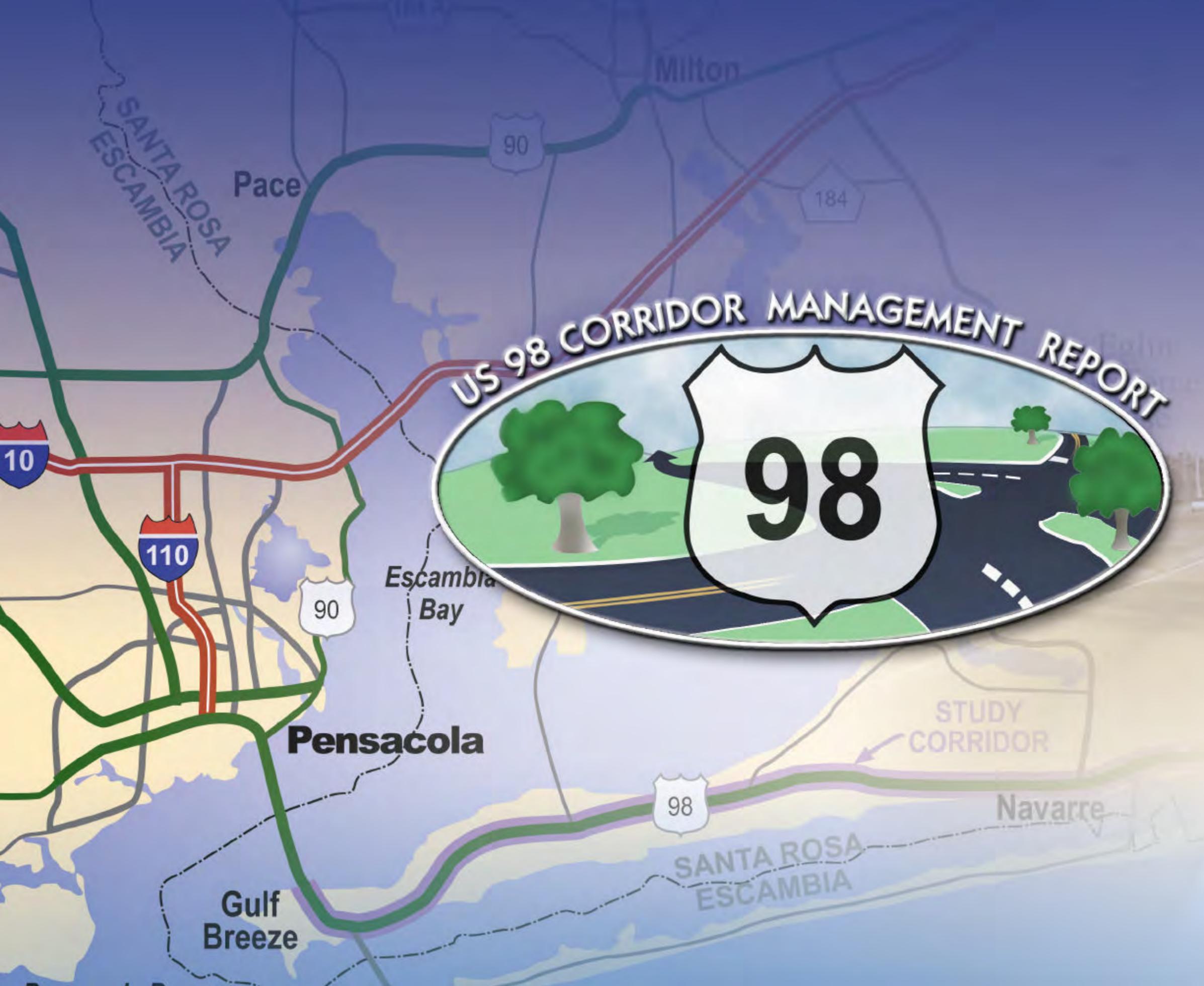


US 98 CORRIDOR MANAGEMENT REPORT



DRAFT REPORT

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Pensacola MPO

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April 2001

Pensacola Metropolitan Planning Organization US 98 Corridor Management Report



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Contents:

Page

Section 1.0 – Introduction

1.1 Study Purpose _____	1-1
1.2 Study Area _____	1-2

Section 2.0 - Data Collection and Existing Conditions

2.1 Data Sources _____	2-1
2.2 Corridor Segment Inventory _____	2-2
2.3 Median Opening Inventory _____	2-7
2.4 Existing Operating Condition _____	2-7
2.5 Projected Operating Condition and Planned Major Improvements _____	2-7

Section 3.0 - Crash Data

Section 4.0 - Community Involvement

Section 5.0 - Recommended Access and Operational Modifications

5.1 Benefits of Access Management _____	5-1
5.2 Principles of Access Management _____	5-1
5.3 Corridor Issues _____	5-2
5.4 Recommended Improvement Plan _____	5-3
5.5 Improvement Plan Cost Estimates _____	5-11
5.6 Summary of Plan Results _____	5-16
5.7 Recommended Plan Implementation Strategies _____	5-16

Section 6.0 - Corridor Protection Strategies

6.1 Right-of-Way Preservation and Advance Acquisition _____	6-1
6.2 Land Use and Transportation Integration _____	6-2
6.3 Communication and Coordination _____	6-3
6.4 Recommendation _____	6-3

Appendices

Appendix A – A.M. And P.M. Peak Period Traffic Counts
Appendix B – Highway Capacity Software (HCS) Intersection Analysis Summary
Appendix C – City of Gulf Breeze Corridor Management Study

List of Figures:

Figure 2-1	Existing Corridor Characteristics.....	2-3
Figure 5-1	Recommended Improvement Plan.....	5-17

Page

List of Tables:

Table 2-1	Median Opening Inventory.....	2-8
Table 5-1	Corridor Issues and Recommendations	5-4
Table 5-2	Recommended Improvement Plan Cost Estimates	5-12

Page

Section 1.0 – Introduction

US 98 is a State-maintained arterial roadway that runs from the Alabama State Line near Pensacola along the entire southern coastline of the Florida panhandle, continuing southeast through Lakeland around the east side of Lake Okechobee to Palm Beach County. It is one of only 3 U.S. highways running east/west through the Florida panhandle. The other east/west facilities are US 90 and I-10. In Santa Rosa County, US 98 is a four-lane divided facility that runs from the Pensacola Bay Bridge east to the Okaloosa County Line, which is the limits of this Corridor Management Report.

US 98 in Santa Rosa County, Florida is the only through east-west roadway on the Gulf Breeze Peninsula. Growth and development has occurred throughout the study area. However, the largest concentration of growth has occurred in the areas of Gulf Breeze, Oriole Beach, and Navarre. The area adjacent to US 98 in Santa Rosa County have become very popular residential communities for people who work in Pensacola and Ft. Walton Beach.

From the Pensacola Bay Bridge to the Naval Live Oaks Reservation, US 98 is a four/six-lane divided facility with a raised median. From Naval Live Oaks to the Okaloosa County Line, US 98 extends as a four-lane facility with a grass median. Both the road and the median were constructed prior to the implementation of Florida's Access Management Act (Section 335.18, Florida Statutes), which was adopted in 1988. Statewide access management standards and regulations were adopted in an attempt to better manage access on State roadways in order to enhance safety and to improve traffic flow. The access management standards regulate the spacing and location of driveway connections, median openings and traffic signals. Because US 98, in Santa Rosa County, was constructed prior to the implementation of these standards, the current driveway connec-

tion and median opening spacing along this roadway, in most cases, falls well below the adopted standards.

Santa Rosa County has experienced significant growth in the last five years and is projected to continue to grow rapidly. This growth has placed a greater burden on the County's transportation system, especially in the expanding urban areas, such as around Tiger Point and in Navarre, both included in this study.

As traffic continues to grow, the sub-standard access conditions along US 98 will result in even worse vehicle operating conditions and create a greater safety hazard. For this reason, the Pensacola Metropolitan Planning Organization (MPO), in conjunction with HDR Engineering, Inc., has prepared a Corridor Management Report (CMR) for US 98 in Santa Rosa County.

1.1 Study Purpose

The magnitude of closely spaced median openings and driveway connections that currently exist along the corridor creates an extremely hazardous condition, especially when coupled with a lack of turning lanes, geometric deficiencies and high vehicle travel speeds. Additionally, the potential interaction of vehicles at all of these access points can significantly impede the flow of traffic along the corridor. The purpose of the US 98 Corridor Management Report is to develop an access management plan that includes recommendations for near-term, low-cost physical improvements that will enhance safety and traffic operations within the corridor. The access management plan also provides recommendations for connections outside of the right-of-way in order to reduce the number of short distance trips on the arterial.

As opposed to determining access modifications at isolated locations along the study corridor, the

recommended modifications were developed using a system-wide approach. The impact of each recommended modification was considered at upstream and downstream locations in order to ensure that the modification did not adversely impact the remainder of the corridor.

A key component of this study is to develop a recommended corridor management plan that balances both mobility and access. As stated in the FDOT Publication *Managing Our Highways "Median Improvements"* -

"The primary function of an arterial on the State Highway System is to move people and goods throughout Florida. A secondary function is to provide access to local roads and adjacent land uses."

This indicates that the focus of US 98, as a State arterial roadway, is to safely and efficiently move people from one place to another, such as from the residential communities in Oriole Beach and Holley By the Sea to the employment centers in Pensacola. Access to local roads and adjacent development is secondary to mobility and should, therefore, be controlled. Posted speed limits along the study corridor, (ranging from 45 m.p.h. to 55 m.p.h.) are consistent with an arterial roadway intended to serve a high level of mobility. However, the current condition of access on the study corridor does not promote high mobility. In conducting this study and developing a recommended improvement plan, an effort was made to balance the intended primary function of the roadway (to serve a higher degree of mobility) with the needs of existing and proposed adjacent development to access the roadway.

An additional component of the CMR is the recommendation of general corridor management and land use/zoning strategies to help preserve the function of US 98. These strategies are

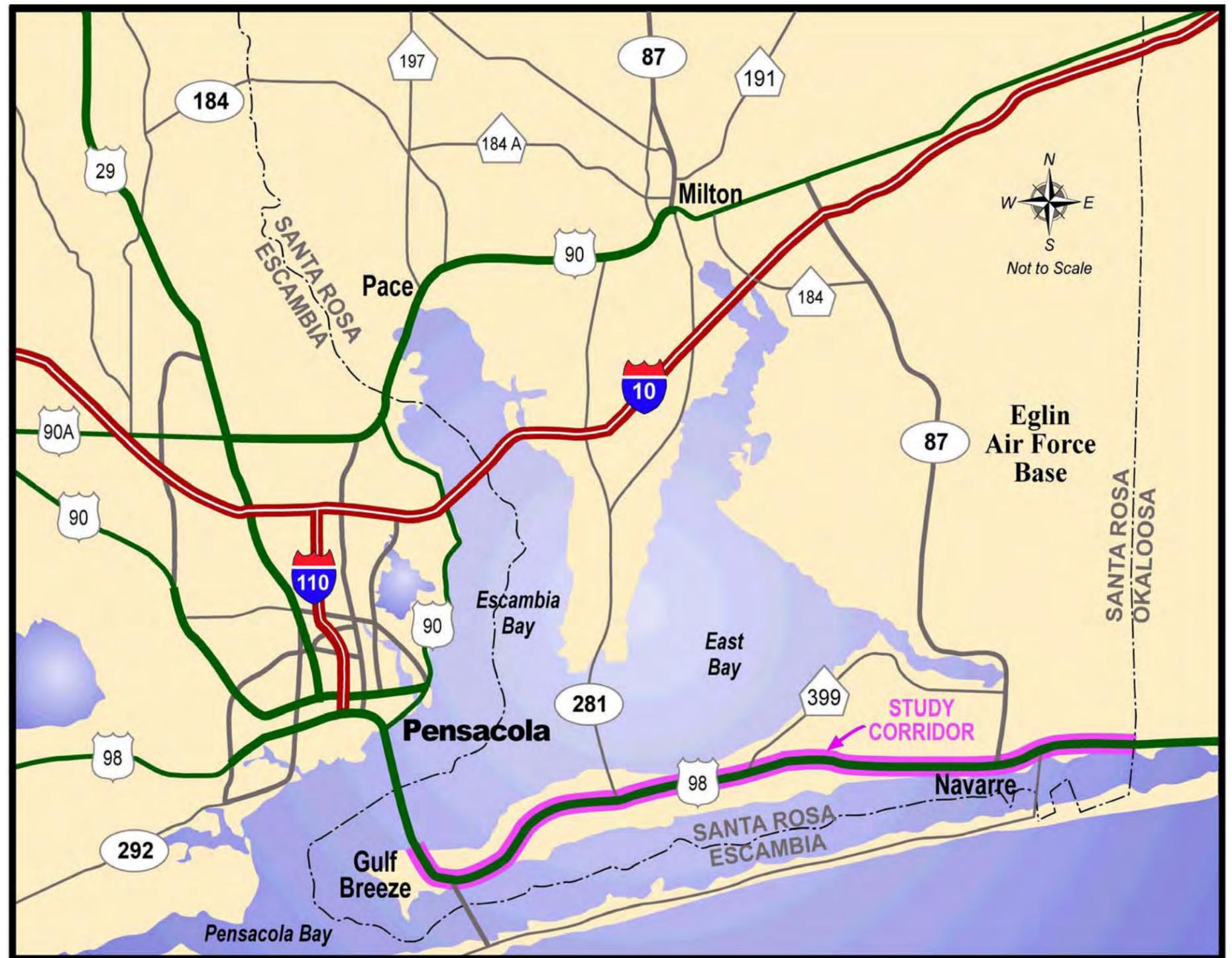
intended to guide future development and redevelopment along the corridor. These strategies, implemented together with the CMR recommendations, will improve mobility and safety on US 98.

1.2 Study Area

The Pensacola MPO prior to the initiation of the study established the study limits for the US 98 CMR. The twenty-four mile CMR study corridor extends from the Pensacola Bay Bridge to the Okaloosa County line. It includes the City of Gulf Breeze, and the communities of Navarre, Holley By the Sea, Midway, Woodlawn Beach, Tiger Point, and Oriole Beach. Major roadways that intersect the corridor include the Pensacola Beach Bridge, Garcon Point Bridge, SR 87 and the Navarre Beach Causeway. This corridor has approximately 150 median openings over the twenty-four mile study area.

The portion of US 98, through the City of Gulf Breeze, from the Pensacola Bay Bridge to the western boundary of the Naval Live Oaks Reservation (2 miles) was previously studied and is included in this report by reference. The recommendations of this previous study are presented in Section 5.0 of this report.

Study Corridor Location



Section 2.0 – Data Collection and Existing Conditions

A major data collection effort was undertaken as part of this study. Meetings were held with the Pensacola MPO, the FDOT and Santa Rosa County to collect data and also to determine existing issues associated with the study corridor. A number of individual access and operational studies and public involvement activities were previously conducted along this corridor. These studies and comments were reviewed to identify corridor issues and previous recommendations.

Detailed information was collected in the field for all median openings along the entire study corridor.

2.1 Data Sources

Data was primarily collected from the following sources and was used in the preparation of the US 98 CMR.

Aerial Photography

Aerial photographs of the corridor were obtained from FDOT. The aerial photographs, which were the most current available, were taken during 1999. HDR created a mosaic aerial of the entire corridor with the individual photographs provided by FDOT. The aerial photographs were used as a base for the recommended improvement plan sheets that are presented in Section 5.0.

Field Inventory

An extensive field inventory was conducted along the entire length of the study corridor. This included a comprehensive inventory of the 125 median openings located along the 22-mile section of US 98 from the western boundary of Naval Live Oaks to the Okaloosa County Line. The following data was collected in the field:

- Location and configuration of each median opening
- Presence of left turn lanes/deceleration lanes at median openings
- Presence of right turn lanes/deceleration lanes at roadway connections and major developments
- Photographs of potential modification areas
- Existing development adjacent to the corridor
- Location of traffic signals

In addition to collecting data in the field, issues and existing deficiencies were identified and preliminary recommendations were developed. Subsequent field visits yielded more defined corridor issues and additional recommendations.

FDOT Data

A data collection effort was coordinated with the FDOT to obtain the following information:

- Straight Line Diagrams for US 98
- FDOT Access Management Classifications for US 98
- Speed limits along the study corridor
- Traffic signal locations and signal phasing & timing plans
- 1999 average annual daily traffic (AADT) volumes
- Recently approved driveway connection permits (1999-2000)
- Intersection and PD & E traffic studies
- General access management data and information (including a public information video)

Additionally, meetings were held with representatives from both the FDOT Pensacola Urban Office and FDOT District 3 Traffic Operations in order to identify existing corridor issues and to

discuss the methodology for conducting the US 98 CMR.

Santa Rosa County Data

Data was collected from both the Santa Rosa Planning Department and the Santa Rosa Engineering Department. This includes the following:

- Turn lane improvements being permitted for construction.
- Traffic Studies for the US 98 Corridor
- Potential left turn and right turn lane improvements.

Additionally, meetings were held with both the Santa Rosa County Planning Department and Santa Rosa County Engineering Department in order to identify existing corridor issues and to discuss the methodology for conducting the US 98 CMR.

Pensacola MPO Data

The Pensacola MPO provided the following data and information for use in this study:

- Pensacola Urbanized Area Transportation Study - 2020 Transportation Plan Update
- Pensacola MPO Congestion Management System Plan
- Historical crash data (accident reports) for the roughly 2 1/2 year period from January 1997 to August 1999

Traffic Counts

Southern Traffic Services, Inc., located in Gulf Breeze, FL, was contracted to collect a.m. and p.m. peak period turning movement counts. The traffic counts collected for this study are included in Appendix A.

Corridor Management Team

The US 98 Corridor Management Team was originally formed in 1999 as a result of concern from citizens and County Commissioners due to a number of accidents and fatalities that occurred along the corridor. The Corridor Management Team originally consisted of several active citizens, Santa Rosa County staff and the Florida Department of Transportation as well as a member of the MPO staff. FDOT District Three staff and their consultant, Kimley-Horn, identified a number of issues along the corridor, mainly focusing on the western portion of the study corridor in the area east of Naval Live Oaks to the Garcon Point Bridge.

The issues and recommendations previously developed through these efforts were reviewed and considered in this study. As part of the US 98 CMR, the Corridor Management Team continued and new appointments were made by the MPO. This group, which includes both agency and citizen representatives, provided additional input into the development of the corridor access plan.

Previous Studies

Coordination with Santa Rosa County, the City of Gulf Breeze, and FDOT resulted in the acquisition of numerous traffic studies for segments or intersections of US 98. The following studies, conducted within the past five years in Santa Rosa County, were reviewed as part of the US 98 CMR.

- FDOT Intersection Studies on US 98 at:
 - * SR 87 (January 1999)
Intersection data collection only
 - * Shoreline Drive (September 1997)
Free flow lanes eliminated and pedestrian actuation added

- * Orion Parker Boulevard (June 2000)
No action was required
- * Blue Tip Road (July 2000)
No action was required
- * Whispering Pines Blvd. (February 2000)
Additional enforcement was requested
- * Ortega Street (July 2000)
No action was required
- * Sound Side Drive (September 2000)
No Improvements identified
- * Sunrise Drive (November 1998)
Traffic signal installed
- * Panhandle Trail (February 1999)
Traffic signal and intersection improvements
- * Country Club/Green Briar (June 2000)
No action was required
- * Navarre School Road (July 1999)
Traffic signal and school zone signs installed
- * Winn Dixie/Cowboys (November 1998)
Traffic signal and intersection improvements
- * Fair Point Drive (June 1996)
Intersection data collection only
- * Live Oak Avenue (June 1996)
Intersection data collection only
- * Pfeiffer Street (June 1996)
Intersection data collection only
- Independent Signal Warrant Studies
 - * Portside Drive (November 1999)
Traffic signal was installed
- Santa Rosa County studies
 - * Intersection Level of Service Analysis – US 98 From Gondolier Blvd. to SR 281/Wal-Mart (October 2000)

- * Existing Traffic Analysis – US 98 From SR 399/Pensacola Beach Boulevard to Naval Live Oaks Eastern Boundary (January 1999) – Identified existing capacity along US 98
- * Existing Traffic Analysis – US 98 From Naval Live Oaks East Boundary to CR 191-B/Soundside Drive (August 1999)
- * Detailed Arterial Capacity Analysis – US 98 From CR 399 to Okaloosa County Line (April 2000) – Identified available capacity along US 98 within the County Concurrency System and identified a potential process for developers to mitigate their traffic impacts
- City of Gulf Breeze – US 98 Corridor Management Report by Hamilton Smith Associates (June 1999)
- CUTR – An Access Management Strategy for the US 98 Highway Corridor – Jan. 1996
- FDOT – US 98 Data and Recommendations by Kimley Horne & Associates
- (1999/2000)FDOT PD&E; Final Preliminary Engineering Report – US 98/SR 30 From End of Pensacola Bay Bridge to Hurlbert Field (January 1997) - Analyzed long range alternative cross sections for US 98
- FDOT PD&E; Capacity Analysis Report – SR 87 PD&E Study From US 98 to US90 (May 1996)

A review of these studies provided background for the report and has ensured coordination with previous efforts.

2.2 Corridor Segment Inventory

Based on the field visits conducted as part of this study and the data collected from the review agencies, a corridor segment inventory was developed. Overall, the US 98 study corridor is

24 miles long. The segment that was evaluated as part of the US 98 CMR, from Naval Live Oaks to the Okaloosa County line, is 22 miles long, and has 12 signalized intersections and 125 median openings.

The US 98 CMR study corridor was divided into eight (8) analysis segments. The delineation of the segments (Labeled “A” through “H”) is based primarily on where a change occurred in the following traffic and roadway characteristics: typical section, type of median, posted speed limit, FDOT access classification and the FDOT functional classification.

The typical section of each analysis segment of US 98 relates to the type of drainage structures present along the roadway. A segment with a rural section indicates that there is an open drainage system. A segment with an urban section indicates that there is a closed drainage system with a raised curb and gutter.

The FDOT establishes a functional classification for each facility on the state highway system. The functional classification of a roadway relates to the physical characteristics of the facility and also the intended purpose of the roadway, with regards to providing mobility or access. Mobility and access are inverse operations of one another. That is, the greater the access allowed along a facility, the less mobility it can provide. The reverse is also true. Interstates and freeways provide the maximum degree of mobility but access is significantly limited. Collector facilities provide a high degree of access to adjacent connections and land use but mobility is limited.

Pursuant to the Access Management Act, the FDOT also assigns an access classification to every segment of the state highway system. There are seven (7) classifications, designated with the numbers “1” through “7.” The access

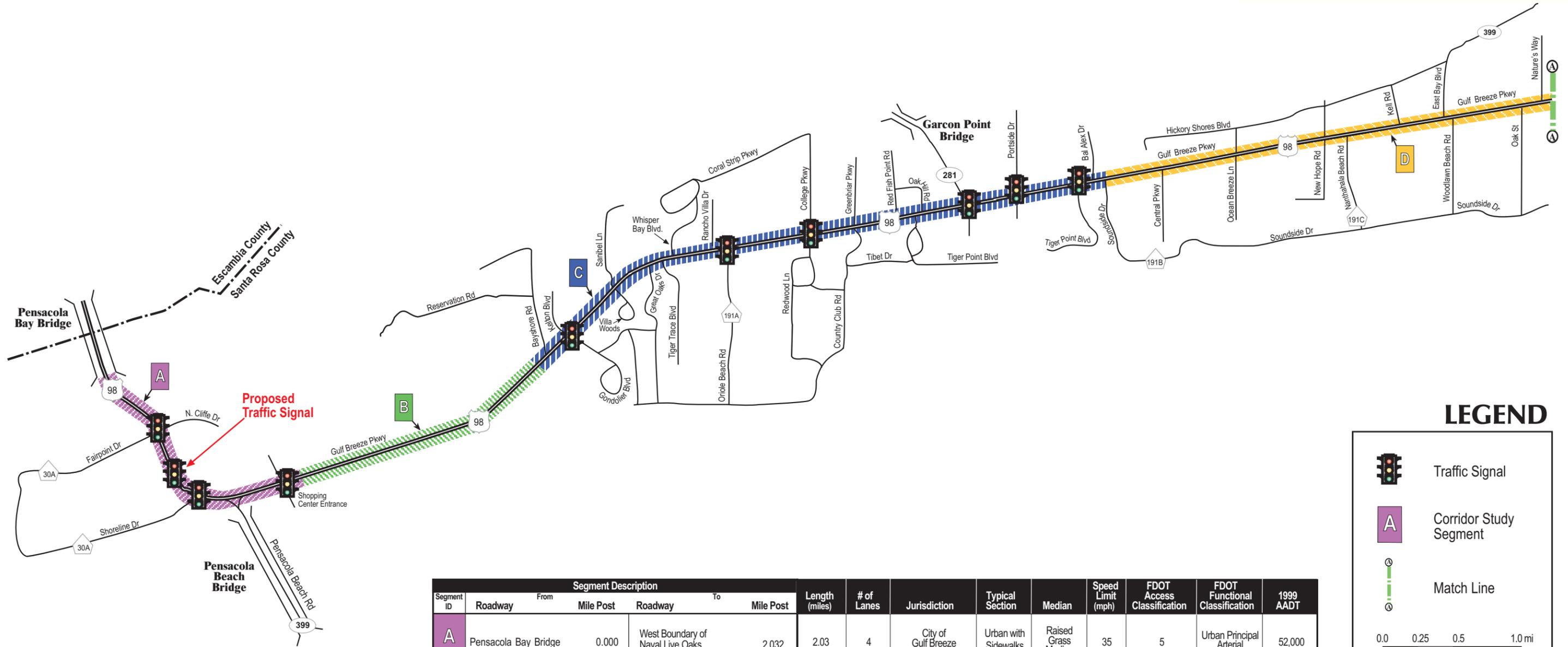
classification is based on the functional classification of the roadway and the posted speed limit. Access class 1 (freeways) is the most restrictive access class. Access class 7 is the least restrictive, thus allowing the greatest degree of access to adjacent property and a lesser degree of mobility.

The western portion of the corridor, through the City of Gulf Breeze, is an access class 5 facility. From the eastern city limit of Gulf Breeze to the Okaloosa County line, US 98 is access class 3, indicating a standard of high mobility and less access.

The eight (8) analysis segments are:

- A. Pensacola Bay Bridge to Naval Live Oaks Reservation
- B. Naval Live Oaks Reservation to East City Limits (ECL) of Gulf Breeze
- C. ECL of Gulf Breeze to CR 191B/Soundside Drive
- D. CR 191B/Soundside Drive to Nature’s Way Road
- E. Nature’s Way Road to Coral Street
- F. Coral Street to Ortega Street
- G. Ortega Street to Fox Den Drive
- H. Fox Den Drive to the Okaloosa County Line

These analysis segments are shown in Figure 2-1. Also included in this figure is an inventory of the analysis segments that includes the following information: segment limits, mile post, length, number of lanes, jurisdiction, typical section, median type, speed limit, FDOT access classification, FDOT functional classification and the 1999 AADT. A brief description of each analysis segment is provided in the text that follows.



Segment ID	Segment Description				Length (miles)	# of Lanes	Jurisdiction	Typical Section	Median	Speed Limit (mph)	FDOT Access Classification	FDOT Functional Classification	1999 AADT
	Roadway	From Mile Post	Roadway	To Mile Post									
A	Pensacola Bay Bridge	0.000	West Boundary of Naval Live Oaks	2.032	2.03	4	City of Gulf Breeze	Urban with Sidewalks	Raised Grass Median	35	5	Urban Principal Arterial	52,000
B	Naval Live Oaks	2.032	Gulf Breeze E. City Limit	4.441	2.41	4	City of Gulf Breeze	Rural	Grass Median	45	5	Urban Principal Arterial	38,500
C	Gulf Breeze E. City Limit	4.441	CR 191B - Soundside Dr.	9.100	4.66	4	Santa Rosa County	Rural	Grass Median	45	3	Urban Principal Arterial	32,000
D	CR 191B - Soundside Dr.	9.100	Nature's Way	12.563	3.46	4	Santa Rosa County	Rural	Grass Median	55	3	Urban Principal Arterial	25,000

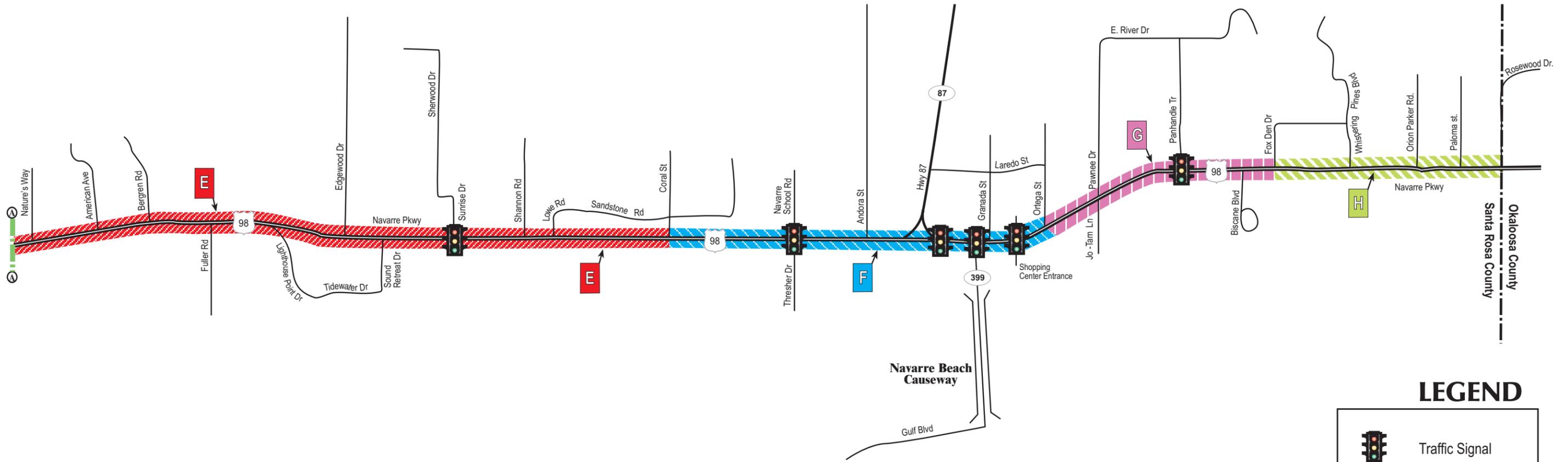
LEGEND

- Traffic Signal
- Corridor Study Segment
- Match Line

0.0 0.25 0.5 1.0 mi

Existing Corridor Characteristics

Figure 2 - 1



LEGEND

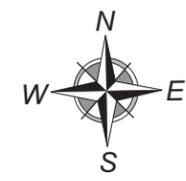
- Traffic Signal
- Corridor Study Segment
- Match Line

0.0 0.25 0.5 1.0 mi

Segment ID	Segment Description					Length (miles)	# of Lanes	Jurisdiction	Typical Section	Median	Speed Limit (mph)	FDOT Access Classification	FDOT Functional Classification	1999 AADT
	Roadway	From Mile Post	Roadway	To Mile Post										
E	Nature's Way	12.563	Coral St.	17.606	5.04	4	Santa Rosa County	Rural	Grass Median	55	3	Rural Principal Arterial	25,000	
F	Coral St.	17.606	Ortega St.	20.624	3.02	4	Santa Rosa County	Rural	Grass Median	45	3	Rural Principal Arterial	31,000	
G	Ortega St.	20.624	Fox Den Dr.	22.385	1.76	4	Santa Rosa County	Rural	Grass Median	55	3	Rural Principal Arterial	31,000	
H	Fox Den Dr.	22.385	Okaloosa County Line	24.007	1.62	4	Santa Rosa County	Rural	Grass Median	55	3	Urban Principal Arterial	31,000	

Existing Corridor Characteristics

Figure 2 - 1 con't



Segment A: Pensacola Bay Bridge (MP 0.00) to W. Boundary of Naval Live Oaks (MP 2.03)

Segment A begins at the Pensacola Bay Bridge (Santa Rosa County Line) and extends 2.0 miles to the west boundary of the Naval Live Oaks Reservation. This segment has an urban typical section with a curbed, grass median and sidewalks. The posted speed limit is 35 m.p.h. The functional classification is Urban Principal Arterial and the FDOT Access Class is 5. Three traffic signals are located along this segment; at Fairpoint Drive, Shoreline Drive and the Gulf Breeze Hospital. A traffic signal is also planned at the high school entrance west of Daniel Drive.

Segment A is entirely within the city limits of Gulf Breeze and the surrounding property is densely developed. Major destinations along this segment of the corridor include several shopping centers, Dolphin Stadium, and Gulf Breeze Hospital. The recommendations for this segment of the corridor were developed by a previous study and are incorporated in Section 5 of this report.

Segment B: W. Boundary of Naval Live Oaks (MP 2.03) to ECL Gulf Breeze (MP 4.44)

Segment B begins just east of Gulf Breeze Hospital at the beginning of Naval Live Oaks and extends 2.4 miles to the ECL of Gulf Breeze. Segment B has a rural typical section with a grass median. This segment of US 98 is functionally classified by the FDOT as an Urban Principal Arterial and the access class is 5. The posted speed limit along this segment is 45 mph and there are no traffic signals.

The property along this segment is largely undeveloped and is within the Naval Live Oaks Reservation, a designated conservation area.



Looking EB along US 98 within the Naval Live Oaks Reservation

Segment C: ECL Gulf Breeze (MP 4.44) to CR 191B/Soundside Drive (MP 9.10)

Segment C begins at the ECL of Gulf Breeze and extends 4.7 miles to CR 191B/Soundside Drive. This segment of US 98 has a rural typical section with grass medians. It is functionally classified as an Urban Principal Arterial and the FDOT access class is 3. The posted speed limit along this segment is 45 mph. There are five traffic signals within this segment; at Gondolier Boulevard / Kelton Drive, Oriole Beach Road, College Parkway, Garcon Point Bridge Connection, and Portside Drive.

This segment contains a wide variety of land uses ranging from institutional and office, residential, medical centers, and a variety of strip commercial ranging from smaller stand-alone establishments such as fast food and gas stations to larger commercial shopping centers. This segment of the corridor is largely developed with some interspersed undeveloped parcels.



Looking WB along US 98 at Tiger Point Boulevard

Segment D: CR 191B/Soundside Drive (MP 9.10) to Nature's Way Road (MP 12.56)

Segment D extends east from CR 191B/Soundside Drive 3.5 miles to Nature's Way Road. This segment has a rural typical section with a grass median and a posted speed limit of 55 mph. It is functionally classified as an Urban Principal Arterial and the FDOT access class is 3. There are no traffic signals along this segment of US 98.

Land use along Segment D consists largely of undeveloped and residential areas with some strip commercial and institutional uses, including several schools / daycares directly accessing US 98.

Segment E: Nature's Way Road (MP 12.56) to Coral Street (MP 17.61)

Segment E begins at Nature's Way Road and extends 5.1 miles to Coral Street. This segment has a rural typical section with grass medians and a posted speed limit of 55 mph. The FDOT functional classification is Rural Principal Arterial and the access classification is 3. There is one signal along this segment, located at Sunrise Drive.

The land use adjacent to this segment is primarily single-family residential, with some multi-family residential developments. There is also a number of large, undeveloped areas as well as some commercial and office development.



Looking WB along US 98 at Sunrise Drive

Segment F: Coral Street (MP 17.61) to Ortega Street (MP 20.62)

Segment F begins at Coral Street and extends 3.0 miles to Ortega Street. This segment has a rural typical section with a grass median and a posted speed limit of 45 mph. This segment of US 98 is functionally classified as a Rural Principal Arterial with an access class of 3. There are four signalized intersections in this segment, at Thresher Drive/Navarre School Road, at Highway 87, at the Navarre Beach Causeway, and at the Winn Dixie Shopping Center.

The land uses along the western portion of this segment are mainly residential or undeveloped properties. Near the Navarre (SR 87) area the land uses become more intense and consist of a mix of residential, tourist (hotels, etc.), strip commercial, and three shopping centers. The segment ends at Ortega Street, just east of the Winn Dixie shopping center.



Looking EB along US 98 towards the W. leg of SR 87

Segment G: Ortega Street (20.62) to Fox Den Drive (MP 22.39)

Segment G begins at Ortega Street and runs 1.8 miles east to Fox Den Drive. This segment has a rural typical section with a grass median and a posted speed limit of 55 mph. It is functionally classified as a Rural Principal Arterial and the FDOT access class is 3. There is one signal located along this segment, at Panhandle Trail.

