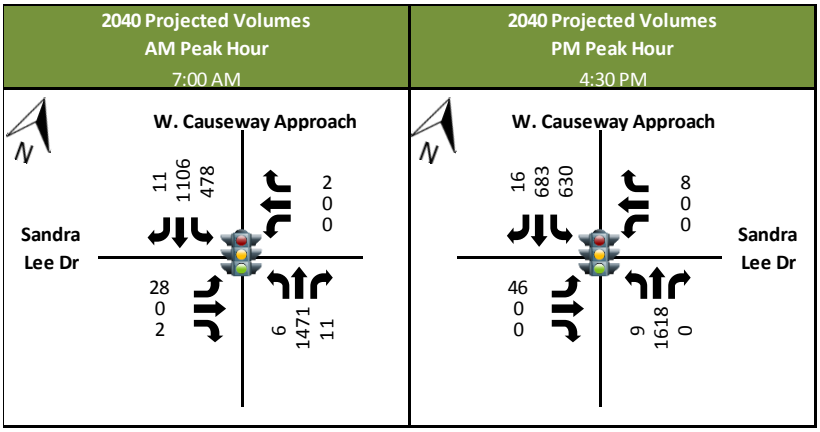


Figure 106: W Causeway Approach at Sandra Lee Drive 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 106.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 107. The level of service for the southbound approach of the West Causeway Approach is predicted to fall to LOS-E in both peak hours.

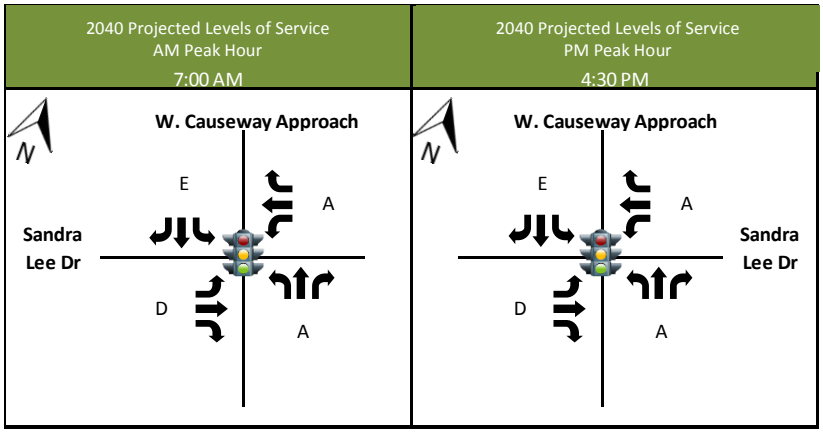


Figure 107: W Causeway Approach at Sandra Lee Drive 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the West Causeway Approach at Sandra Lee Drive intersection. It is, however, recommended that this intersection be taken into consideration with the modification of Florida Street by the City of Mandeville. The two signalized intersections are less than 120 feet apart; therefore the modifications at Florida Street will directly impact this intersection.

# 22. LA-59 at LA-1088

## *Existing Conditions*

Figure 108: LA-59 at LA-1088

The existing intersection is a three-legged signalized intersection. LA-59 is a north-south urban minor arterial with a three-lane cross section and a posted speed limit of 45 MPH. LA-1088 is an east-west urban minor arterial with a two-lane cross section and a posted speed limit of 45 MPH.

There are no designated crosswalks at this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 109. The observed AM Peak Hour occurred from 7:30 – 8:30 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 110. The existing levels of service during the Peak Hours do not exceed LOS-C. The existing intersection operates without any observed issues.

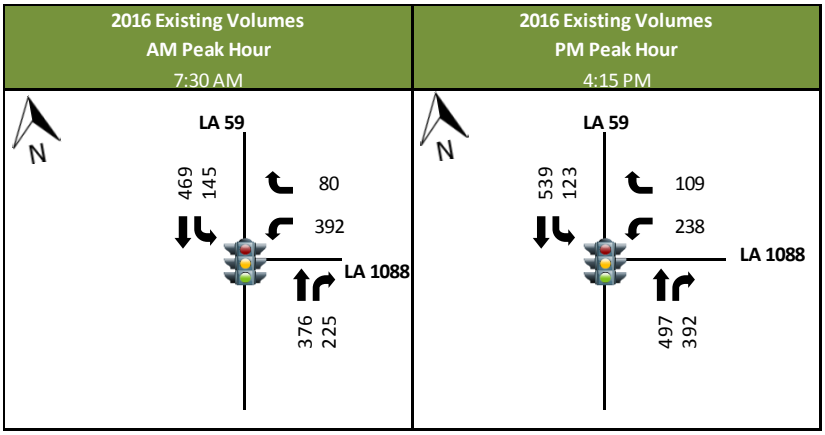


Figure 109: LA-59 at LA-1088 2016 Existing Volumes

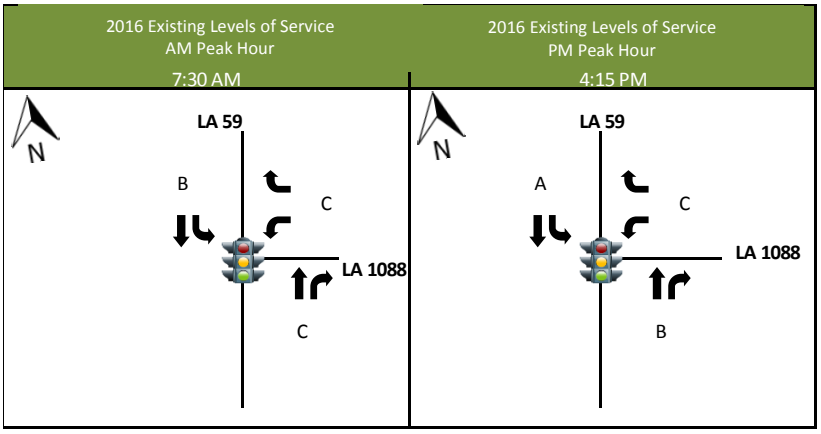


Figure 110: LA-50 at LA-1088 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

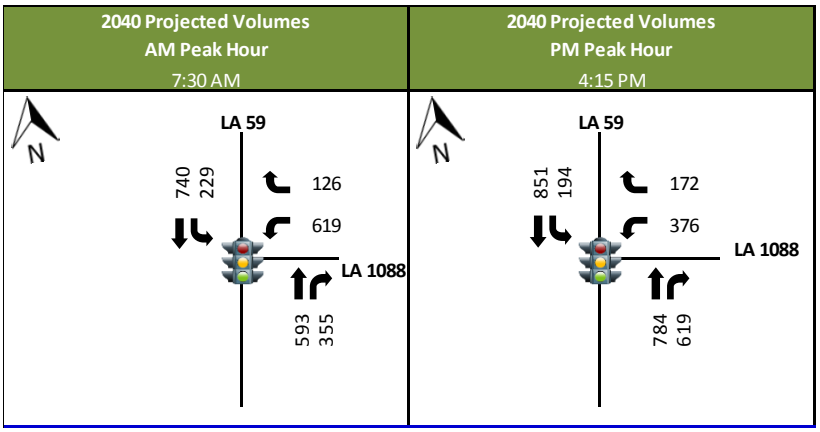


Figure 111: LA-59 at LA-1088 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 111.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 112. The levels of service are predicted to fall to below acceptable in the AM Peak hour in 2040 for the northbound LA-59 and westbound LA-1088 approaches.

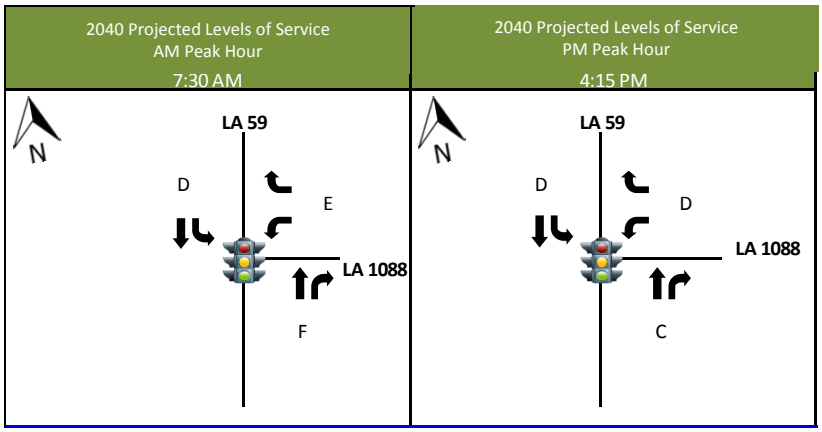


Figure 112: LA-59 at LA-1088 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-59 at LA-1088 intersection. The planned addition of the Mandeville By-pass would remove some traffic from this route, however at the time this report was prepared, the specifics of the Mandeville Bypass were not available to quantify this reduction.

Further study of this intersection is recommended for potential geometric improvements, without knowing the impact of the proposed bypass recommending such improvements herein would be premature. At a minimum, the traffic signal timings should be monitored into the future as traffic is modified by the Bypass and other area projects. This location based on preliminary review would be a potential location for a round-a-bout installation, further study of this is required.

# 23. North Causeway Boulevard (Service Road) at DeSoto Street

## *Existing Conditions*

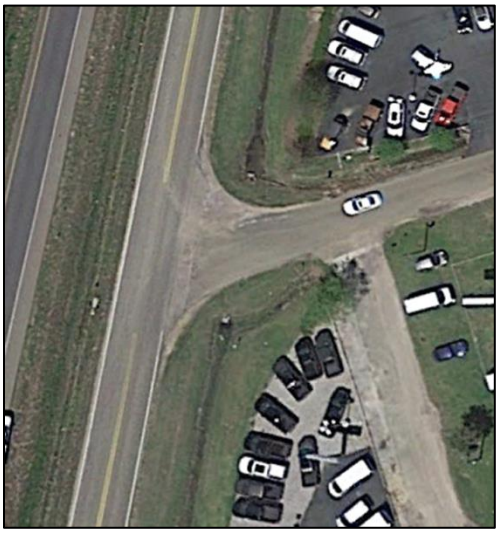

Figure 113: North Causeway Boulevard at Sharp Street

The existing intersection is a three-legged intersection with stop control in the minor direction (DeSoto Street). North Causeway Boulevard (Service Road) is a two-lane, north-south urban major collector. The speed limit on North Causeway Boulevard (Service Rod) is 45 MPH. DeSoto Street is an east-west two lane urban collector. The speed limit on DeSoto is 25 MPH.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 114. The observed AM Peak Hour occurred from 7:45 – 8:45 AM. The observed PM Peak Hour occurred from 2:45 – 3:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 115. The existing levels of service during the Peak Hours do not exceed LOS-B. The existing intersection operates without any observed issues.

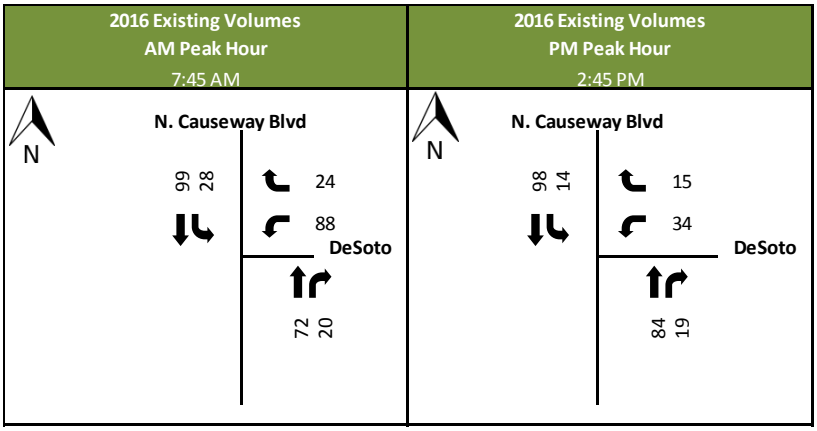


Figure 114: N Causeway Blvd (Svc Rd) at DeSoto Street 2016 Existing Volumes

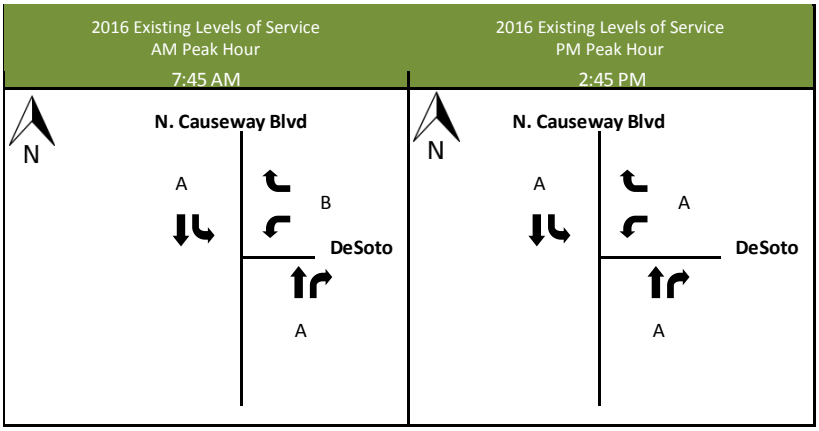


Figure 115: N Causeway Blvd (Svc Rd) at DeSoto Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

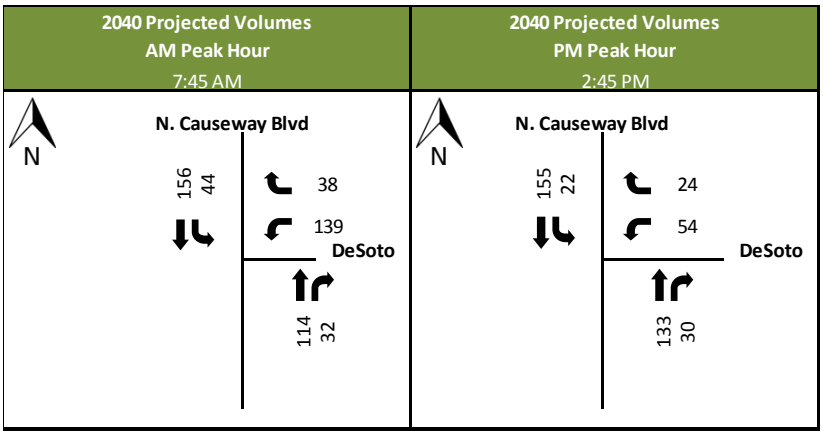


Figure 116: N Causeway Blvd (Svc Rd) at DeSoto Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 116.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 117. The levels of service for the intersection remain at acceptable levels of service.