Land use along this segment is almost entirely residential or undeveloped, with some commercial development. Other notable land uses adjacent to this segment of the corridor include the Baptist Medical Center and a couple of campgrounds.



Looking EB along US 98 to Elks Way

Segment H: Fox Den Drive (MP 22.385) to Okaloosa County Line (MP 24.01)

Segment H begins at Fox Den Drive and extends 1.6 miles east to the Okaloosa County Line. This segment has a rural typical section with a grass median and a 55 mph posted speed limit. This segment of the corridor is functionally classified as an Urban Principal Arterial with an access class of 3. There are no traffic signals located along this segment.

Land use adjacent to this segment of US 98 is primarily residential, with some commercial development and a campground. There are also two large churches located at the western end of this segment.



Looking WB along US 98 from Estates Circle

2.3 Median Opening Inventory

After the corridor characteristics were collected as part of the roadway segment inventory and the location of median openings were identified, a comprehensive inventory of each individual median opening was conducted. The median opening inventory is summarized in Table 2-1. This table presents the following information for each median opening along the study corridor: median opening identification number, distance from the previous median opening, type of access allowed, presence of a traffic signal, the intersecting roadways/driveway connections on the north and south, presence of turn lanes/deceleration lanes on the west, east, north and south approaches and the adjacent development located in each intersection quadrant (northwest, northeast, southwest and southeast).

Each median opening was assigned a numeric identification (ID) number, starting with "1" for the median opening at the western limits of the study corridor. This was done for ease of referencing specific median openings. These ID numbers are also used to locate the median openings on the aerial-based recommended plan sheets presented in Section 5.0 of this report.

Overall, there are 125 median openings that were evaluated as part of the US 98 CMR. This does not include those median openings that were evaluated as part of the previous access study conducted within the City of Gulf Breeze.

The median opening inventory was used to evaluate the existing conditions along the corridor and to develop specific modification recommendations based on the connection spacing, presence of turn lanes, and adjacent development.

2.4 Existing Operating Condition

The Pensacola MPO annually updates the Pensacola Urbanized Area Congestion Management System (CMS) Plan. The purpose of this plan is to evaluate and rate the performance of transportation facilities within the MPO area. As part of the 2000 Update to the CMS Plan an existing conditions level of service (LOS) analysis was conducted for each of the major roadways within the MPO Urbanized Area. The existing conditions LOS reported for the US 98 study corridor, by MPO analysis segment, is as follows:

Existing Conditions LOS Analysis

Segment	LOS Standard	1999 LOS
Escambia County Line to Fairpoint Dr.	D	D
Fairpoint Drive to SR 399/Pensacola Beach Blvd.	D	D
SR 399/Pensacola Beach Blvd. to East End of Naval Live Oaks	D	F
East End of Naval Live Oaks to CR 191B/Soundside Dr.	D	F
CR 191B/Soundside Dr. to Edgewood Dr.	C	B
Edgewood Dr. to Belle Meade Circle	C	C
Belle Meade Circle to Okaloosa County Line	D	B

Source: Pensacola MPO Congestion Management System Plan - 2000 Update

This LOS summary indicates that the roughly 9 mile section of US 98 from SR 399/Pensacola Beach Boulevard to CR 191B/Soundside Drive currently operates deficiently, below its adopted LOS standard.

2.5 Projected Operating Condition and Planned Major Improvements

In addition to the existing conditions LOS analysis, the Pensacola MPO CMS Plan also includes projected traffic volumes and LOS conditions for the years 2005 and 2010. The projected operating condition of the US 98 study corridor, as reported in the MPO CMS Plan, is as follows:

Future Conditions LOS Analysis

Segment	LOS Standard	2005 LOS	2010 LOS
Escambia County Line to Fairpoint Dr.	D	F	F
Fairpoint Drive to SR 399/Pensacola Beach Blvd.	D	F	F
SR 399/Pensacola Beach Blvd. to East End of Naval Live Oaks	D	F	F
East End of Naval Live Oaks to CR 191B/Soundside Dr.	D	F	F
CR 191B/Soundside Dr. to Edgewood Dr.	C	B	C
Edgewood Dr. to Belle Meade Circle	C	F	F
Belle Meade Circle to Okaloosa County Line	D	C	C

Source: Pensacola MPO Congestion Management System Plan - 2000 Update

This future conditions analysis indicates that the majority of the US 98 study corridor is projected to operate deficiently, at LOS F, by 2005. Based on the analysis conducted as part of the Pensacola CMS Plan, more than 50 congested major roadway segments were identified. A technical ranking was determined for each congested roadway segment. The segment of US 98 from East Naval Live Oaks to CR

191B/Soundside Drive is tied as the 4th highest ranked project within the Pensacola MPO area and was tied as the highest ranked project within Santa Rosa County. The segment of US 98 from the Escambia County Line to Fairpoint Drive was tied as the 6th highest ranked project in the MPO area and tied as the 2nd highest ranked project within Santa Rosa County.

Despite the existing and projected LOS anticipated for these segments of US 98 and the high priority rankings developed by the MPO, roadway projects for these segments are not currently included within the MPO's five-year Transportation Improvement Program. US 98 from Whisper Bay Boulevard to the Garcon Point Bridge Connection is scheduled for widening to six lanes between 2005 and 2010. The widening of US 98 to six lanes from Pensacola Beach Boulevard to Whisper Bay and from the Garcon Point Bridge Connection to CR 399 (East Bay Boulevard) are not planned until after 2011. There are no improvements in the financially feasible plan for US 98 east of CR 399 (East Bay Boulevard). The segment of US 98 from Edgewood Drive to Belle Meade Circle, falls within this part of the corridor and is projected to be deficient in 2005. Access management improvements will provide safety enhancements in the short term and will establish where the access points along the corridor should be for the long term.

With increased growth and the lack of any near-term programmed capacity improvements, these segments of US 98 will continue to be further degraded, creating greater operational deficiencies and safety hazards. Because funding is not readily available to conduct short-term major widening and improvement projects, a plan to identify near-term, low-cost improvements to enhance traffic operations and safety needed to be developed. As such, this US 98 CMR was conducted.

**Table 2-1
Median Opening Inventory**

ID Number	Location	Distance From Previous Opening	Access Allowed	Traffic Signal	Intersecting Roadways/ Driveway Connections		Turn Lanes / Deceleration Lanes (For Each Intersection Approach)				Adjacent Development (For Each Intersection Quadrant)				
							North		South		Northwest	Northeast		Southwest	Southeast
							West	East	North	South					
1	East of Gulf Breeze	530'	Full	No	No connection	No connection	None	None	N/A	N/A	None	None	None	None	
2	North Park Entrance	5,220'	Full	No	Park Entrance	No connection	LT	RT	LT + RT	N/A	Park	None	None	None	
3	Visitor Center Entrance	2,310'	Full	No	No connection	Visitor Center Entrance	RT	LT	N/A	N/A	None	None	Visitor Center	None	
4	Visitor Center Exit	1,720'	Directional	No	No connection	Visitor Center Exit	None	None	N/A	LT + RT	None	None	Visitor Center	None	
5	Bayshore Rd.	3,750'	Full	No	Bayshore Rd.	None (Illegal turns from Tom Thumb)	LT	LT + RT	LT + RT	N/A	None	None	None	Tom Thumb	
6	Gondolier Blvd.	1,030'	Full	Yes	Kelton Blvd.	Gondolier Blvd.	LT + RT	LT + RT	LT-Th + RT	LT + LT-Th-RT	Grand Point Subdivision	Regions Bank	Vila Venyce	None	
7	Gulf Breeze Masonic Lodge	750'	Full	No	No connection	Gulf Breeze Masonic Lodge	None	LT	None	LT-Th-RT	None	Gulf Breeze Masonic Lodge	Cajun Specialty Meats	None	
8	Grand Point East	800'	Directional	No	Grand Point East	None	LT	RT	RT	N/A	Grand Point East	None	None	None	
9	Sanibel Ln.	880'	Full	No	Sanibel Ln.	None	LT	LT + RT	LT-Th - RT	N/A	Sandpiper Village	Law Offices	Animal Hospital	None	
10	Villa Woods Circle	60'	Full	No	None	Villa Woods Circle	None	LT	N/A	LT-Th-RT	Sandpiper Village	A+ Learning Center Day Care	Gulf Breeze Animal Hospital	Whistler's Walk Plaza	
11	Great Oaks Dr.	600'	Full	No	Marble Ct.	Great Oaks Dr.	LT + RT	LT	LT-Th-RT	LT-Th-RT	Power Substation	Oak Leaf Plaza	Water Tower	None	
12	Whisper Bay Blvd.	1,080'	Full	No	Whisper Bay Blvd.	Santa Rosa Plaza	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Whisper Bay	None	Santa Rosa Plaza	None	
13	Santa Rosa Plaza	350'	Full	No	Chiropractic Center	Santa Rosa Plaza	LT + RT	None	LT-Th-RT	LT-Th-RT	Chiropractic Center	Santa Rosa Plaza	None	None	
14	Crane Cove Blvd.	720'	Full	No	Live Oak Medical Center	Crane Cove Blvd.	LT + RT	LT + RT	LT-Th-RT	LT-Th + RT	Live Oak Medical Center	None	None	None	
15	Rose Lawn Cemetery	300'	Full	No	Rose Lawn Cemetery	Dirt driveway	None	RT	LT-Th-RT	LT-Th-RT	Rose Lawn Cemetery	None	None	Gulf Breeze Marine	
16	Ramblewood Ln.	400'	Full	No	Church of Christ	Ramblewood Ln.	LT + RT	LT	LT-Th-RT	LT-Th-RT	Rose Lawn Funeral Home	Church of Christ	Workman's Auto	Amoco	
17	Church of Christ	220'	Full	No	Church of Christ Entrance	Kent's Special Events	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Church of Christ	None	Kent's Special Events	None	
18	Rancho Villa Dr.	500'	Full	No	Rancho Villa Dr.	Master Tune & Lube	LT	None	LT-Th-RT	LT-Th-RT	Gulf Breeze Medical Center	Commercial Gulf Technical Services	Master Tune & Lube	None	
19	Speedy Oil Change	450'	Full	No	Autostate Restyling Center	Speedy Oil Change	LT	None	LT-Th-RT	LT-Th-RT	Autostate Restyling Center	Speedy Oil Change and Car Wash	None	None	

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**Table 2-1 (Cont.)
Median Opening Inventory**

ID Number	Location	Distance From Previous Opening	Access Allowed	Traffic Signal	Intersecting Roadways/ Driveway Connections		Turn Lanes / Deceleration Lanes (For Each Intersection Approach)				Adjacent Development (For Each Intersection Quadrant)							
							North		South		Northwest		Northeast		Southwest		Southeast	
							West	East	North	South								
20	Breeze Plaza	230'	Full	No	Breeze Plaza	Subway	LT	RT	LT-Th-RT	LT-Th-RT	Breeze Plaza		Subway					
21	CR 191 A / Oriole Beach Rd.	360'	Full	Yes	Breeze Plaza	Oriole Beach Rd.	LT + RT	LT + RT	LT-Th + RT	LT-Th + RT	Breeze Plaza	None	Bamhill's Country Buffet	Texaco				
22	Harvard Dr.	730'	Full	No	Harvard Dr.	Santa Rosa Shores Baptist Church	LT	RT	LT-Th-RT	LT-Th-RT	Whitney Bank	Auto Brokers	Santa Rosa Shores Baptist Church					
23	Wendy's	450'	Full	No	Shopping Plaza	Wendy's & BP	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Shopping Plaza	Papa Johns	BP	Wendy's				
24	Animal Center	350'	Full	No	Service Road Connection	Animal Center	None	None	LT-Th-RT	LT-Th-RT	Animal Center							
25	CR 399 / College Pkwy.	980'	Full	Yes	College Pkwy.	College Pkwy.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	The Real Estate House	Wood's Gallery Frame Shop	Tom Thumb	SunTrust				
26	Winn Dixie Plaza	370'	Full	No	None	Winn Dixie Plaza	RT	LT	N/A	LT-Th-RT	None	McDonald's	SunTrust	Winn Dixie Plaza				
27	Winn Dixie Plaza	420'	Full	No	Arby's	Winn Dixie Plaza	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Discount Auto Parts	Arby's	Winn Dixie Plaza					
28	El Rito Dr.	520'	Full	No	El Rito Dr.	Winn Dixie Plaza	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Sacred Heart Medical Group	Burger King	Pizza Hut	AM South				
29	Burger King	80'	Full	No	Burger King	Bay Breeze Nursing & Retirement Center	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Burger King		Bay Breeze Nursing and Retirement Center					
30	Country Club Rd.	800'	Full	No	Greenbriar Pkwy.	Country Club Rd.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Circle K	Fairpoint Market Fruit Stand	Sonic Drive-In					
31	Breezy Wind Dr.	1,240'	Full	No	Breezy Wind Dr.	Saint Sylvester Catholic Church	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Sea Breeze Villas		Saint Sylvester Catholic Church					
32	Red Fish Point Rd.	650'	Full	No	Red Fish Point Rd.	None	LT	RT	LT-Th-RT	N/A	Private Residences	Sea Breeze Baptist Church	None					
33	Tiger Point Blvd.	1,130'	Full	No	Caldwell Banker	Tiger Point Blvd.	RT	LT	LT-Th-RT	LT-Th-RT	Caldwell Banker		Tiger Point Village					
34	Oak Hill Rd.	220'	Full	No	Oak Hill Rd.	None	LT	RT	LT-Th-RT	N/A	None	None	None	None				
35	Sterling Point Dr.	450'	Full	No	Dirt Driveway	Sterling Point Dr.	LT + RT	LT	LT-Th-RT	LT-Th-RT	future Raceway		None	Shopping Plaza				
36	SR 281 / Garcon Point Bridge Connection	300'	Full	Yes	Garcon Point Bridge Connection	Wal-Mart Super Center	LT + RT	LT + RT	LT + Th + RT	LT + Th + RT	None	None	Wal-Mart Super Center					
37	Portside Dr.	1,400'	Full	Yes	Portside Dr.	Lowe's	LT + RT	2 LT + RT	LT-Th-RT	LT-Th + RT	None	Paradise Bay	Lowe's	None				
38	Baywoods Rd.	1,750'	Full	No	Baywoods Rd.	None	LT	RT	LT-Th-RT	N/A	None		None					

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							North		South		Northwest		Northeast		Southwest		Southeast	
							West	East	North	South								
39	Tiger Point Blvd. E.	600'	Full	No	None	Tiger Point Blvd. E.	RT	LT	N/A	LT-Th-RT	None		None					
40	Magnolia Manor Dr.	280'	Full	No	Magnolia Manor Dr.	None	LT + RT	LT	LT-Th-RT	N/A	None		None					
41	Bal Alex Ave.	2,170'	Full	No	Bal Alex Ave.	None	LT	RT	LT-Th-RT	N/A	Woodcraft Manufacturers	EZ Serve Gas	Methodist Community Life Center					
42	Soundside Dr.	360'	Full	No	Warehouse	Soundside Dr.	RT	LT	LT-Th-RT	LT-Th-RT	Warehouse	None	Methodist Community Life Center	Good Shepherd Lutheran Church				
43	Central Pkwy.	1,370'	Full	No	None	Central Pkwy.	LT + RT	LT	N/A	LT-Th-RT	None	Angel's Salon	Kensington Antiques	None				
44	Hickory Shores Rd.	750'	Full	No	Hickory Shores Rd.	None	LT	RT	LT-Th-RT	N/A	Magnolia Antique Mall	None	None					
45	Ocean Breeze Ln.	1,320'	Full	No	Ocean Breeze Ln.	Ocean Breeze Ln.	LT	LT + RT	LT-Th-RT	LT-Th-RT	None		None					
46	Tradewinds Dr.	700'	Full	No	None	Tradewinds Dr.	RT	LT	N/A	LT-Th-RT	None		Anna's Antique Mall	None				
47	Beachwood Dr.	680'	Full	No	Beachwood Dr.	None	LT	RT	LT-Th-RT	LT-Th-RT	None		None	Commercial building				
48	Kittyhawk Dr.	1,490'	Full	No	None	Kittyhawk Dr.	RT	LT	N/A	LT-Th-RT	None		The Lounge	None				
49	Mohawk Tr.	1,190'	Full	No	Mohawk Tr.	None	LT	RT	LT-Th-RT	N/A	Pike's Auto Sales	None	None					
50	New Hope Rd.	1,340'	Full	No	New Hope Rd.	New Hope Rd.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	None		None	St. Paul Preschool				
51	CR 191C / Nantahala Beach Rd.	1,080'	Full	No	None	Nantahala Beach Rd.	RT	LT	N/A	LT-Th-RT	None		Midway Water	None				
52	1400'E. of Nantahala Beach Rd.	1,400'	Full	No	Driveway	None	None	None	LT-Th-RT	N/A	Rural Metro Ambulance		None					
53	Kell Rd.	940'	Full	No	Kell Rd.	None	LT	LT	LT-Th-RT	LT-Th-RT	None		None					
54	Wheeler Rd.	1,200'	Full	No	Wheeler Rd.	Antique Store	LT	RT	LT-Th-RT	LT-Th-RT	Sail Inn Sandwich Shop	None	Guns and Antiques					
55	Abercrombie Rd.	390'	Full	No	Abercrombie Rd.	None	LT	RT	LT-Th-RT	N/A	Oasis Lounge	None	Cherokee Campground					
56	CR 399 / East Bay Blvd.	1,050'	Full	No	East Bay Blvd.	None	LT	RT	LT-Th-RT	N/A	BP	Citgo	None					
57	Woodlawn Beach Rd.	1,300'	Full	No	Midway Mini Storage	Woodlawn Beach Rd.	RT	LT	LT-Th-RT	LT-Th-RT	Midway Mini Storage		None	Santa Rosa Store It				

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							North		South		Northwest		Northeast		Southwest		Southeast	
							West	East	North	South								
58	Midway Baptist Church	650'	Full	No	French Construction	Midway Baptist Church	None	LT	LT-Th-RT	LT + RT	French Construction	Tyler's Auto Service	Midway Baptist Church					
59	Oak Dr.	1,130'	Full	No	Power Station driveway	Oak Dr.	RT	LT	LT-Th-RT	LT-Th-RT	None	Power Station	None	Pappy's				
60	Zoo	1,900'	Full	No	Dirt road	Zoo	RT	LT	LT-Th-RT	LT-Th-RT	None	Flea Market	None	Zoo				
61	Flea Market	700'	Full	No	Flea Market	Zoo	LT	LT + RT	LT-Th-RT	LT-Th-RT	Flea Market		Zoo					
62	County Health Department	1,050'	Full	No	County Health Department	County Service Center	LT	LT + RT	LT-Th-RT	LT-Th-RT	County Health Department		Santa Rosa County	Service Center				
63	America Ave.	370'	Full	No	American Ave.	None	LT	RT	LT-Th-RT	N/A	None		None					
64	Ambassador Dr.	800'	Full	No	Ambassador Dr.	None	LT	LT + RT	LT-Th-RT	N/A	None	Elysium Prayer	None					
65	Bergen Rd.	1,240'	Full	No	Bergen Rd.	None	LT	RT	LT-Th-RT	N/A	None	Vacant building	None					
66	Midway Consignment Center	920'	Full	No	Driveway	None	LT	LT	LT-Th-RT	N/A	Murphy Bed Outlet	Midway Consignment Center	None					
67	Fuller Dr.	950'	Full	No	Texaco	Fuller Dr.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Texaco	None	None					
68	Sunny Oaks St.	990'	Full	No	Emerald Coast RV Center	Sunny Oaks St.	LT	LT	LT-Th-RT	LT-Th-RT	Emerald Coast RV		None	Tradewinds Pawn & Gun				
69	Smuggler's Cove	1,100'	Full	No	None	Smuggler's Cove (entrance only)	LT + RT	LT	N/A	Enter Only	None		None	Smuggler's Cove				
70	Hidden Shores Dr.	850'	Full	No	Hidden Shores Dr.	Lighthouse Point Dr.	LT + RT	LT + RT	LT-Th-RT	LT + RT	The Reserve	None	None	Lighthouse Point				
71	St. Sylvester Catholic Parish Center	1,220'	Full	No	St. Sylvester Catholic Parish Center	None	LT	LT + RT	LT-Th-RT	N/A	St. Sylvester Catholic	Parish Center	Lighthouse Point					
72	Edgewood Dr.	1,680'	Full	No	Edgewood Dr.	None	LT	RT	LT-Th-RT	N/A	None		None					
73	Ron Brown Circle	1,050'	Full	No	Ron Brown Circle	None	LT + RT	LT	none	LT-Th-RT	None		None					
74	Sound Retreat Dr.	1,440'	Full	No	None	Sound Retreat Dr.	RT	LT	N/A	LT-Th-RT	None		None					
75	Sunrise Dr.	1,400'	Full	Yes	Sunrise Dr.	Tom Thumb Driveway	LT + RT	LT	LT-Th + RT	LT-Th-RT								
76	Constitution Dr.	390'	Full	No	Constitution Dr.	Sea Lark Dr.	LT + RT	LT		LT-Th-RT	Chevron	None		Commercial / Office building				

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							North		South		Northwest		Northeast		Southwest		Southeast	
							West	East	North	South								
77	Camp Ada Rd.	710'	Full	No	None	Camp Ada Rd.	RT	LT	N/A	LT-Th-RT	None		None					
78	Serosa Dr.	1,890'	Full	No	Serosa Dr.	Sound Hammock Dr.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	None		None					
79	Shannon Rd.	610'	Full	No	Shannon Rd.	None	LT	None	LT-Th-RT	N/A	None		None					
80	Lowe Rd.	1,450'	Full	No	Lowe Rd.	None	LT	LT + RT	LT-Th-RT	N/A	None		None					
81	Joybrooke Dr.	1,130'	Full	No	None	Joybrooke Dr.	LT + RT	LT	N/A	LT-Th-RT	None		None					
82	Falling Leaves Court	830'	Full	No	Falling Leaves Court	None	LT	None	LT-Th-RT	N/A	Falling Leaves		None					
83	Villa Vizcaya Dr.	400'	Full	No		Villa Vizcaya Dr.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	None		None					
84	Harvest Village	1,350'	Full	No	Harvest Village (W. driveway)	None	LT	None	LT-Th-RT	N/A	Harvest Village		None					
85	Mustang Dr.	450'	Full	No	Harvest Village (E. driveway)	Mustang Dr.	RT	LT	LT-Th-RT	LT-Th-RT	Harvest Village		None	Residential community				
86	920' E. of Mustang Dr.	940'	Full	No	None	None	LT	LT	N/A	N/A	The Vineyards		Residential community					
87	Lewis Funeral Home	1,860'	Full	No	Lewis Funeral Home	None	LT	LT + RT	LT-Th-RT	N/A	Lewis Funeral Home	None	None					
88	1020' W. of Thresher Dr.	1,910'	Full	No	None	None	LT	LT	N/A	N/A	None		None					
89	Thresher Dr.	1,020'	Full	Yes	Navarre Middle School Rd.	Thresher Dr.	LT	LT + RT	LT-Th-RT	LT-Th-RT	Navarre Family Medical Center	Post Office	None					
90	Alpine Ave.	790'	Full	No	Exxon / Power Station	Alpine Ave.	LT	LT + RT	LT-Th-RT	LT-Th-RT	Exxon	Power station	New building	None				
91	Blue Tip Dr.	900'	Full	No	Blue Tip Dr.	Blue Tip Dr.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Souvenir City & Shark Museum	Navarre Emergency Family Care	Shopping center	Navarre Marine				
92	True Value	600'	Full	No	True Value	Commercial driveway	None	None	LT-Th-RT	LT-Th-RT	True Value		Commercial	None				
93	Safe Harbor Village Condominiums	800'	Full	No	None	Safe Harbor Village	LT + RT	LT	N/A	LT-Th-RT	None		None					
94	SR 87 (West)	1,300'	Full	No	SR 87	None	LT	RT	LT	N/A	None		None					
95	Eckerd	880'	Full	No	Eckerd	Sea Mist	LT	RT	LT-Th-RT	LT-Th-RT	future Market of Navarre	Eckerd	Sea Mist					

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							West		East		North		South		Northwest		Northeast		Southwest		Southeast	
96	SR 87 (East)	700'	Full	Yes	SR 87	Commercial plaza	LT + RT	LT + RT			LT + Th-RT			None				Lighthouse Executive Plaza				
97	Presida St.	570'	Full	No	Presida St.	Commercial plaza	LT	LT	LT-Th-RT	LT-Th-RT												
98	Lunetta St.	300'	Full	No	Lunetta St.	Park driveway	LT + RT	None	LT-Th-RT	LT-Th-RT			Century 21					Park				
99	Prado St.	390'	Full	No	Prado St.		LT	LT	LT-Th-RT	LT-Th-RT				First National Bank of Trust				Visitor Information Center				
100	Navarre Beach Causeway	490'	Full	Yes	Burger King Driveway	Toll Booth to Causeway	LT + RT	LT	LT-Th-RT				Waffle House	Burger King								
101	Winn Dixie Marketplace (West)	650'	Full	No	Winn Dixie Marketplace	None	LT	RT	LT-Th-RT	N/A			None	McDonald's				None				
102	Winn Dixie Marketplace (Center)	580'	Full	Yes	Winn Dixie Marketplace	Cowboys Restaurant	LT + RT	LT + RT	LT-Th + RT	LT-Th-RT			Winn Dixie Marketplace				Cowboys Restaurant	Best Western				
103	Comfort Inn / Taco Bell	450'	Full	No	Comfort Inn / Taco Bell	None	LT	LT + RT	LT-Th-RT	N/A			Comfort Inn	Taco Bell				None				
104	Ortega St.	1,200'	Full	No	Ortega St.	None	LT	LT	LT-Th-RT	N/A			Whitney Bank					None				
105	Navarre Sound Circle	1,070'	Full	No	None	Navarre Sound Circle	RT	LT	N/A	LT-Th-RT			None					None				
106	Jo Tam Ln.	500'	Full	No	Elks Way	Jo Tam Ln.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT			Baptist Medical	Pizza Den				Sandy Dunes				
107	Old Navarre Hardware	1,940'	Full	No	Old Navarre Hardware	Gift Shop	LT	LT + RT	LT-Th-RT	LT-Th-RT			Old Navarre Hardware					Gift Shop				
108	450'W. of Rio Lafontaine	470'	Full	No		None	None	None		N/A			None					None				
109	Rio Lafontaine	450'	Full	No	Larker Woods Rd.	Rio Lafontaine	LT + RT	LT	LT-Th-RT	LT-Th-RT			None					Residential community				
110	Panhandle Tr.	1,540'	Full	Yes	Panhandle Tr.	Navarre Beach Campground	LT	LT + RT	LT-Th-RT	LT-Th-RT			None	Ocean Breeze Plaza				Navarre Beach Campground				
111	Biscayne Blvd.	1,370'	Full	No	First Baptist Church of Navarre	Biscayne Blvd.	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT			First Baptist Church of Navarre					Residential community				
112	Navarre Insurance Agency	370'	Full	No	Navarre Insurance Agency	None	LT	None	LT-Th-RT	N/A			Navarre Insurance Agency					None				
113	Fox Den Dr.	1,310'	Full	No	Fox Den Dr.	None	LT	RT	LT-Th-RT	N/A			Fox Den Plaza	None								
114	Buckley Dr.	200'	Full	No	None	Buckley Dr.	None	None	N/A													

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ID Number	Location	Distance From Previous Opening	Access Allowed	Traffic Signal	Intersecting Roadways/ Driveway Connections		Turn Lanes / Deceleration Lanes (For Each Intersection Approach)				Adjacent Development (For Each Intersection Quadrant)							
							North		South		West	East	North	South	Northwest	Northeast	Southwest	Southeast
115	Jessica Way	100'	Full	No	Navarre United Methodist Church	Jessica Way	LT + RT	LT + RT	LT-Th-RT	LT-Th-RT	Navarre United Methodist Church		Residential community					
116	Twelve Oaks	750'	Full	No	None	Twelve Oaks	LT	None	N/A	LT-Th-RT	None		None					
117	Whispering Pines Blvd.	1,100'	Full	No	Whispering Pines Blvd.	None	LT	LT + RT	LT-Th-RT	N/A	Navarre First Assembly of God		None					
118	Tom St.	1,830'	Full	No	Tom St.	None	LT	LT + RT	LT-Th-RT	N/A			None					
119	280'W. of Orion Parker Rd.	870'	Full	No	Gas station	Magnolia Beach Campground	LT	RT	LT-Th-RT	LT-Th-RT	Gas station		Magnolia Beach Campground					
120	Orion Parker Rd.	280'	Full	No	Orion Parker Rd.	None	LT	None		N/A	Gas station		None					
121	Colonial Pines Mobil Estates	880'	Full	No	Colonial Pines Mobil Estates	Dirt driveway	LT	RT	LT-Th-RT	LT-Th-RT	Colonial Pines Mobil Estates		Jurazic Park Family Fun Center	None				
122	Calle De Cantabria	270'	Full	No	Calle De Cantabria	None	LT	LT + RT	LT-Th-RT	N/A	None		None					
123	Paloma St.	690'	Full	No	Paloma St.	Gryson Dr.	LT + RT	LT	LT-Th-RT	LT-Th-RT	Patio Specialists		None	Pomphrey Manor				
124	Calle De Palencia	1,000'	Full	No	Commercial / Industrial building	Calle De Palencia	RT	LT	LT-Th-RT	LT-Th-RT	None							
125	Rosewood Dr.	1,100'	Full	No	Rosewood Dr.	Emerald Coast Trailer and Welding Complex	LT	RT		LT-Th-RT	First National Bank		None					

Notes: LT = Separate left turn lane provided.
 RT = Separate right turn lane provided.
 LT + RT = Separate left turn lane and right turn lane are provided.
 N/A = Not Applicable

LT-Th-RT = Shared left turn, through movement and right turn lane is provided.
 LT-Th + RT = Shared left turn and through movement lane and a separate right turn lane are provided.
 LT + Th-RT = Shared through movement and right turn lane and a separate left turn lane are provided.

Section 3.0 – Crash Data

An evaluation of the historical crash data for the study corridor was conducted in order to determine if there are any significant, existing safety hazards along the corridor. The Pensacola MPO provided a historical crash summary for US 98, from the eastern city limits of Gulf Breeze to the Okaloosa County line, for the roughly 2 1/2 year period from January 1997 to August 1999. The number of crashes that occurred in each study segment and the crash rate per million vehicle miles is summarized below. The crash rate is a function of the number of accidents along a length of roadway per year relative to the degree of exposure at the location, which is measured in millions of vehicle miles of travel.

Based on the historical crash data, the MPO identified eleven (11) locations along US 98 as high crash locations. Since mid-1998, five of the eleven intersections have had further study, and three of the intersections have been modified.

The eleven intersections from west to east, are:
Bayshore Road

1. Gondolier Boulevard (Villa Venyce Entrance)
2. Oriole Beach Road (CR 191A)
3. College Parkway
4. Greenbriar Parkway / Country Club Road
5. Garcon Point Bridge Connection / Wal-Mart
6. Sunrise Drive
7. SR 87 (East Leg)
8. Navarre Bridge
9. Winn Dixie Entrance and Pullum Street
10. Panhandle Trail

For each of these eleven (11) locations a collision diagram, indicating the location of each crash, was prepared by the MPO and is included on the following pages. This information was evaluated and the recommendations included in this section are incorporated in the recommendations in Section 5.

**US 98 Study Corridor
Crash Rates**

Segment ID	Segment Limits		Length (miles)	# of Crashes	ADT	Crash Rate (per mvm)
	From	To				
A	Pensacola Bay Bridge	Naval Live Oaks Reservation	2.032	N/A	52,000	N/A
B	Naval Live Oaks Reservation	ECL Gulf Breeze	2.409	N/A	38,500	N/A
C	ECL Gulf Breeze	CR 191B / Soundside Dr.	4.659	271	32,000	1.93
D	CR 191B / Soundside Dr.	Nature's Way	3.463	52	25,000	0.64
E	Nature's Way	Coral St.	5.043	61	25,000	0.51
F	Coral St.	Ortega St.	3.018	155	31,000	1.76
G	Ortega St.	Fox Den Dr.	1.761	40	31,000	0.78
H	Fox Den Dr.	Okaloosa County Line	1.622	57	31,000	1.20

Note: mvm = million vehicle miles



Looking West along US 98 at Bayshore Drive



Looking East along US 98 to Gondolier Boulevard



Looking East along US 98 to Wal-Mart



Looking East along US 98 at Sunrise Drive

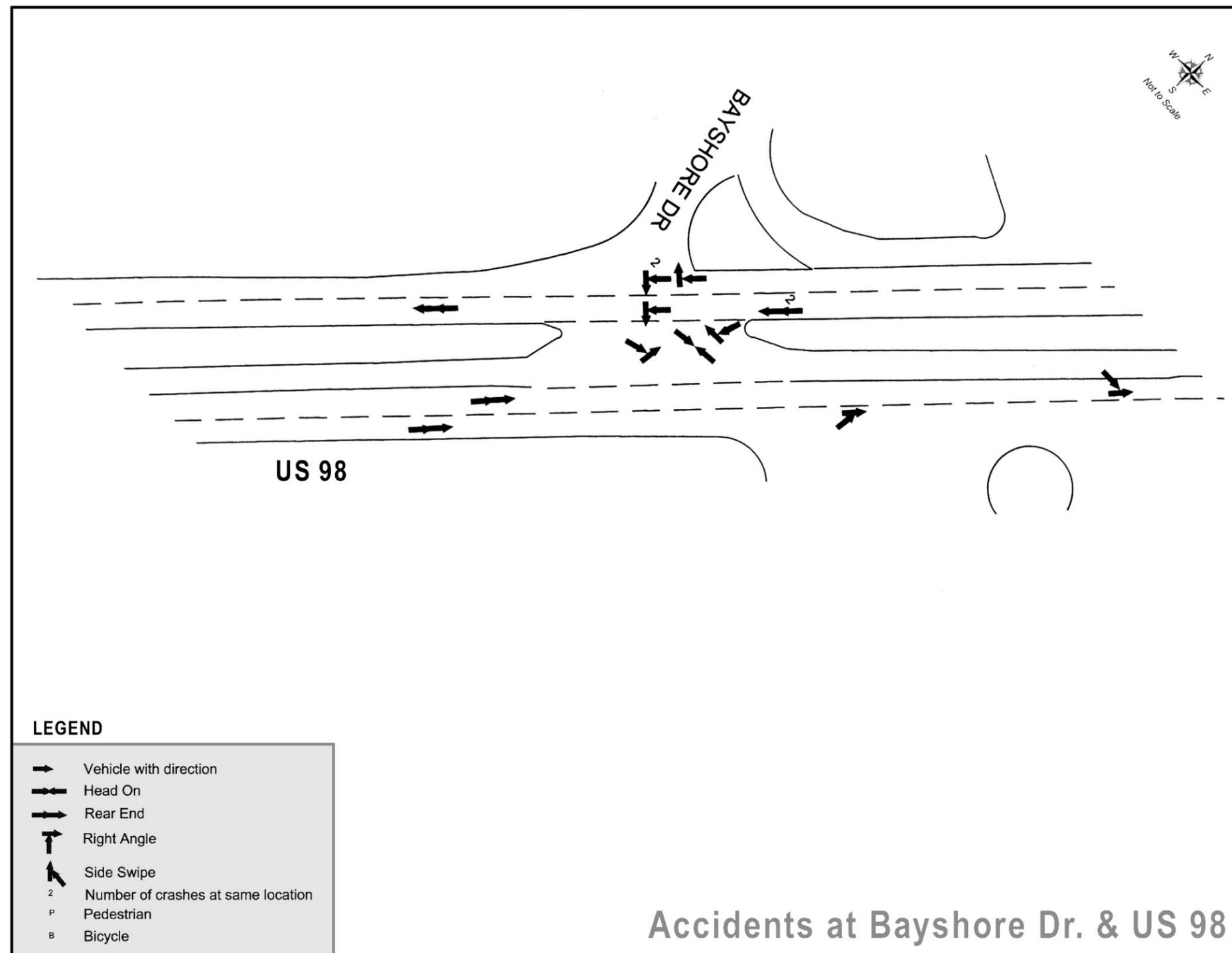
US 98 at Bayshore Road

Type of Crash	Number of Crashes
Right angle	6
Sideswipe	2
Rear End	5
Head-on	1
TOTAL	14

As indicated in the above table and crash diagram there were 14 crashes in the general location of this intersection. There were six angle crashes, two sideswipe crashes, five rear end crashes and one head-on crash.