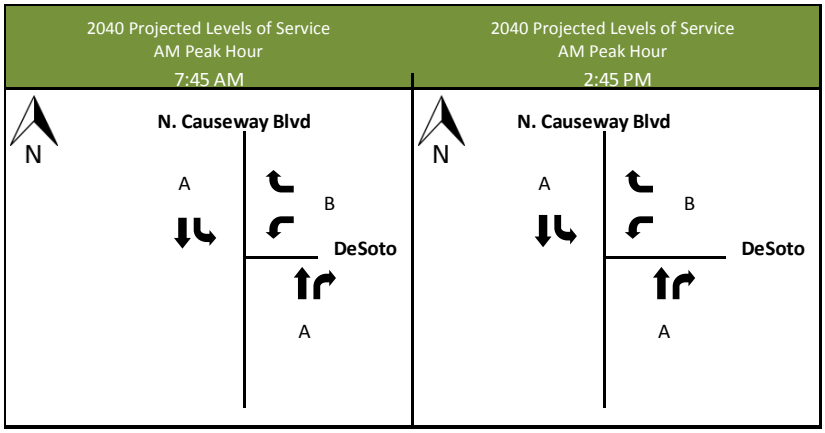


Figure 117: N Causeway Blvd (Svc Rd) at DeSoto Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the N Causeway Boulevard (Service Road) at DeSoto Street intersection. The location should be considered for pavement marking improvements to include a stop bar on the DeSoto Street approach. It is, however, recommended that the conditions be continually monitored throughout the study period.

# 24. LA-3228 (Asbury Drive) at LaSalle Street

## *Existing Conditions*

Figure 118: LA-3228 (Asbury Drive) at LaSalle Street

The existing intersection is a four-legged intersection with stop control in the minor direction (LaSalle Street). LA-3228 (Asbury Drive) is a two lane north-south urban major collector. The speed limit on LA-3228 (Asbury Drive) is 40 MPH. LaSalle Street is an east-west local road with one lane in each direction. The speed limit on LaSalle Street is 25 MPH. The approach on the east of LA-3228 (Asbury Drive) is a driveway.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 119. The observed AM Peak Hour occurred from 8:15 – 9:15 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 120. The existing level of service during the AM and PM Peak Hours is acceptable. The existing intersection operates without any observed issues.

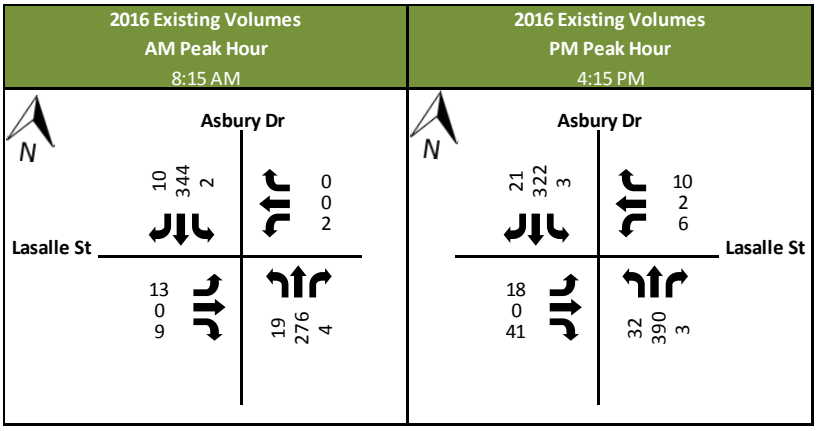


Figure 119: LA-3228 (Asbury Drive) at LaSalle Street 2016 Existing Volumes

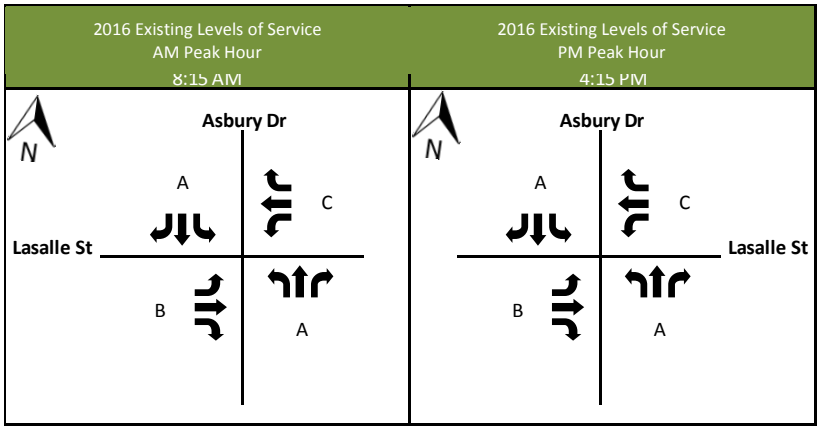


Figure 120: LA-3228 (Asbury Drive) at LaSalle Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

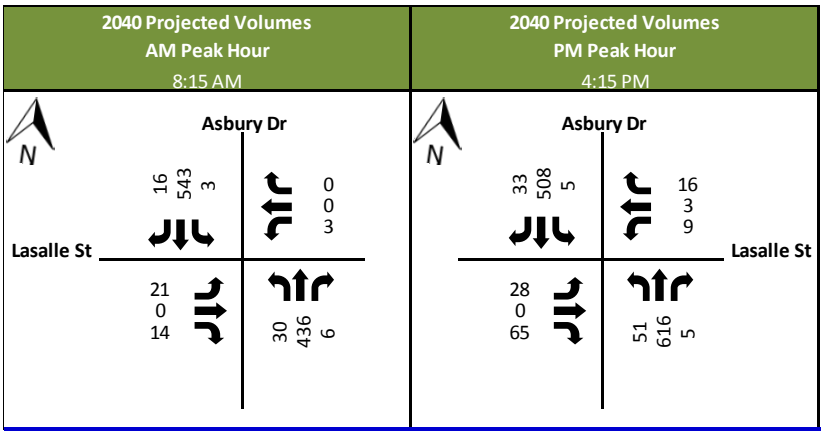


Figure 121: LA-3228 (Asbury Drive) at LaSalle St 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 121.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 122. The levels of service for LA-3228 (Asbury Drive) at this intersection remain acceptable into the predicted future conditions.

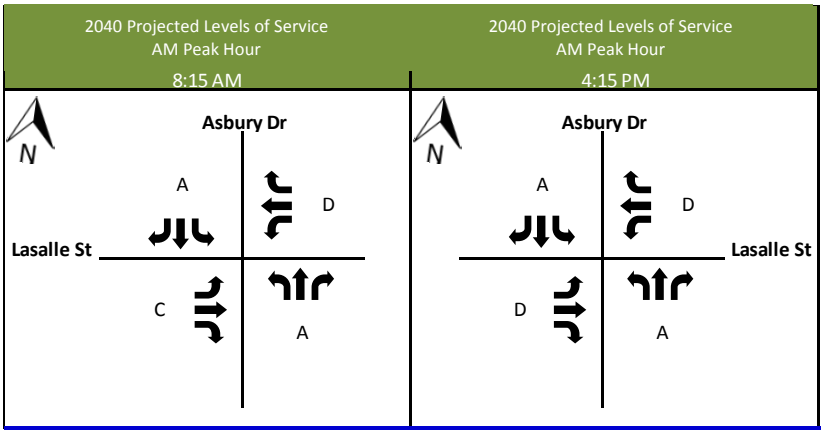


Figure 122: LA-3228 (Asbury Drive) at LaSalle Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-3228 (Asbury Drive) at LaSalle Street intersection.

As part of the LADOTD Road Transfer Program, LA-3228 (Asbury Drive) will be improved to a three-lane section and turned over for maintenance to the City (SP H012379). This is not expected to negatively affect the operations at the intersection. The RPC expects this to be completed within the next two years.

# 25. LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road

## *Existing Conditions*

Figure 123: LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road

The existing intersection is a four-legged signal-controlled intersection. LA-3228 (Asbury Drive) is a north-south urban major collector with one lane in each direction. The speed limit on LA-3228 (Asbury Drive) is 40 MPH. DeSoto Street and Sharp Road are urban major collectors with one lane in each direction. The speed limit on DeSoto is 25 MPH. The speed limit of Sharp is 35 MPH.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 124. The observed AM Peak Hour occurred from 8:00 – 9:00 AM. The observed PM Peak Hour occurred from 2:45 – 3:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 125. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-D. The existing intersection operates without any observed issues.

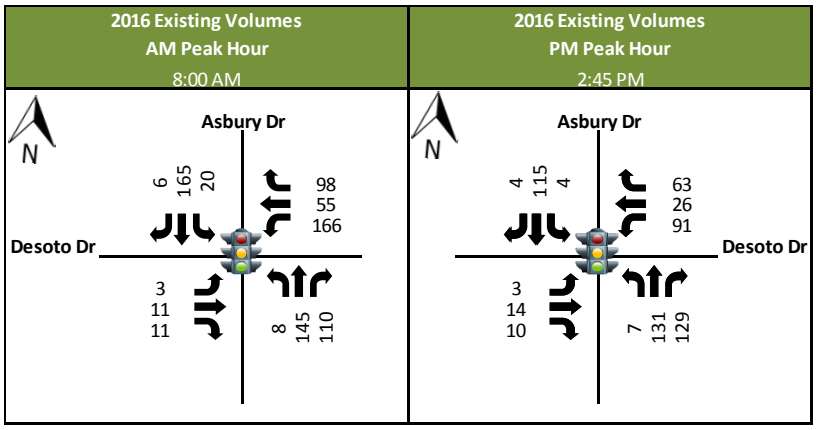


Figure 124: LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road 2016 Existing Volumes

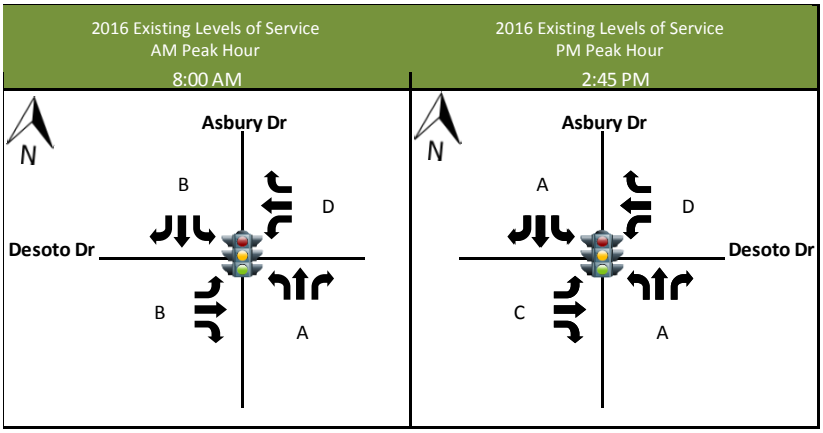


Figure 125: LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

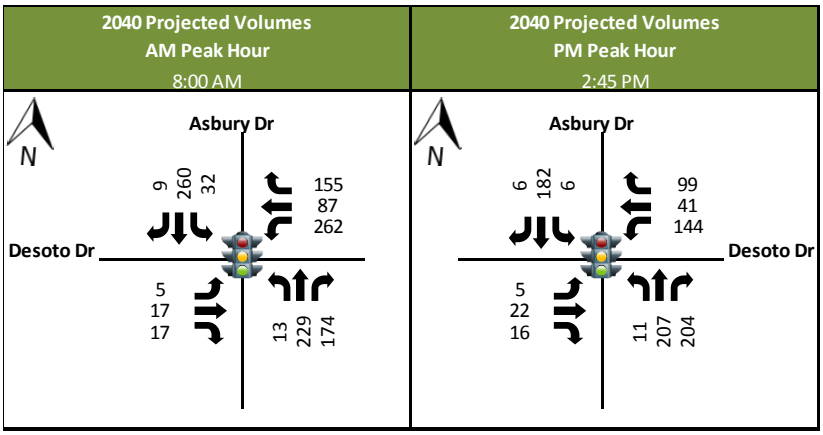


Figure 126: LA-3228 (Asbury Drive) at Desoto Street/Sharp Road 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 126.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 127. The levels of service at this intersection remain at acceptable levels of service.

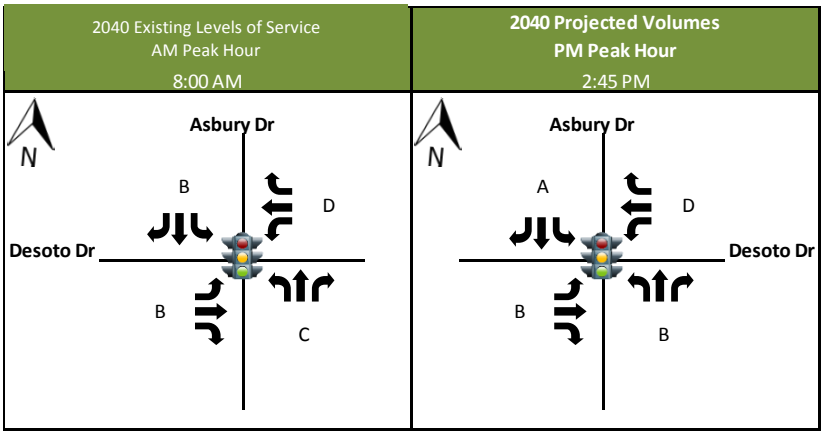


Figure 127: LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-3228 (Asbury Drive) at DeSoto Street/Sharp Road intersection.

As part of the LADOTD Road Transfer Program, LA-3228 (Asbury Drive) will be improved to a three-lane section and turned over for maintenance to the City (SP H012379). This is not expected to negatively affect the operations at the intersection. The RPC expects this to be completed within the next two years.

# 26. US-190 at Greenleaves Boulevard

## *Existing Conditions*

Figure 128: US-190 at Greenleaves Boulevard

The existing intersection is a four-legged signalized intersection. US-190 is a north-south urban principal arterial in the vicinity with two lanes in each direction separated by a raised median. The speed limit on US-190 is 45 MPH. Greenleaves Boulevard is an east-west local road with two lanes in each direction separated by a median. The speed limit on Greenleaves Boulevard is 25 MPH.

There are designated crosswalks at this intersection on the west, east and south quadrants. There are sidewalks along the east and west sides of US-190 as well as the north side of Greenleaves Boulevard. There are existing ADA sidewalk ramps on all corners. As well as pedestrian signal heads integrated with the traffic signal.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 129. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

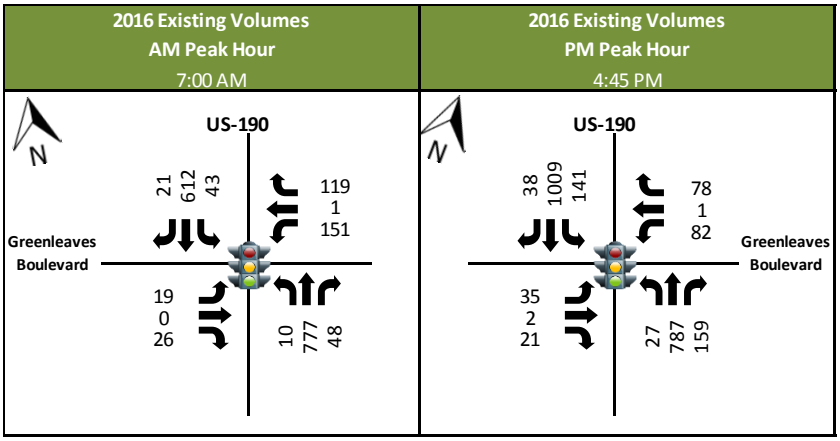


Figure 129: US-190 at Greenleaves Boulevard 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 130. The existing levels of service during the AM Peak Hour do not exceed LOS-D, and do not exceed LOS-C during the PM Peak Hour.

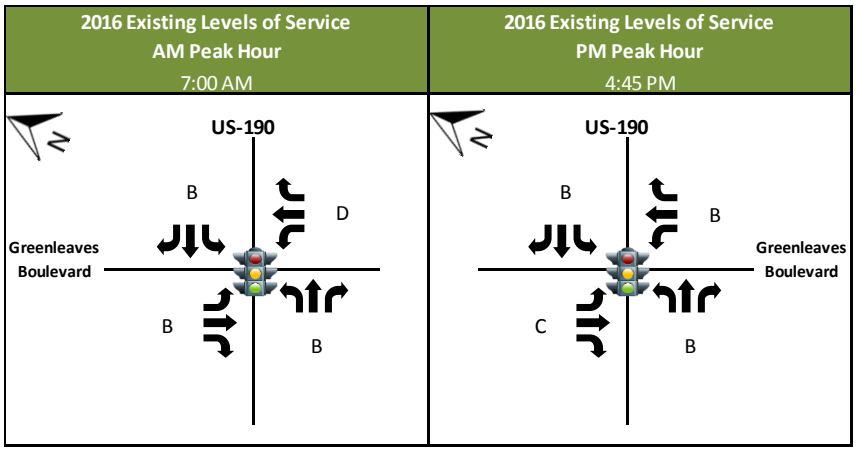


Figure 130: US-190 at Greenleaves Boulevard 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 131.

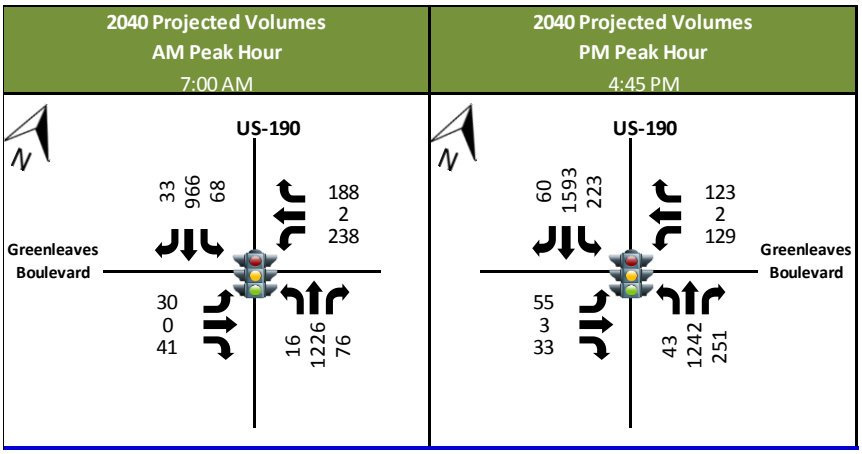


Figure 131: US-190 at Greenleaves Boulevard 2040 Projected Volumes

These volumes were then were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 132. The levels of service for US-190 at this intersection remain at acceptable in the PM Peak hour. However, the side-street falls to LOS-F in the AM Peak hour. Signal timing modifications tested improve the operations. The levels of service for Greenleaves Boulevard are projected to be similar in the future as they are under existing conditions.

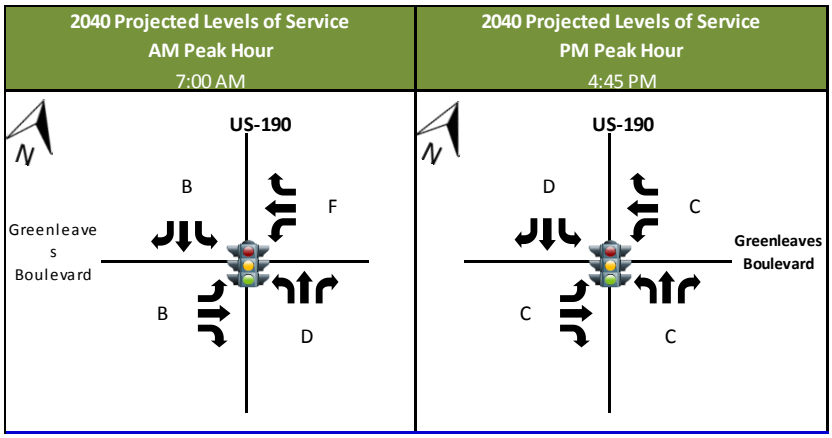


Figure 132: US-190 at Greenleaves Boulevard 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the US-190 at Greenleaves Boulevard. It is, however, recommended that the conditions be continually monitored throughout the study period.

# 27. LA-22 at Beau West

## *Existing Conditions*

The existing intersection is a three-legged intersection with stop control in the minor direction (Beau West). LA-22 is an east-west principal urban arterial with two lanes in westbound direction and one in the eastbound direction, separated by a reversible center turn lane. The speed limit on LA-22 is 45 MPH. Beau West is a north-south local road with one lane in each direction. The speed limit on Beau West is 20 MPH.

Figure 133: LA-22 at Beau West

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity. Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 134. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:15 – 5:15 PM.

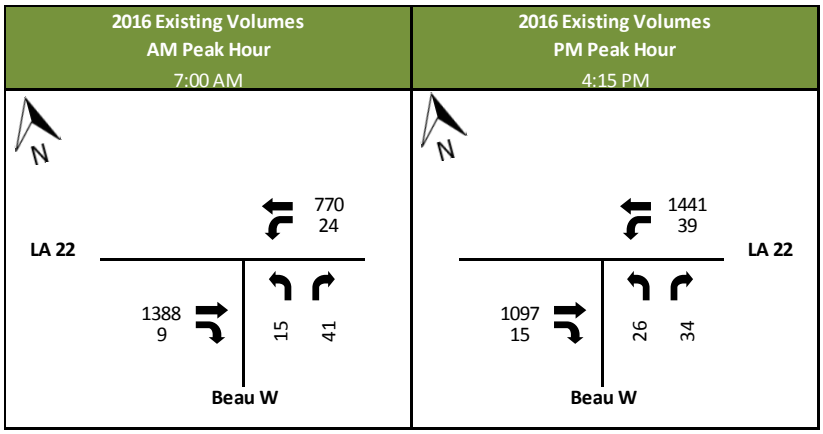


Figure 134: LA-22 at Beau West 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 135. The existing levels of service during the AM Peak Hour exceed acceptable levels (LOS-F), and do not exceed LOS-D during the PM Peak Hour. While the morning shows a failing (LOS-F) movement for the northbound Beau West approach. It is the stop-controlled approach to an unsignalized intersection. The observed operations performed acceptably.

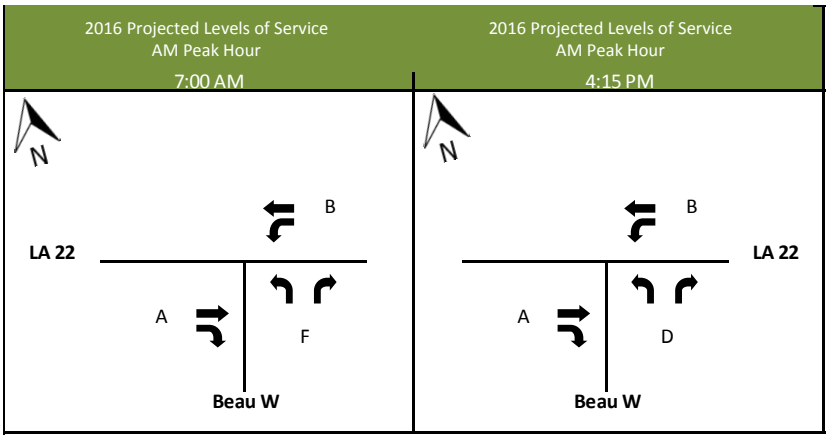


Figure 135: LA-22 at Beau West 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 136.

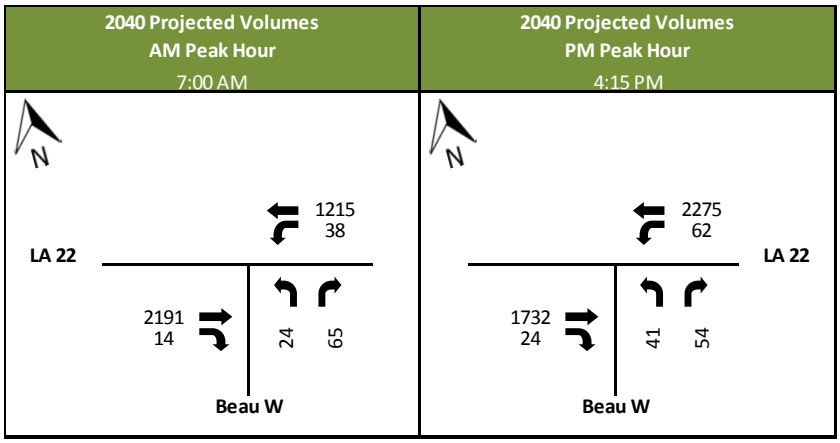


Figure 136: LA-22 at Beau W 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 137. The levels of service for Beau West at this intersection remain at LOS-F in the AM Peak hour and are projected to fall to LOS-F in the PM Peak hour. This is attributed to the stop-controlled traffic on the minor roadway (Beau West) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

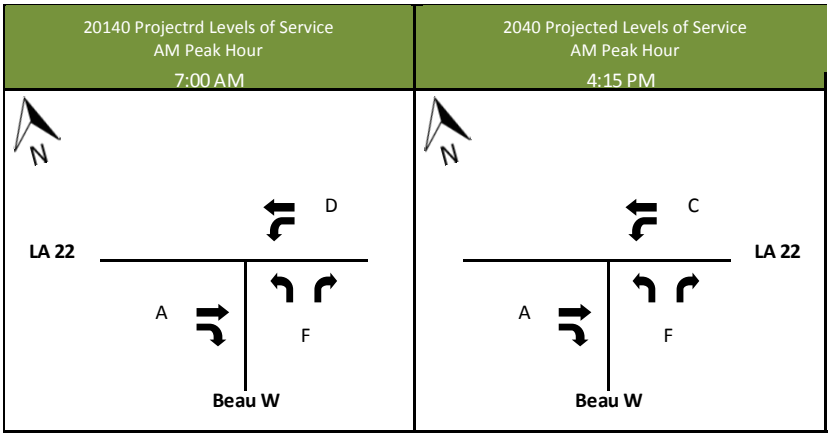


Figure 137: LA-22 at Beau West 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-22 at Beau West intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

Long term there is expected to be a need to install improvements at key intersections along LA-22 to facilitate the exiting of residential traffic onto LA-22. This intersection should be evaluated to determine if it would be a candidate for potential improvement.

# 28. LA-22 at Cedarwood Drive

## *Existing Conditions*

The existing intersection is a three-legged intersection with stop control in the minor direction (Cedarwood Drive). LA-22 is an east-west principal urban arterial with two lanes in the westbound direction and one in the eastbound direction, separated by a center reversible turn lane. The speed limit on LA-22 is 45 MPH. Cedarwood Drive is a north-south local road with one lane in each direction. The speed limit on Cedarwood Drive is 20 MPH.