A westbound left turn lane was added due to rear end collisions caused by vehicles decelerating in the travel lane in order to make a left turn into the Tom Thumb (or u-turn) located to the southeast of the intersection. Several of the crashes within the median, especially the rear end collisions can be attributed to the congestion that occurs at the opening. The proximity of the intersection to the traffic signal at Gondolier Boulevard results in queues on US 98 through the median opening.

Several vehicles were observed in the field making northbound left turns from the Tom Thumb driveway. The driveway of the Tom Thumb does not line up with the opening and therefore vehicles are traveling against traffic for a short distance on US 98 in order to complete the northbound left turn. The median opening should be converted to a directional median opening providing for eastbound and westbound left turns. The westbound left turn lane should line up with the Tom Thumb driveway.



Accidents at Bayshore Dr. & US 98

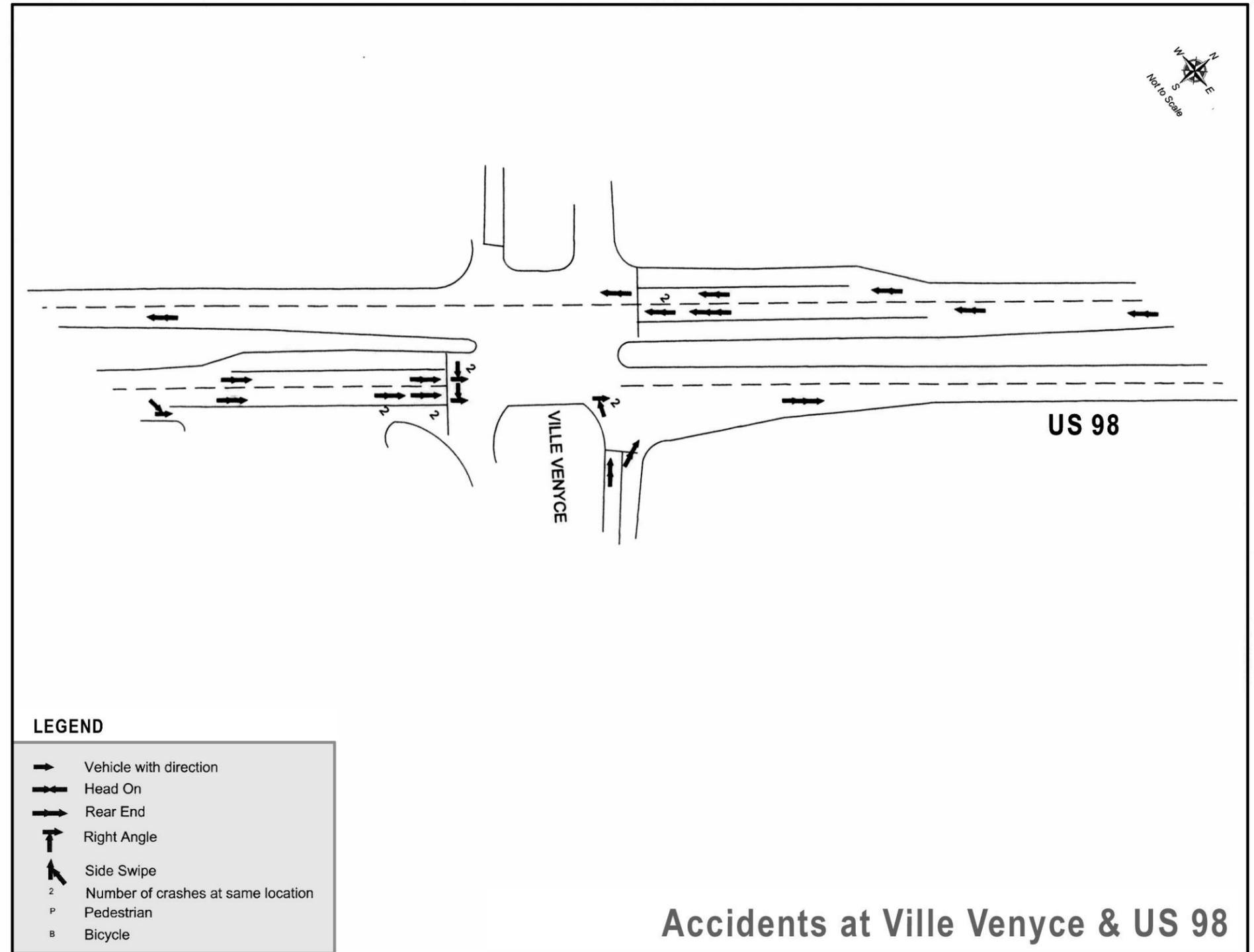
US 98 at Gondolier Blvd. / Kelton Blvd. (Ville Venyce Entrance)

Type of Crash	Number of Crashes
Right angle	5
Sideswipe	1
Rear End	19
Head-on	0
Total	25

As indicated in the above table and crash diagram there were 25 crashes in the general location of this intersection. There were five angle crashes, one sideswipe crash, and nineteen rear end crashes.

The most common occurring type of crash at this intersection are rear end crashes. This is typical in congested areas. It is recommended that additional advance notice of the signal be implemented. A variable advance sign that notified when the signal was red could prove to be useful especially for the eastbound direction where drivers are now entering a developed area when they were just in Naval Live Oaks where there are minimal access points.

Another strategy that could be used in reducing the number of rear end collisions is to consolidate some driveways in the southwest part of the intersection. There are numerous wide undefined driveways that impact driver expectation and can contribute to rear end crashes.



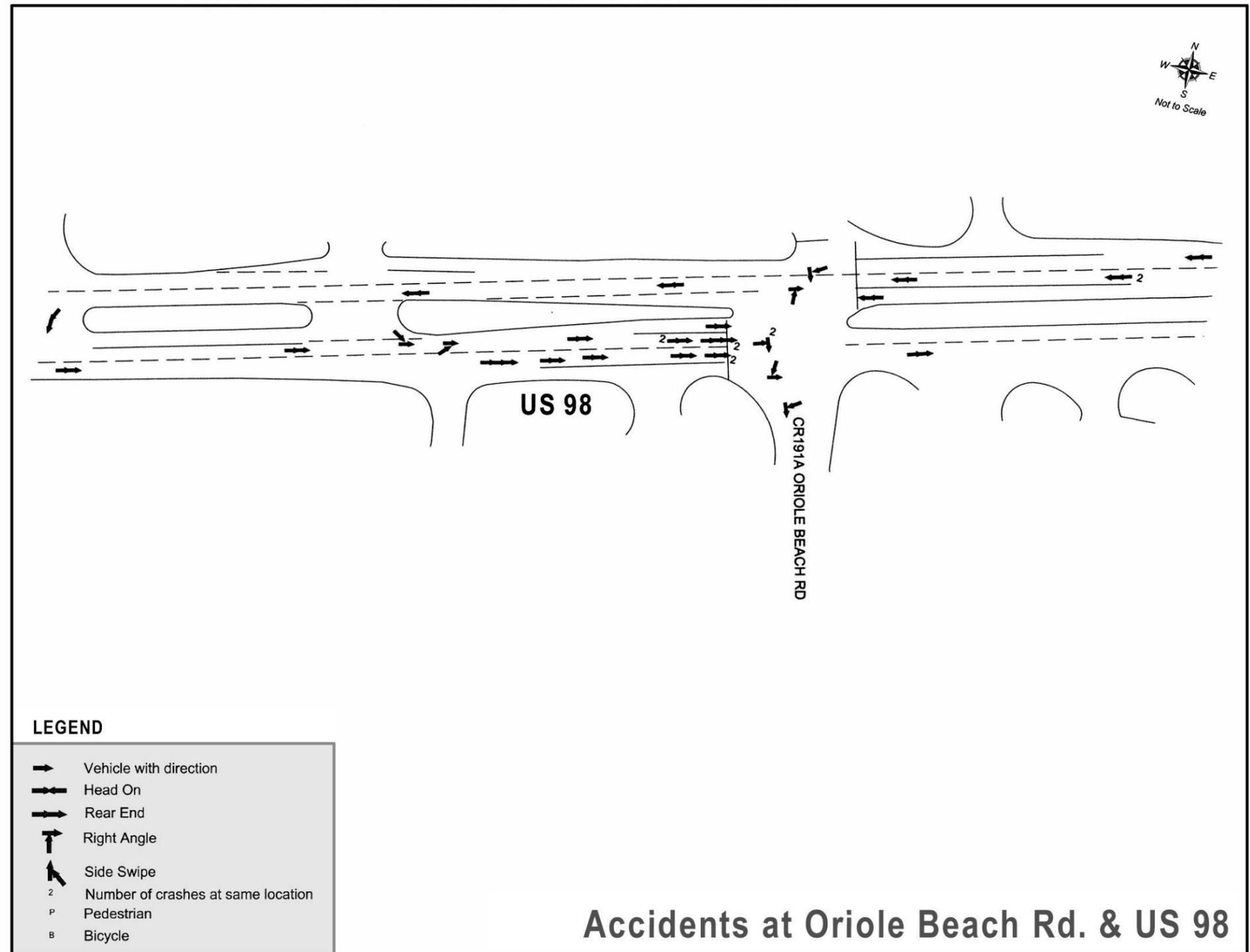
US 98 at Oriole Beach Road (CR 191A)

Type of Crash	# of Crashes
Right angle	6
Sideswipe	2
Rear End	23
Head-on	0
Total	31

As indicated in the above table and crash diagram there were 31 crashes in the general location of this intersection. There were six angle crashes, two sideswipe crashes, and twenty-three rear end crashes.

The majority of the crashes are rear end collisions that are typical of congested conditions. Reducing the number of driveways on the approaches to the intersection will assist in reducing the likelihood of rear end crashes.

Some of the collisions did occur at the median openings to the west of the intersection. These openings are too close to the signal and should be closed. Median openings close to signals are hazardous due to sight line problems from queued vehicles and lack of adequate room for deceleration lanes. At least three of the crashes at this intersection occurred at the median openings west of the Oriole Beach Road signal.



US 98 at College Parkway

Type of Crash	Number of Crashes
Right angle	10
Sideswipe	1
Rear End	24
Head-on	0
Total	35

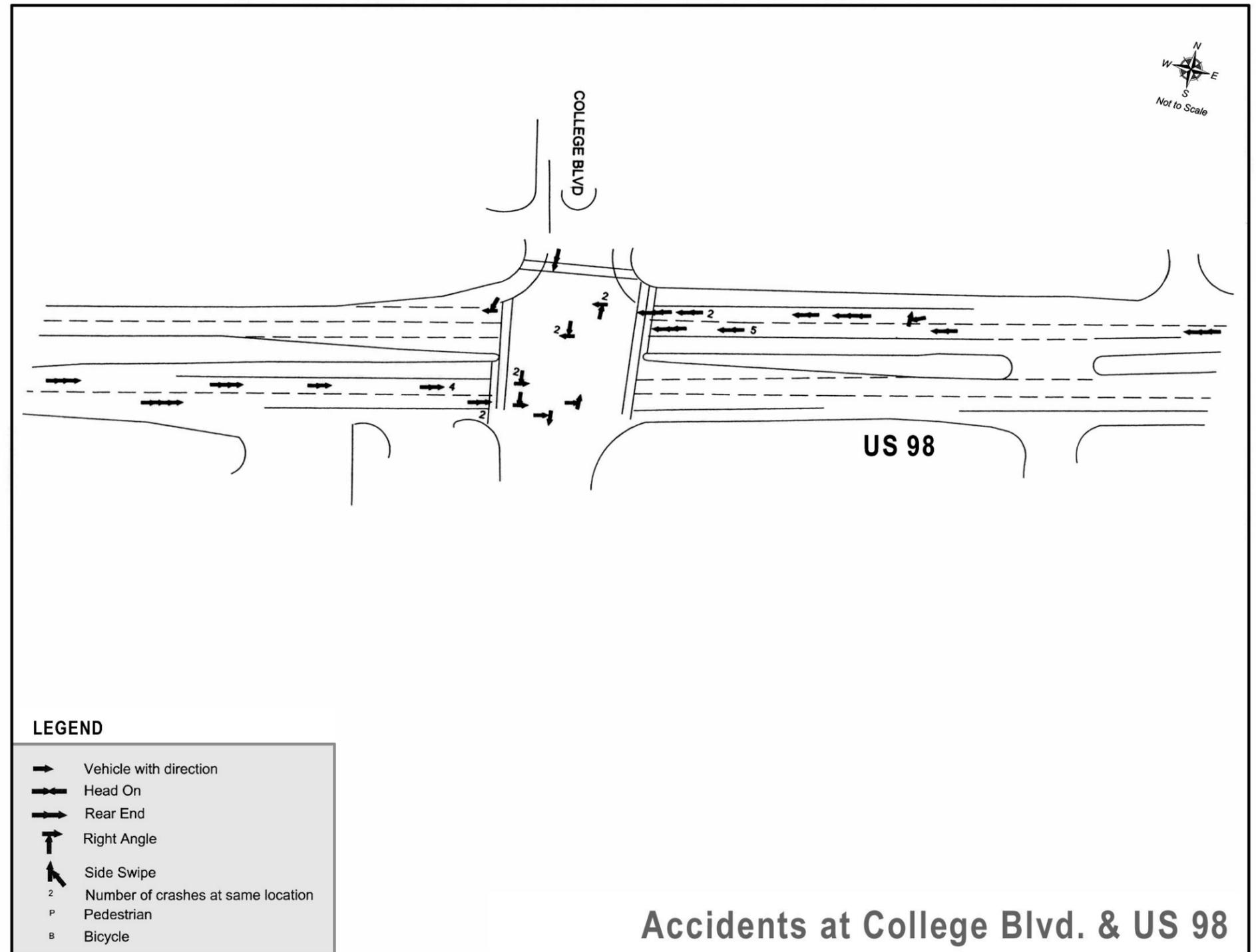
As indicated in the above table and crash diagram there were 35 crashes in the general location of this intersection.

The rear end collisions are due to congestion along US 98. The wide undefined driveway on the eastbound approach to the intersection should be narrowed and moved further away from the median opening due to the additional conflict points it introduces in the area of the signal. The wide driveway creates confusion for drivers because they are unable to anticipate where vehicles will be entering or leaving the highway.

The US 98 Existing Traffic Analysis completed by Hamilton Smith & Associates in August of 1999 also included recommendations as follows:

- Install intersection striping (skip lines) to direct turning movements;
- Extend the southbound approach median to prohibit through movements on the service road;
- Modify the northwest portion of the intersection to add pavement to allow right turns on red.

Further evaluation of this intersection is needed prior to the relocation of the Fire Department to south College Parkway.



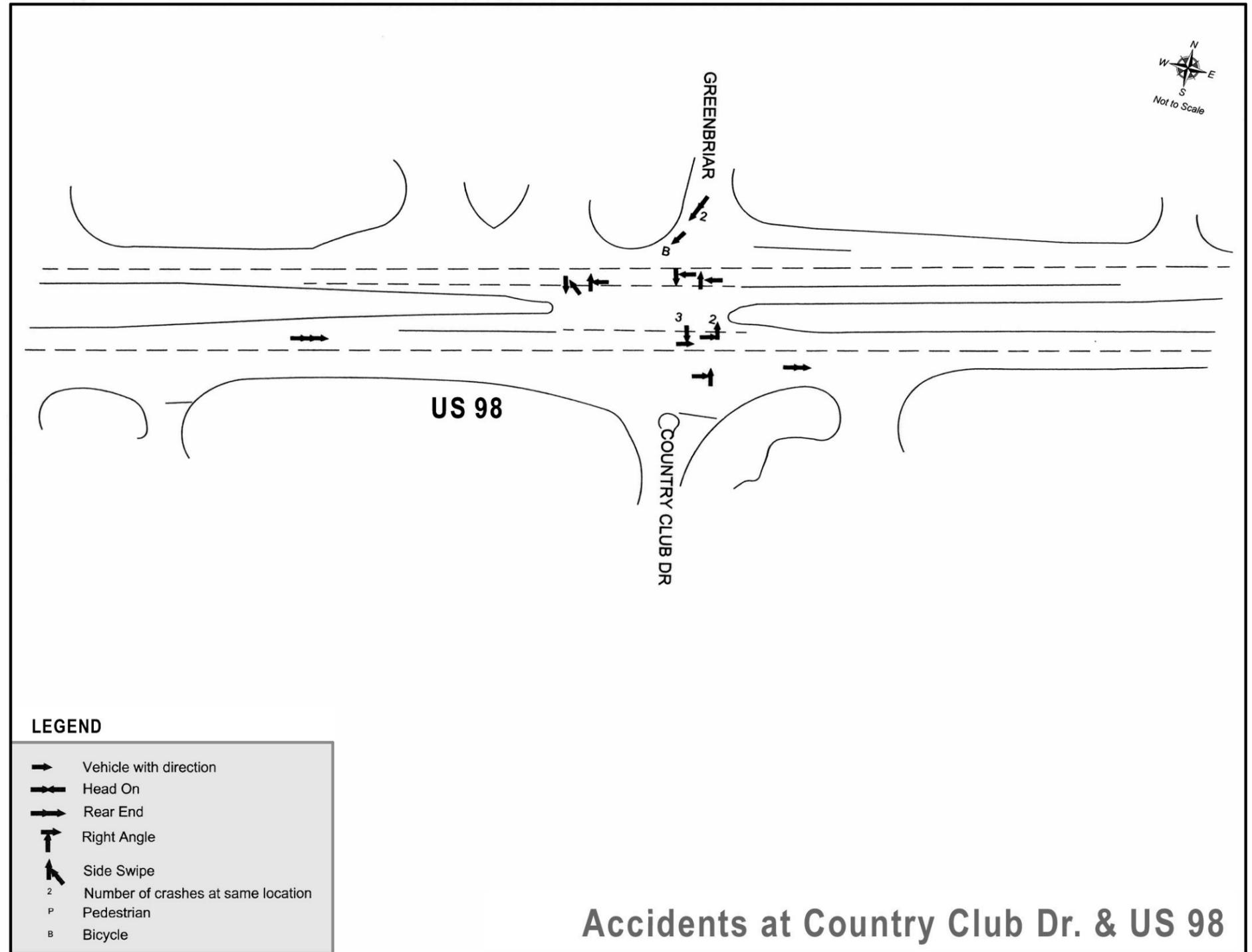
US 98 at Greenbriar Parkway/Country Club Road

Type of Crash	# of Crashes
Right angle	9
Sideswipe	1
Rear End	4
Head-on	0
w/ Bicycle	1
Total	15

As indicated in the above table and crash diagram there were 15 crashes in the general location of this median opening. There were nine angle crashes, one sideswipe crash, and four rear end crashes. In addition, there was one crash involving a bicyclist.

A study of this area was completed in April 2000. This study noted that there were only 4 crashes at this location in 1999, and there had been 0 crashes as of the date of the study in 2000. The study recommended that this intersection be reanalyzed after the signal installation planned at Tiger Point East.

HDR further recommends that the eastern driveway to the Circle K be closed as soon as possible. Two of the crashes were due to vehicles turning directly into or out of the driveway across the median opening. The presence of the driveway within the median opening introduces additional conflict points and increases problems related to driver expectancy.



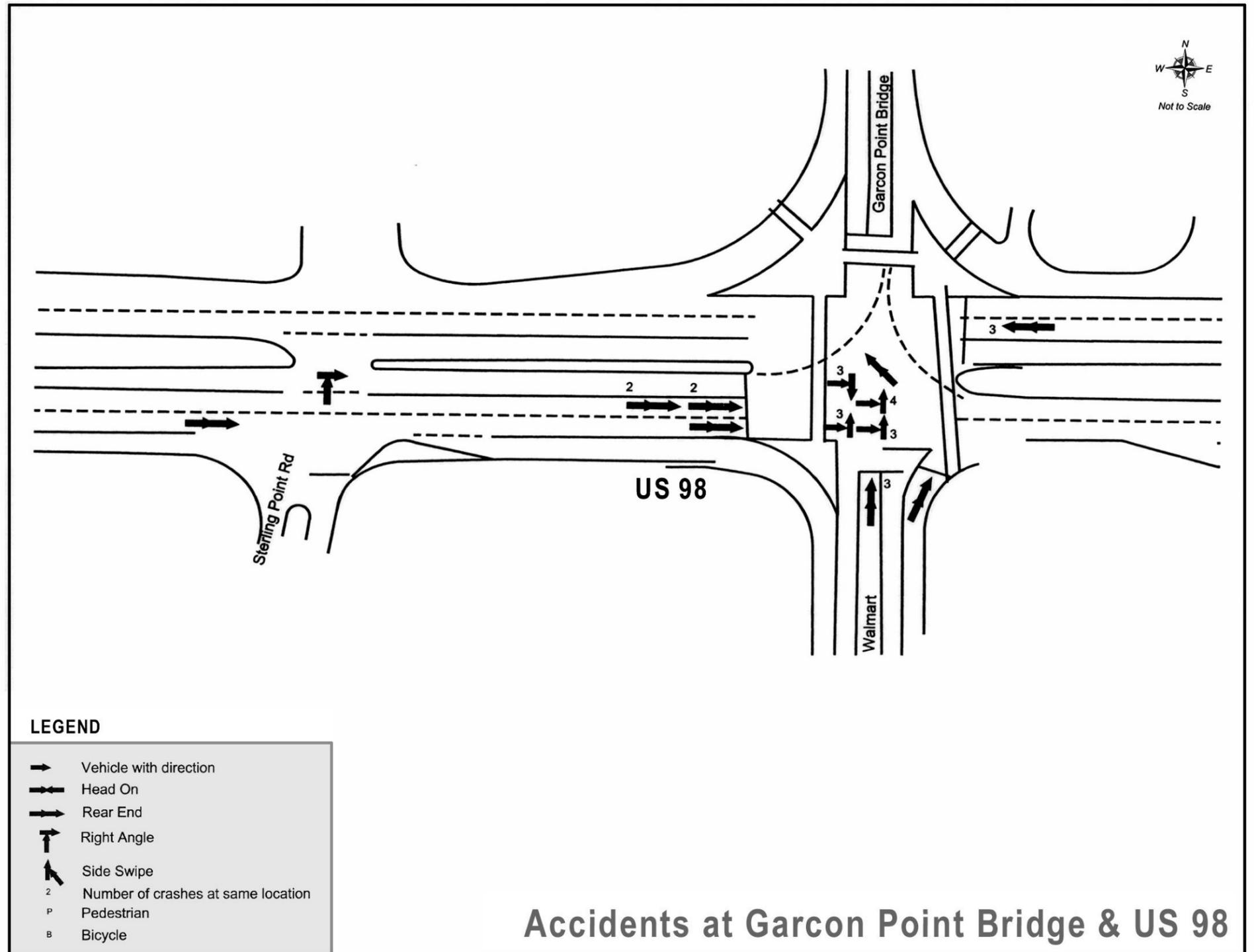
**US 98 (SR 30) at Garcon Point Bridge
Connection/Wal-Mart Entrance**

Type of Crash	# of Crashes
Right angle	14
Sideswipe	0
Rear End	14
Head-on	0
Total	28

As indicated in the above table and crash diagram there were 28 crashes in the general location of this intersection. There were fourteen angle crashes and fourteen rear end crashes.

The large number of right angle collisions experienced at the signalized intersection was attributed to permissive left turns. The timing has since been revised to only allow protected left turns.

The median opening at Sterling Point Drive should be closed. It is located too close to the signalized intersection. Queued vehicles can obstruct the view of vehicles attempting to make a left turn from Sterling Point Drive. The presence of the left turn lane for Sterling Point Drive beginning at the intersection for the Wal-Mart also creates additional confusion.



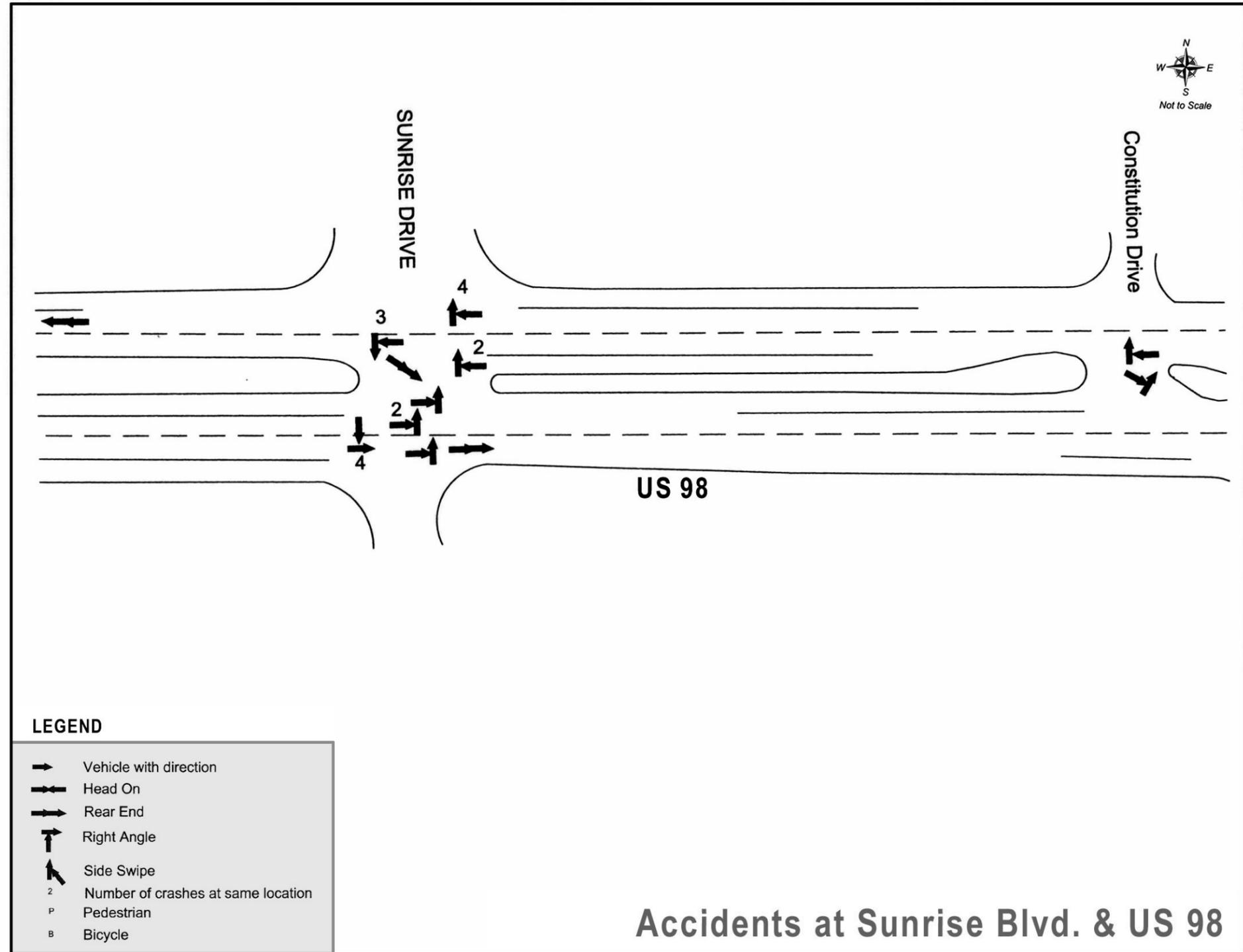
US 98 at Sunrise Drive

Type of Crash	Number of Crashes
Right angle	17
Sideswipe	0
Rear End	3
Head-on	0
Total	20

As indicated in the above table and crash diagram there were 20 crashes in the general location of this median opening. There were seventeen angle crashes and three rear end crashes.

A study was conducted at this intersection in the fall of 1998 that recommended the installation of a signal. The study found that this intersection met the MUTCD signal warrants #2 and #6. The study also determined that 6 of the 11 crashes reported in the study at this location were correctable. Based on the study findings and recommendation, a traffic signal was installed.

Sidewalks are currently planned within Holley By the Sea to extend to the Sunrise Drive / US 98 intersection. Pedestrian features should be added to the signal and a sidewalk along US 98 from the signalized intersection to the entrance of the recreation center should be provided.



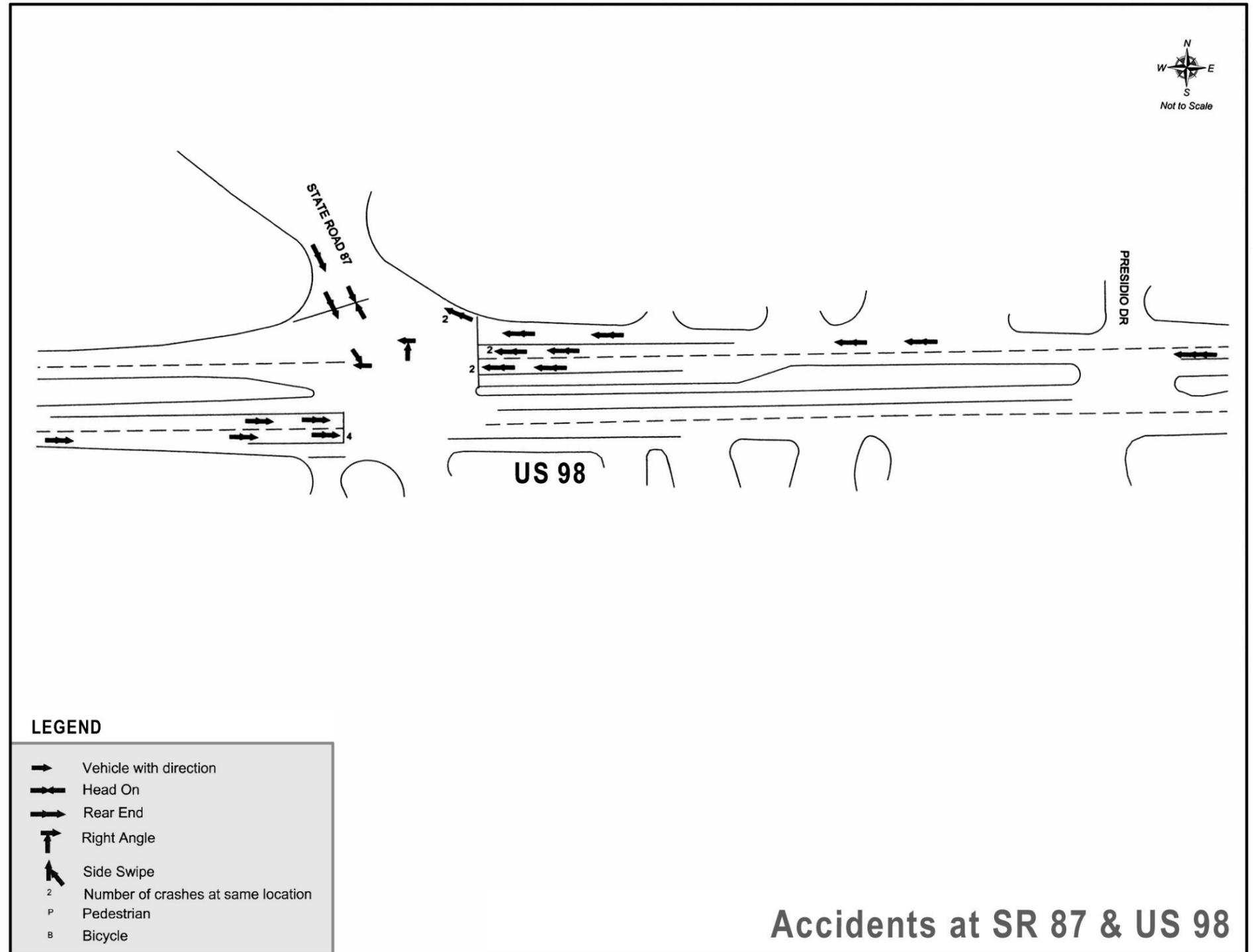
US 98 at SR 87 (East Leg)

Type of Crash	# of Crashes
Right angle	2
Sideswipe	0
Rear End	22
Head-on	1
Total	25

As indicated in the above table and crash diagram there were 25 crashes in the general location of this median opening. There were two angle crashes, twenty-two rear end crashes and one head-on crash.

Most of the crashes at the intersection were rear end crashes that are usually the result of congestion. Close driveway spacing can contribute to these types of collisions due to vehicles suddenly entering or exiting the highway from multiple locations. The Navarre area of US 98 has many developments with multiple driveways. As many driveways as possible should be consolidated to reduce the hazardous conditions.

The signal is being relocated to the west as a part of the SR 87 project. This median opening will be converted into a directional opening allowing only westbound left turns.

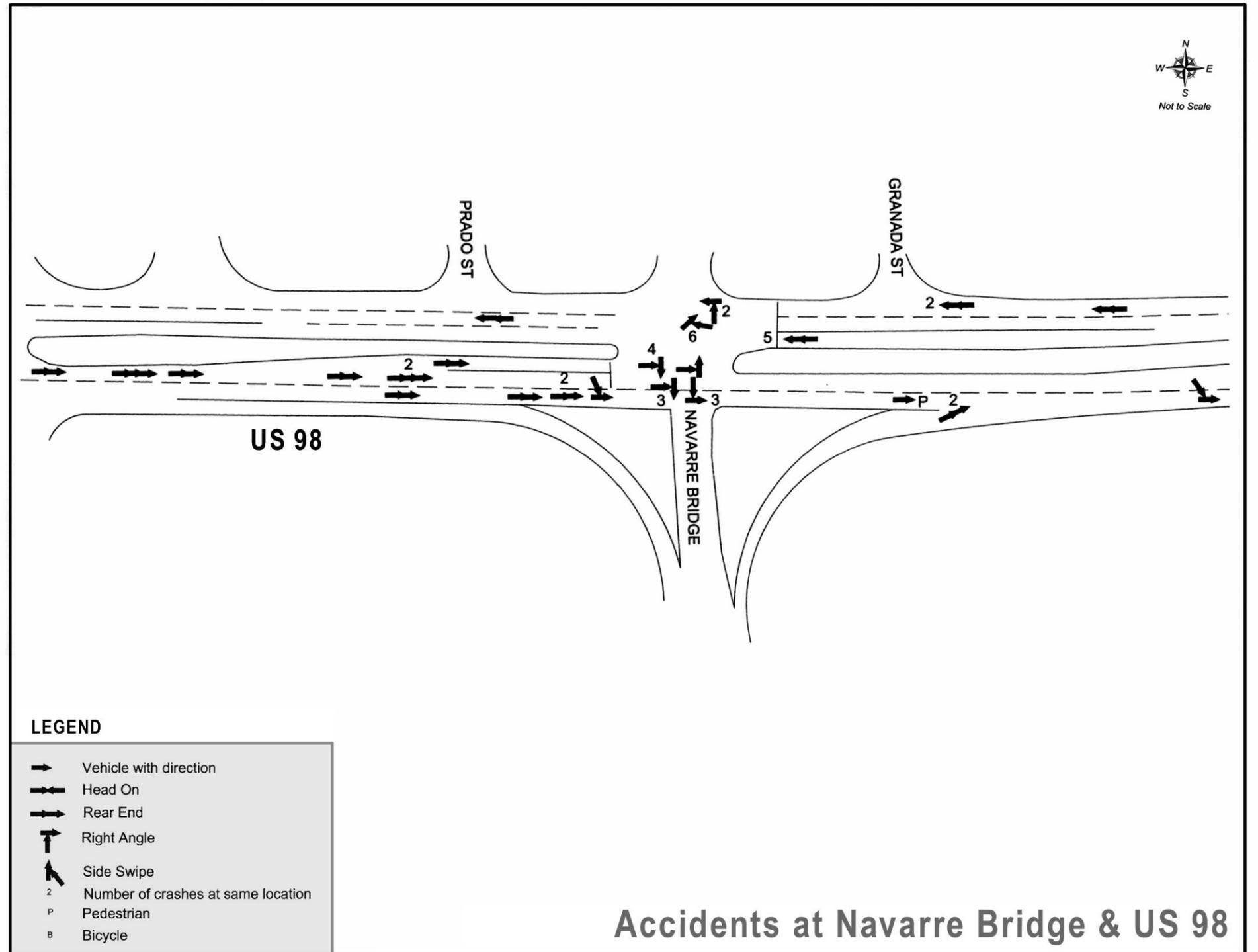


US 98 (SR 30) at Navarre Bridge

Type of Crash	# of Crashes
Right angle	21
Sideswipe	0
Rear End	22
Head-on	0
w/ Pedestrian	1
Total	44

As indicated in the above table and crash diagram there were 44 crashes in the general location of this intersection. There were twenty-one angle crashes, twenty-two rear end crashes and one crash involving a pedestrian. The rear end crashes occurring farther back from the intersection were likely contributed to by congestion. Several of the driveways in this area should be closed in order to reduce the number of conflict points in the Navarre area.