Figure 138: LA-22 at Cedarwood Drive

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 139. The observed AM Peak Hour occurred from 7:45 – 8:45 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

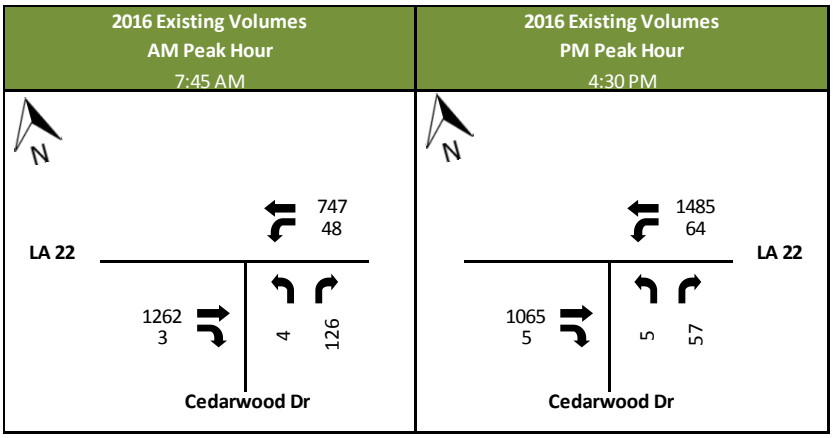


Figure 139: LA-22 at Cedarwood Drive 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 140. The existing levels of service during the AM Peak Hour exceed acceptable (LOS-F), and remain acceptable during the PM Peak hour. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

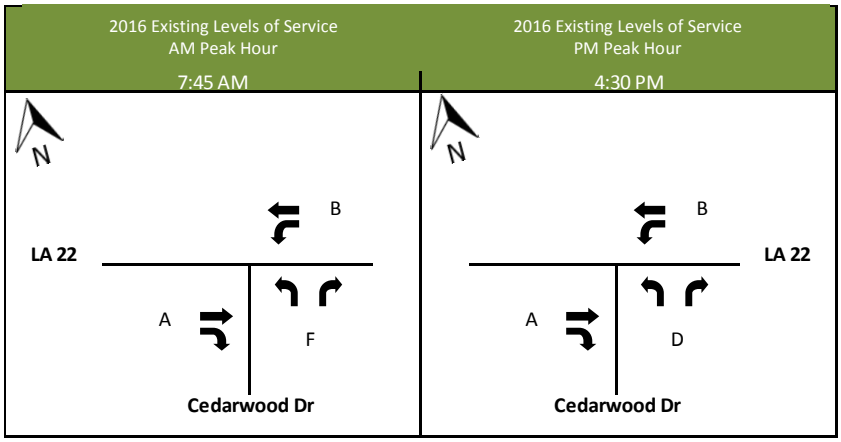


Figure 140: LA-22 at Cedarwood Drive 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

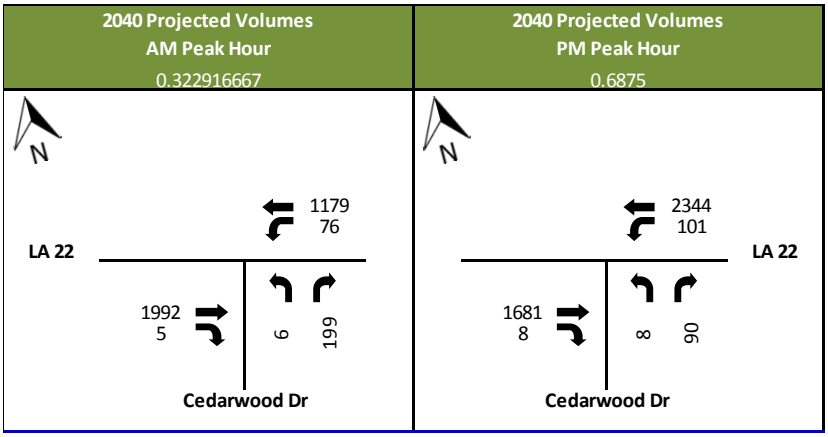


**Figure 141: LA-22 at Cedarwood Drive 2040 Projected Volumes**

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 141.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 142. The levels of service for Cedarwood Drive remain at LOS-F in the AM Peak hour and are projected to fall to LOS-F in the PM Peak hour. This is attributed to the stop-controlled traffic on the minor roadway (Cedarwood Drive) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a principal arterial to experience increased delays.

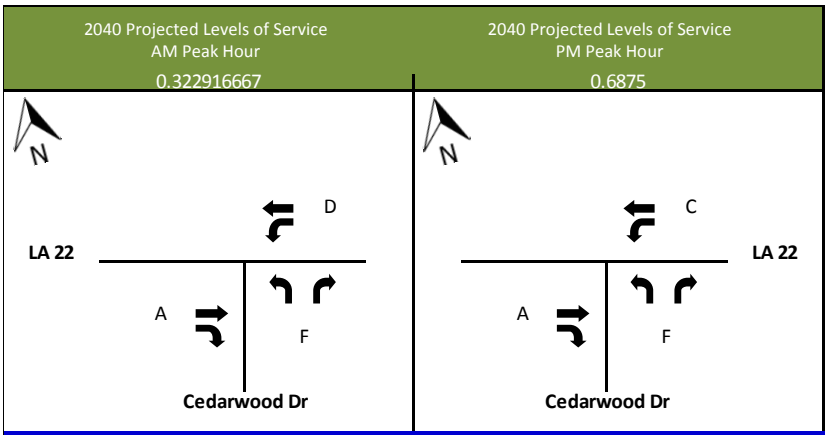


**Figure 142: LA-22 at Cedarwood Drive 2040 Projected Levels of Service**

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-22 at Cedarwood Drive intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

Long term there is expected to be a need to install improvements at key intersections along LA-22 to facilitate the exiting of residential traffic onto LA-22. This intersection should be considered as a potential location for improvement. While further study is needed, this intersection could be considered for the installation of a round-a-bout into the future.

# 29. West Causeway Approach at Dalwill Drive

## *Existing Conditions*

The existing intersection is a four-legged intersection with stop control in the minor direction (Dalwill Drive). West Causeway Approach is a north-south urban minor arterial with two lanes in each direction separated by a raised median. The turn movements at the intersection are channelized and only allow a southbound left onto Dalwill Drive. The speed limit on the West Causeway Approach is 45 MPH. Dalwill Drive is a local road with one lane in each direction. The speed limit on Dalwill Drive is 25 MPH.

Figure 143: West Causeway Approach at Dalwill Drive

There are no designated crosswalks at this intersection. There are sidewalks along the west side of the West Causeway Approach.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 144. The observed AM Peak Hour occurred from 6:45 – 7:45 AM. The observed PM Peak Hour occurred from 3:15 – 4:15 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 145.

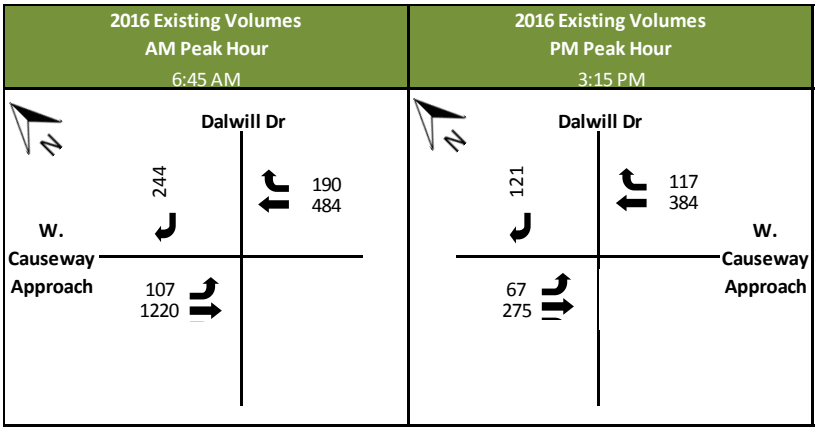


Figure 144: West Causeway Approach at Dalwill Drive 2016 Existing Volumes

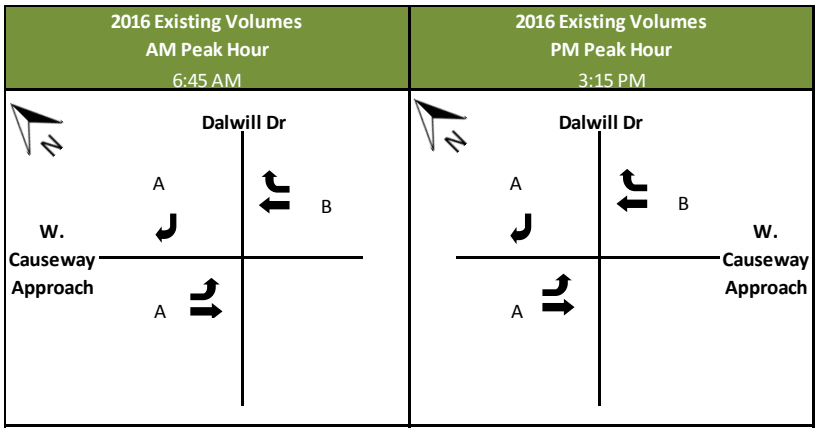


Figure 145: West Causeway Approach at Dalwill Drive 2016 Existing Levels of Service

The existing levels of service during both Peak hours do not exceed LOS-B. The existing intersection operates without any observed issues.

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

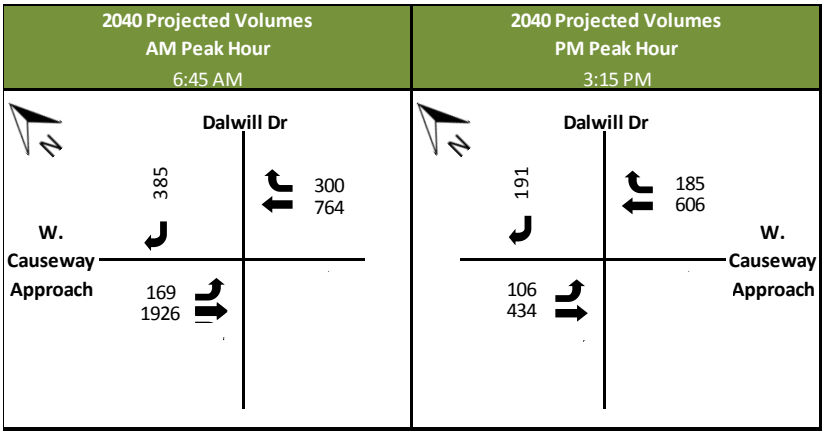


Figure 146: West Causeway Approach at Dalwill Drive 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 146.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 147. The levels of service for US-190 at this intersection remain at acceptable levels in the future

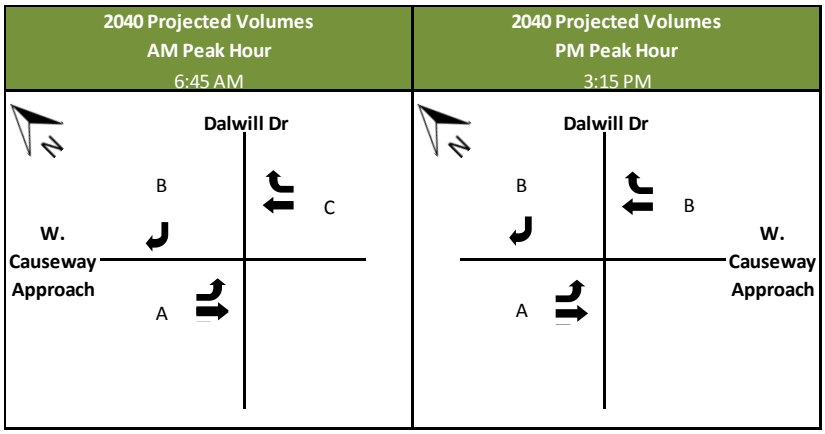


Figure 147: West Causeway Approach at Dalwill Drive 2040 Projected Level of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the West Causeway Approach at Dalwill Drive intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

At the time this report was prepared there is a project being planned by several agencies that would include road-widening at the end of Dalwill Drive and LA-22 (SP H000506). This project would impact the flow of traffic at this intersection and therefore have the potential to impact its function. A timeframe on this project was not available at the time this report was prepared.

# 30. LA-22 at Dalwill Drive

## *Existing Conditions*

Figure 148: LA-22 at Dalwill Drive

The existing intersection is a four-legged signalized intersection. LA-22 is an east-west principal urban arterial with two lanes in the westbound direction and one lane in the eastbound direction, separated by a reversible center turn lane. The speed limit on LA-22 is 45 MPH. Dalwill Drive is a north-south local road with one lane in each direction. The speed limit on Dalwill Drive is 25 MPH.

There are no designated crosswalks at this intersection. There is a sidewalk along LA-22 east of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 149. The observed AM Peak Hour occurred from 7:15 – 8:15 AM. The observed PM Peak Hour occurred from 4:30 – 5:30 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 150. The existing levels of service during both Peak Hours do not exceed LOS-D. The existing intersection operates without any observed issues.

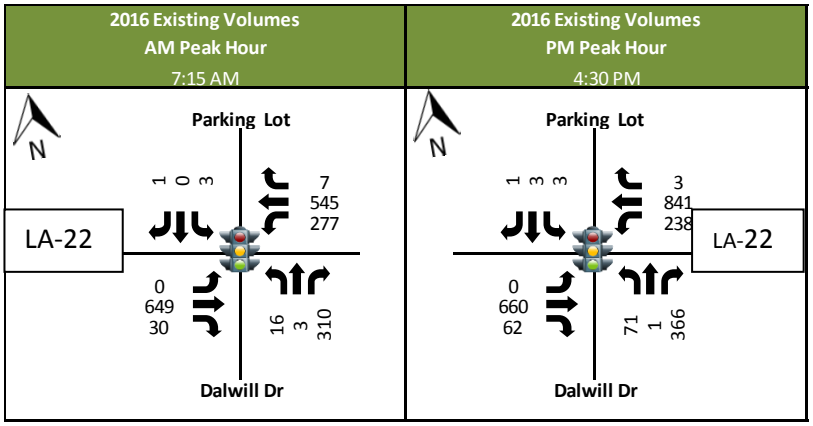


Figure 149: LA-22 at Dalwill Drive 2016 Existing Volumes

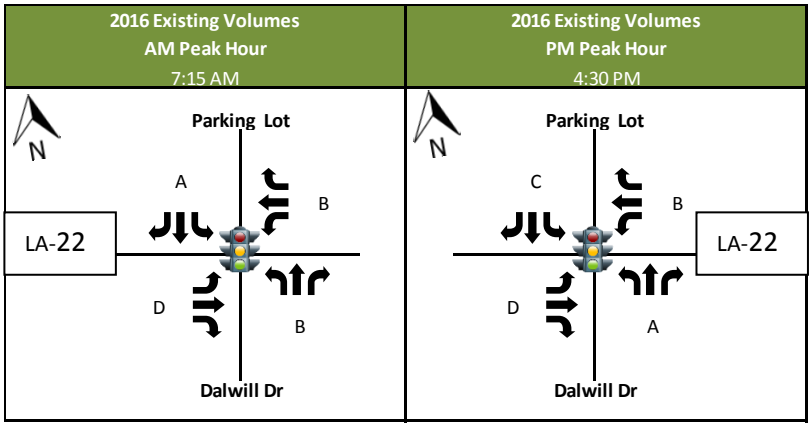


Figure 150: LA-22 at Dalwill Drive 2016 Existing Levels of Service

## *Impacts of Known Developments*

There are no known developments expected to directly impact this area as of the time of this study.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 151.

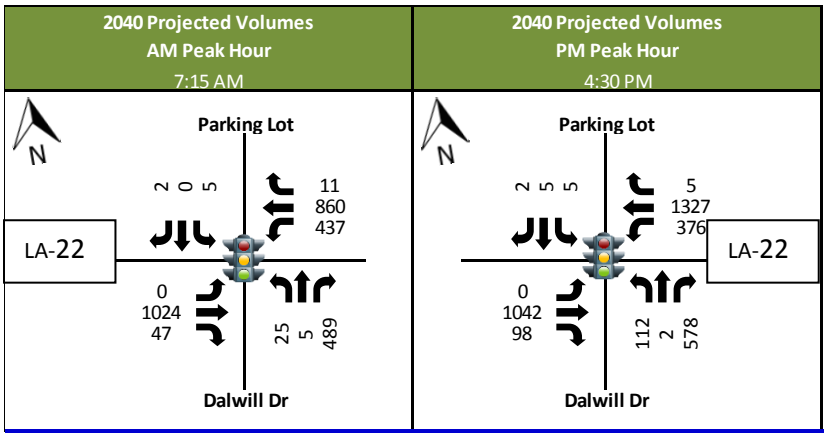


Figure 151: LA-22 at Dalwill Drive 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 152. The levels of service at this intersection are predicted to fall below acceptable into the year 2040.

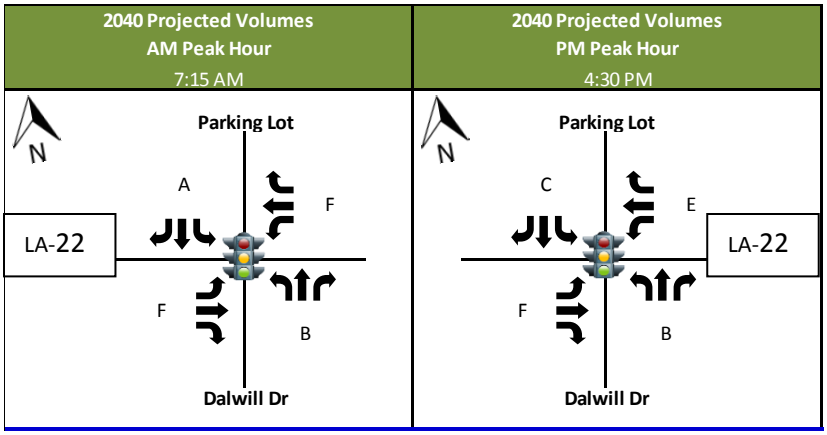


Figure 152: LA-22 at Dalwill Drive 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, there are no specific recommended improvements for the LA-22 at Dalwill Drive intersection. It is, however, recommended that the conditions be continually monitored throughout the study period.

At the time this report was prepared there is a project being planned by several agencies that would include road-widening at the end of Dalwill Drive and LA-22 (SP H000506). This intersection will be directly impacted by this project. Because the details of the project are not developed at this time, it is recommended that an additional through lane in the eastbound direction be considered, this would reduce the time required for that approach of the signal which would improve operations. It would be suggested to be carried through to the existing similar cross-section just west of the West Service Road Intersection with LA-22. A timeframe on this project was not available at the time this report was prepared.

# 31. East Causeway Approach at Lambert Street

## *Existing Conditions*

Figure 153: East Causeway Approach at Lambert Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Lambert Street). East Causeway Approach is an east-west urban minor arterial with two lanes in each direction separated by a raised median. Note this intersection currently does not operate with a median break. The speed limit on the East Causeway Approach is 45 MPH. Lambert Street is a north-south local road with one lane in each direction. The speed limit on Lambert Street is 25 MPH. Note that Lambert is very narrow.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 154. The observed AM Peak Hour occurred from 7:45 – 8:45 AM. The observed PM Peak Hour occurred from 3:00 – 4:00 PM.

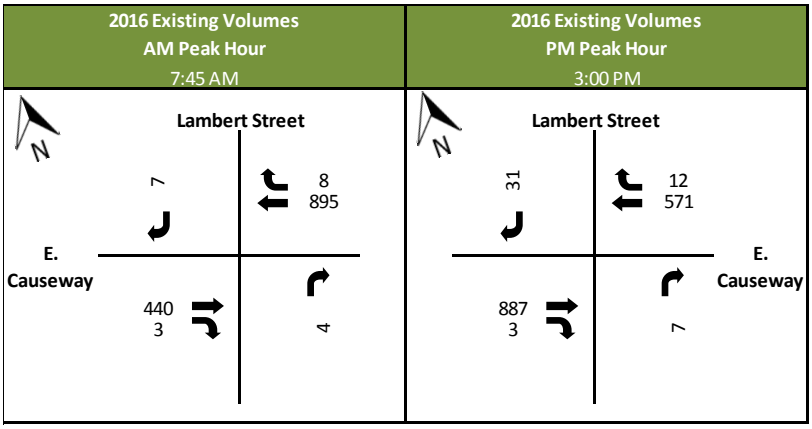


Figure 154: East Causeway Approach at Lambert Street 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 155. The existing levels of service during both Peak Hours do not exceed LOS-B.

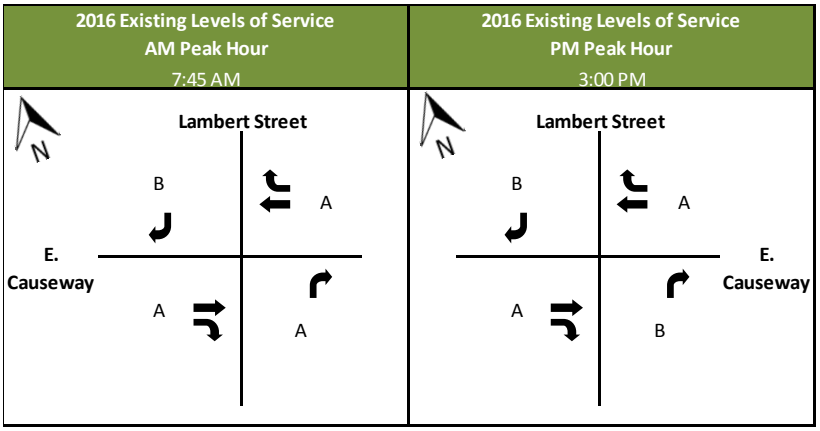


Figure 155: East Causeway Approach at Lambert Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

This intersection will directly be impacted by the Port Marigny and Mariner's Village developments. The developer of Port Marigny recommends opening the median at this intersection. The median opening in the TIA from the development suggests the median opening be full directional.

After review of that concept, an alternative was evaluated and determined to be preferred. The alternative provided directional left turns onto Lambert Street from the East Causeway Approach and limited the Lambert Street approaches to right in right out only as it exists today. In addition, it provided U-turn opportunities to both the east and west. Therefore accommodating all proposed movements. The concept drawing is provided in Appendix A.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 156.

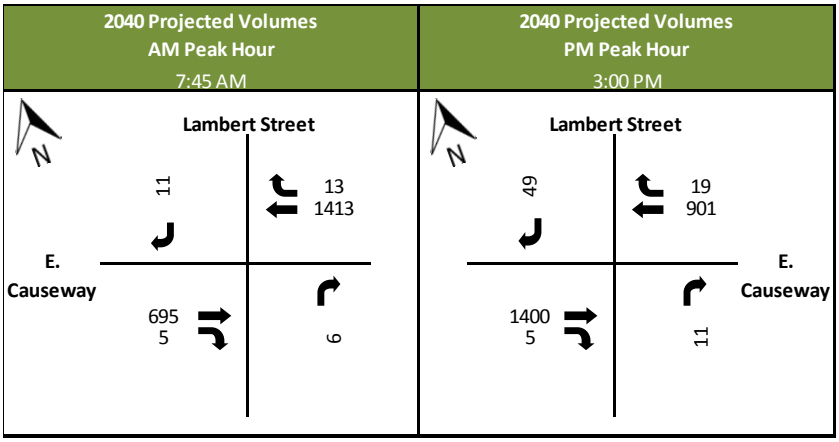


Figure 156: East Causeway Approach at Lambert Street 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 157. The levels of service for the intersection remain acceptable in both future peak hours. Please note that this does not include the full directional median opening being proposed by the developments.

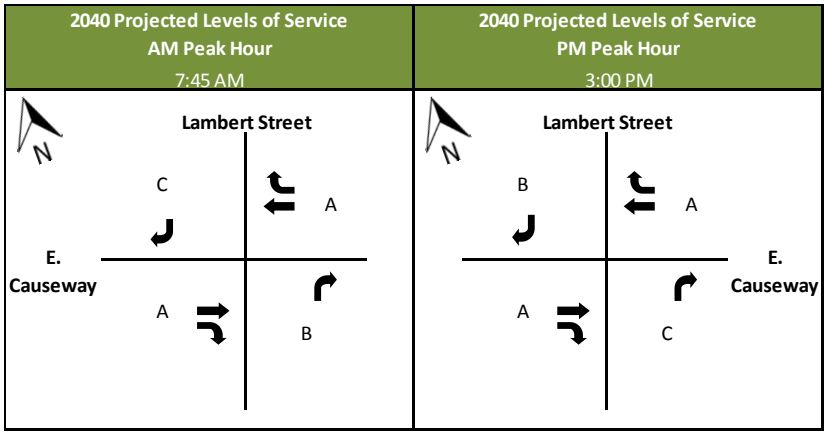


Figure 157: East Causeway Approach at Lambert Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, it is recommended that the median break if allowed at this intersection not be full directional but channelized to allow left turns onto Lambert Street south of the East Causeway Approach and improve the U-turn movements allowed at the adjacent median openings. This would facilitate the development traffic but maintain the mobility required for motorist traveling to and from the Causeway Bridge.

# 32. East Causeway Approach at Massena Street

## *Existing Conditions*

Figure 158: East Causeway Approach at Massena Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Massena Street). East Causeway Approach is an east-west urban minor arterial with two lanes in each direction separated by a raised median. The speed limit on East Causeway Approach is 45 MPH. Massena Street is a north-south local road with one lane in each direction. The speed limit on Massena Street is 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north and south sides of East Causeway Approach.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 159. The observed AM Peak Hour occurred from 7:15 – 8:15 AM. The observed PM Peak Hour occurred from 2:45 – 3:45 PM.

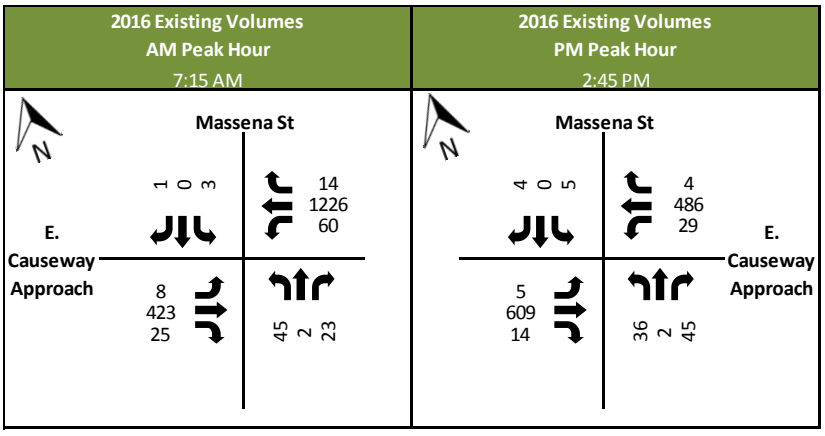


Figure 159: East Causeway Approach at Massena Street 2016 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 160. The existing levels of service during the AM Peak Hour do exceed acceptable levels of service (LOS-F). This intersection is used as part of the circulation for drop off and pick up at Mandeville Elementary to the south on Massena Street.