The number of right angle collisions occurring at the intersection over the 2 1/2 year period shows that this intersection needs a detailed safety study of its operations. It is likely that the use of permissive left turns at this intersection contributed to several of the right angle collisions. The use of permissive left turns, the northbound right free flow movement and its proximity to Pullum Street (weaving issues), and the lack of pedestrian facilities along US 98 and at the signal should be included in any subsequent study of the intersection.



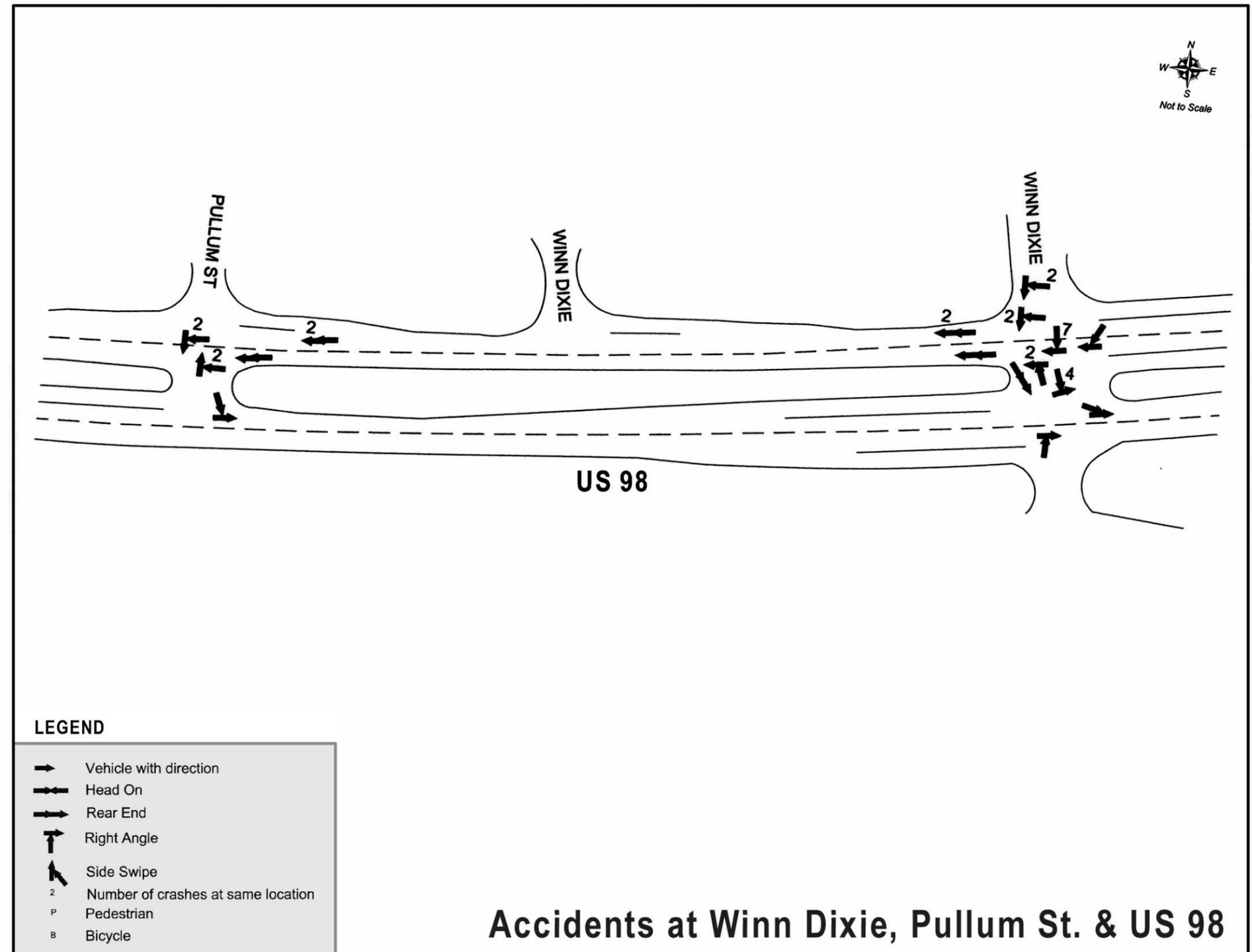
US 98 (SR 30) at Winn Dixie Entrance and Pullum Street

Type of Crash	# of Crashes at Pullum St	# of Crashes at Winn Dixie	Total
Right angle	5	18	23
Sideswipe	0	2	2
Rear End	3	4	7
Head-on	0	0	0
Total	8	24	32

As indicated in the above table and crash diagram there were 8 crashes at the Pullum St median opening and 24 crashes at the Winn Dixie main entrance/exit.

A study was conducted of this area in the fall of 1998 that found that the Winn Dixie entrance met the MUTCD signal warrants #2 and #6. The study recommended that the developers be required to install a left-through and right turn lanes exiting Winn Dixie (on the north approach) and a centerline and stop bar at the Cowboys Restaurant exit (south approach). The study referenced that there had been 8 correctable crashes within a one-year period at this location. Based on the study, a signal was installed at this location. To further improve the operation and safety of this intersection, HDR recommends that the east and westbound turn lanes be extended.

HDR also recommends that an emergency actuated traffic signal be installed at Pullum Street because it serves as the main access to US 98 for the Holley-Navarre Fire Department. The location of Pullum Street in close proximity to the free flow northbound right from the Navarre Bridge and evidence of some accident history justify a reevaluation of a regular traffic signal at this location.



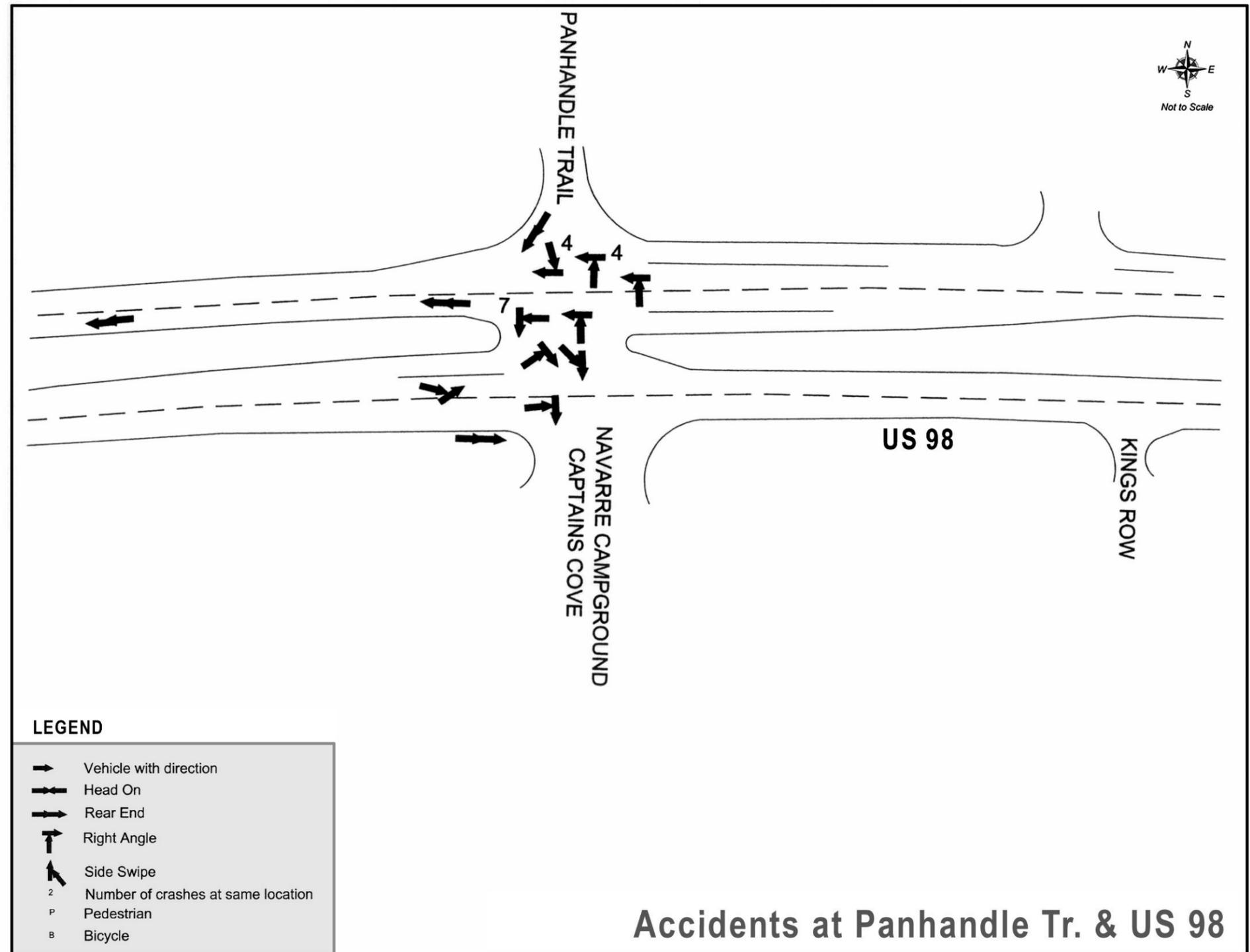
US 98 at Panhandle Trail

Type of Crash	Number of Crashes
Right angle	19
Sideswipe	2
Rear End	4
Head-on	0
Total	25

As indicated in the above table and crash diagram there were 25 crashes in the general location of this median opening. There were nineteen angle crashes, two sideswipe crashes, and four rear end crashes.

A study of this intersection conducted early in 1999 found that the intersection met the MUTCD signal warrants #2 and #6. This study concluded that there were 10 correctable crashes at this intersection in 1997-98. The study recommended the construction of a southbound right turn/deceleration lane, placement of a stop bar and new stop sign on the southbound approach to US 98 and the installation of a signal at this intersection. The traffic signal has since been installed. Most of the right angle conflicts at this intersection should be alleviated by the signal installation.

HDR also recommends the extension of the east and west bound left turn lanes to further alleviate some of the typical contributing factors to crashes (congestion and slowing or stopped vehicles in the through lanes) at this intersection.



Section 4.0 – Community Involvement

Community input is an integral part of the Corridor Management Report process. Community involvement for the project consisted of the formation of a Corridor Management Team, public meetings, presentations to small groups, one-on-one meetings with property owners along the corridor, presentations to the Santa Rosa County Board of County Commissioners, the Pensacola MPO, media coverage, and the use of the MPO website.



Corridor Management Team Meeting on December 12, 2000

The original Corridor Management Team (CMT) was formed in 1999 as a result of concern due to some highly publicized accidents on US 98. This team was continued and additional appointments were made by the MPO at the initiation of this study. The CMT includes technical, citizen and business owner representation. The technical group includes representatives from FDOT District 3 (Pensacola Urban Office and Traffic Operations), Santa Rosa County (Planning and Engineering) and the MPO. The CMT assisted in identifying key issues along the corridor as well as providing feedback on the initial corridor improvement recommendations.



Corridor Management Team Meeting on December 12, 2000

Public meetings were held to explain the purpose of the study, identify issues, present recommendations, and to collect public comments. A public meeting was conducted on March 8, 2001 at the Holley By the Sea Recreation Center. The meeting was advertised in the Pensacola News Journal. A formal presentation was made to the citizens in attendance followed by questions from the citizens. The presentation included a viewing of the video "Managing our Highways" which was produced by the FDOT. The video was shown to provide the public with a general understanding of the purpose and concepts of access management. The preliminary recommendations along the corridor were on display for the citizens to view.

Presentations were also made by the MPO to the Navarre Chamber of Commerce and the Gulf Breeze Chamber of Commerce in April 2001. The presentations included an explanation of the project and question and answer sessions.

Media Coverage to raise awareness of the project also occurred through both the Pensacola

News Journal and local television stations. The Public Meetings were advertised in the Pensacola News Journal and articles about the meetings were written. Local television media were in attendance at several of the meetings.

The Pensacola MPO Website displayed the recommended plan sheets and provided the ability for the public to email comments from the site. Public Comments were solicited throughout the public involvement process. Approximately 50 individual comments were received and were taken into account during the development and refinement of the corridor access plan.

In addition to the public meetings, presentations were made to Santa Rosa County Commission and the Pensacola MPO Board. The draft US 98 CMR and recommended improvement plan was presented at these meetings. Based on comments received at these meetings, the report was completed and a final US 98 CMR document was prepared.

Section 5.0 – Recommended Access and Operational Modifications

The purpose of access management is to achieve safer and more efficient traffic flow by regulating access. This is done by managing the location and design of street connections, driveways, and median openings. The keys to good access management for arterial roadways, such as US 98, are to minimize conflict points along the corridor, provide ample spacing between heavy conflict areas and to minimize the number of trips that have to access the arterial for short distances.

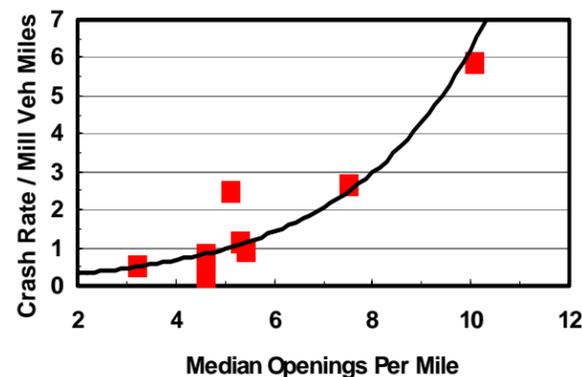
5.1 Benefits of Access Management

The key benefits of access management are increased safety and enhanced traffic operations. The implementation of access management techniques can also serve to enhance the overall aesthetics of a corridor.

Safety

Studies have shown that the use of good access management has reduced the rate and severity of accidents along corridors. A study of US 41 in Lee County, Florida showed the correlations between the crash rate per million vehicle miles and the number of median openings per mile.

**Median Openings and Crashes
US 41 - Lee County, Florida**



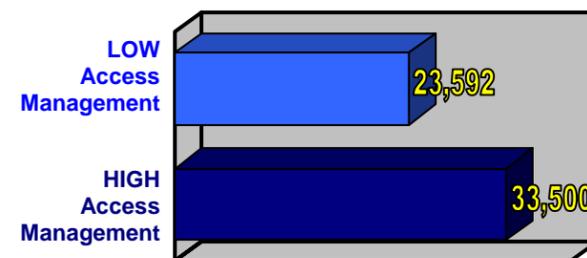
Source: W. Millard PE 1993

As can be seen, the number of crashes per million vehicle miles increases as the number of median openings per mile increases.

Increased Arterial Capacity

Studies have also shown that corridors with good access management experience an increase in vehicle capacity compared to corridors with poor access management. The chart prepared by the FDOT shows how a four lane arterial can increase its capacity by approximately 10,000 vehicles per day through the use of good access management techniques.

Increased Roadway Capacity



Maximum Daily Traffic at LOS "D" on 4-Lane Road

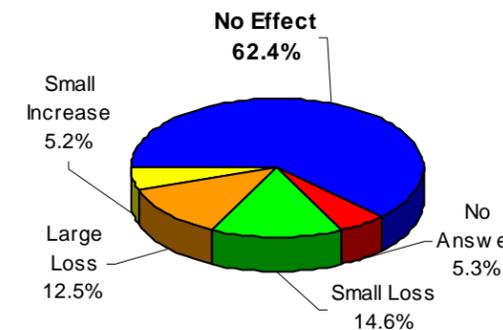
Source: FDOT and 1985 Highway Capacity Manual

As previously discussed, US 98 is not scheduled for widening for several years. As increased development along the corridor continues, traffic along the corridor will also grow, resulting in increased congestion. Access management can help in providing additional capacity along the corridor and reduce congestion. Increased congestion has a detrimental effect on an area, especially an area that serves as a bedroom community to employment centers in Pensacola and Fort Walton Beach. If the congestion continues to grow unmanaged, then commute times will increase and the desirability of an area could

decrease and could cause property values to decline because fewer commuters would be willing to accept the longer travel times.

Implementation of access management techniques has often been a cause for concern from adjacent business owners that reduced access to the arterial will result in an adverse economic impact on their business. Studies have shown that the majority of business owners experience no or minimal impact to their business. Surveys of business owners who are adjacent to corridors that have undergone access modifications were conducted in FDOT District 4. The pie chart displays the results of the survey.

**Survey of Adjacent Businesses
FDOT District 4 Median Retrofit**



Source: FDOT District 4 Traffic Operations

Sixty two percent of the adjacent property owners surveyed believed the access modifications had no effect on their property.

Destination businesses are the least likely to be impacted by decreased access because patrons are still going to go to their favorite commercial establishment even if they are required to make a U-turn. The minor additional delay incurred by the U-turn is not typically enough to result in a

patron to decide not to frequent the business. However if poor access management was present on the corridor, resulting in increased delay and travel times along the corridor, then patrons may decide not to visit the establishment in a part of the corridor because the overall time to travel to the destination business has increased. Therefore the patron may choose to frequent businesses in a different part of the region.

Aesthetics

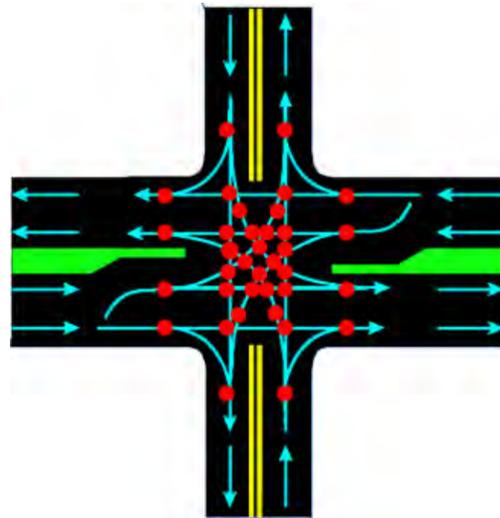
Limiting the number of driveways and median openings results in a reduction in the amount of asphalt along the corridor. This provides the opportunity for additional landscaping. Several access management projects throughout the State have incorporated streetscape and landscape treatments.

5.2 Principles of Access Management

Conflict Points and Median Openings

A conflict point is defined as a location where there is a potential for two vehicle paths to cross and thus a potential accident location. Drivers can only perceive and react to a limited number of other vehicle movements at a time. Conflict points along the corridor can be reduced by adding a median where one is not present and by the elimination of driveways and median openings, or through the installation of directional median openings along the arterial. Each full median opening has 36 potential conflict points. If the median opening is signalized, there are 22 conflict points. Limiting the number of conflict points at intersections along the corridor provides for increased safety because it reduces the number of places where vehicles can collide.

Full Median Opening

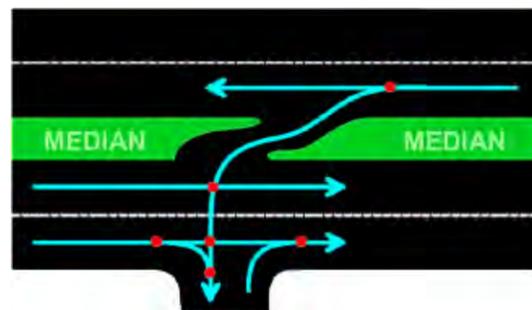


36 Conflict Points
22 Conflict Points if Signalized

Source: *FDOT Access Management Overview*

The use of directional median openings reduces the number of conflict points at an intersection, with one side street connection, to 6 places where vehicle paths can cross.

Directional Median Opening



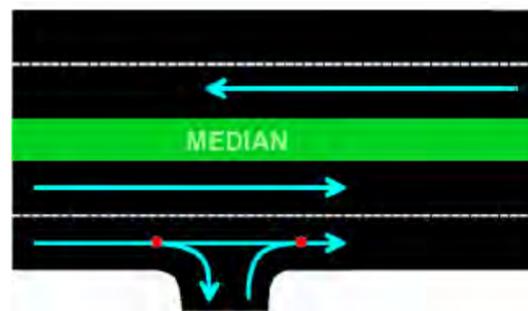
6 Conflict Points

Source: *FDOT Access Management Overview*

Although the use of directional median openings increases the number of u-turns, safety is improved because left turns across full median openings have been reduced and vehicles are now able to break up the left turn across the median opening into two separate movements (right turn onto US 98 & U-turn across US 98) and are able to perceive and react to gaps along US 98 one direction at a time. Left turning vehicles at full median openings must contend with finding a gap in both directions along US 98 at the same time or make a two stage left turn using the median opening as a refuge. However, the movement into the center of the median opening has potential conflicts due to vehicles that may be approaching from the opposite side street or turning left onto the side street from US 98. In many instances along US 98 there is insufficient storage space in the median opening, which creates additional conflicts with through traffic when vehicles "hang out" into the travel lanes.

The use of right in/right outs along the corridor further reduces the conflict points at an intersection, with one side street connection, to a total of 2 conflict points.

Right In / Right Out



2 Conflict Points

Source: *FDOT Access Management Overview*

Right in/right out connections further increase the number of U-turns, however, they provide the benefit of reducing the conflict points while providing the access to the connection via the use of U-turns.

Access Spacing

Increasing the spacing between conflict points along the corridor increases the overall safety of the corridor by providing more time for vehicles traveling along the corridor to be able to perceive each isolated conflict area.

The FDOT access classification system is found in Chapter 14-97 of the Florida Administrative Code. FDOT has classified each study segment of US 98 based on the function it is intended to serve.

FDOT Spacing Standards

Segment ID	FDOT Access Class.	Median Opening Spacing Standards	
		Directional	Full
A	5	660'	1320'
B	5	660'	1320'
C	3	1320'	2640'
D	3	1320'	2640'
E	3	1320'	2640'
F	3	1320'	2640'
G	3	1320'	2640'
H	3	1320'	2640'

Access classes 3 and 5 apply to roadway segments with restrictive medians, meaning that turning movements are limited. For each access class, spacing standards have been established for directional and full median openings. These standards can differ based on the posted speed limit.

5.3 Corridor Issues

Median Opening Spacing

Access spacing standards are intended to reduce the median opening and driveway spacing (i.e. total number of conflict points) along a corridor. As discussed earlier, US 98 was constructed prior to adoption of FDOT access management standards. The intent of this report is to retrofit the corridor to try to achieve the median spacing standards while being sensitive to the existing developed property along the corridor.

Joint/Cross Access

Another issue related to the US 98 corridor is the lack of cross access connections between adjacent commercial and residential developments. In several instances along the corridor there are opportunities for abutting land uses to share access. This sharing of access and provision of cross access easements will result in a safer corridor by reducing the number of curb-cuts and the potential for turning conflicts on the arterial.



Cross Access Opportunity East of Harvard Drive

Wide Undefined driveways

Some driveways accessing US 98 are currently wide and undefined. Wide and undefined driveways are an operational hazard because of driver expectancy problems. Drivers are not able to clearly identify where other drivers should be accessing or leaving the highway. This lack of a defined access to and from the corridor can also cause safety issues for pedestrians and bicyclists along the corridor due to the uncertainty of where vehicles may be leaving the highway.



Wide Undefined Driveway at Tom Thumb on West Approach to College Parkway

Lack of Turn Lanes

The corridor also lacks deceleration lanes at several of the median openings and driveways. The presence of deceleration/turn lanes are important operational and design considerations along an arterial roadway, such as US 98, with large traffic volumes and high travel speeds.



Lack of Left Turn Decel Lane at Harvard Dr

5.4 Recommended Improvement Plan

Process of Developing Recommendations

The first step in the development of the access plan for US 98 was to review the existing median opening and driveway spacing along the corridor relative to the FDOT access spacing standards discussed in Section 5.2. However, due to the existing development adjacent to the corridor, achieving the FDOT standard for access spacing is difficult. Therefore, an access plan that would improve the safety and operation of the corridor while trying to adhere as closely as possible to standards yet providing reasonable access was developed.

A determination of which access connections should be provided or maintained was made based on the following inputs: FDOT spacing standards, adjacent development, crash history, qualitative field review and peak period traffic counts. An operational analysis was performed at several critical intersections along the corridor to quantify the shifts in traffic and to ensure that the proposed infrastructure of median openings and turn lanes could accommodate the traffic volumes. The Highway Capacity Software (HCS) was used to analyze the operating conditions of these intersections (summary of results is in Appendix B). The results of this operational analysis indicate that each analysis location will continue to operate at an acceptable level and will not be significantly impacted by the recommended access modifications.

Additionally, operational issues such as the lack of deceleration turn lanes or undefined driveways were addressed as part of the corridor access recommendations. Joint and cross access opportunities were identified based on a review of the aerial photography, fieldwork, previously identified issues and public comments.

Issues and Recommendations

The access modifications and operational improvements developed for the US 98 study corridor are summarized in Table 5-1. The issues identified for each median opening and improvement location are also summarized in Table 5-1. The recommended corridor improvements are presented on the aerial base maps in Figure 5-1.

A preliminary was provided to the applicable review agencies and was also presented to the public at a meeting held at the Holley By the Sea Recreation Center on March 8, 2001. These plans were made available for the public to view on the Pensacola MPO's web site. The public comment period extended through April 6, 2001. During this period, both the MPO and HDR collected comments from review agencies and the public through e-mail, written comments, one-on-one meetings with property owners, small group meetings and phone calls. All of the public and agency comments were reviewed and taken into consideration and a number of modifications were made to the draft plan. The recommended plan, shown in Figure 5-1, reflects the changes made to the preliminary plan due to public and agency comments.

**Table 5-1
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
1	East of Gulf Breeze	No turn lanes are provided. Need turn lane to serve U-turns for EB traffic desiring to head back to Gulf Breeze.	Close median opening. Relocate to #1A as a directional opening, allowing only EB U-turns, 1,320' from the previous median opening in Gulf Breeze.
1A	East of Gulf Breeze	<i>(Recommended new median opening)</i>	New directional median opening allowing only EB U-turns. Located 1,320' from the previous median opening in Gulf Breeze. Add an EB left turn lane.
2	N. Park Entrance	No issues identified.	Maintain existing median opening configuration. Add a NO U-TURN sign for WB traffic.
3	Visitor Center Entrance	No issues identified.	Maintain existing median opening configuration. Add a NO U-TURN sign for EB traffic.
4	Visitor Center Exit	Existing directional median opening allowing only NB left turns out of the Visitor Center. An acceleration lane exiting the Visitor Center is provided.	Maintain existing directional median opening configuration. Add a NO LEFT TURN sign for WB traffic and a NO U-TURN sign for EB traffic.
4A	1,320' W. of Bayshore Rd.	<i>(Recommended new median opening)</i>	New directional median opening allowing only WB U-turns. Located 1,320' from the median opening at Bayshore Rd. (#5). Add a WB left turn lane.
5	Bayshore Rd.	Growing demand on US 98 is increasing congestion and making access more difficult. Vehicles observed trying to turn left out of the Tom Thumb heading WB - dangerous condition. Tom Thumb in the SW corner and development in the NW have large undefined driveways.	Convert to a directional median opening allowing only EB and WB left turns. Reduce the driveway widths for the Tom Thumb in the SW corner and the development in the NW corner.
6	Gondolier Blvd.	EB left turn lane and WB left turn lane may be too short. NB traffic restricted by lane widths - diminished use of the double left turn lanes which reduces side street capacity. No designated NB right turn lane. Regions Bank driveway is in close proximity to the intersection in the SW corner and too wide to provide appropriate control and meet driver expectation. Signal timing in a.m. causes long delays for WB traffic on US 98. Conflicting LT paths heading N-S and E-W. Need improved backbone access to businesses S. of US 98.	Extend EB and WB left turn lanes. Add a dedicated NB right turn lane. Reduce the Regions Bank driveway width to 24'. Conduct a study to evaluate the signal phasing/timing and ped features. Median modifications to approaches should be made. Conduct study to evaluate feasibility.
7	Gulf Breeze Masonic Lodge	Potential for adjacent business to travel WB in the EB lane to access the median opening.	Convert to a directional median opening allowing only WB left turns.
8	Grand Point East	A directional median opening has recently been installed that allows only EB left turns into Grande Point East.	Maintain existing EB directional median opening.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
9	Sanibel Ln.	Very close proximity to median opening #10 (Villa Woods Circle). Sanibel Lane does not align with Villa Woods. EB left turn lane may not be long enough. Unlimited access to businesses W. of Sanibel Ln. creates confusion and impacts driver expectation. Vehicles from commercial development in the N.W. corner have been observed to travel EB in WB lanes to access opening #9.	Close median opening #10. Explore future realignment of Sanibel Lane to create a plus intersection between two roads. Extend EB left turn lane. Limit access to development in the NW corner to 2 defined driveways.
10	Villa Woods Circle	Very close proximity to median opening #9 (Sanibel Ln.). An EB right turn lane into Villa Woods, a sizable multifamily unit community, is not provided. Drainage ditch S. of US 98 could conflict with construction of an EB right turn lane into Villa Woods Circle. Driveways for Whistler's Walk and Gene's Floor Coverings are located too close to the intersection S. of US 98.	Close median opening. Add an EB right turn lane, if feasible. Close and/or narrow extra driveways.
11	Great Oaks Dr. / Marble Ct.	Substandard median opening spacing. Tiger Trace homeowners (through a petition to FDOT & WFRPC) request a full median opening and traffic signal at the Tiger Trace entrance. (E. of #11) The school bus stop on the N. side in the WB direction is a traffic hazard.	Convert to a directional median opening allowing only EB and WB left turns. Provide a service road parallel to the S. of US 98 that would connect Tiger Trace to the Santa Rosa Plaza and to Crane Cove Blvd. Relocate bus stop to N. of intersection on Marble Court.
12	Whisper Bay Blvd.	Potential for alternative access S. of US 98 to new development located on Crane Cove Blvd. Whisper Bay Blvd. is not properly aligned with the Santa Rosa Plaza entrance.	Provide a service road parallel to the S. of US 98 that would connect Tiger Trace to the Santa Rosa Plaza and to Crane Cove Blvd. Realign Santa Rosa Plaza driveway.
13	Santa Rosa Plaza (East)	Substandard median opening spacing. No WB left turn lane is provided.	Close the median opening.
14	Crane Cove Blvd.	Potential for connection to Ramblewood. Potential sight distance problem looking to the W. from Crane Cove Blvd.	Explore possible future connection to Ramblewood. Conduct intersection safety study.
15	Rose Lawn Cemetery	Substandard median opening spacing - conflicts with Crane Cove Blvd. WB left turn lane. No EB left turn lane or right turn lane is provided.	Close the median opening and provide cross access to #14.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
16	Ramblewood Ln.	Substandard median opening spacing. Potential for a cross-access connection between Church of Church and the Rose Lawn Funeral Home to the W. Potential connection to Crane Cove.	Close the median opening. Provide a cross access connection between the Church of Christ and the Rose Lawn Funeral Home. Explore possible future connection to Crane Cove Blvd.
17	Church of Christ	Substandard median opening spacing - conflicts with the operation at opening #16.	Close the median opening.
18	Rancho Villa Dr.	No WB right turn lane into the North Ridge Ranchettes. Does not meet spacing for full median opening. Driveway for the Commercial Gulf Technical Services in N.E. is located too close to the intersection - access is provided to Rancho Villa Dr. No access is provided to the Gulf Breeze Medical Center from Rancho Villa Drive. EB left turn lane short.	Add a WB right turn lane. Convert to directional. Close the Commercial Gulf Technical Services driveway connection on US 98. Provide a connection to Rancho Villa Dr. from the Gulf Breeze Medical Center Clinic in the N.W. corner. Extend EB left turn lane.
19	Speedy Oil Change	Median openings #19 and #20 are very closely spaced and in close proximity to the signal at #21. Cross access is not provided. Cross access is not provided.	Close the median opening. Provide a cross access connection N. of US 98 between the Commercial Gulf Technical Services and the Breeze Plaza to the E. Provide a cross access connection S. of US 98 between the Speedy Oil Change & Car Wash and the Subway to the E.
20	Breeze Plaza	Median openings #19 and #20 are very closely spaced and in close proximity to the signal at #21.	Close the median opening.
21	CR 191 A / Oriole Beach Rd.	EB left turn lane may not be long enough. No lane designation for the NB through movements. Signal timing in AM peak hour causes significant delay for WB traffic on US 98. WB left turns queue back into through lanes due to delay associated with unloading at Oriole Beach Elementary School located to the S. Oriole Beach Rd. offset from the Breeze Plaza driveway to the N. Sight distance issue traveling SB from the Breeze Plaza due to grade differences and the crest in the roadway. Possible connection to Harvard from Breeze Plaza.	Extend EB left turn lane. Restripe NB approach. Conduct an intersection operational analysis and safety study and evaluate ped features. Explore connection through Gulf Power property.
22	Harvard Dr.	Sight distance problem for vehicles traveling SB - especially left turns.	Convert to a directional median opening allowing only EB left turns.
23	Wendy's	Sight distance issue when traveling NB between Wendy's and Papa John's. EB left turn lane is inadequate.	Convert to a directional median opening allowing only EB and WB left turns. Extend EB left turn lane.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
24	Animal Center	Bullet-nose median opening with no deceleration lanes. A frontage road exists along the N. side of US 98 from Ole South Pancake House to McDonald's - no defined access to US 98 & conflicts with the signalized College Pkwy./US 98 intersection.	Close the median opening. Extend frontage road W. to Papa Johns. Eliminate driveway connections to US 98 between Papa Johns and College Pkwy.
25	CR 399 / College Pkwy.	NB left turn bay is too short. SunTrust median opening on College Pkwy. S. of US 98, conflicts with intersection. The N. SunTrust driveway connection to College Pkwy. is too close to the intersection. Tom Thumb, in SW corner, has a wide, undefined driveway which conflicts with operation of the intersection. Midway Fire is relocating on South College Parkway. There is confusion caused by the crossing of the frontage road on the N. side of the intersection. Pedestrian crossing markings are faded. Signal timing in the AM peak hour causes long delays for WB traffic on US 98.	Evaluate northbound left storage as a part of intersection study. Close SunTrust median opening on College Pkwy. Close the N. SunTrust driveway connection to College Pkwy. Create defined driveway connections from Tom Thumb on US 98 and on College Pkwy. Evaluate Fire Department needs at intersection. Extend the median on the N. College Pkwy. approach further S. in order to prohibit traffic from crossing College Pkwy. on the frontage road. Restripe pedestrian crossing pavement markings. Conduct a study to evaluate the signal phasing/timing and Ped Features.
26	Winn Dixie Plaza (W.)	4 closely spaced median openings (#26, #27, #28 and #29).	Close the median opening.
27	Winn Dixie Plaza (E.)	4 closely spaced median openings (#26, #27, #28 and #29). The WB left turn lane may not be long enough. A cross-access connection does not exist between Discount Auto and Arby's.	Convert to a directional median opening allowing only EB and WB left turns. Extend the WB left turn lane. Provide a cross access connection N. of US 98 between Discount Auto Parts and Arby's.
28	El Rito Dr.	Continuous WB right turn lane across intersection. 4 closely spaced median openings (#26, #27, #28 and #29). EB left turn lane may not be long enough. El Rito Drive is offset from the Winn Dixie driveway.	Provide hatched channelization striping to discourage use as through lane. Maintain full median opening. Extend EB left turn lane. Realignment not likely due to existing development.
29	Burger King	4 closely spaced median openings (#26, #27, #28 and #29). Burger King does not access El Rito Dr.	Close the median opening. Provide a driveway connection to El Rito Dr. from the Burger King.
30	Country Club Rd.	Potential signal location.	Maintain full median opening.
31	Breezy Wind Dr.	In close proximity to median opening at Red Fish Point Rd. (#32). Location serves as a polling precinct which places extra demand on WB left turn lane.	Convert to a directional median opening allowing only EB and WB left turns. Extend EB and WB left turn lanes.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
32	Red Fish Point Rd.	Substandard median opening spacing. Lack of WB left turn lane	Convert to EB and WB directional. Add WB left turn lane.
33	Tiger Point Blvd.	Two closely spaced, offset, T-Intersections, each with a median opening (#33 & #34). Only a short EB deceleration taper is provided.	Maintain full opening. Add an EB left turn lane.
34	Oak Hill Rd.	Two closely spaced, T-Intersections, each with a median opening (#33 & #34).	Close the median opening.
35	Sterling Point Dr.	In close proximity to signalized intersection at SR 281 (#36). Sight distance is poor due to queued vehicles turning left on SR 281 at #36. Extremely short weave section for SB vehicles on SR 87 turning right and then making an immediate left into Sterling Point Dr.	Close the median opening.
36	SR 281 / Garcon Point Bridge Connection	Excessive queues observed for WB traffic turning left into the Wal-Mart. Excessive queues observed for NB traffic exiting from Wal-Mart.	Add new directional median opening (#36A) at the existing Wal-Mart right in/out driveway that allows WB left turns. Retime the signal as a N-S split phase. Restripe and reconfigure S. approach as NB left turn lane and a shared NB left-through lane and a right turn lane.
36A	Wal-Mart (East)	<i>(Recommended new median opening)</i>	New directional median opening at the existing Wal-Mart right in/out driveway that allows WB left turns.
37	Portside Dr.	A STOP bar missing on Portside Dr. (N. approach).	Restripe STOP bar on the N. approach.
38	Baywoods Rd. / Tiger Lake Rd.	In close proximity to the median opening at Tiger Point Blvd. East (#39) Tiger Lake Rd. is offset to the W. with no access to the median opening.	Convert to a directional median opening allowing only EB and WB left turns. Realign Tiger Lake Rd. to the S. and Baywoods Rd. to the N.
39	Tiger Point Blvd. E.	Potential connection to the north of US 98 at intersection to Magnolia Manor and Bal Alex. Identified as signal location.	Explore future connection. Signal being installed.
40	Magnolia Manor Dr.	In close proximity to the opening at Tiger Point Blvd. East (#39).	Close the median opening and explore connection of Magnolia Manor to Tiger Point (east) intersection.
40A	1200' east of Tiger Point Blvd. (east)	Recommended directional median opening.	Median opening to accommodate U-turns without requiring excessive driving distances.
41	Bal Alex Ave.	In close proximity to median opening at Soundside Dr. (#42). EB left turn lane may not be long enough. There are a number of closely spaced driveway openings in the NW corner - most have access to Williams Rd. to N.	Convert to a directional median opening allowing only EB left turns. Extend EB left turn lane. Eliminate 2 driveways, provide cross access connection to parcel on the W.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
42	Soundside Dr.	No EB left turn lane is provided. There is the potential for connecting Bal Alex subdivision opposite Soundside Dr. in order to create a 4-leg intersection.	Add a NO LEFT TURN sign for EB traffic only 300' to Bal Alex - too short for turn lane. Provide a connection from the Bal Alex on the Bay subdivision, N. of US 98, to align with Soundside Dr.
43	Central Pkwy.	In close proximity to median opening at Hickory Shores Rd. (#44) Inadequate EB and WB left turn lanes.	Convert to a directional median opening allowing EB and WB left turns. Extend EB and WB left turn lanes.
44	Hickory Shores Rd.	In close proximity to median opening at Central Pkwy. (#43)	Convert to a directional median opening allowing only EB left turns.
45	Ocean Breeze Ln.	No issues identified.	Maintain full median opening.
46	Tradewinds Dr.	In close proximity to median openings at Ocean Breeze Lane (#45) and at Beechwood Dr. (#47).	Close the median opening.
47	Beachwood Dr.	In close proximity to median opening at Trade Winds Dr. (#46) and Kittyhawk Drive (#48). No WB left turn lane for U-turning vehicles. Large gravel area on the S. side which services several commercial establishments - need better defined driveways.	Convert to a directional median opening allowing only EB and WB left turns. Add a WB left turn lane. Limit driveway width for the commercial establishments S. of US 98.
48	Kittyhawk Dr.	No EB left turn lane is provided.	Add an EB left turn lane & Maintained Full Median Opening.
49	Mohawk Tr.	In close proximity to median opening at Mohawk Tr. (#49) at Kittyhawk Dr. (#48). No WB left turn lane is provided for U-turning vehicles. Potential connection between Beaver Pond and Mohawk.	Convert to a directional median opening allowing only EB and WB left turns. Add WB left turn lane. Explore connection.
50	New Hope Rd.	In close proximity to median opening at Mohawk Trail (#49) and Nantahala Beach Rd. (#51).	Convert to a directional median opening allowing only EB and WB left turns.
51	CR 191C / Nantahala Beach Rd.	No EB left turn lane is provided for U-turning vehicles. Sioux Trail does not align with opening.	Add an EB left turn lane. Consider realigning Sioux Trail across from opening.
52	1400' E. of Nantahala Beach Rd.	Rural Metro Ambulance north of opening. Bullet-nose median opening with no turn lanes.	Maintain full opening. Add EB left turn lane. Add WB left turn lane.
53	Kell Rd.	In close proximity to full median opening (#52). EB left turn lane may not be long enough. No WB right turn lane is provided.	Convert to a directional median opening allowing only EB and WB left turns. Extend EB left turn lane. Add WB right turn lane.
53A	Woodlawn Heights	Main Access to Middle School	Add Full Median Opening with LT Lanes