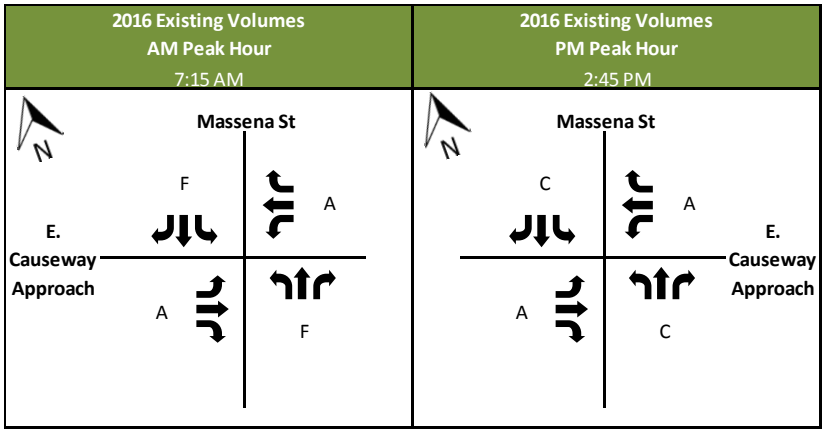


Figure 160: East Causeway Approach at Massena Street 2016 Existing Levels of Service

Please note that for the 2017 school year, traffic patterns for the school were modified, it has improved operations at this intersection.

## *Impacts of Known Developments*

This intersection will be impacted by both the Port Marigny and Mariner's Village developments. As a full access median opening on the East Causeway Approach, it is believed that a portion of traffic will utilize this intersection to access the development to the south.

## *2040 Conditions*

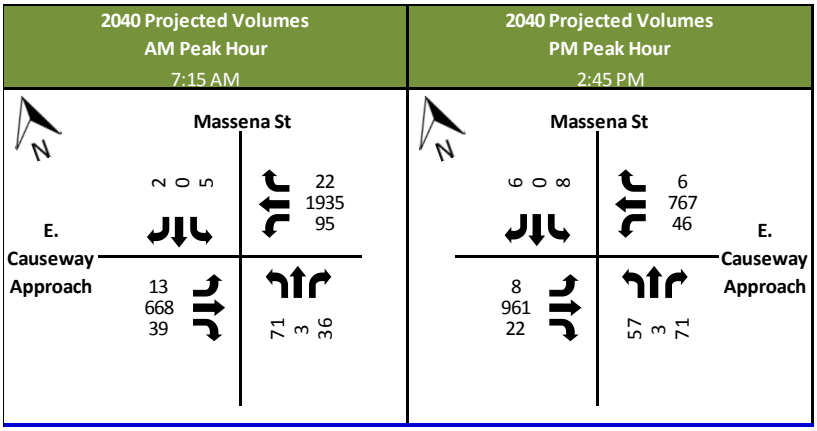


Figure 161: East Causeway Approach at Massena Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 161.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 162. The levels of service for this intersection are predicted to remain at unacceptable levels of service into the future. This is attributed to the stop-controlled traffic on the minor roadway (Massena Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with a minor arterial to experience increased delays.

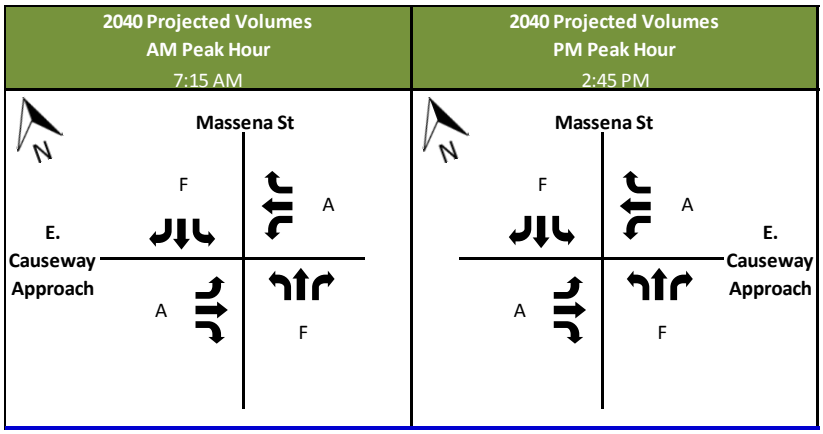


Figure 162: East Causeway Approach at Massena Street 2040 Projected Levels of Service

## *Recommendations*

Alternative configurations at this intersection were evaluated as part of this study, which include roundabout and limited channelized turn movements. It is recommended, however, that for the interim the intersection continue to be monitored as the school traffic pattern has been modified and the development impact at the intersection has not been completely determined as the plan is still changing. Conceptual drawing is provided in Appendix A.

# 33. Monroe Street at Antibes Street West

## *Existing Conditions*

Figure 163: Monroe Street at Antibes Street West

The existing intersection is a four-legged intersection with stop control in the minor direction (Antibes Street W). Monroe Street is an east-west urban minor arterial with one lane in each direction separated by a raised median west of Antibes Street West. The speed limit on Monroe Street is 30 MPH. Antibes Street West is a north-south local road with one lane in each direction. The speed limit on Antibes Street West is 25 MPH.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 164. The observed AM Peak Hour occurred from 6:30 – 7:30 AM. The observed PM Peak Hour occurred from 2:45 – 3:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 165. The existing levels of service during both Peak Hours are acceptable. The existing intersection operates without any observed issues.

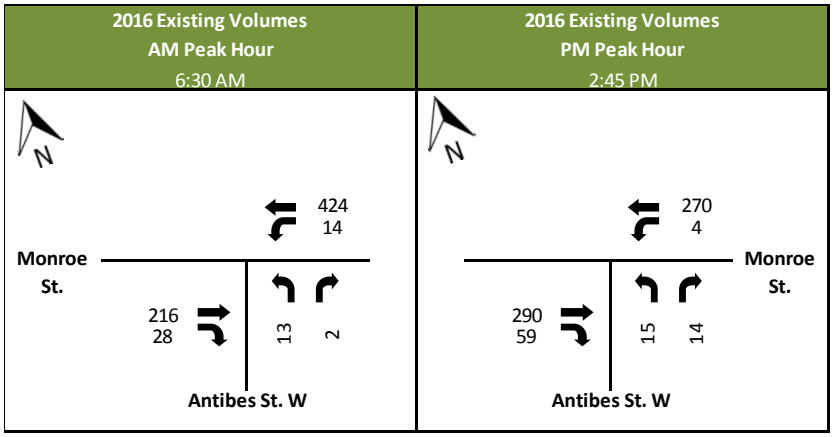


Figure 164: Monroe Street at Antibes Street West 2016 Existing Levels of Service

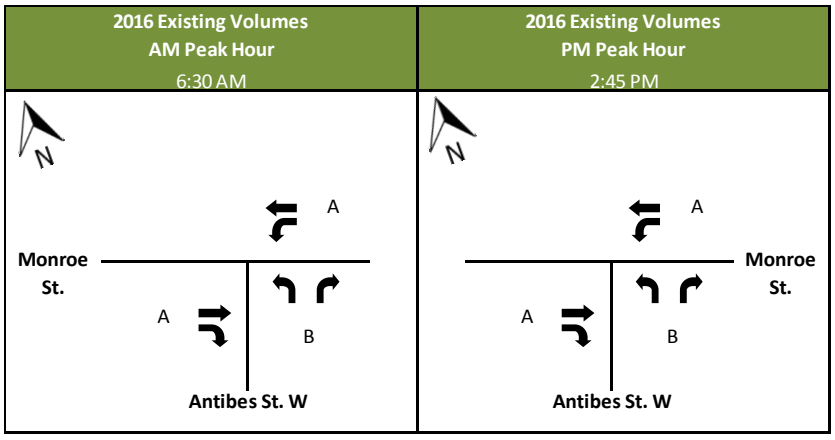


Figure 165: Monroe Street at Antibes Street West 2016 Existing Levels of Service

## *Impacts of Known Developments*

This intersection will be directly impacted by both the Port Marigny and the Mariner's Village developments.

## *2040 Conditions*

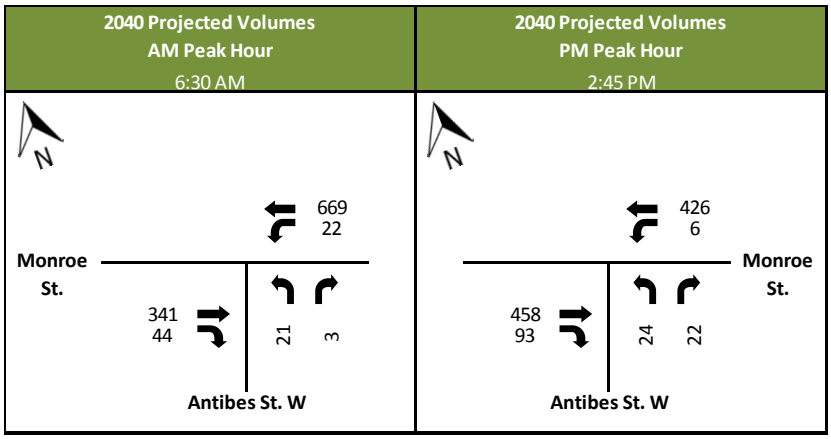


Figure 166: Monroe Street at Antibes Street West 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 166.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 167. The levels of service are expected to function at acceptable for future conditions.

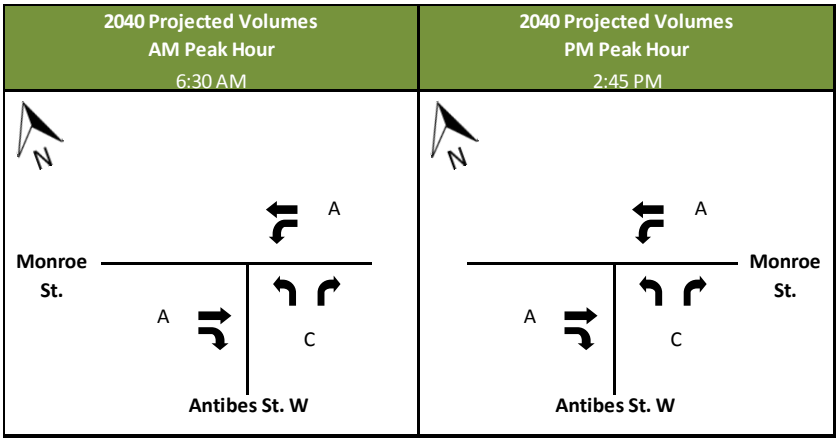


Figure 167: Monroe Street at Antibes Street West 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, it is recommended that this intersection be monitored as the developments come on line for increased side street delays.

# 34. Monroe Street at Antibes Street East

## *Existing Conditions*

The existing intersection is a four-legged intersection with stop control in the minor direction (Antibes Street E). Monroe Street is an east-west urban minor arterial with one lane in each direction separated by a raised median west of Antibes Street West. The speed limit on Monroe Street is 30 MPH. Antibes Street West is a north-south local road with one lane in each direction. The speed limit on Antibes Street East is 25 MPH.

Figure 168: Monroe Street at Antibes Street East

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 169. The observed AM Peak Hour occurred from 6:45 – 7:45 AM. The observed PM Peak Hour occurred from 2:45 – 3:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 170. The existing levels of service during both Peak Hours are acceptable. The existing intersection operates without any observed issues.

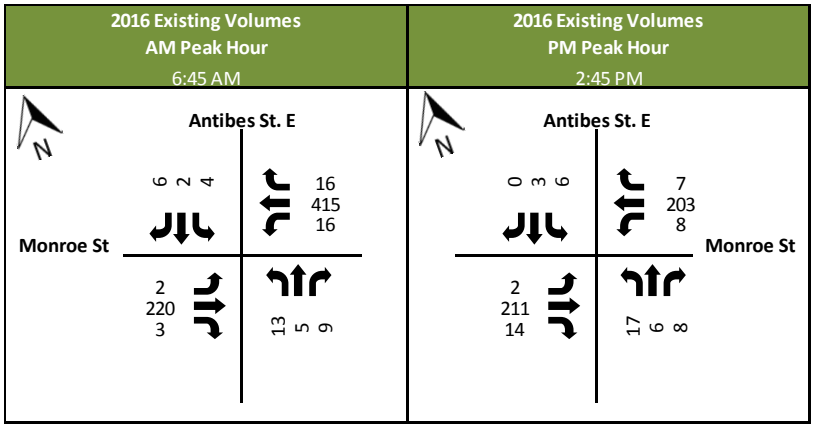


Figure 169: Monroe Street at Antibes Street East 2016 Levels of Service

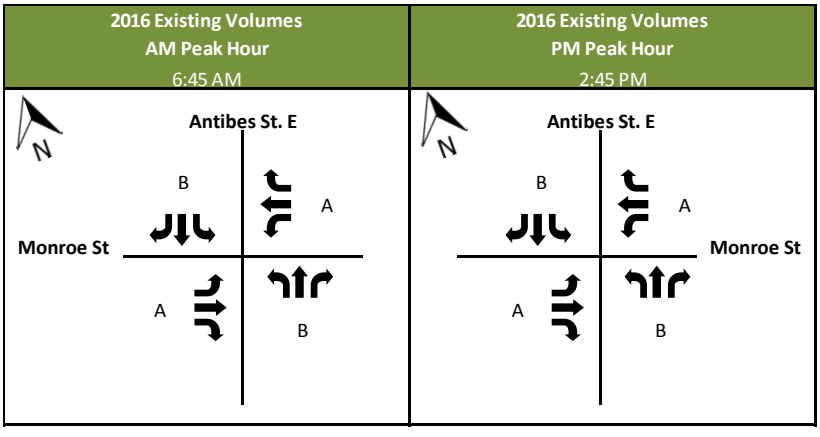


Figure 170: Monroe Street at Antibes Street East 2016 Levels of Service

## *Impacts of Known Developments*

This intersection will be directly impacted by both the Port Marigny and the Mariner's Village developments.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 171.