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
54	Wheeler Rd.	In very close proximity to median opening at Abercrombie Rd. (#55) and Woodlawn Heights (#53A). No WB left turn lane is provided.	Close the median opening.
55	Abercrombie Rd.	No WB left turn lane is provided for U-turning vehicles. EB left turn lane may not be long enough. Fire station located on Abercrombie Road. Fire station may be relocation.	Add a WB left turn lane. Extend EB left turn lane. Maintain full median opening. Convert to EB and WB directional after relocation of fire station.
56	SR 399 / East Bay Blvd.	No WB left turn lane is provided for U-turning vehicles.	Add NO LEFT TURN sign for WB traffic.
57	Woodlawn Beach Rd.	No EB left turn lane is provided.	Add EB left turn lane.
58	Midway Baptist Church	In close proximity to the median opening at Woodlawn Beach Rd. (#57) No EB left turn lane is provided. WB left turn lane may be too short.	Convert to a directional median opening allowing only EB and WB left turns. Add an EB left turn lane. Extend WB left turn lane.
59	Oak Dr.	No EB left turn lane is provided for U-turning vehicles.	Add an EB left turn lane.
60	Zoo	Not location of Flea Market's main access. WB left turn lane is too short. EB right turn lane into the Zoo appears to be too short. No EB left turn lane is provided.	Change Flea Market's main access to this opening to create a plus intersection. Extend WB left turn lane. Extend EB right turn lane. Add an EB left turn lane.
61	Flea Market	In close proximity to the median opening at the main Zoo entrance (#60). EB left turn is too short.	Convert to a directional median opening allowing only EB and WB left turns. Extend EB left turn lane.
62	County Health Department	In close proximity to the median opening at America Ave. (#63). Serves County Health Department to the N. and the County Service Center to the S.	Maintain full median opening until additional access of County facilities is added. Provide access from County facilities to the N. and S. to the median opening at American Ave. (#63)
63	America Ave.	In close proximity to median opening #62. WB left turn lane is not provided.	Convert to EB directional until access of County Health Dept. and County Service Center can be provided to opening, then make a full median opening. Add a WB left turn lane after converted to a full median opening.
64	Ambassador Dr.	In close proximity to the median opening at America Ave. (#63).	Convert to a directional median opening allowing only EB and WB left turns.
65	Bergen Rd.	A WB left turn lane is not provided for U-turning vehicles. Meredith Lumber, located W. of #65, has requested a median opening to serve truck traffic due to the operational and safety issues of U-turning trucks.	Add a WB left turn lane. Provide connection from Meredith Lumber to Bergen Rd. which has a full median opening - Meredith Lumber is too close to Bergen Rd. for a median opening.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
66	Midway Consignment Center	Small median opening - not enough separation between EB left turning vehicles and the WB left turning vehicles.	Convert to a directional median opening allowing only EB and WB left turns.
67	Fuller Dr.	Small median opening - WB lefts and EB lefts in the median trying to turn conflict with one another - create a sight distance problem. Undefined driveway east of Texaco.	Consider widening the median opening to reduce E-W left turning radius conflicts. Narrow driveway.
68	Sunny Oaks St.	Small median opening - WB lefts and EB lefts in the median trying to turn conflict with one another - create a sight distance problem. Emerald Coast RV - located to north - large vehicles. No WB right turn lane.	Widen Median Opening. Maintain full opening due to difficulties with U-turns and RVs. Add WB right turn lane.
69	Smuggler's Cove	In close proximity to median openings at Sunny Oaks St. (#68) and at Hidden Shores Dr. (#70). Inadequate WB left turn lane.	Convert to a directional median opening allowing only EB and WB left turns. Extend WB left turn lane.
70	Hidden Shores Dr.	No identified issues.	Maintain full median opening.
71	St. Sylvester Catholic Parish Center	Median opening located too close to Hidden Shores Dr. to provide a full opening.	Convert to a directional median opening allowing only EB and WB left turns and provide cross access to Hidden Shores Dr.
72	Edgewood Dr.	No WB left turn lane is provided for U-turning vehicles.	Add a WB left turn lane and maintain full opening.
73	Ron Brown Circle	In close proximity to median opening at Edgewood Dr. (#72). No WB right turn lane at Candlewood Dr.	Convert to a directional median opening allowing only EB and WB left turns. Add WB right turn lane at Candlewood Dr.
74	Sound Retreat Dr.	Does not meet spacing for a full opening. No EB left turn lane is provided for U-turning vehicles.	Convert to a directional median opening allowing only EB and WB left turns. Add EB left turn lane.
75	Sunrise Dr.	Holley by the Sea, located to the N., is seeking to have direct access to the Recreation Center, located S. of US 98 and W. of the intersection. WB left turn lane is too short. Sidewalks are planned to be constructed on Sunrise Dr. from US 98 N. to Valley Rd. - HBTS requests that ped. features be added to the existing traffic signal.	Provide a connection to the W. of the Tom Thumb that aligns with Sunrise Blvd. to the N. and connects to the Holley by the Sea Recreation Center. Extend WB left turn lane. Add pedestrian signal features.
76	Constitution Dr. / Sea Lark Ln.	In very close proximity to median openings at Sunrise Dr. (#75) and at Camp Ada Rd. (#77). Constitution Dr. is offset to the W. of Sea Lark Ln. Median treatment is confusing and creates conflicts - a concrete channelizer is in the center of the median which allows a SB left out, but not a SB left in.	Close median opening - it is too close to signal to provide adequate deceleration lanes. Explore connection to Sunrise Drive.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
76A	Cotton Bay Lane	<i>(Recommended new directional median opening)</i>	New WB directional opening to provide for U-turns to Constitution Dr. and traffic to Cotton Bay Lane. Add WB left turn lane.
77	Camp Ada Rd.	In close proximity to signal at Sunrise Drive (#75).	Provide WB directional median opening.
77A	1,320' E. of Sea Lark Ln.	<i>(Recommended new median opening)</i>	New directional median opening located 1,320' E. of Sea Lark Ln. that allows EB and WB U-turns. Add EB and WB left turn lanes.
78	Serosa Dr.	In close proximity to the median opening at Shannon Rd. (#79). Inadequate EB left turn lane servicing Serosa Dr. - ample room in the median to extend.	Maintain full median opening. Close adjacent opening. Extend EB left turn lane.
79	Shannon Rd.	In close proximity to the median opening at Serosa Dr. (#78). No WB left turn lane is provided for U-turning vehicles.	Close the median opening.
80	Lowe Rd.	No issues identified.	Maintain full median opening.
81	Joybrooke Dr.	In close proximity to median openings at Lowe Rd. (#80) and at Falling Leaves Court (#82).	Convert to a directional median opening allowing only EB and WB left turns.
82	Falling Leaves Court	In close proximity to median openings at Joybrooke Rd. (#81) and at Villa Vizcaya Dr. (#83). EB left turn lane may be too short.	Close the median opening.
83	Villa Vizcaya Dr.	In close proximity to median opening at Falling Leaves Court (#82). EB left and right turn lanes may be too short.	Maintain full median opening. Extend EB left and right turn lanes.
84	Harvest Village	In very close proximity to median opening at Mustang St. (#85). New EB left turn lane may not be long enough. No WB left turn lane is provided for U-turning vehicles.	Convert to a directional median opening allowing only EB and WB left turns. Extend EB left turn lane. Add a WB left turn lane.
85	Mustang Dr.	No EB left turn lane is provided. Coral St., located to the E. of #85 is a major N-S road serving Holley by the Sea (HBTS). HBTS requests a median opening at Coral St. New Tom Thumb gas station is being constructed in the N.E. corner of the Coral St./US 98 intersection - will add traffic to Coral St. and increase U-turns on US 98.	Close the median opening. Coral Street serves a higher volume of traffic. Add a new full median opening at Coral St. to the E.
85A	Coral St.	<i>(Recommended new median opening)</i>	New full median opening located at Coral St. serves higher volume of traffic than #85. Add EB and WB left turn lanes.
86	920' E. of Mustang Dr.	Small median opening - WB lefts and EB lefts in the median trying to turn conflict with one another - located in close proximity to Coral Street. Only serves U-turns.	Close the median opening.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
86A	Gayo Grande Apartments	<i>(Recommended new median opening)</i>	New directional median opening located at the Gayo Grande Apartments that allows EB and WB left turns. Add EB and WB left turn lanes. Provide cross access connections from Gayo Grande Apartments to vacant parcels on E. and W.
87	Lewis Funeral Home	Median opening does not serve St. Augustine Episcopal Church located E. of Lewis Funeral Home.	Close the median opening and relocate to the E. in order to serve both the Lewis Funeral Home and the St. Augustine Episcopal Church. Consolidate driveway connections from Lewis Funeral Home and St. Augustine Church to form one connection that accesses the new median opening.
87A	Lewis Funeral Home / St. Augustine Church	<i>(Recommended new median opening)</i>	New full median opening located between the Lewis Funeral Home and the St. Augustine Episcopal Church.
88	1020' W. of Thresher Dr.	Small median opening - WB lefts and EB lefts in the median trying to turn conflict with one another.	Convert to a directional median opening allowing only EB and WB left turns.
89	Thresher Dr. / Navarre School Rd.	Williams Creek Drive is not connected to median opening. EB left turn lane may not be long enough.	Provide cross connection to Navarre Middle School Rd. Extend EB left turn lane.
90	Alpine Ave.	Small median opening - WB lefts and EB lefts in the median trying to turn conflict with one another.	Convert to a directional median opening allowing only EB and WB left turns.
91	Blue Tip Dr.	Businesses N of US 98 do not have good access to Blue Tip. EB and WB left turn lanes may not be long enough. Businesses S of US 98 have undefined driveways and lack cross access.	Improve connection to side street - Blue Tip. Extend EB and WB left turn lanes. Close driveways, narrow driveways and provide cross access.
92	True Value Hardware	In close proximity to median openings at Blue Tip Dr. (#91). No turn lanes are provided. Andora St. is located in close proximity to the E. Additional driveway in NW is not needed. Wide undefined True Value driveway.	Close the median opening. Close driveway. Narrow driveway.
92A	Andora Street	<i>(Recommended new EB directional median opening)</i> No WB right turn lane.	Andora is a significant N-S street in area that is heavily traveled. Add EB directional opening & turn lane Add WB and right turn lane.
93	Safe Harbor Village Condominiums	Additional driveway is not needed. Wide undefined True Value driveway. In close proximity to the median opening at the True Value Hardware store (#92). Very small median opening - conflicting EB and WB left turning movements.	Close driveway. Narrow driveway. Convert to a directional median opening allowing only EB and WB left turns.
94	SR 87 (West)	FDOT is redesigning the intersection.	Per FDOT plans, close the median opening. Only free flow SB right turn movement allowed.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
95	Eckerd / Sea Mist	FDOT is redesigning the intersection.	New SR 87 alignment to the N. with a connection to Eckerd. Movements provided: 2 SB left turn lanes, 2 EB left turn lanes, EB and WB right turn lanes. Sea Mist access will be limited to right in/right out only.
96	SR 87 (East)	FDOT is redesigning the intersection.	Traffic signal removed - moved to opening #95. Convert to a directional median opening that will only allow free flow WB right turns and WB left turns into the commercial plaza to the S.
97	Presido St.	Cross access opportunities S. of US 98 Presido St. connects to Laredo - heavily traveled.	Connect commercial parking lots. Maintain full opening.
98	Lunetta St.	In close proximity to median openings at Presido St. (#97) and at Prado St. (#99). No WB left turn lane is provided. EB left turn lane is inadequate. Cross access opportunity on N. side of US 98.	Close Median Opening Connect parking lots.
99	Prado St.	In close proximity to median openings at Lunetta St. (#98) and at Navarre Beach Causeway (#100).	Provide EB directional opening.
100	Navarre Beach Causeway	Burger King is not connected to Alhambra. Toll booths cause traffic to queue onto US 98 during summer weekends. Signal does not line up with a public street. Merge area for NB traffic making a right turn at US 98 then making a left turn into Winn Dixie .25 miles to the E. (#101) is too short.	Provide new connection to Alhambra. Move the toll booth to the S. side of the bridge. Re-align from Burger King to Granada St. Evaluate safety of intersection and free flow.
101	Winn Dixie Marketplace (West)/Pullum Street	In close proximity to median openings at Navarre Beach Causeway (#100) and at Winn Dixie Marketplace center driveway (#102). Very short EB left turn lane is provided. Fire station main access to US 98. No WB left turn lane.	Monitor median opening. Extend EB left turn lane. Add emergency actuated signal. Add WB left turn lane.
102	Winn Dixie Marketplace (Center)	EB and WB left turn lanes may not be long enough.	Extend EB and WB left turn lanes.
103	Comfort Inn / Taco Bell	In close proximity to median opening at Winn Dixie Marketplace center driveway (#102).	Convert to a directional median opening allowing only EB left turns.
104	Ortega St.	Driveway in NW corner is wide and there is no cross access Driveway in NE corner is too close to intersection and conflicts with turn lane. A WB right turn lane is not provided.	Narrow driveway and provide cross access Close driveway. Add a WB right turn lane.
105	Navarre Sound Circle	In close proximity to median opening at Elks Way (#106). No EB left turn lane is provided.	Convert to a directional median opening allowing only WB left turns.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
106	Elks Way / Jo Tam Ln.	In close proximity to median opening at Navarre Sound Circle (#105). Very wide median opening - N. and S. roadways are not properly aligned. WB left turn lane may not be long enough. Driveway for the Pizza Den in the N.E. corner is located too close to the intersection - no access is provided to Elks Way.	Maintain full opening due to Baptist Medical Center - Evaluate intersection safety due to offset approaches. Extend WB left turn lane. Close driveway connection to US 98 from the Pizza Den and provide a connection to Elks Way.
106A	1,530' E. of Jo Tam Ln.	(Recommended new median opening)	New directional median opening located that allows EB and WB left turns. Add EB and WB left turn lanes.
107	Old Navarre Hardware	Does not meet spacing. EB right turn lane crosses opening. Very wide median opening.	Close the median opening.
108	450' W. of Rio Lafontaine	In close proximity to median openings at Old Navarre Hardware (#107) and at Larker Woods Rd. (#109). No turn lanes are provided.	Close the median opening.
109	Rio Lafontaine	In close proximity to median opening #108. EB left turn lane may not be long enough. Geometric configuration of S. approach may increase vehicle conflicts.	Maintain full median opening & close adjacent median opening. Extend EB left turn lane. Reconfigure S. approach.
110	Panhandle Tr.	EB and WB left turn lanes may not be long enough.	Extend EB and WB left turn lanes.
111	Biscayne Blvd.	Does not meet spacing for a full median opening.	Convert to a directional median opening allowing only EB and WB left turns.
112	Navarre Insurance Agency	In close proximity to median opening at Biscayne Blvd. (#111). EB left turn lane is continuous through the opening at #111.	Close the median opening.
113	Fox Den Dr.	In very close proximity to median opening at Buckley Dr. (#114). Road accesses large amount of residential Potential cross access north of US 98 from Estates Cir. to Fox Den Dr. No WB left turn lane is provided for U-turning vehicles.	Maintain full median opening. Close adjacent median opening Provide cross access. Add WB left turn lane.
114	Buckley Dr.	In very close proximity to median opening at Jessica Way (#115) & Fox Den Drive (#113) Potential weave problem for Estates Cir vehicles. No turn lanes are provided.	Close the median opening.
115	Jessica Way	In very close proximity to median opening at Buckley Dr. (#114) and Fox Den Dr (#113). EB left turn lane is inadequate.	Close the median opening.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

**Table 5-1 (Cont.)
Corridor Issues and Recommendations**

Median Opening ID #	Location	Issues	Recommended Modifications to Address Issues
116	Twelve Oaks	In close proximity to median opening at Whispering Pines Blvd. (#117). No WB left turn lane is provided.	Close the median opening.
117	Whispering Pines Blvd.	Continuous WB right turn lane across Belle Meade Cir. In close proximity to median opening at Twelve Oaks Circle (#116).	Add hatched channelizing striping west of Belle Meade Circle. Close adjacent opening and maintain full median opening.
118	Tom St.	In close proximity to median opening #119 and #120. Does not meet spacing for a full median opening.	Convert to a directional median opening allowing only EB and WB left turns.
119	280' W. of Orion Parker Rd.	In very close proximity to median opening at Orion Parker Rd. (#120).	Close the median opening.
120	Orion Parker Rd.	In very close proximity to median opening #119. No WB left turn lane is provided for U-turning vehicles.	Maintain full median opening and close adjacent. Add a WB left turn lane.
121	Colonial Pines Mobil Estates	In very close proximity to median opening at Calle De Cantabria (#122). Large vehicles make U-turns difficult No WB left turn lane is provided.	Maintain full median opening and close adjacent median opening. Add WB left turn lane.
122	Calle De Cantabria	In very close proximity to median opening at Colonial Pines Mobil Estates (#121).	Close the median opening.
123	Paloma St.	No WB right turn lane is provided. WB left turn lane may not be long enough.	Add a WB right turn lane. Extend WB left turn lane.
124	Calle De Palencia	Does not meet spacing for a full median opening. Continuous EB right turn lane across intersection No EB left turn lane is provided.	Convert to a directional median opening allowing only EB and WB left turns. Add hatched channelizing striping to discourage use of right turn lane as through lane. Add an EB left turn lane.
125	Rosewood Dr.	No WB left turn lane is provided. EB left turn lane may not be long enough. Emerald Coast Trailer and Welding Complex to the S.- frontage on US 98 is entirely gravel - no defined driveway.	Add a WB left turn lane. Extend EB left turn lane. Reduce driveway widths in S.W. corner to form 2 defined driveways.

Notes: The issues presented in this table are a cumulation of issues gathered from the following sources: HDR field work and data collection, US 98 Corridor Management Citizens Task Team, public comments, and previous work conducted for the US 98 corridor.

5.5 Improvement Plan Cost Estimates

Generalized cost estimates were prepared for the recommended improvement plan presented in Table 5-1 and in Figure 5-1. The overall corridor improvement plan cost estimate is based on applying the costs of prototypical improvements throughout the corridor. Seven (7) different prototypical improvement types were identified:

- Remove median opening
- Remove turn lane
- Add directional median separator
- Add turn lane
- Extend turn lane
- Narrow driveway
- Close driveway

The conceptual cost estimates for each of the prototypical improvements were developed based on experience related to the design and construction of access improvements in the State of Florida. The conceptual prototype cost estimates account for all design and construction activities and are based on the assumption that approximately four to five individual median opening/intersection improvements would be completed simultaneously. If each improvement was constructed separately, the costs would likely be higher. However, if all the improvements were completed under one contract the overall cost would be lower due to the economies of scale as it relates to construction mobilization, unit costs of quantities and administrative costs. The cost estimates assume that no additional right-of-way would be required for any of the improvements. As such, where additional right-of-way is required, the right-of-way cost should be added to the improvement cost.

After each of the individual improvement cost estimates were developed, they were applied throughout the corridor based on the recommended improvement plan. The itemized cost of the improvements, by median opening identification number, is summarized in Table 5-2.

The conceptual cost estimates developed for this study are general, planning-level estimates and are not based on quantity calculations or field evaluation. These cost estimates have been prepared for the purpose of prioritizing improvements along the corridor and providing the MPO with a general guideline for determining the required funding needed for any of the recommended improvements that are carried forward into the MPO's Transportation Improvement Program (TIP).

Improvements that were not included in the list of prototypical improvements such as new cross access connections were not estimated. These estimates cannot be prepared without more detailed site-specific information such as available right-of-way, drainage, and environmental data. These improvements are not included in the cost calculation and are listed as other improvements in Table 5-2.

**Table 5-2
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
1	East of Gulf Breeze	1							\$20	
1A	East of Gulf Breeze			1	1				\$130	
2	N. Park Entrance								\$0	Add no U-turn sign WB
3	Visitor Center Entrance								\$0	Add no U-turn sign EB
4	Visitor Center Exit								\$0	Add no U-turn sign EB and WB
4A	1,320' W. of Bayshore Rd.			1	1				\$130	
5	Bayshore Rd.			1			2		\$70	
6	Gondolier Blvd.				1	2	3		\$320	Modify NB/SB & EB/WB approaches
7	Gulf Breeze Masonic Lodge			1					\$30	
8	Grand Point East								\$0	
9	Sanibel Ln.				1	1	2	1	\$250	Realign Sanibel Ln., add cross access
10	Villa Woods Circle	1	1					2	\$110	
11	Great Oaks Dr. / Marble Ct.			1				1	\$60	
12	Whisper Bay Blvd.								\$0	Realign intersection and add cross access between Tiger Trace, Santa Rosa Plaza, and Crane Cove
13	Santa Rosa Plaza (East)	1	1						\$50	Add cross access from Crane Cove to Santa Rosa Plaza in front
14	Crane Cove Blvd.								\$0	Add cross access between Ramblewood and Crane Cove, Conduct Intersection Safety Study
15	Rose Lawn Cemetery	1							\$20	Cross access to Median Opening # 14
16	Ramblewood Ln.	1	2						\$80	Cross access between Church and Cemetery

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
17	Church of Christ	1	2						\$80	
18	Rancho Villa Dr.			1	2	1		2	\$370	Add new access from development to side street
19	Speedy Oil Change	1	1						\$50	Add cross access
20	Breeze Plaza	1	1						\$50	
21	CR 191 A / Oriole Beach Rd.					1			\$80	Conduct intersection safety study
22	Harvard Dr.			1					\$30	Add cross access from Breeze Plaza to Harvard Drive
23	Wendy's			1		1			\$110	Add cross access
24	Animal Center	1						5	\$170	
25	CR 399 / College Pkwy.					1	3	2	\$200	Extend N. Median, conduct intersection safety study
26	Winn Dixie Plaza (W.)	1	1						\$50	
27	Winn Dixie Plaza (E.)			1		1			\$110	Add cross access
28	El Rito Dr.					1			\$80	Add cross access, striping
29	Burger King	1	2					1	\$110	
30	Country Club Rd.							1	\$30	Narrow the median opening
31	Breezy Wind Dr.			1		2			\$190	
32	Red Fish Point Rd.			1	1				\$130	
33	Tiger Point Blvd.				1	1			\$180	
34	Oak Hill Rd.	1	1						\$50	
35	Sterling Point Dr.	1	2					1	\$110	
36	SR 281 / Garcon Point Bridge								\$0	Modify timing and re-stripe S. approach

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
36A	Wal-Mart (East)			1	1				\$130	
37	Portside Dr.								\$0	Add stop bar on north approach
38	Baywoods Rd. / Tiger Lake Rd.								\$0	Realign N. and S. approaches
39	Tiger Point Blvd. E.								\$0	Add new access from Tiger Point Opening to Bal Alex Ave
40	Magnolia Manor Dr.	1	2						\$80	
40A	1200' east of Tiger Point Blvd. (east)			1	2				\$230	
41	Bal Alex Ave.			1		1	1	2	\$190	Add a cross access connection
42	Soundside Dr.								\$0	Add No U-turn sign EB, add new access from Bal Alex Bay to Intersection
43	Central Pkwy.			1		2			\$190	
44	Hickory Shores Rd.			1					\$30	
45	Ocean Breeze Ln.								\$0	
46	Tradewinds Dr.	1	1						\$50	
47	Beachwood Dr.			1	1		1		\$150	
48	Kittyhawk Dr.				1				\$100	
49	Mohawk Tr.			1	1		1		\$150	New connection from Mohawk Tr. To Beaver Pond
50	New Hope Rd.			1					\$30	
51	CR 191C / Nantahala Beach Rd.				1				\$100	Realign Sioux Tr.
52	1400' E. of Nantahala Beach Rd.				2				\$200	Realign S. approach
53	Kell Rd.			1	1	1			\$210	
53A	Woodlawn Heights				2				\$200	New median opening, cross access N. of US

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
54	Wheeler Rd.	1	1				1		\$70	
55	Abercrombie Rd.				1	1	2		\$220	
56	CR 399 / East Bay Blvd.				1			1	\$130	
57	Woodlawn Beach Rd.				1				\$100	
58	Midway Baptist Church			1	1	1			\$210	
59	Oak Dr.				1				\$100	Add cross access
60	Zoo				1	2			\$260	Add new access
61	Flea Market			1	1				\$130	
62	County Health Department	1	2						\$80	Close in future
63	America Ave.			1	1				\$130	Make full in future, add new access to America Ave.
64	Ambassador Dr.			1					\$30	
65	Bergen Rd.				1				\$100	Add new access from Bergen to Meredith Lumber
66	Midway Consignment Center			1				1	\$60	
67	Fuller Dr.								\$0	
68	Sunny Oaks St.				1		1		\$120	
69	Smuggler's Cove			1		1			\$110	
70	Hidden Shores Dr.								\$0	Add cross access
71	St. Sylvester Catholic Parish Center			1					\$30	
72	Edgewood Dr.				1				\$100	
73	Ron Brown Circle			1	1				\$130	
74	Sound Retreat Dr.			1	1				\$130	

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
75	Sunrise Dr.					1			\$80	Add cross access to Recreation Center and Constitution Dr., add ped. features to signal
76	Constitution Dr. / Sea Lark Ln.	1	2						\$80	
76A	Cotton Bay Ln.			1	1				\$130	
77	Camp Ada Rd.			1					\$30	
77A	1,320' E. of Sea Lark Ln.			1	2				\$230	
78	Serosa Dr.					1			\$80	
79	Shannon Rd.	1	1						\$50	
80	Lowe Rd.								\$0	
81	Joybrooke Dr.			1					\$30	
82	Falling Leaves Court	1	1						\$50	
83	Villa Vizcaya Dr.					2			\$160	
84	Harvest Village			1	1	1			\$210	
85	Mustang Dr.	1	1						\$50	
85A	Coral St.				2				\$200	New median opening
86	920' E. of Mustang Dr.	1	2						\$80	
86A	Gayo Grande Apartments			1	2				\$230	Add cross access
87	Lewis Funeral Home	1	2						\$80	Add cross access
87A	Lewis Funeral Home / St. Augustine Church							2	\$60	Relocate median opening
88	1020' W. of Thresher Dr.			1					\$30	
89	Thresher Dr. / Navarre School Rd.					1			\$80	Add cross access to Williams Creek Drive
90	Alpine Ave.			1					\$30	

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements
		UNIT COST (in \$1,000's)								
		\$20	\$30	\$30	\$100	\$80	\$20	\$30		
91	Blue Tip Dr.					2	2	2	\$260	Add cross access to parcels S.W. of intersection and add new access to Blue Tip for adjacent development
92	True Value Hardware	1					3	1	\$110	
92A	Andora St.			1	2				\$230	
93	Safe Harbor Village Condominiums			1			1		\$50	
94	SR 87 (West)	1	1					3	\$140	SR 87 Improvements
95	Eckerd / Sea Mist				2				\$200	Future Signal-SR 87 Improvements
96	SR 87 (East)			1				2	\$90	Remove Signal-SR 87 Improvements
97	Presido St.					1	1		\$100	Add cross access to development S. of US 98
98	Lunetta St.	1	1					2	\$110	Improved cross access between adjacent commercial in NW quadrant of intersection
99	Prado St.			1				1	\$60	
100	Navarre Beach Causeway							1	\$30	Realign Causeway with Granada St. & relocate Toll Booth
101	Winn Dixie (West)				1	1			\$180	Install emergency signal
102	Winn Dixie (Center)					2			\$160	Add ped. features to signal
103	Comfort Inn / Taco Bell			1				1	\$60	
104	Ortega St.				1		1	1	\$150	Add cross access between adjacent parcels in SW quadrant
105	Navarre Sound Circle			1				1	\$60	Add hatched channelizing striping
106	Elks Way / Jo Tam Ln.							1	\$30	Intersection safety study & connection of Pizza Den to Elks Way
106A	1,530' E. of Jo Tam Ln.			1	2				\$230	Add hatched channelizing striping

**Table 5-2 (Cont.)
Recommended Improvement Plan Cost Estimates**

ID #	Location	Remove Opening	Remove Turn Lane	Add Directional Median Separator	Add Turn Lane	Extend Turn Lane	Narrow Driveway	Close Driveway	Total Cost (in 1,000's)	Other Improvements	
		UNIT COST (in \$1,000's)									
		\$20	\$30	\$30	\$100	\$80	\$20	\$30			
107	Old Navarre Hardware	1	2				1		\$100		
108	450' W. of Rio Lafontaine	1						1	\$50		
109	Rio Lafontaine					1		1	\$110	Reconfigure S. approach	
110	Panhandle Tr.					2	2		\$200	Improve cross access at plaza in N.W. quadrant	
111	Biscayne Blvd.			1					\$30		
112	Navarre Insurance Agency	1	1					1	\$80		
113	Fox Den Dr.					2			\$160		
114	Buckley Dr.	1							\$20	Add additional connection of Church to Fox Den Drive and Estates Circle	
115	Jessica Way	1	2						\$80	Connect future plaza to the west to Estates Circle	
116	Twelve Oaks	1	1						\$50		
117	Whispering Pines Blvd.								\$0	Add hatched channelizing striping	
118	Tom St.			1			1		\$50		
119	280' W. of Orion Parker Rd.	1	1						\$50		
120	Orion Parker Rd.				1				\$100		
121	Colonial Pines Mobil Estates				1				\$100		
122	Calle De Cantabria	1	2					2	\$140		
123	Paloma St.				1	1			\$180		
124	Calle De Palencia			1	1				\$130	Add hatched channelizing striping	
125	Rosewood Dr.				1	1	2		\$220		
TOTALS		34	40	47	54	40	31	43	\$13,800		

5.6 Summary of Plan Results

As previously discussed, the proposed corridor access plan attempts to reduce the number of conflict points at openings along the corridor and to increase the corridor's median opening spacing. Based on the recommended improvement plan, the elimination of some median openings and the conversion of some openings from full openings to directional results in a significant reduction in the number of conflict points along the corridor. In the existing condition there are a total of 3,455 potential conflict points at the 125 median openings along the study corridor. With the implementation of the recommended plan the number of conflict points at these locations is reduced to 2,097. This reduction in conflict points, by forty percent, would result in a significant safety enhancement because there would be fewer places where vehicles' paths would cross.

The existing spacing of median openings along the corridor falls well below the FDOT spacing standards. The proposed plan significantly improves the median opening spacing for all of the study segments. An example of this is in segment F where the existing average full median opening spacing is 840 feet. With the implementation of the recommended plan, the average full median opening spacing would be 1,770 feet. With an access class 3 designation, the FDOT spacing standard for a full median opening in segment F is 2,640 feet. This example shows that while the recommended plan results in a significant improvement over the existing median opening spacing along the corridor, the overall proposed plan still does not meet the FDOT spacing standards. This is because the effort to improve the median opening spacing was balanced with the desire to provide reasonable access to the existing development along the corridor.

Recommended Plan – Number of Median Openings

Segment	Median Openings				
	Existing		Proposed		
	Full	Directional	Full	Directional	Closed
A	NOT ANALYZED				
B	3	1	2	3	0
C	37	1	14	15	13
D	17	0	10	8	2
E	26	0	12	14	4
F	18	0	8	8	5
G	10	0	4	2	3
H	13	0	6	2	5

Recommended Plan - Conflict Points

Segment	Conflict Points at Median Openings	
	Existing	Proposed
A	NOT ANALYZED	
B	49	42
C	1,218	624
D	442	330
E	690	503
F	448	223
G	260	168
H	348	207

5.7 Recommended Plan Implementation Strategies

The US 98 Corridor Management Plan will provide a comprehensive guide for the FDOT and Santa Rosa County to follow as development continues to occur and requests are made for new access to US 98. Having an access plan for the entire corridor will serve to provide a better understanding of the interrelationship of each access point along the corridor, ensuring a better coordinated system of access provisions between FDOT, Santa Rosa County, and the City of Gulf Breeze. Santa Rosa County and the City of Gulf Breeze should use the CMR as a guide for development approvals in addition to supporting and implementing some of the improvements.