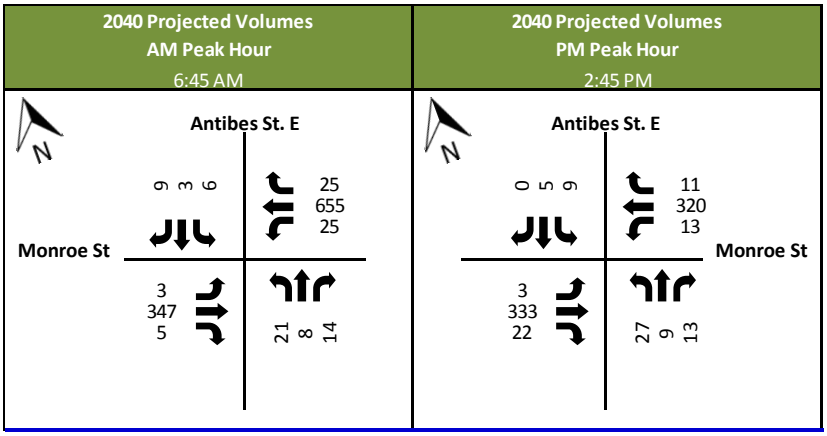


Figure 171: Monroe Street at Antibes Street East 2040 Projected Volumes

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 172. The levels of service are expected to function at acceptable for future conditions.

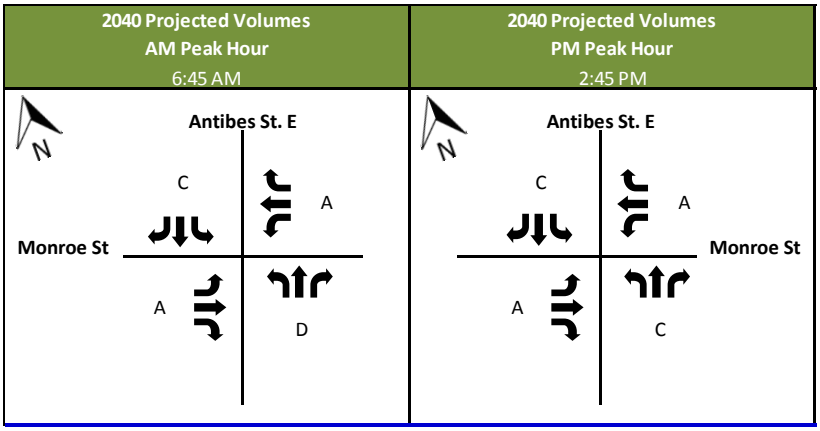


Figure 172: Monroe Street at Antibes Street East 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, it is recommended that this intersection be monitored as the developments come on line for increased side street delays.

# 35. East Causeway Approach at Kleber Street

## *Existing Conditions*

Figure 173: East Causeway Approach at Kleber Street

The existing intersection is a three-legged intersection with stop control in the minor direction (Kleber Street). East Causeway is an east-west urban minor arterial with two lanes in each direction separated by a raised median. The speed limit on East Causeway Approach is 45 MPH. Kleber Street is a north-south local road with one lane in each direction. The speed limit on Kleber Street is 25 MPH.

There are no designated crosswalks at this intersection. There are no sidewalks in the vicinity of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 174. The observed AM Peak Hour occurred from 6:45 – 7:45 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 175. The existing levels of service during the AM and Peak Hours do not exceed LOS-D. The existing intersection operates without any observed issues.

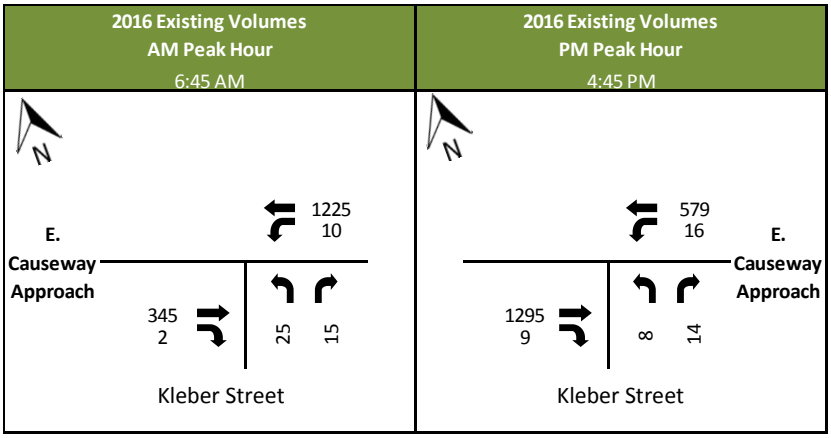


Figure 174: East Causeway Approach at Kleber Street 2016 Existing Volumes

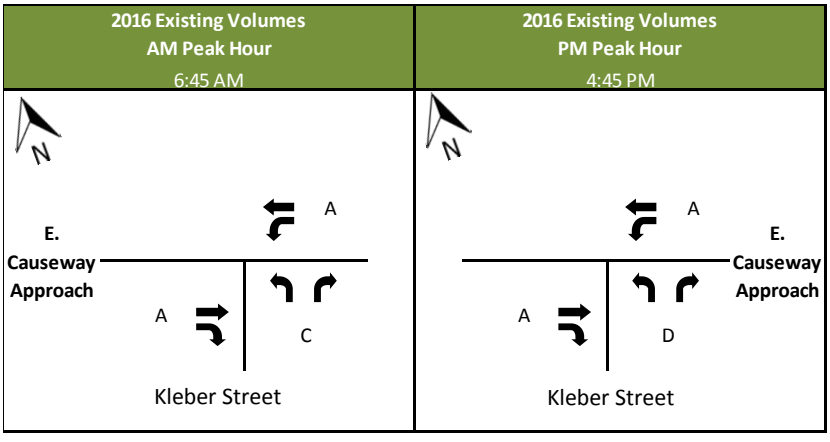


Figure 175: East Causeway Approach at Kleber Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

This intersection will be impacted by both the Port Marigny and Mariner's Village developments. As a full access median opening on the East Causeway Approach, it is believed that a portion of traffic will utilize this intersection to access the development to the south.

## *2040 Conditions*

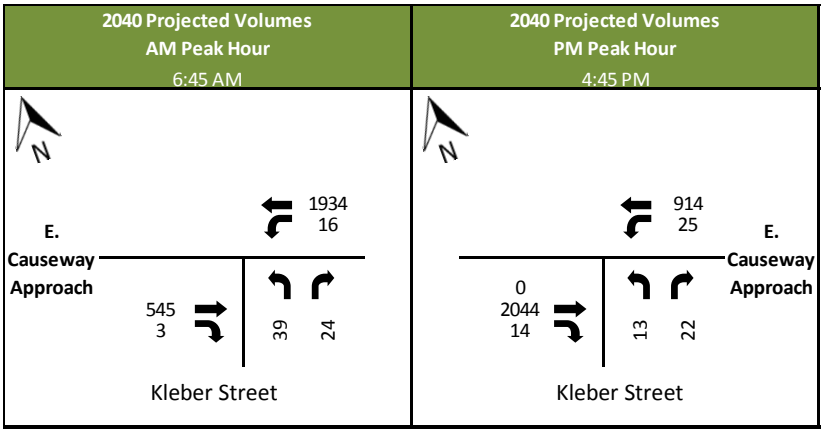


Figure 176: East Causeway Approach at Kleber Street 2040 Projected Volumes

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 176.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 177. The levels of service for Kleber Street at this intersection are expected to fall to LOS-F in the horizon year. This is attributed to the stop-controlled traffic on the minor roadway (Kleber Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with an arterial to experience increased delays.

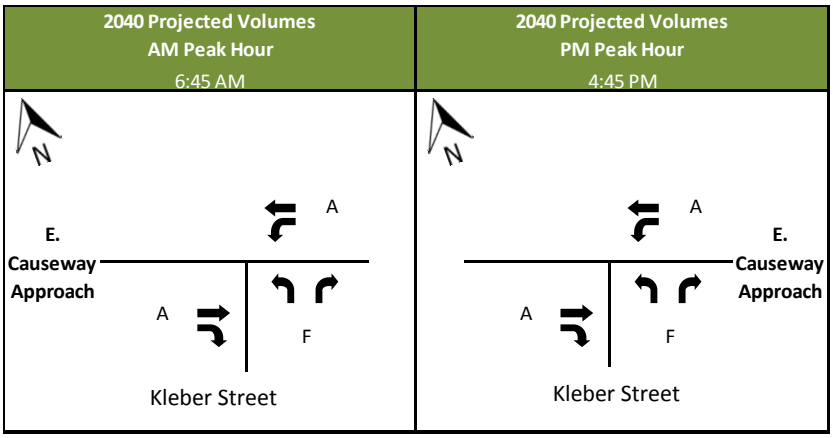


Figure 177: East Causeway Approach at Kleber Street 2040 Projected Levels of Service

## *Recommendations*

Based on the information and analysis contained herein, it is recommended that this intersection be monitored as the developments come on line for increased side street delays. This intersection is a candidate for restricted turning movements which would create a J-turn scenario for this corridor.

# 36. Monroe Street at Massena Street

## *Existing Conditions*

Figure 178: Monroe Street at Massena Street

The existing intersection is a four-legged intersection with stop control in the minor direction (Massena Street). Monroe Street is an east-west urban minor arterial with one lane in each direction. The speed limit on Monroe Street is 30 MPH. Massena Street is a north-south local road with one lane in each direction. The speed limit on Massena Street is 25 MPH.

There are no designated crosswalks at this intersection. There are sidewalks along the north sides of Monroe Street. There are existing ADA sidewalk ramps on the corners near the sidewalks. A pedestrian crossing beacon has been installed for pedestrians crossing Monroe Street on the east side of Massena Street. The Mandeville Elementary School is located in the northeast quadrant of this intersection.

Existing traffic counts were collected at this intersection in 2016. This data is shown in Figure 179. The observed AM Peak Hour occurred from 6:45 – 7:45 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 180. The existing levels of service during the both Peak Hours do not exceed LOS-D. These are acceptable levels of service and delay for a two-way stop-controlled intersection. The existing intersection operates without any observed issues.

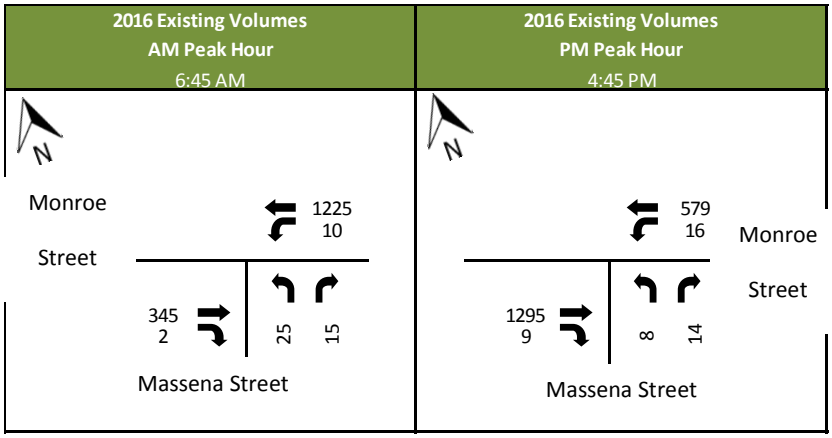


Figure 179: Monroe Street at Massena Street 2016 Existing Volumes

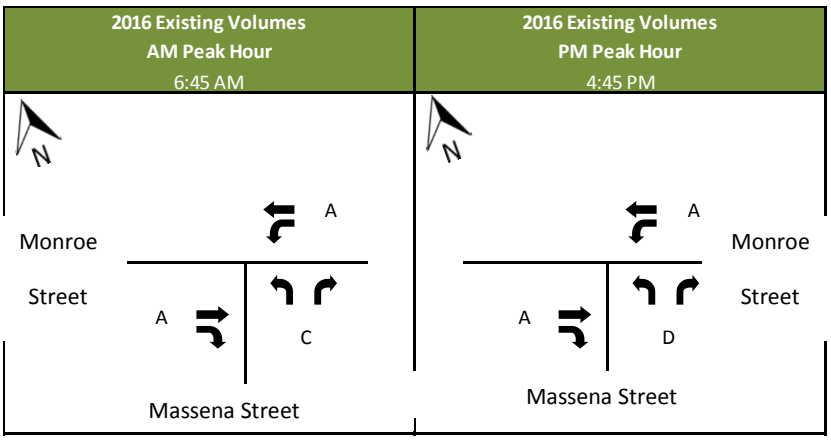


Figure 180: Monroe Street at Massena Street 2016 Existing Levels of Service

## *Impacts of Known Developments*

This intersection will be impacted by both the Port Marigny and Mariner's Village developments. The development plan shows utilization of Massena Street to gain access into Port Marigny south of this intersection.

This intersection was evaluated as a potential round-a-bout location under development level volumes. The concept drawing is included in Appendix A.

## *2040 Conditions*

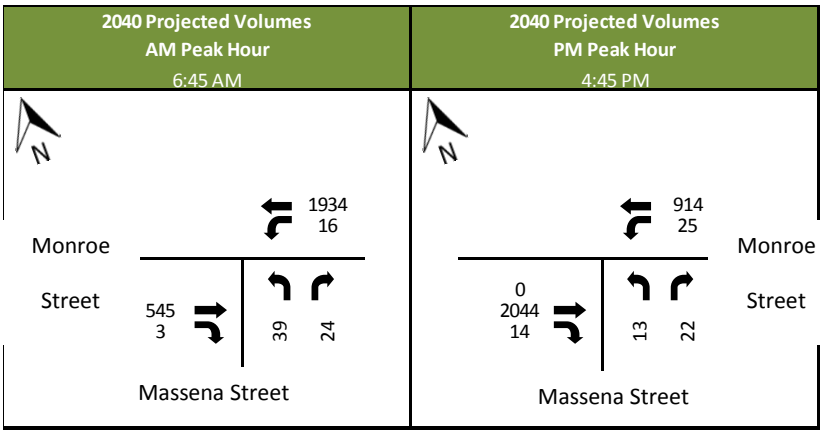


**Figure 181: Monroe Street at Massena Street 2040 Projected Volumes**

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 181.

These volumes were then analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 182. The levels of service for Massena Street are expected to fall to LOS-F in both peak hours. This is attributed to the stop-controlled traffic on the minor roadway (Massena Street) not receiving sufficient gaps to enter the roadway via a left turn movement. It is not uncommon for a stop-controlled minor street at an intersection with an arterial to experience increased delays.

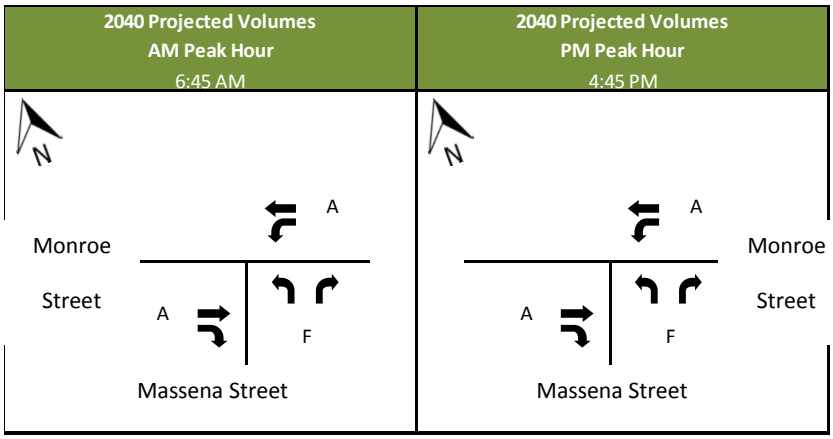


**Figure 182: Monroe Street at Massena Street 2040 Projected Levels of Service**

## *Recommendations*

It is recommended that this intersection be monitored as the developments come on line for increased side street delays. This intersection is a candidate for round-a-bout installation. The pedestrian traffic for the elementary school should be considered in any intersection design for this location.

# 37. East Causeway Approach at Monroe Street

## *Existing Conditions*

Figure 183: East Causeway Approach at Monroe Street

The existing intersection is a four-legged intersection with traffic signal control. Monroe Street is an east west urban minor arterial with two lanes in each direction separated by a raised median, note that Monroe Street narrows to two lanes just east of this intersection. East Causeway Approach is classified as an urban minor arterial north of its intersection with Monroe Street and an Urban Freeway/Expressway south of its intersection with Monroe Street. The speed limit on Monroe Street is 30 MPH while the speed limit on East Causeway Approach is 45 MPH.

There are painted crosswalks on the south and east approaches to the intersection. There are ADA sidewalk rams connecting those two crosswalks to existing sidewalks.

Existing traffic counts were utilized from the Hall Planning & Engineering document dated December 2015. They were collected on September 8, 2015. This data is shown in Figure 184. The observed AM Peak Hour occurred from 7:00 – 8:00 AM. The observed PM Peak Hour occurred from 4:45 – 5:45 PM.

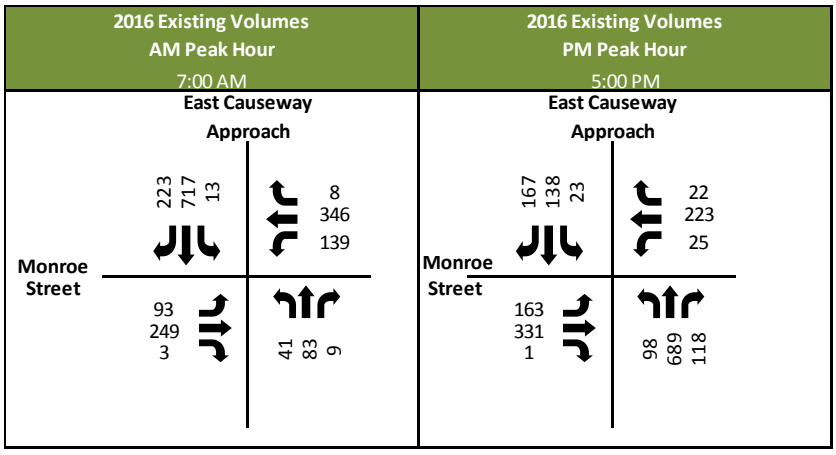


Figure 184: East Causeway Approach at Monroe Street 2015 Existing Volumes

These volumes were analyzed using Synchro 9 with HCM 2000 Methodologies. The resulting levels of service are shown in Figure 185. The existing levels of service during the AM and PM Peak Hours do not exceed LOS-C.

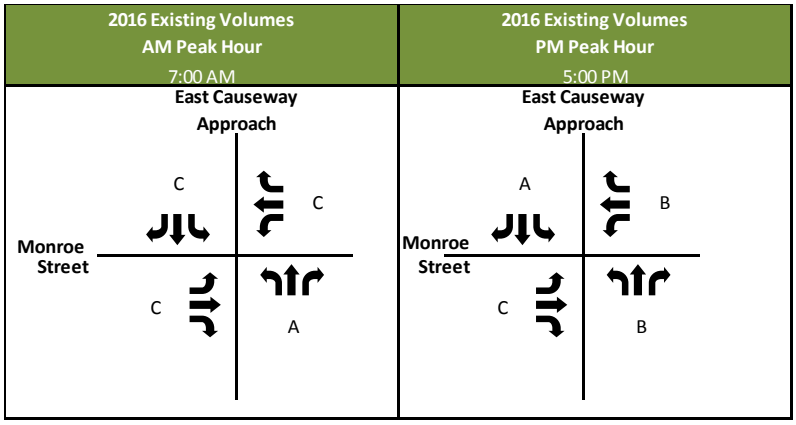


Figure 185: East Causeway Approach at Monroe Street 2015 Existing Levels of Service

## *Impacts of Known Developments*

Port Marigny and Mariner's Village developments are expected to impact this intersection directly. The volumes projected by the Port Marigny development are shown below in Figure 186.

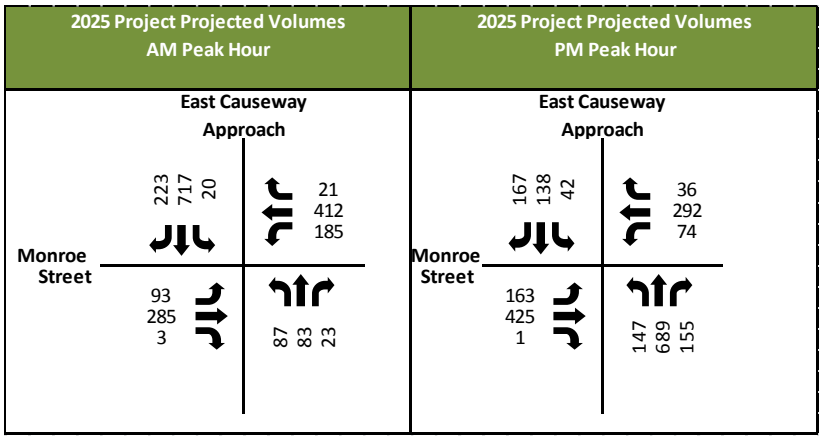


Figure 186: East Causeway Approach at Monroe Street 2025 Development Volumes

According to the same report, the intersection is expected to experience below acceptable levels of service at that time. The document recommended some turn lane improvements to the intersection.

This intersection was evaluated as a potential round-a-bout location under development level volumes. The concept drawing is attached in Appendix A.

## *2040 Conditions*

The existing volumes were increased to predict Year 2040 traffic conditions at this location. A growth rate of 1.92% per year was used in accordance with information provided by the RPC. The resulting 2040 Projected Volumes are shown in Figure 187.

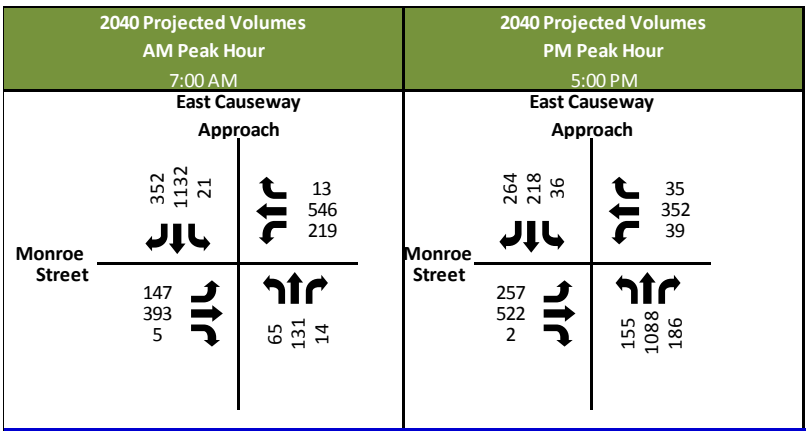


Figure 187: East Causeway Approach at Monroe Street 2040 Projected Volumes

Because the projected intersection operation is expected to experience below acceptable levels of service for future conditions, as shown in Figure 188, this intersection was evaluated for and determined to be a candidate for round-a-bout installation.

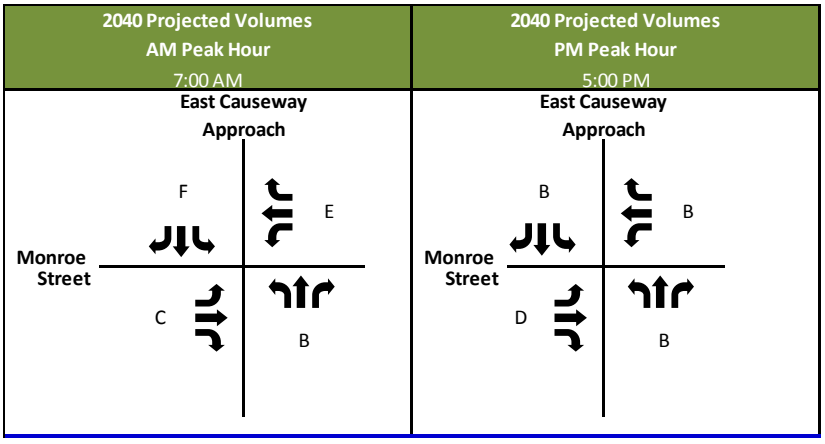


Figure 188: East Causeway Approach at Monroe Street 2040 Projected Levels of Service

## *Round-a-bout Discussion*

After determining the intersection was a candidate for the installation of a round-a-bout, a preliminary analysis of the intersection in that configuration was performed. The round-a-bout would allow for improved flow through the area while decreasing delays and improving safety. The design would be recommended as a major-minor round-about with two circulating lanes for the east-west direction. Pedestrians should be accommodated at the intersection.

The proposed layout would also improve the access management in the vicinity of the intersection by removing the direct left turn from eastbound Monroe Street onto the northbound Frontage Road access to this movement would be via U-turn movement in the round-a-bout. It will require some right of way and coordination with the existing gas station to the north. This is needed because in order to reduce movements at the intersection, a connector between the Frontage Road and the East Causeway Approach will be needed. The southbound Frontage Road would be converted to one-way in the southbound direction south of the gas station. See the attached sketch for the details.

## *Recommendations*

This intersection was evaluated with the projected volumes and it is recommended for the installation of a roundabout. The sketch and preliminary cost estimate are attached for reference. The estimated cost to construct the roundabout based on the preliminary information and sketch is approximately $2.4 million. This plan is not based on survey information but preliminary data obtained in the field. The sketch is attached in Appendix A.

# Project Programming

## Short Term Improvement Implementation Recommendations

- Striping should be evaluated for all intersections.
- Traffic Signal timings should be evaluated at all area intersections, minor adjustments in timings and offsets can significantly improve operations through intersections. In particular the LA-22/US-190 corridor in the vicinity of North Causeway Boulevard through to the LA-22 intersection with Franco's Athletic Club to the west.
- Pedestrian crossing striping should be added to the locations where ramps exist without the striping.

## Long Term Improvement Implementation Recommendations

- Install a roundabout at the intersection of East Causeway Approach and Monroe Street
- Monitor the progress of SP H011721 and SP H012379 in LA-22 corridor. The projects may alleviate the congestion in the area, but because specific plans have not yet been completed, this could not be confirmed. The congestion is caused by the point just west of the LA-22 at West Service Road intersection. The merging results in lane utilization issues, this area should be improved to allow for improved flow.
- The area of Monroe Street in the vicinity of the proposed developments should be monitored closely as the developments plans progress.
- The area of East Causeway should be considered for a directional turn movement restrictions at Lambert Street, modifications to the East Causeway Approach at Massena Street and Kleber Street at Massena Street as the developments plans progress.
- Consideration should be given to providing interconnect between the LA-22 at West Causeway Approach intersection and the LA-22 at US-190 system. In addition, while not part of the study are the two signals west of the West Causeway Approach (LA-22 at Beau Chene Boulevard and LA-22 at Franco's Health Club & Spa) should be considered for inclusion into the Signal System).
- The LA-22 corridor should be considered for an access management study to help improve corridor flow between Madisonville and Mandeville.

# Appendix A

## Alternative Sketches

# Appendix B

## Existing Configuration Printouts

# Appendix C

# Synchro Printouts

# Appendix D

# Count Data