The conceptual cost can be used to assist the MPO in the prioritization and funding of recommended improvements.

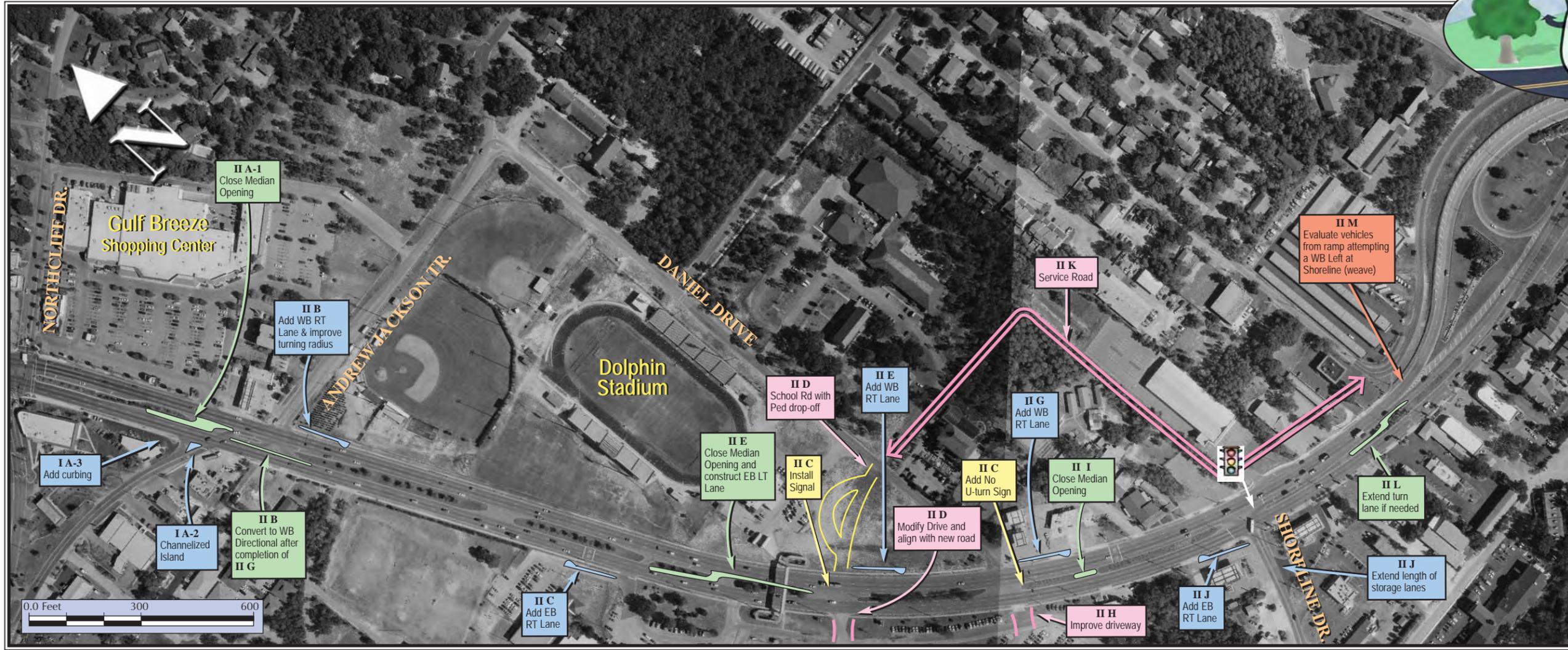
Recommended Plan - Average Median Opening Spacing

Full Median Openings

Segment	FDOT Standard (ft.)	Average Median Opening Spacing (ft.)	
		Existing	Proposed
A	1320	NOT ANALYZED	
B	1320	3180	4240
C	2640	670	1890
D	2640	1020	1826
E	2640	990	2220
F	2640	840	1770
G	2640	1030	2320
H	2640	780	2140

Directional Median Openings

Segment	FDOT Standard (ft.)	Average Median Opening Spacing (ft.)
		Proposed
A	660	NOT ANALYZED
B	660	4240
C	1320	1050
D	1320	1110
E	1320	1130
F	1320	1100
G	1320	1430
H	1320	1070



LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - 1** ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: A	MILE POST
MEDIAN OPENING IDENTIFICATION NUMBER	0.75 1.00 1.25 1.50 mile post
Analyzed in HSA Study for City of Gulf Breeze	
EXISTING TURN LANES	
RECOMMENDATIONS	

Recommendations shown on aerial are a summary of HSA Recommendations (SEE APPENDIX C - for detail regarding Recommendations from HSA Study)

NOTE: Numbering of Recommendations is consistent with HSA Plan in the Appendix

FIGURE 5 - 1.2





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1 ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

SEGMENT: A	SEGMENT: B
<p>MEDIAN OPENING IDENTIFICATION NUMBER</p> <p>Analyzed in HSA Study for City of Gulf Breeze</p>	<p>1 1A</p>
<p>EXISTING TURN LANES</p>	<p></p>
<p>RECOMMENDATIONS</p> <p>Recommendations shown on aerial are a summary of HSA Recommendations (SEE APPENDIX C - for detail regarding Recommendations from HSA Study)</p> <p>NOTE: Numbering of Recommendations is consistent with HSA Plan in the Appendix</p>	<p> → </p> <p>• Relocate 1 1320' from previous opening in Gulf Breeze</p> <p> Add EB LT Lane</p>

FIGURE 5 - 1.3





LEGEND

Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

ID Number

EXISTING TURN LANES

EB Left Turn Lane
 EB Right Turn Lane
 WB Right Turn Lane
 WB Left Turn Lane
 Turn Lane Present
 No Turn Lane Present

RECOMMENDATIONS

Close Median Opening
 Convert to EB and WB Directional Median Opening
 Convert to EB Directional Median Opening
 Convert to WB Directional Median Opening
 Maintain Full Median Opening
 Turn Lane Improvement
 Close Connection
 Narrow Driveway
 New Access/Connection

2.50 2.75 3.00 mile post

SEGMENT: B	
MEDIAN OPENING IDENTIFICATION NUMBER	2
EXISTING TURN LANES	
RECOMMENDATIONS	 • Maintain Existing Median Opening Configuration • Add NO U-TURN Sign for WB

FIGURE 5 - 1.4





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1** ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

SEGMENT: B			
MEDIAN OPENING IDENTIFICATION NUMBER			
2	3	4	
EXISTING TURN LANES			
RECOMMENDATIONS			
<ul style="list-style-type: none"> • Maintain Existing Median Opening Configuration • Add NO U-TURN Sign for WB 	<ul style="list-style-type: none"> • Maintain Existing Median Opening Configuration • Add NO U-TURN Sign for EB 	<ul style="list-style-type: none"> • Maintain Existing Left Out Median Opening Configuration • Add NO LEFT TURN sign for WB & NO U-TURN sign for EB 	

FIGURE 5 - 1.5





LEGEND

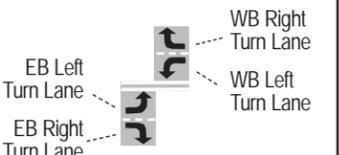


Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

1 ID Number

EXISTING TURN LANES



Turn Lane Present
No Turn Lane Present

RECOMMENDATIONS

- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

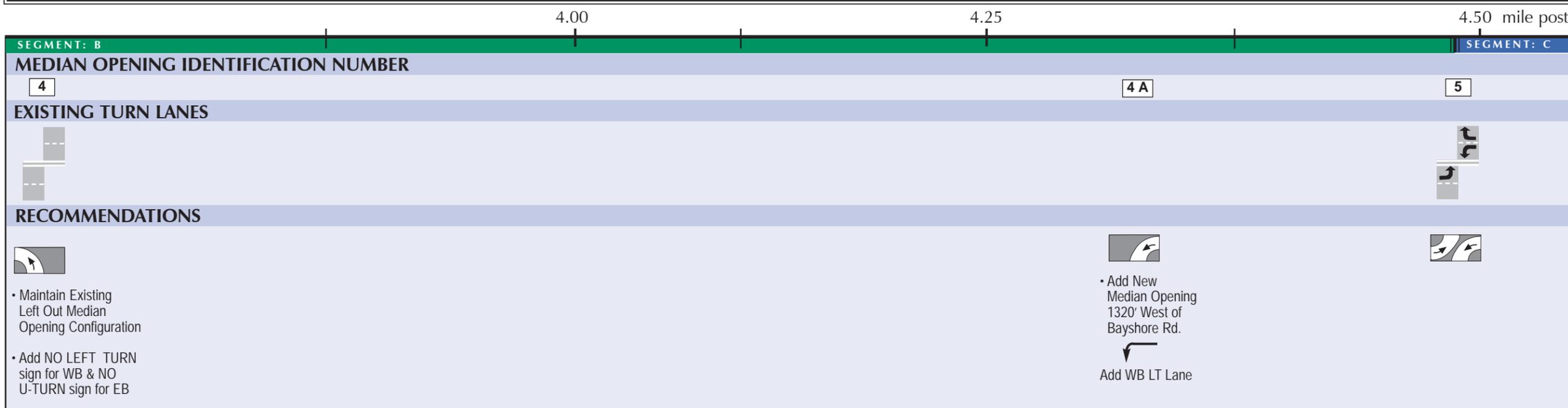


FIGURE 5 - 1.6





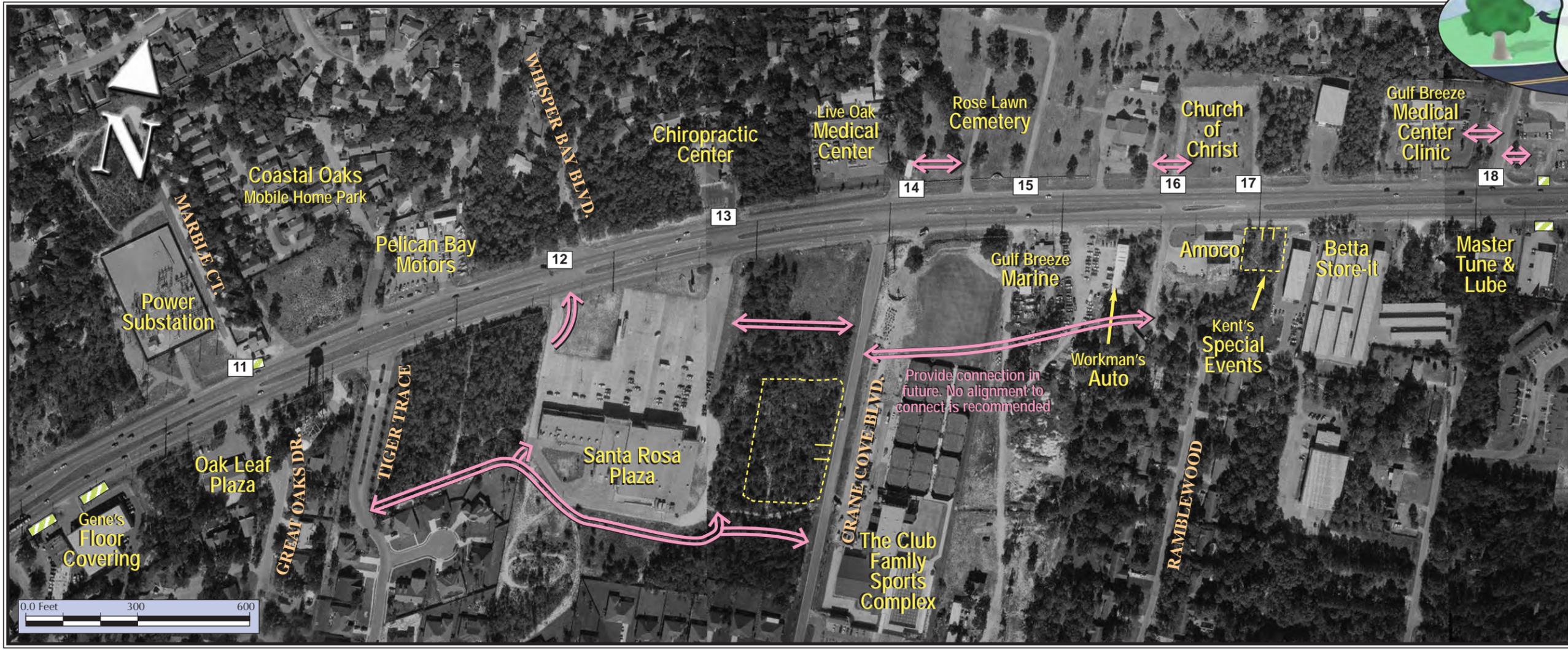
LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: C	4.50	4.75	5.00	mile post
MEDIAN OPENING IDENTIFICATION NUMBER	5	6	7	8 9 10
EXISTING TURN LANES				
RECOMMENDATIONS				 • Maintain Existing EB Directional Add EB RT Lane Extend EB LT Lane
		Extend EB & WB LT Lanes and Add NB RT Lane • Conduct Study to evaluate signal phasing timing & ped features • Modify North/South & E/W Median Approaches to address conflicting LT paths		

FIGURE 5 - 1.7





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - WB Right Turn Lane
 - WB Left Turn Lane
 - EB Left Turn Lane
 - EB Right Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: C	MILE POST							
MEDIAN OPENING IDENTIFICATION NUMBER	11	12	13	14	15	16	17	18
EXISTING TURN LANES								
RECOMMENDATIONS				<ul style="list-style-type: none"> • Conduct Intersection Safety Study 				<ul style="list-style-type: none"> Add WB RT Lane Extend EB LT Lane Add WB LT Lane

FIGURE 5 - 1.8





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

6.00 6.25 6.50 mile post

SEGMENT: C									
MEDIAN OPENING IDENTIFICATION NUMBER									
18	19	20	21	22	23	24	25	26	
EXISTING TURN LANES									
RECOMMENDATIONS									
Add WB RT Lane			Extend EB LT Lane • Conduct Intersection Safety Study and evaluate Ped features.		Extend EB LT Lane		Extend EB LT Lane	Extend EB LT Lane • Extend Median on N. approach across Frontage Rd. • Conduct Intersection Study to evaluate safety & needs for Midway Fire & Ped Features	

FIGURE 5 - 1.9





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: C					
MEDIAN OPENING IDENTIFICATION NUMBER					
26	27	28	29	30	31
EXISTING TURN LANES					
RECOMMENDATIONS					
	Extend WB LT Lane	Extend EB LT Lane		Narrow Median opening	Extend EB & WB LT Lanes
					Add WB LT Lane

FIGURE 5 - 1.10

February 2001





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1** ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

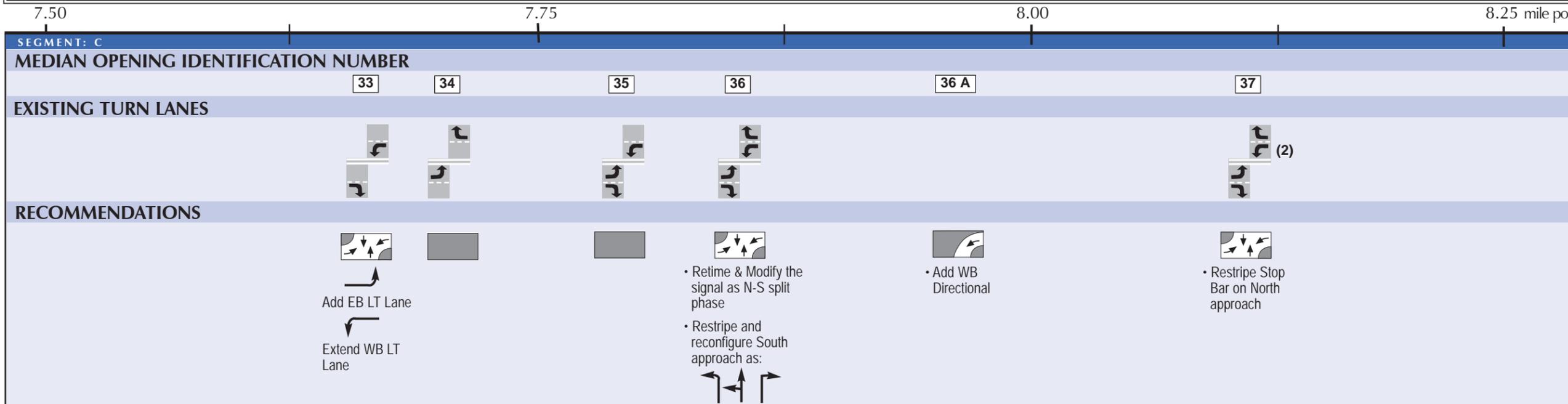
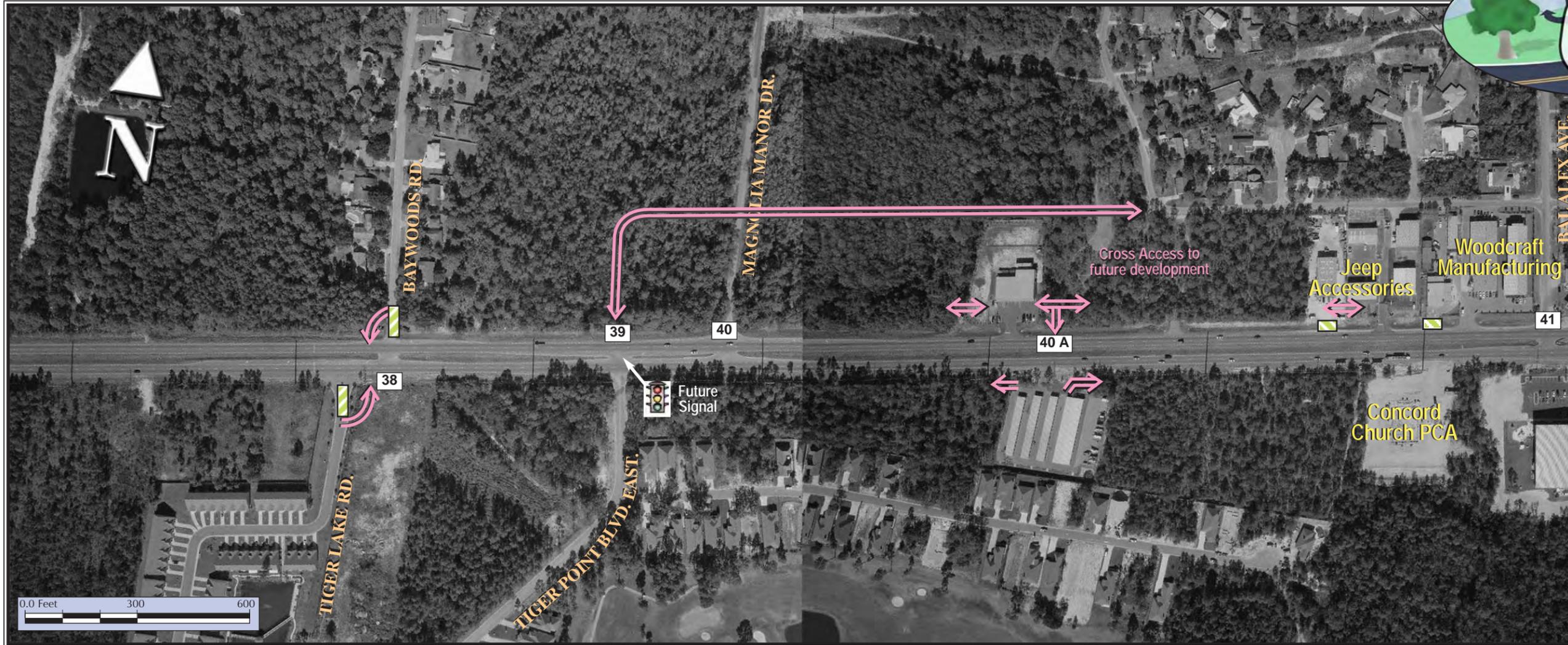


FIGURE 5 - 1.11





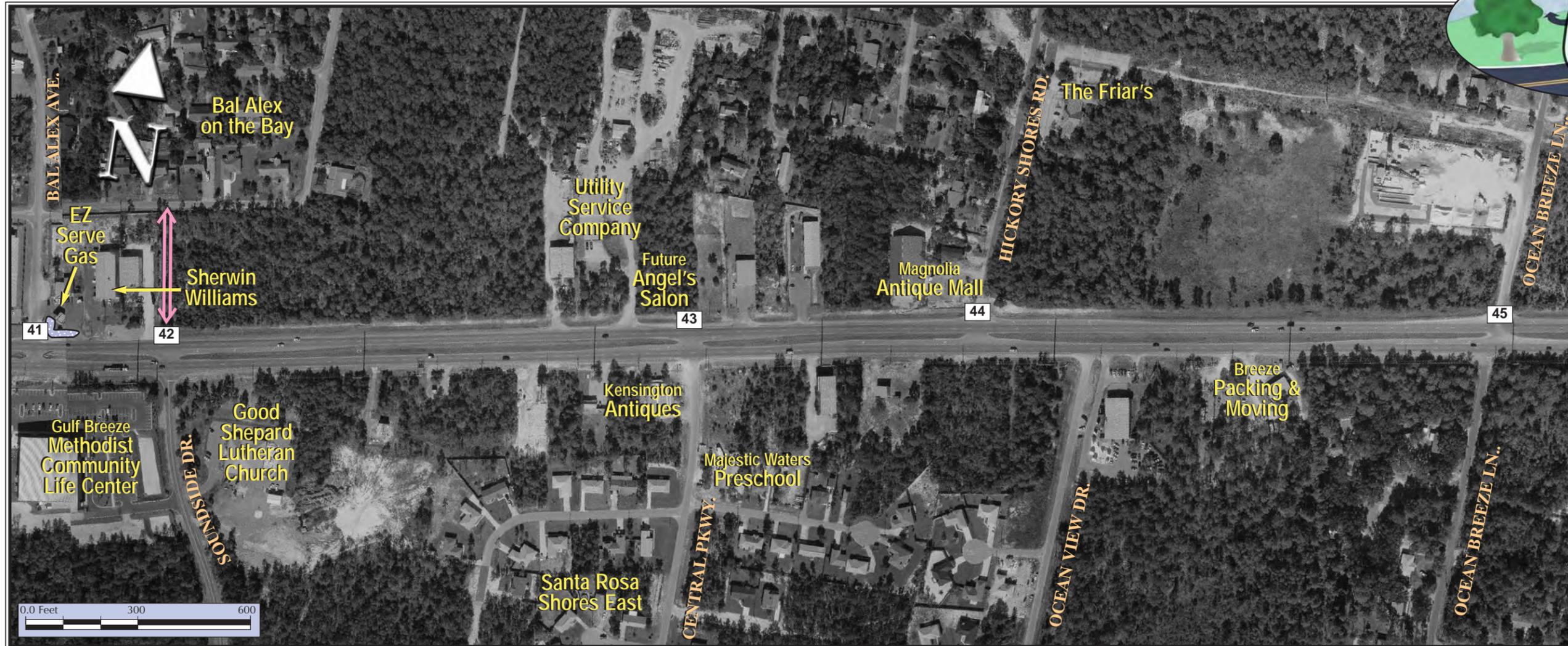
LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: C	8.50	8.75	9.00		
MEDIAN OPENING IDENTIFICATION NUMBER	38	39	40	40 A	41
EXISTING TURN LANES					
RECOMMENDATIONS	<ul style="list-style-type: none"> • Realign Roads 	<ul style="list-style-type: none"> Convert to EB and WB Directional Median Opening 	<ul style="list-style-type: none"> Close Median Opening 	<ul style="list-style-type: none"> Convert to EB and WB Directional Median Opening Add EB LT Lane Add WB LT Lane 	<ul style="list-style-type: none"> Convert to EB and WB Directional Median Opening Extend EB LT Lane

FIGURE X - 1.12





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

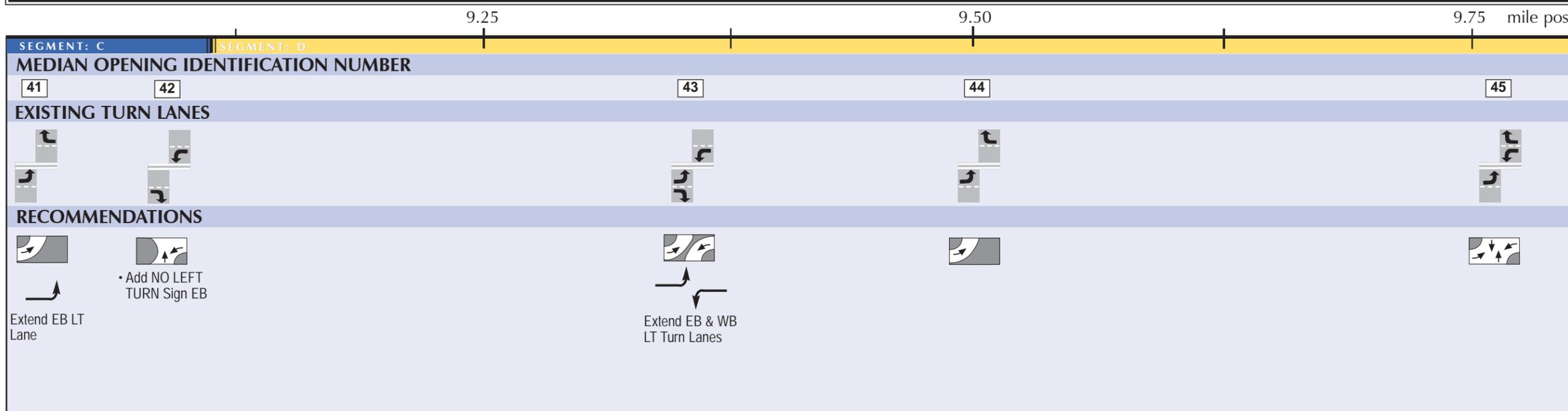


FIGURE 5 - 1.13





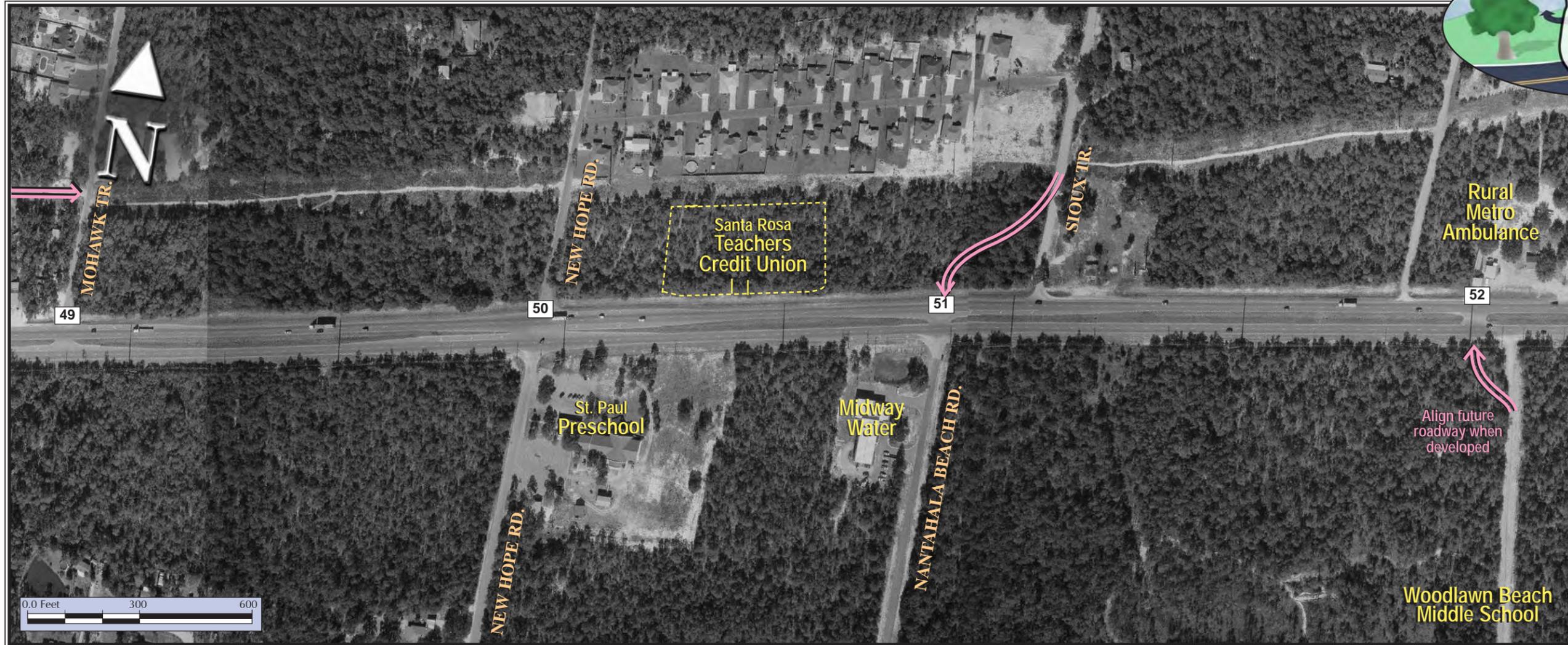
LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

SEGMENT: D				
MEDIAN OPENING IDENTIFICATION NUMBER				
45	46	47	48	49
EXISTING TURN LANES				
RECOMMENDATIONS				
		Add WB LT Lane	Add EB LT Lane	Add WB LT Lane

FIGURE 5 - 1.14





LEGEND

Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

1 ID Number

EXISTING TURN LANES

EB Left Turn Lane
 EB Right Turn Lane
 WB Right Turn Lane
 WB Left Turn Lane

Turn Lane Present
 No Turn Lane Present

RECOMMENDATIONS

Close Median Opening
 Convert to EB and WB Directional Median Opening
 Convert to EB Directional Median Opening
 Convert to WB Directional Median Opening
 Maintain Full Median Opening
 Turn Lane Improvement
 Close Connection
 Narrow Driveway
 New Access/Connection

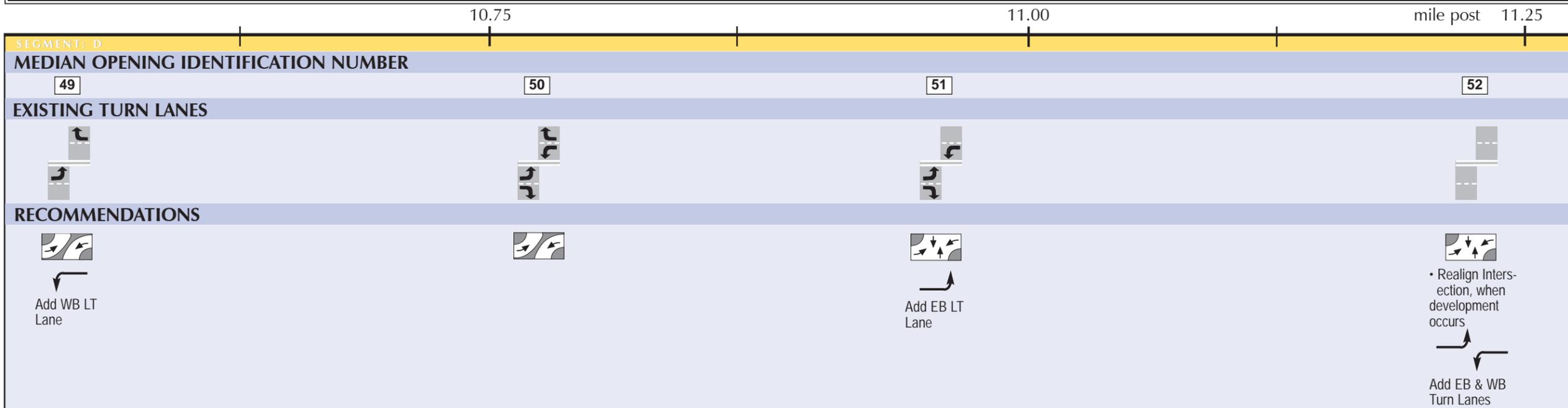
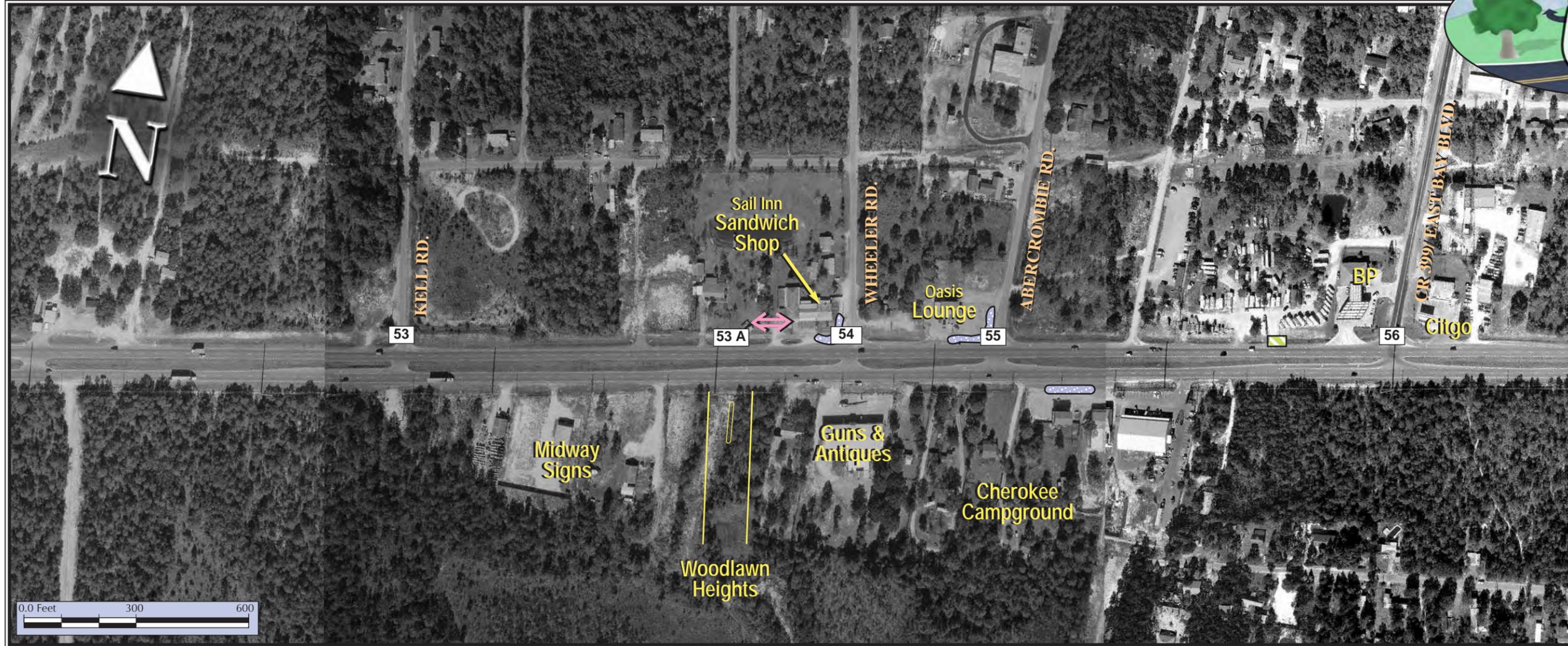


FIGURE 5 - 1.15



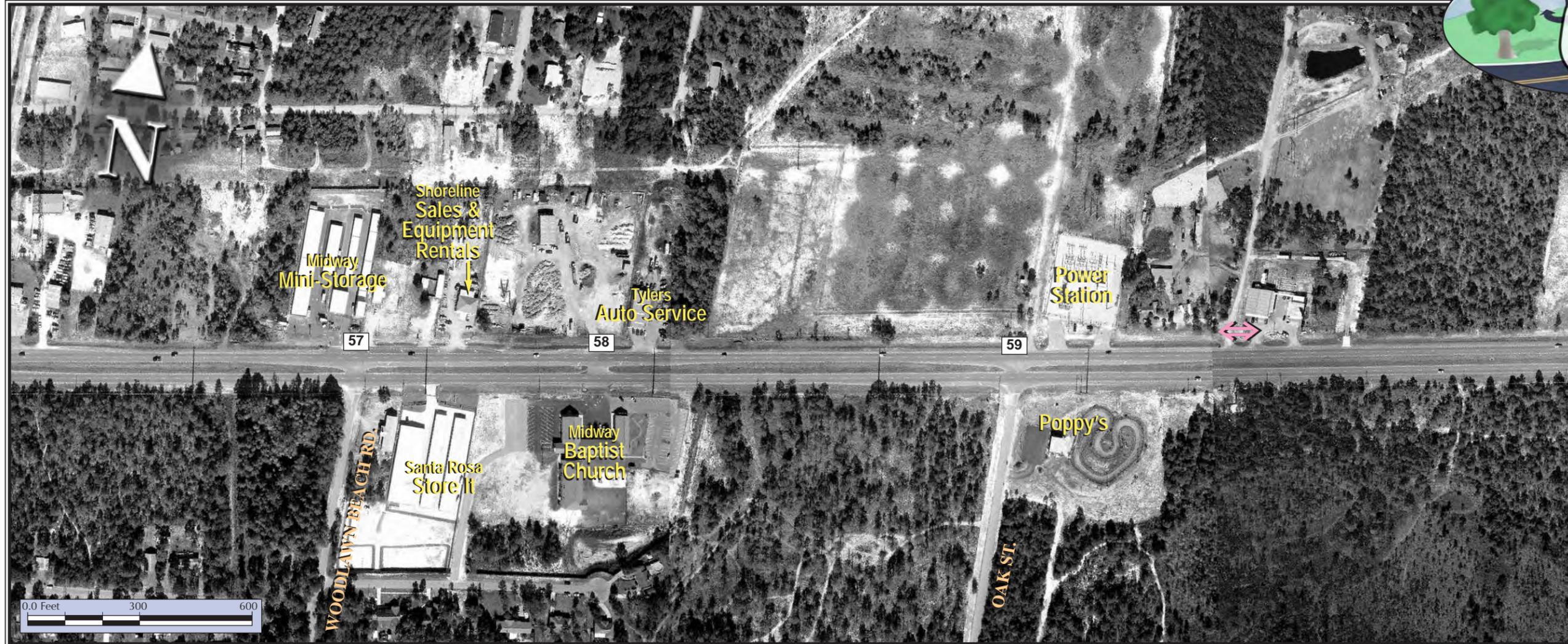
LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

SEGMENT: D					
MEDIAN OPENING IDENTIFICATION NUMBER					
	53	53 A	54	55	56
EXISTING TURN LANES					
RECOMMENDATIONS					
		<ul style="list-style-type: none"> • New Full Median Opening 		<ul style="list-style-type: none"> • Extend EB LT Lane • Add WB LT Lane • Maintain as full opening until Fire Dept. relocates, then EB & WB Directional 	

FIGURE 5 - 1.16





LEGEND

Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

ID Number

EXISTING TURN LANES

EB Left Turn Lane
 WB Right Turn Lane
 WB Left Turn Lane
 EB Right Turn Lane

Turn Lane Present
 No Turn Lane Present

RECOMMENDATIONS

Close Median Opening
 Convert to EB and WB Directional Median Opening
 Convert to EB Directional Median Opening
 Convert to WB Directional Median Opening
 Maintain Full Median Opening
 Turn Lane Improvement
 Close Connection
 Narrow Driveway
 New Access/Connection

12.00 12.25 12.50 mile post

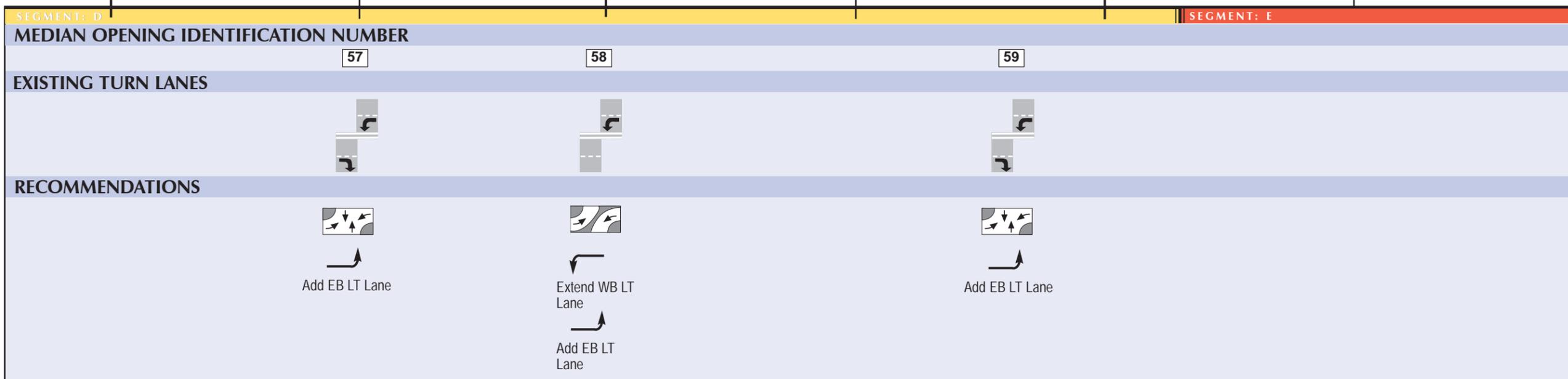
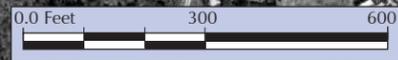
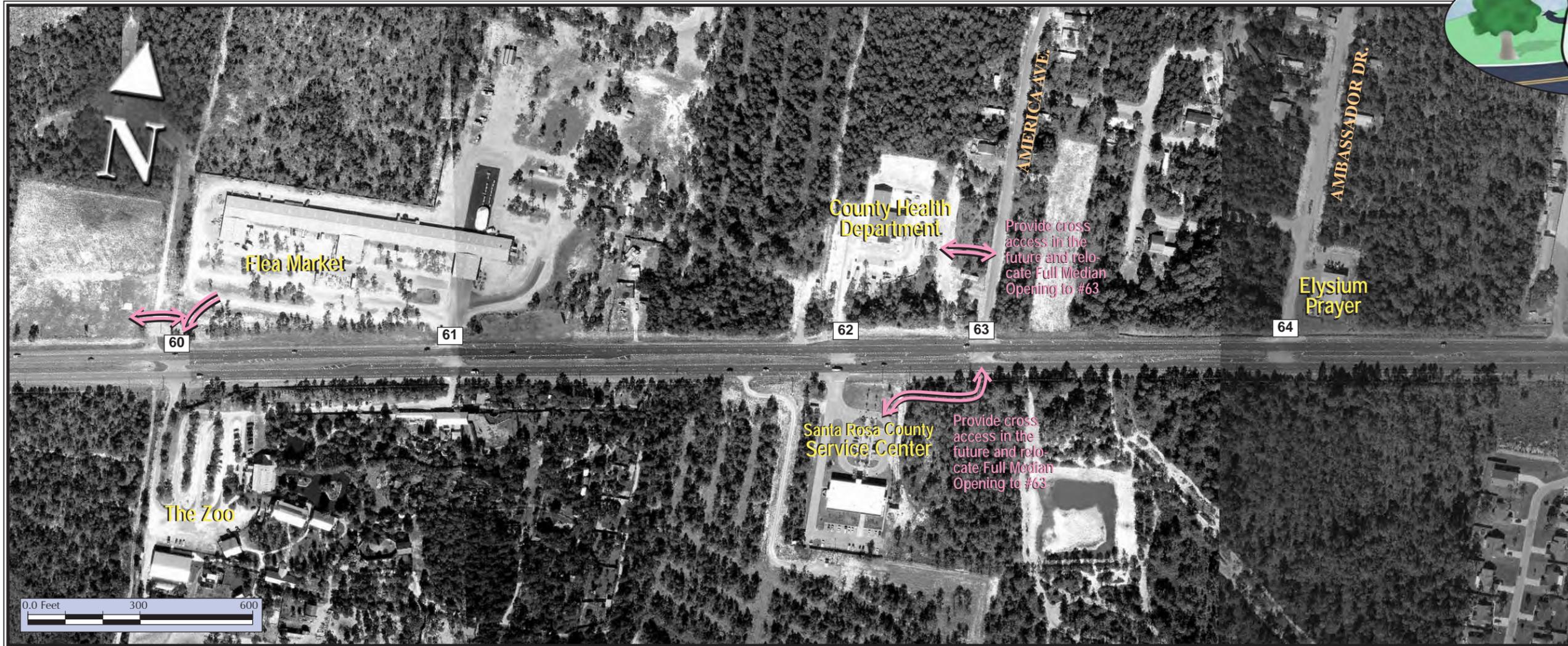


FIGURE 5 - 1.17





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

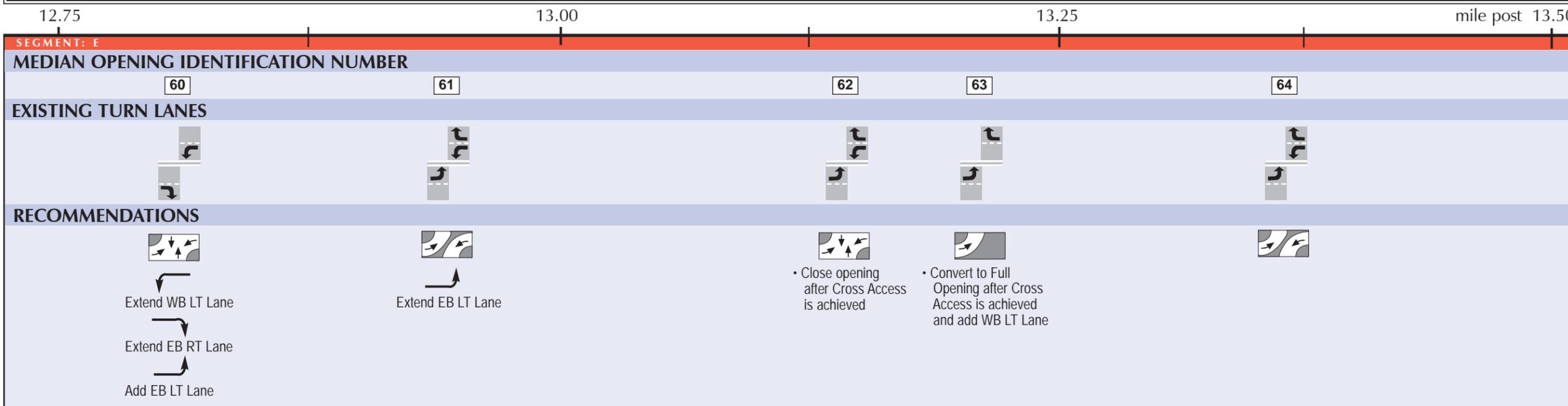


FIGURE 5 - 1.18





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

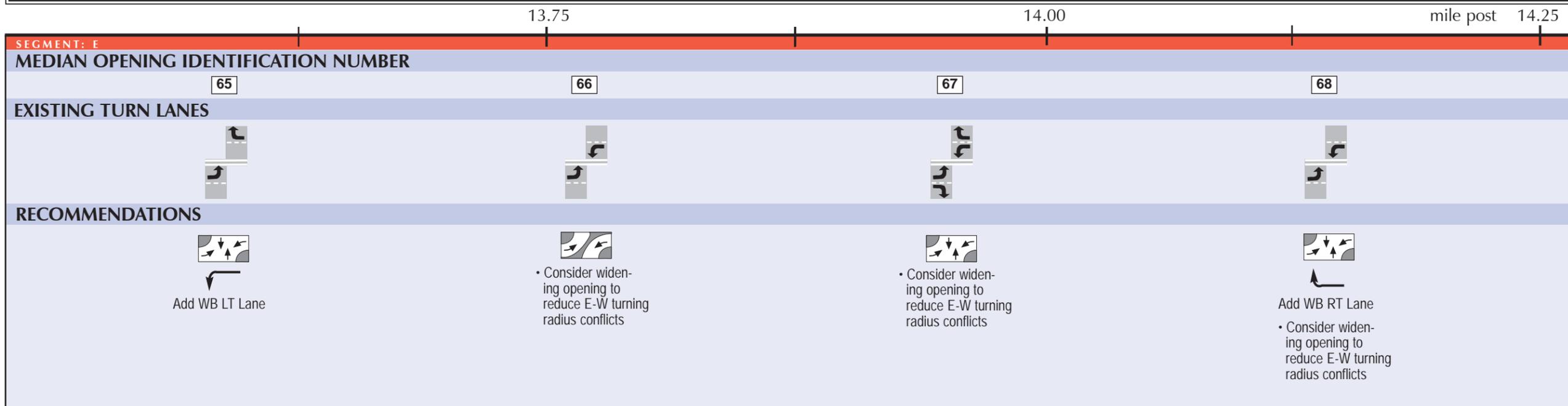
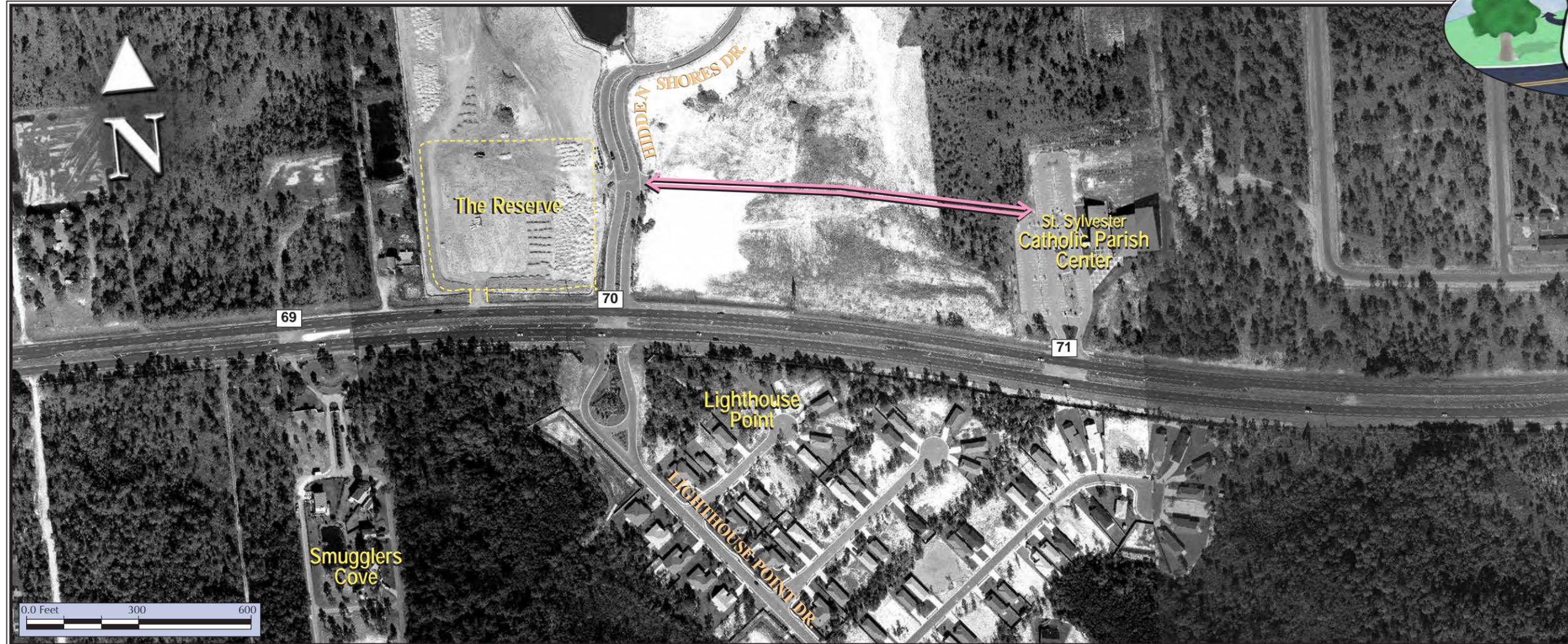


FIGURE 5 - 1.19





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1 ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

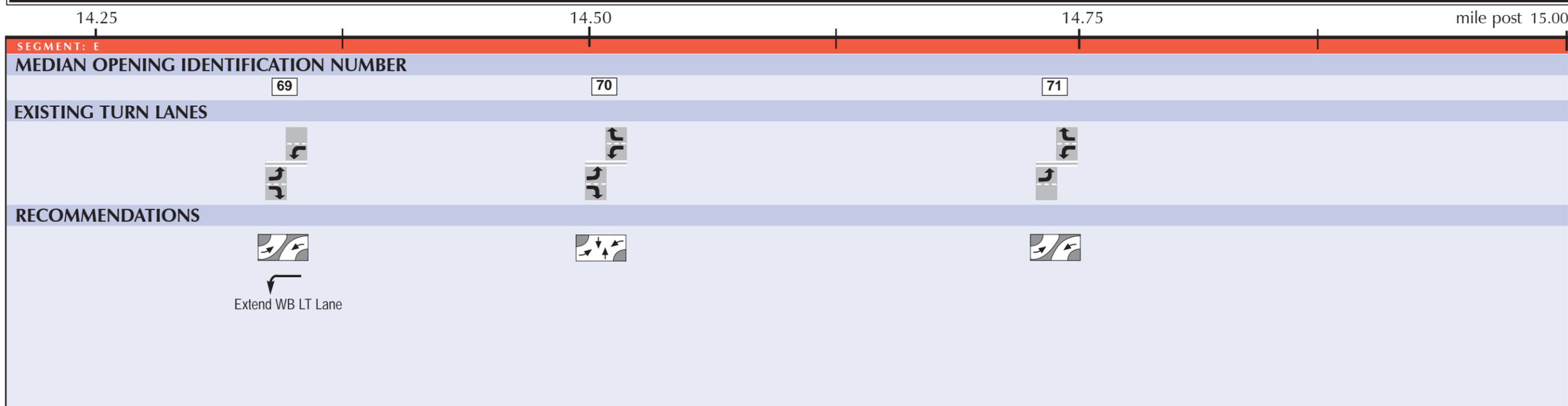


FIGURE 5 - 1.20





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - Turn Lane Present
 - No Turn Lane Present
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

FIGURE 5 - 1.21





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1 ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

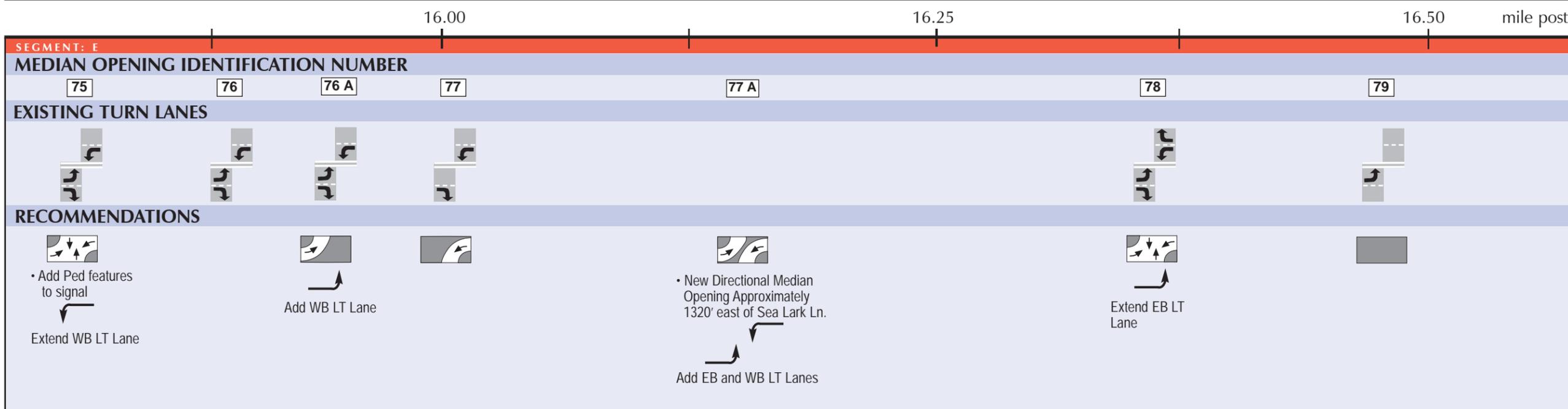


FIGURE 5 - 1.22





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

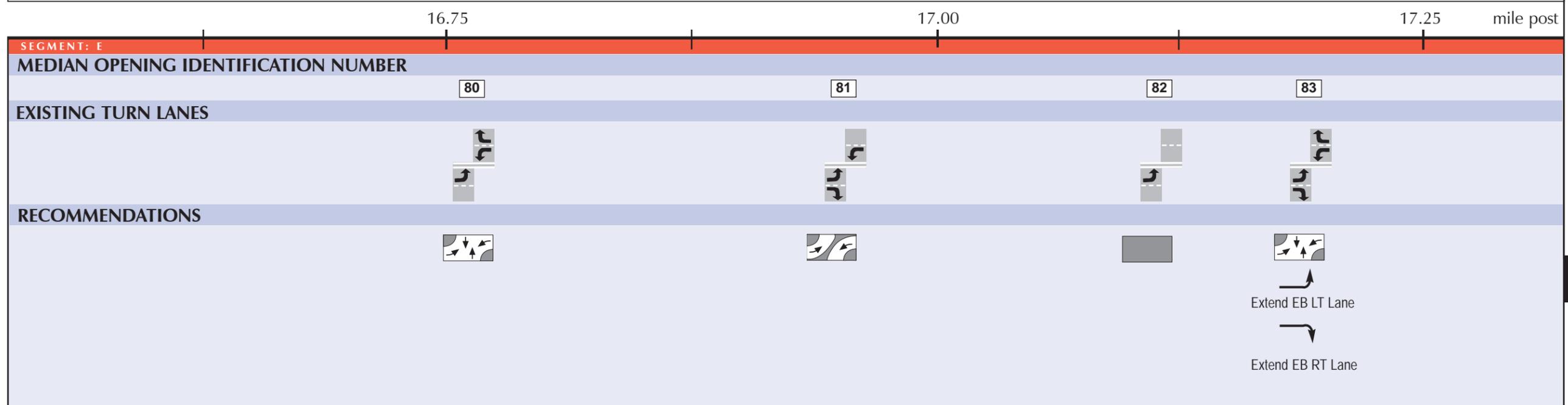
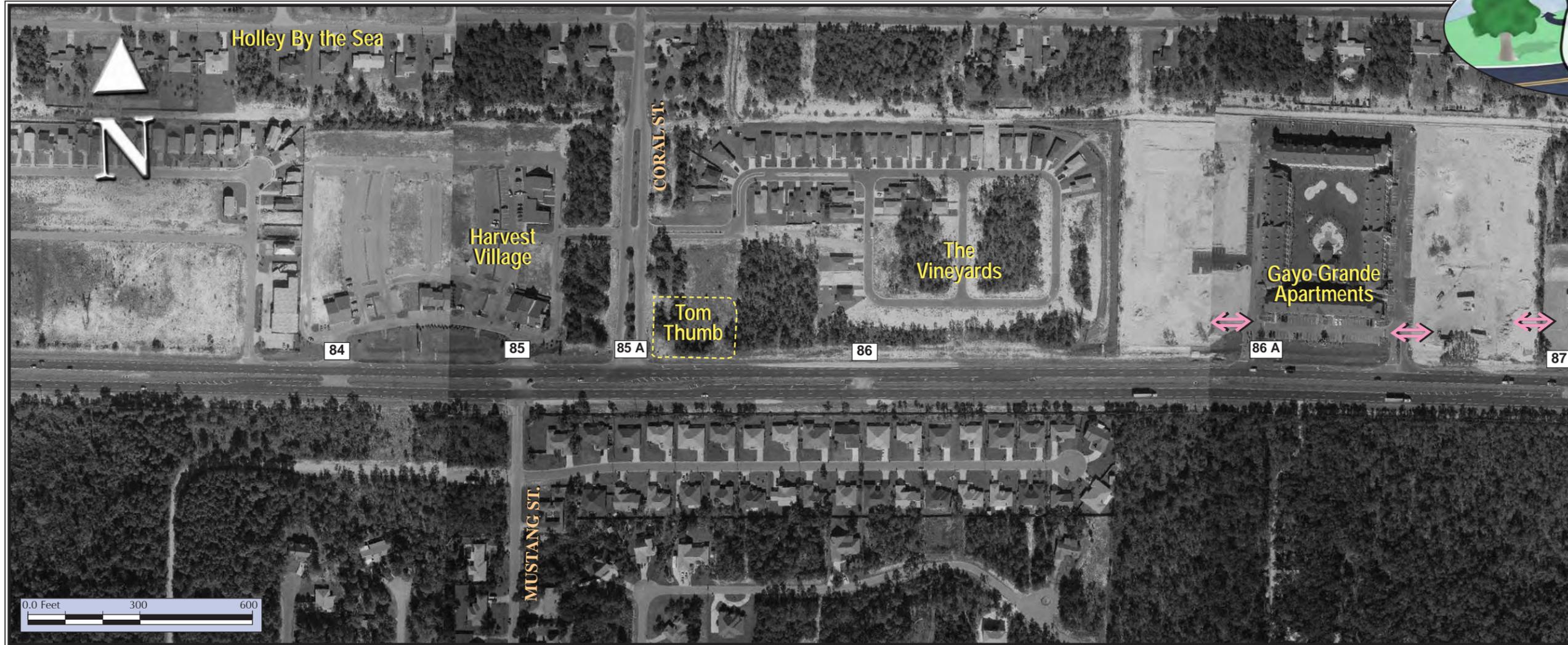


FIGURE 5 - 1.23





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- 1 ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

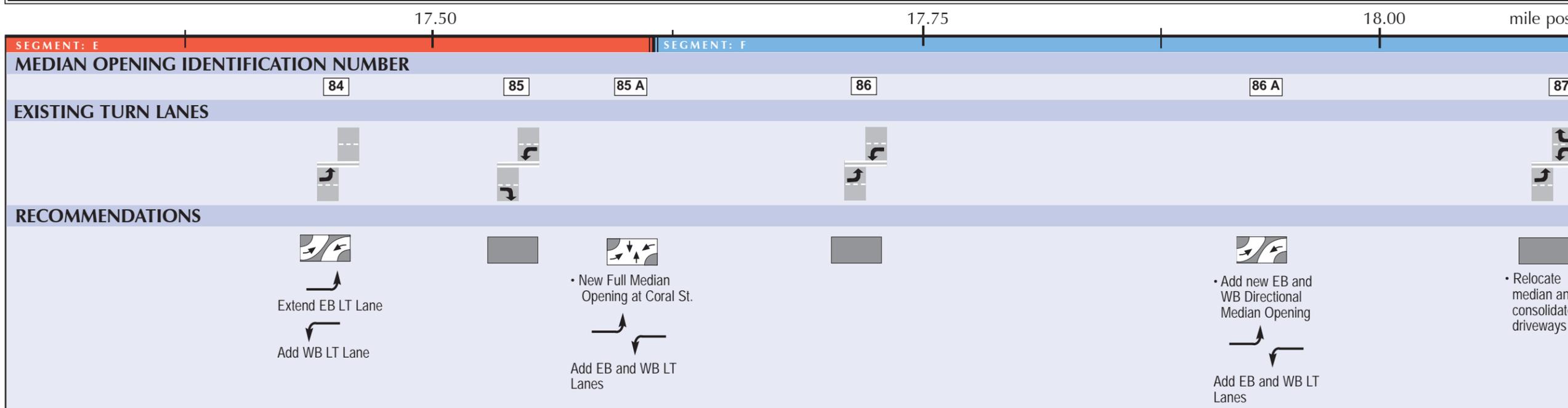


FIGURE 5 - 1.24





LEGEND

Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

ID Number

EXISTING TURN LANES

EB Left Turn Lane
 EB Right Turn Lane
 WB Right Turn Lane
 WB Left Turn Lane

Turn Lane Present
 No Turn Lane Present

RECOMMENDATIONS

Close Median Opening
 Convert to EB and WB Directional Median Opening
 Convert to EB Directional Median Opening
 Convert to WB Directional Median Opening
 Maintain Full Median Opening
 Turn Lane Improvement
 Close Connection
 Narrow Driveway
 New Access/Connection

18.25 18.50 18.75 mile post

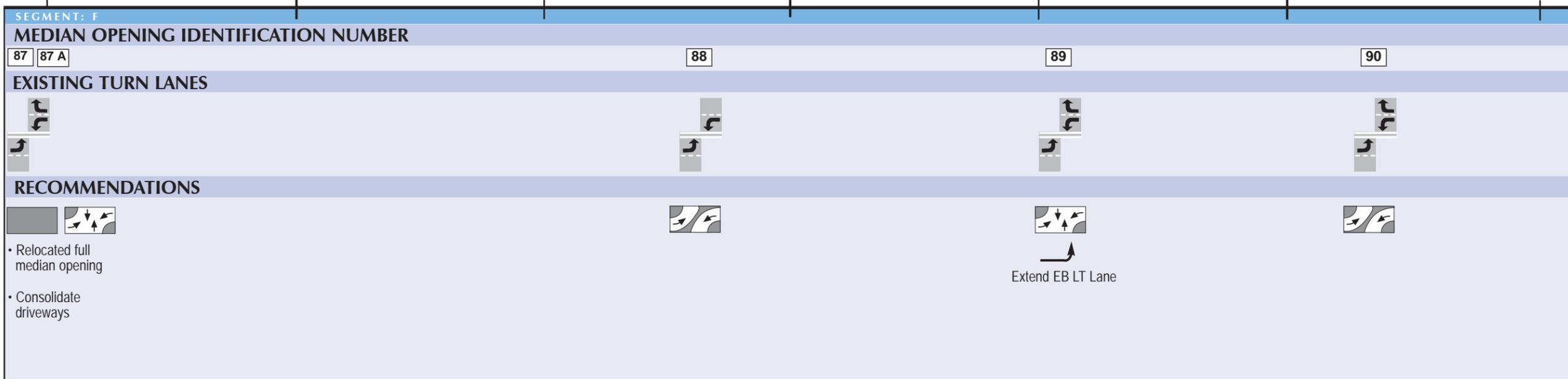


FIGURE 5 - 1.25





LEGEND

-  Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
-  ID Number
- EXISTING TURN LANES**
-  EB Left Turn Lane
-  EB Right Turn Lane
-  WB Right Turn Lane
-  WB Left Turn Lane
-  Turn Lane Present
-  No Turn Lane Present
- RECOMMENDATIONS**
-  Close Median Opening
-  Convert to EB and WB Directional Median Opening
-  Convert to EB Directional Median Opening
-  Convert to WB Directional Median Opening
-  Maintain Full Median Opening
-  Turn Lane Improvement
-  Close Connection
-  Narrow Driveway
-  New Access/Connection

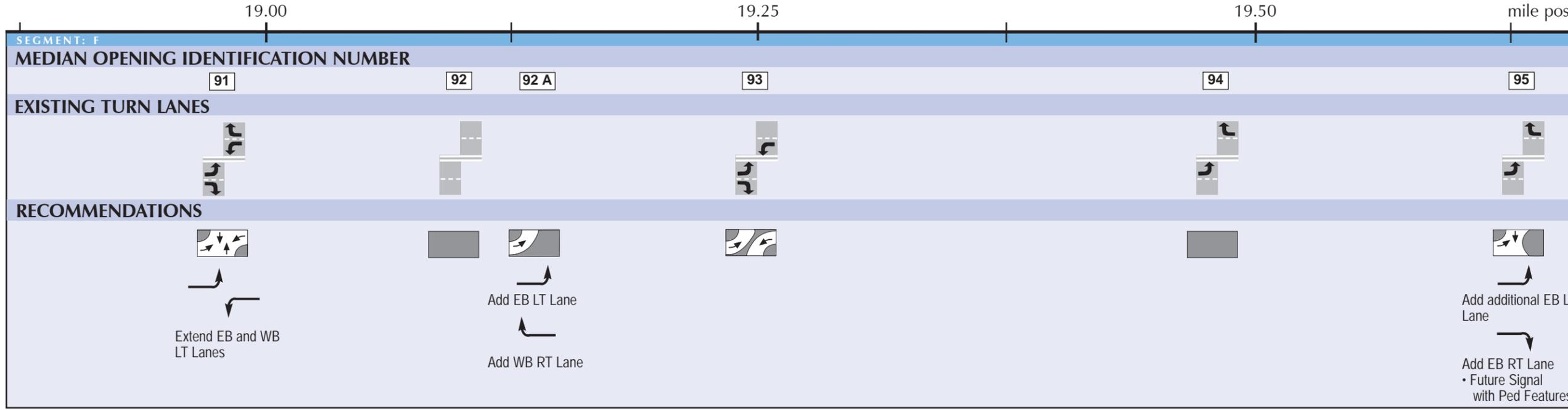


FIGURE 5 - 1.26





LEGEND

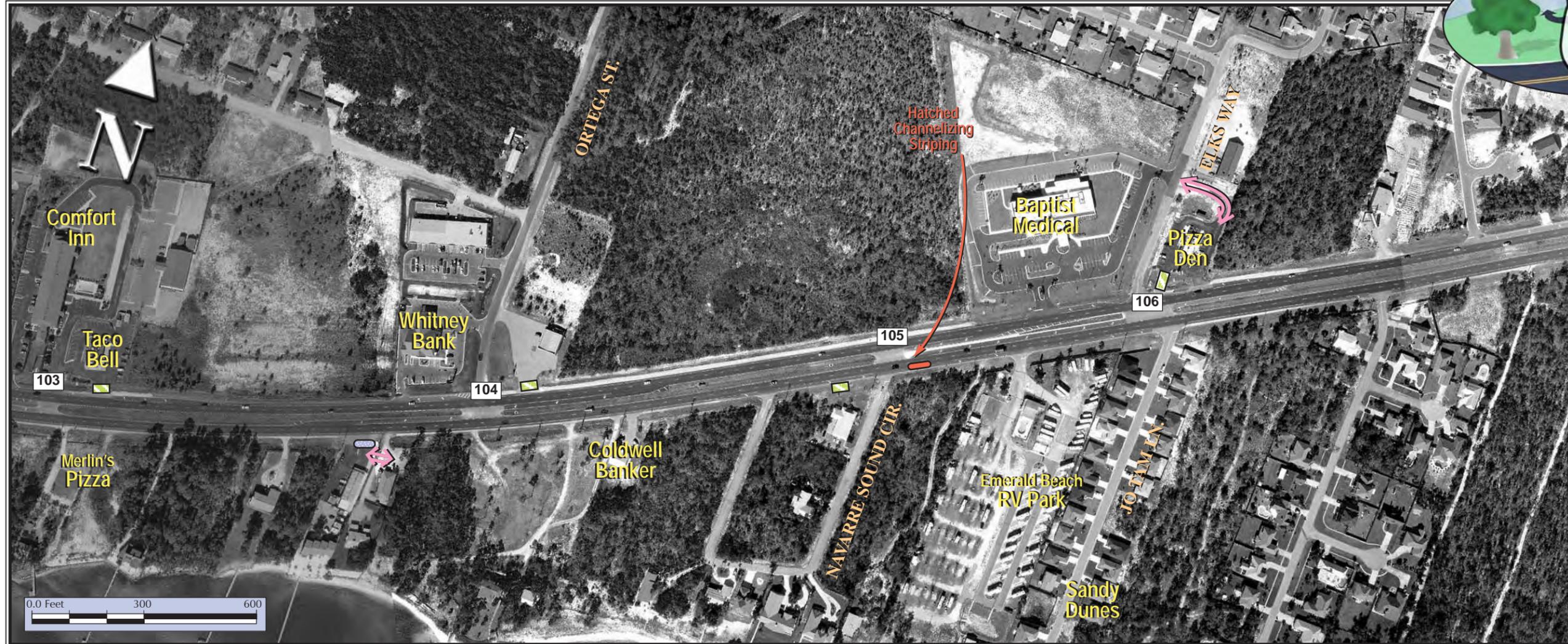
- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

19.75 20.00 20.25 mile post

SEGMENT: F									
MEDIAN OPENING IDENTIFICATION NUMBER									
95	96	97	98	99	100	101	102	103	
EXISTING TURN LANES									
RECOMMENDATIONS									
Add additional EB LT Lane	• Signal is Removed	Extend WB LT Lane		• Move toll booth to the south side of the bridge	• Realign Causeway with Granada	• Add Ped features to signal	• Evaluate Intersection Safety	Add WB LT Lane	• Install Emergency Actuated Traffic Signal
Add EB RT Lane								Extend EB LT Lane	Extend WB LT Lane
• Future Signal should have Ped features									• Add Ped features to signal

FIGURE 5 - 1.27





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
- ID Number
- EXISTING TURN LANES**
- EB Left Turn Lane
- EB Right Turn Lane
- WB Right Turn Lane
- WB Left Turn Lane
- Turn Lane Present
- No Turn Lane Present
- RECOMMENDATIONS**
- Close Median Opening
- Convert to EB and WB Directional Median Opening
- Convert to EB Directional Median Opening
- Convert to WB Directional Median Opening
- Maintain Full Median Opening
- Turn Lane Improvement
- Close Connection
- Narrow Driveway
- New Access/Connection

SEGMENT: F	20.50	20.75	21.00	mile post
MEDIAN OPENING IDENTIFICATION NUMBER				
103	104	105	106	
EXISTING TURN LANES				
RECOMMENDATIONS				
	 Add WB RT Lane		 Extend WB LT Lane • Evaluate Intersection for Safety issues due to offset approaches	

FIGURE 5 - 1.28





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - EB Left Turn Lane
 - EB Right Turn Lane
 - WB Right Turn Lane
 - WB Left Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

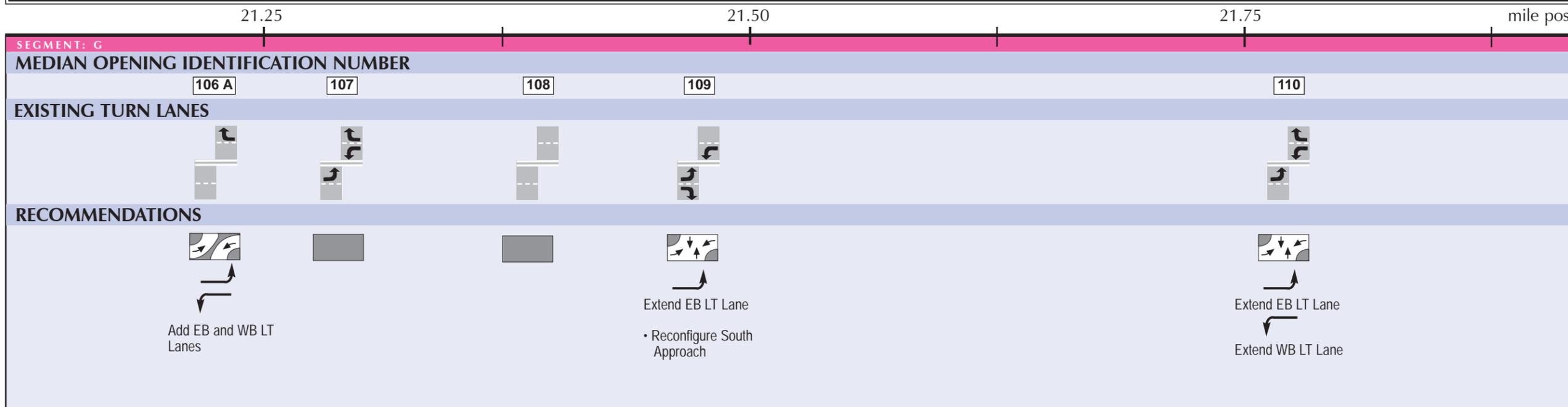


FIGURE 5 - 1.29





LEGEND

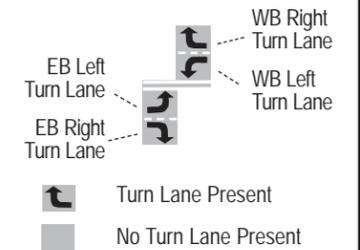


Traffic Signal

MEDIAN OPENING IDENTIFICATION NUMBER

1 ID Number

EXISTING TURN LANES



RECOMMENDATIONS

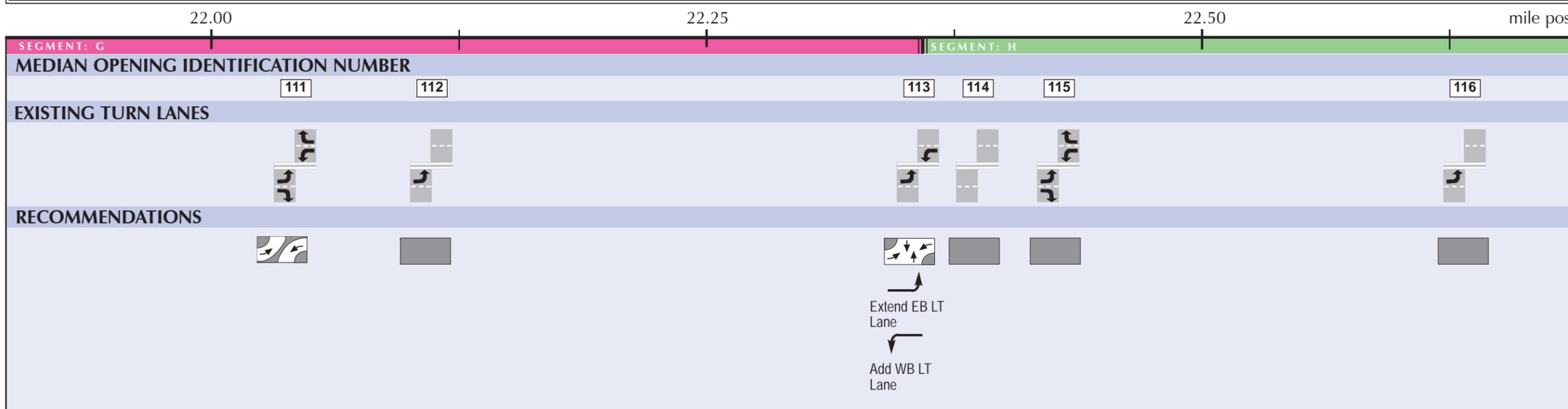
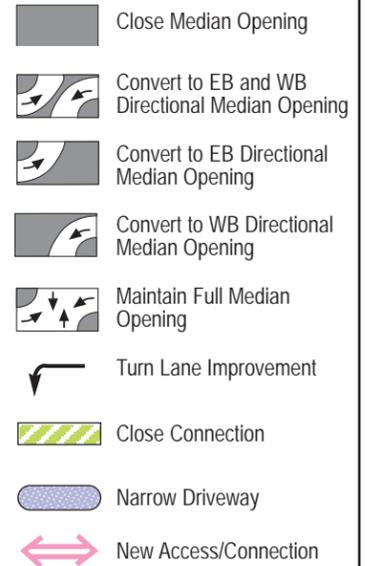


FIGURE 5 - 1.30





LEGEND

- Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
 - ID Number
- EXISTING TURN LANES**
 - WB Right Turn Lane
 - WB Left Turn Lane
 - EB Left Turn Lane
 - EB Right Turn Lane
 - Turn Lane Present
 - No Turn Lane Present
- RECOMMENDATIONS**
 - Close Median Opening
 - Convert to EB and WB Directional Median Opening
 - Convert to EB Directional Median Opening
 - Convert to WB Directional Median Opening
 - Maintain Full Median Opening
 - Turn Lane Improvement
 - Close Connection
 - Narrow Driveway
 - New Access/Connection

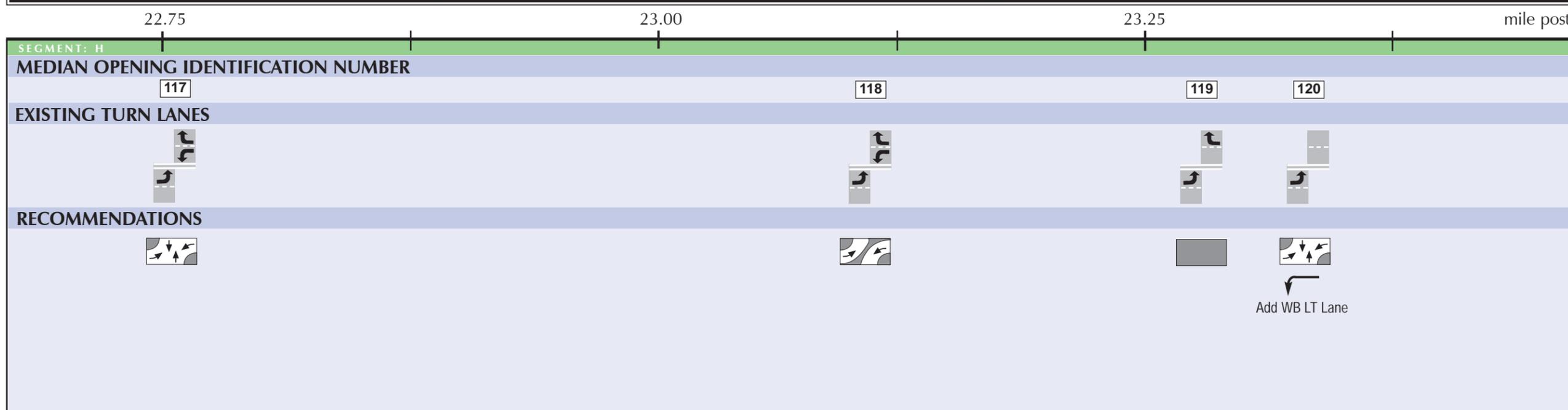


FIGURE 5 - 1.31





LEGEND

-  Traffic Signal
- MEDIAN OPENING IDENTIFICATION NUMBER**
-  ID Number
- EXISTING TURN LANES**
-  EB Left Turn Lane
-  EB Right Turn Lane
-  WB Right Turn Lane
-  WB Left Turn Lane
-  Turn Lane Present
-  No Turn Lane Present
- RECOMMENDATIONS**
-  Close Median Opening
-  Convert to EB and WB Directional Median Opening
-  Convert to EB Directional Median Opening
-  Convert to WB Directional Median Opening
-  Maintain Full Median Opening
-  Turn Lane Improvement
-  Close Connection
-  Narrow Driveway
-  New Access/Connection

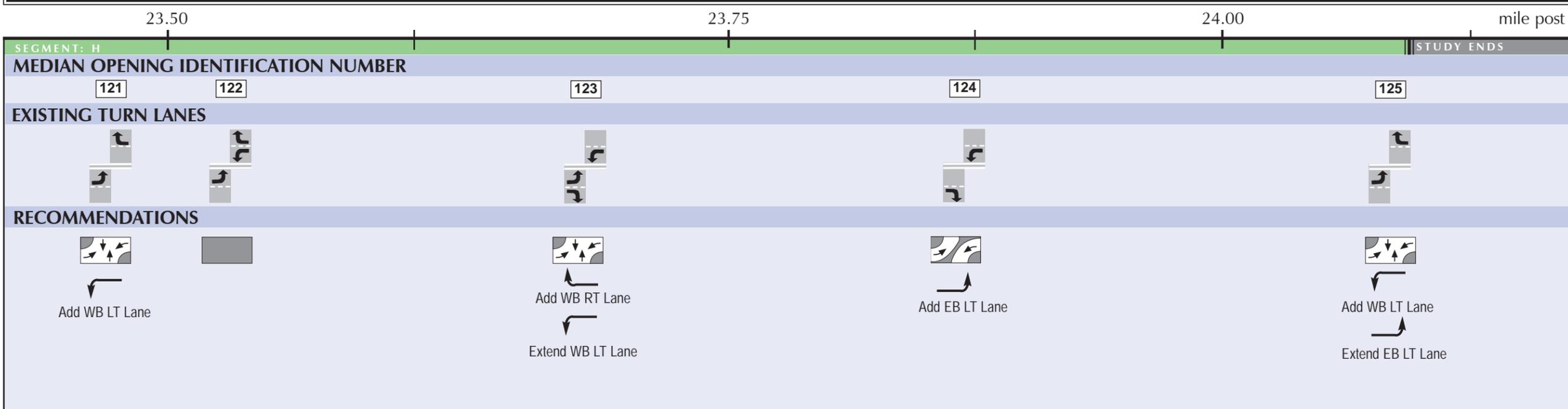


FIGURE 5 - 1.32



Section 6.0 – Corridor Protection Strategies

Florida planning law defines corridor management as “coordination of the planning of designated future transportation corridors with land-use planning within and adjacent to the corridor...” (Chapter 163.3164(30), F.S.) The dynamic relationship between land-use and transportation planning requires that they be closely coordinated in order to be successful. As transportation plans are implemented, they frequently fuel, through increased land values and accessibility, intensification and changes to land use. These land-use changes can lead to increased traffic, congestion and traffic conflicts, which in turn lead to a need to revise transportation plans. If not properly managed, this synergistic relationship can have a negative effect on an area's long-term transportation and land-use goals.

Effective corridor management practices seek to integrate the mobility needs of the transportation facility with the access needs of adjacent properties. The focus of this CMR has been on access modifications within the FDOT right-of-way. However, development along the corridor (beyond the right-of-way) has an equally important impact on the mobility and safety of US 98. This section provides a general overview of the strategies that can be implemented along US 98, beyond the public right-of-way.

6.1 Right-of-Way Preservation and Advance Acquisition

The early identification of needed future transportation corridors and advance acquisition of right-of-way is an important part of any corridor management/preservation strategy. One of the best means to preserve needed future rights-of-way is through the creation of a map or map series, adopted in the Santa Rosa County Comprehensive Plan, which identifies future transportation corridors. At a minimum, these

maps would include the general location of roadway improvements and needed right-of-way widths. The identification of proposed corridors early in the process allows for needed right-of-way to be protected through a variety of zoning tools and land development regulations. The adopted Transportation Element of the Santa Rosa County Comprehensive Plan does not include a right-of-way needs map. Policy 8.A.1.12(A-E) includes a list of scheduled roadway improvement projects identified by the Pensacola MPO, however the study segment of US 98 is not included in this list and the list itself does not identify ultimate right-of-way needs.

As stated in Policy 8.A.4.2 of the County Transportation Element, the general policy direction of the County is to “...provide for the protection of existing and future rights-of-way from encroachment...” Policy 8.A.5.3 states that “All roadways shall be protected, through provisions within the county-wide zoning ordinance, from encroachment by buildings or other structures.” It is clear that it is the County's intent to preserve the necessary right-of-way required to accommodate the future transportation system. The County has developed a number of policies in their comprehensive plan that specifically address land use and access along US 98. The County has also designated US 98 as an Access Management Corridor in their LDC (Section 4.04.02(D)(2)). A number of special standards and regulations have been developed for the roadways that have this designation.

The restriction of land uses, interim use allowances, setback requirements, development review requirements, clustering and transfer of development rights (TDR), overlay zones, and variance provisions provide a means of protecting the ultimate right-of-way needs of US 98. After adopting a map establishing the needed corridor right-of-way, Santa Rosa County could protect future needed right-of-way within the

mapped area using one or a combination of these zoning tools.

Building Restrictions

One method is to restrict all building within the mapped right-of-way preservation area (subject to a variance). Developers would be required to meet the setback requirements from the proposed right-of-way lines. This tool would be applicable throughout most of the study corridor where there are large sections of undeveloped adjacent property. For areas of US 98 such as the western portion of Segment “C” and the eastern portion of Segment “F”, this tool would not be as applicable given the intensity of development located adjacent to US 98.

Interim Uses

Since transportation plans may be long term, Santa Rosa County may want to consider allowing interim uses in the corridor. Interim uses should be of a type that involve little or no structural investment, and that could be easily relocated or discontinued. Some examples include agricultural pursuits, stormwater retention or parking features, and temporary uses such as produce stands, periodic events, or sales. Where uses that would require relocation are allowed, Santa Rosa County could require the applicant/developer to agree to relocate the use. This tool would be used in conjunction with the implementation of building restrictions within the designated right-of-way preservation area.

Setback Requirements

Setbacks along the corridor may be increased to accommodate the proposed right-of-way needed for the corridor. As setbacks are typically measured from the centerline of the facility, this tool is only useful insofar as the centerline of the corridor may be reasonably estimated. Policy

8.A.5.1 of the County Comprehensive Plan, states “...the Zoning Ordinance contains adequate set-back provisions which will protect existing and future rights-of-way from building encroachment.” The status of the existing zoning regulations regarding set-back requirements needs to be evaluated in conjunction with an evaluation of the ultimate right-of-way needs of US 98.

Development Review Procedures

Santa Rosa County could require that applications for development include information on the US 98 corridor, or any other designated corridor, that would be impacted by the development. This might include any development that crosses, abuts, or is within close proximity of the proposed right-of-way for the US 98 corridor. County staff could then work with the applicant to avoid encroaching on the needed future right-of-way.

Section 4.04.03(D)(12) of the County LDC presents Site Plan Review Procedures for roadways designated as an Access Management Corridor. The current standards are very general, however they could be updated to include specific considerations such as an evaluation of the ultimate proposed right-of-way for the US 98 Corridor.

Cluster Zoning and Transfer of Development Rights (TDR)

Clustering and TDRs work in a similar fashion. Both tools would permit higher densities or intensities in one area in order to preserve the future needed right-of-way for the US 98 corridor. Cluster zoning allows a relaxation in lot size and setback requirements in a manner which works with the natural features of the site and avoids encroaching on the protected area. For example, a 5-acre parcel with an allowable

density of 4 units/acre may elect to cluster the 20 units on 3 acres (a density of 6.67 units/acre) to preserve future needed right-of-way and natural features. Clustering may be done through an administrative process or through a more formalized hearing process.

TDR programs differentiate from clustering in that they may allow the unused development potential to be sold, or built at a different location. TDR programs require the clear identification of the “sending area,” in this case the US 98 corridor right-of-way preservation area, and a “receiving area,” or the area in which the unused development rights may be used. The benefit is that developers may acquire additional densities or intensities in the receiving area where conditions would otherwise limit such expansion.

These tools are applicable throughout the study corridor where there is undeveloped property adjacent to US 98. However, the implementation of these tools would have to be closely coordinated with the current policies of the County Comprehensive Plan, the Land Development Code and the County's vision for US 98 and where increased development densities are appropriate.

Overlay Zones

Overlay zones allow for specific requirements to be applied in a specific area in addition to the requirements of the underlying zones. It enables the local government to tailor requirements to each corridor's circumstances. Overlay zones may encompass a variety of requirements including interim uses, variance procedures, setbacks, clustering, TDRs, access standards (e.g. driveway spacing, cross access requirements, etc.), and provide for right-of-way preservation and/or dedication.

The special standards developed for roads such as US 98 that are designated as Access Management Corridors include the implementation of an access management overlay zone (Section 4.04.03(D)(10)). This section of the LDC includes some standards for driveway access and spacing. Additional standards and regulations, including some of the tools previously discussed, could be implemented as part of the overlay zone in order to further enhance the corridor management program for US 98.

Variance

Local governments may face circumstances not contemplated when drafting regulations, or which are general exceptions to the common case where a variance or special exception is needed. Such cases include instances where there are exceptionally shallow or constrained lots, little buildable area is available, or where meeting setback and/or buffering requirements would encroach upon the right-of-way. The variance in this instance would only be appropriate where the hardship is attributable to a corridor management program established for US 98. Such variance process could be achieved administratively, or through an appeals board. If compliance would prevent the owner from a reasonable return on the property, it may become necessary to acquire the property or issue a building permit. In any event, a variance procedure allows flexibility to examine special circumstances on a case-by-case basis. The County has established a general variance process in its LDC (Section 2.04.00 (A)) and also a more detailed process for those roadways, such as US 98, that are designated as Access Management Corridors (Section 4.04.03(D)(13)).

In addition to preserving future needed right-of-way, a government agency must acquire ownership of the right-of-way prior to construction.

Advance acquisition of the needed right-of-way may facilitate acquisition at lower cost and with less conflict. Santa Rosa County can implement advance acquisition of right-of-way through dedications, exactions, eminent domain, options to purchase, and purchase of development rights.

Dedications and Exactions

Dedication or contribution of land or monetary payments may be required by Santa Rosa County as a condition of development approval. In this circumstance, a developer is paying their “fair share” of the cost of providing transportation facilities, and the County would acquire needed right-of-way for the US 98 corridor. Regulations may provide for mandatory dedications. These dedications must be differentiated from any mandatory “site-related” improvements. Mandatory dedications for thoroughfares are subject to legal limitations based on the impacts of the development. Compensation would be necessary for additional dedications of land not in proportion to the impacts of the project. In addition, many communities use negotiated exactions or voluntary dedications. Voluntary or negotiated dedications may occur when the facility will provide overall benefit to the project or development. Increased public awareness and informal negotiations may provide for protection and dedication of right-of-way by developers in a mutually beneficial environment.

Eminent Domain

Under the United States Constitution a government has the right to acquire property for necessary public use. However, property taken in this manner must provide for “fair compensation” to the owner. The process of condemning property to acquire through the eminent domain process is legally complex and typically costly. Eminent domain powers are limited to public purpose,

when acquisition is needed to achieve that purpose, and only the amount needed for said public purpose may be condemned.

Other

Other types of acquisition include early acquisition, options to purchase, and purchase of development rights. These options provide for acquisition of property when an advantageous opportunity occurs, in response to inverse condemnation or hardship claims, for protective buying where development is imminent, to make options to purchase property, to purchase the rights to develop, and to ensure the right-of-way is preserved without paying for or taking the entire property.

6.2 Land Use and Transportation Integration

The methods used to integrate transportation and land use are varied and provide multiple benefits. Methods include regulation of driveway locations through lot size and setbacks, provisions for shared access, and reverse frontage. These techniques provide increased vehicular and pedestrian safety, preservation of roadway level of service, capacities and function, and protection of the public investment in transportation infrastructure.

Lot Size and Setbacks

Typically, the minimum lot frontage and setback requirements along thoroughfares should be increased and the lot width-to-depth ratio should be regulated. The creation of long, narrow lots or flag lots greatly increases the number of driveways needed and reduces the spacing between driveways, increasing the potential for conflict. Subdivisions of land, which create flag lots or multiple lots requiring access on the thoroughfare, should be prohibited.

US 98, as a designated Access Management Corridor, is subject to a special set of standards and regulations. The current corridor standards reference the general zoning regulations for lot size and setback requirements. However, special lot size and setback standards could be established for these designated corridors based on the future corridor needs and the County's ultimate vision for the US 98 corridor.

Shared Access and Frontage Roads

Shared access and frontage roads improve safety and traffic flow by minimizing interruptions from driveways or side streets. Contiguous parcels should be encouraged (or required) to share points of access or provide cross access easements to adjacent parcels. This not only reduces the number of driveways on the thoroughfare, it encourages/facilitates trip linking. Trip linking occurs when a driver is able to reach several destinations without having to re-enter the thoroughfare. Frontage roads are very similar to shared driveways; however, they typically are more formal structures, serving more users. Frontage roads must be designed with care to avoid safety and operational challenges.

Policy 8.A.5.2 of the County Comprehensive Plan states that "...a system of service roads, connections by joint access and/or cross access will be required for new development along arterial roads within the County." This policy is implemented by Section 4.04.03(D)(4) that provides standards for joint and cross access for roadways, such as US 98, that are designated as Access Management Corridors. The current standards require a system of joint driveways and cross access easements when the established connection spacing standards cannot be met. These standards could be updated to place a greater emphasis on providing shared access in all development

scenarios, not just where connection spacing is an issue.

Reverse Frontage

The local government may require that when land is subdivided for residential use that driveway connections may not be allowed on the thoroughfare. Access should instead be provided from an interior street, reducing conflicts between cars entering/exiting driveways and through traffic. The requirements may also include provisions of berms or buffers between the residential uses and the thoroughfares.

Section 4.04.03(C) of the Santa Rosa County LDC states that

"Vehicular access to adjoining minor residential streets shall not be permitted when adequate access is available to collector or arterial roads unless the following conditions are met: a) granting the access point will improve safety or traffic circulation along the collector or arterial road for vehicles, pedestrians and/or bicycles; and, b) the access point will not create a safety hazard or significantly impact vehicles, pedestrians, and/or bicycles utilizing the residential street."

This indicates that the County's overall policy is to provide connections to arterial roadways, such as US 98, and limit connections to side streets. This is most likely to reduce the impacts of vehicular traffic in residential areas. However, in the case of US 98 where there are too many driveway connections, revised standards should be considered.

6.3 Communication and Coordination

The Pensacola MPO plans to provide training and assistance to local governments and applicable agencies later this year through corridor preservation workshops and the development of a model corridor preservation ordinance.

Successful corridor management requires interaction of a variety of agencies, and involvement on behalf of groups and users. "Meaningful public involvement early in project planning and broad based collaboration throughout the decision-making process helps avoid costly delays down the road."¹ Public involvement throughout the process keeps property owners and residents informed and involved. This increases the awareness of the importance of, and need for, corridor management. Involvement of the public in the process allows for input on regulations, viability of alternatives, and guidance on policy issues.

Coordination among governmental agencies is crucial, due to the impact of one agency's or government's decisions on the other's long-term goals. Santa Rosa County and the City of Gulf Breeze determine land use patterns along the corridor, controlling development impacts to the corridor. FDOT controls the mobility of the facility through approval of driveway connection permits, median modifications, and other roadway modifications. In addition to the FDOT, the City of Gulf Breeze, and Santa Rosa County, the MPO provides funding for transportation priorities and is responsible for the overall mobility of the region. Local governments, the MPO, and the FDOT are all necessary partners in the creation of successful corridor management programs.

¹ CUTR. *Managing Corridor Development*. October 1996.

6.4 Recommendation

Effective corridor management requires a combination of strategies such as zoning requirements, changes to subdivision regulations, driveway spacing requirements, and increased intergovernmental coordination.

General policy direction should be provided in the City of Gulf Breeze, and the Santa Rosa County Comprehensive Plans, then implemented through their respective land development codes.

Santa Rosa County and the City of Gulf Breeze should take the following specific actions:

- 1) Use the US 98 Corridor Management Report to guide development and redevelopment approvals in the corridor and support the implementation of the recommended improvements.
- 2) Actively participate in the corridor management training and assistance to be provided by the MPO.
- 3) Align sidestreets along US 98 to create 4-way (plus) intersections to reduce the number of T-intersections, thus reducing the number of conflicts on the corridor.
- 4) Provide east-west connections among subdivisions, through commercial parking lots and through the provision of service roads so that local trips can be satisfied on local streets, improving safety and traffic flow on the arterial.
- 5) Evaluate ultimate right-of-way needs for US 98.
- 6) Refine the standards and regulations for Access Management Corridors to better emphasize corridor management techniques.
- 7) Revisit Section 4.04.03(c) of the Santa Rosa County LDC to encourage side street access and discourage direct access to arterials.

Appendix A - Turning Movement Counts

INTERSECTION: 1 US 98 @ BAYSHORE BLV

SOUTHERN TRAFFIC SERVICES, INC.
2911 WESTFIELD RD
GULF BREEZE, FLORIDA 32561
800-786-3374

RECEIVED

JEFF OPS

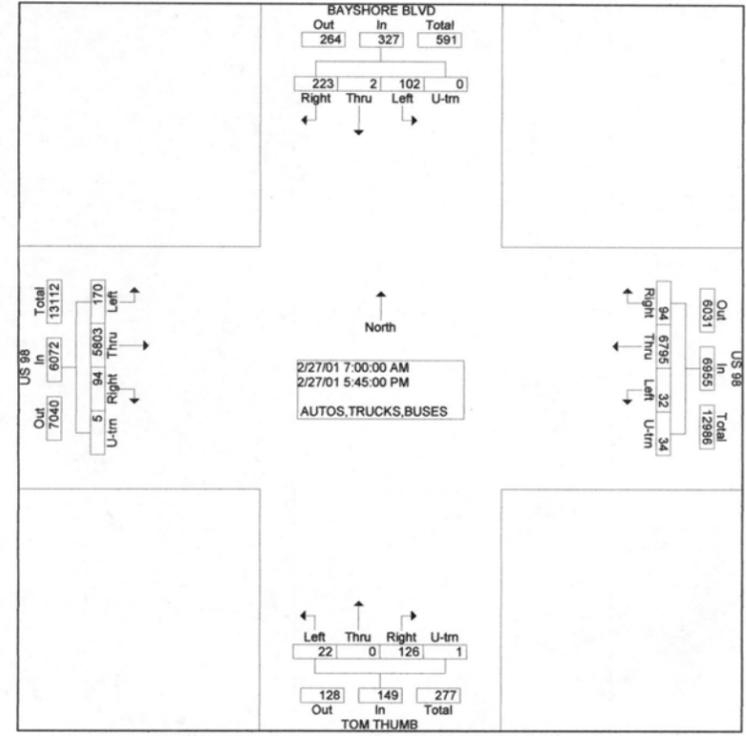
MAP 05 2001

File Name : 13561
Site Code : 00013561
Start Date : 02/27/2001
Page No : 1

HDR

Groups Printed- AUTOS,TRUCKS,BUSES

Start Time	BAYSHORE BLVD Southbound				US 98 Westbound				TOM THUMB Northbound				US 98 Eastbound				Int. Total
	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	
07:00	3	0	33	0	3	734	5	1	2	0	5	0	3	169	6	0	964
07:15	9	0	34	0	3	681	1	0	3	0	9	0	3	209	10	2	964
07:30	2	0	20	0	0	699	3	1	1	0	11	0	2	270	9	0	1018
07:45	6	0	15	0	2	432	4	3	0	0	20	0	9	296	11	1	779
Total	20	0	102	0	8	2526	13	5	6	0	45	0	17	944	36	3	3725
08:00	4	0	18	0	1	380	4	3	0	0	7	0	11	235	9	6	672
08:15	10	0	14	0	1	391	1	2	3	0	6	1	2	272	6	10	708
08:30	8	0	14	0	2	383	6	3	0	0	8	0	2	212	8	0	646
08:45	4	0	7	0	1	398	4	1	0	0	14	0	4	246	7	0	686
Total	26	0	53	0	4	1552	15	9	3	0	35	1	19	965	30	0	2712
*** BREAK ***																	
16:00	7	0	11	0	5	338	6	3	3	0	6	0	11	453	2	0	845
16:15	7	1	3	0	1	316	14	6	0	0	5	0	20	446	4	0	823
16:30	12	0	9	0	3	373	3	1	1	0	5	0	20	436	3	0	866
16:45	6	0	9	0	3	363	11	1	2	0	6	0	14	454	5	0	874
Total	32	1	32	0	12	1390	34	11	6	0	22	0	65	1789	14	0	3408
17:00	7	0	5	0	2	350	2	2	4	0	7	0	15	501	4	2	901
17:15	4	0	8	0	2	319	9	2	2	0	3	0	16	582	2	0	949
17:30	10	0	12	0	0	287	12	3	0	0	3	0	25	565	5	0	922
17:45	3	1	11	0	4	371	9	2	1	0	11	0	13	457	3	0	886
Total	24	1	36	0	8	1327	32	9	7	0	24	0	69	2105	14	2	3658
Grand Total	102	2	223	0	32	6795	94	34	22	0	126	1	170	5803	94	5	13503
Approch %	31.2	0.6	68.2	0.0	0.5	97.7	1.4	0.5	14.8	0.0	84.6	0.7	2.8	95.6	1.5	0.1	
Total %	0.8	0.0	1.7	0.0	0.2	50.3	0.7	0.3	0.2	0.0	0.9	0.0	1.3	43.0	0.7	0.0	



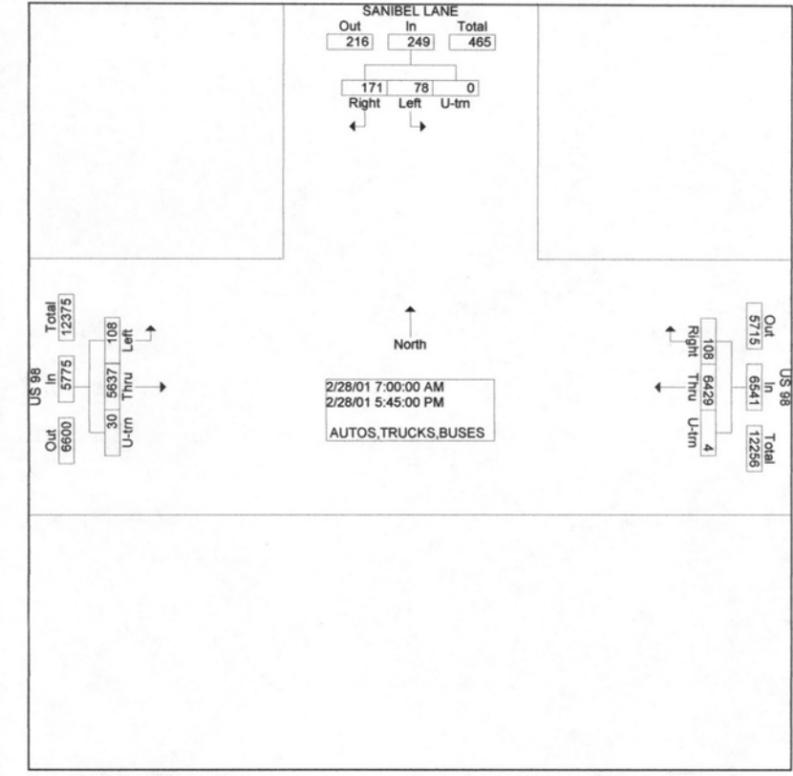
INTERSECTION: 2 US 98 @ SANIBEL LN

SOUTHERN TRAFFIC SERVICES, INC.
2911 WESTFIELD RD
GULF BREEZE, FLORIDA 32561
800-786-3374

File Name : 13562
Site Code : 00135635
Start Date : 02/28/2001
Page No : 1

Groups Printed- AUTOS,TRUCKS,BUSES

Start Time	SANIBEL LANE Southbound			US 98 Westbound			US 98 Eastbound			Int. Total
	Left	Right	U-trn	Thru	Right	U-trn	Left	Thru	U-trn	
07:00	8	31	0	690	5	0	0	150	0	884
07:15	2	28	0	567	3	0	2	235	2	839
07:30	8	11	0	563	6	0	2	269	1	860
07:45	2	13	0	400	3	0	3	297	0	718
Total	20	83	0	2220	17	0	7	951	3	3301
08:00	2	11	0	353	6	1	1	244	2	620
08:15	6	14	0	382	3	0	2	284	0	691
08:30	5	4	0	369	5	0	2	254	1	640
08:45	0	8	0	378	3	0	2	238	2	631
Total	13	37	0	1482	17	1	7	1020	5	2582
*** BREAK ***										
16:00	3	7	0	338	12	0	11	431	2	804
16:15	6	10	0	327	11	0	10	428	7	799
16:30	7	6	0	383	10	1	9	437	1	854
16:45	6	5	0	351	4	1	19	428	1	815
Total	22	28	0	1399	37	2	49	1724	11	3272
17:00	4	6	0	349	9	1	8	481	3	861
17:15	5	1	0	346	11	0	14	526	3	906
17:30	7	9	0	304	10	0	13	514	2	859
17:45	7	7	0	329	7	0	10	421	3	784
Total	23	23	0	1328	37	1	45	1942	11	3410
Grand Total	78	171	0	6429	108	4	108	5637	30	12565
Approch %	31.3	68.7	0.0	98.3	1.7	0.1	1.9	97.6	0.5	
Total %	0.6	1.4	0.0	51.2	0.9	0.0	0.9	44.9	0.2	



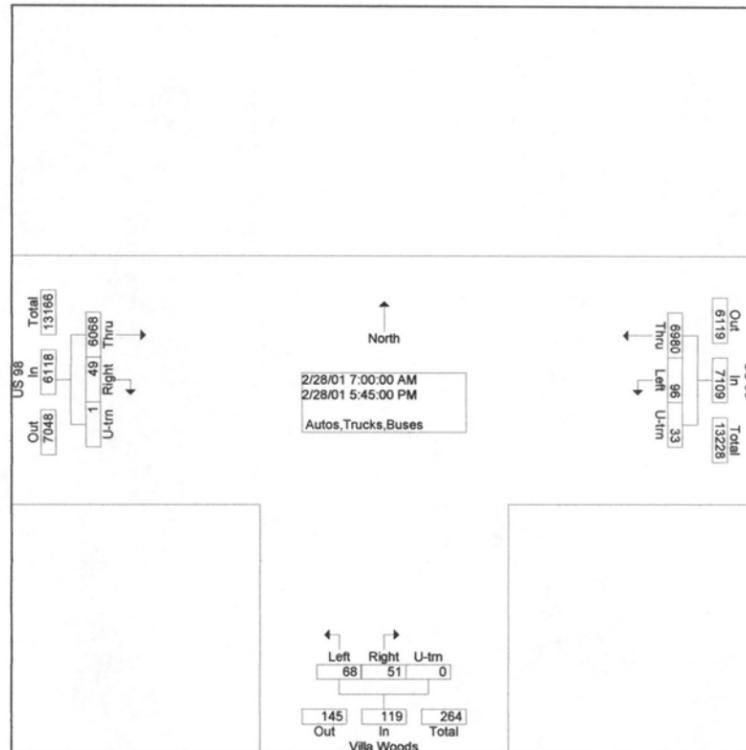
INTERSECTION: 3 US 98 @ Villa Woods

SOUTHERN TRAFFIC SERVICES, INC.
2911 WESTFIELD RD
GULF BREEZE, FLORIDA 32561
800-786-3374

File Name : 13563
Site Code : 34513563
Start Date : 02/28/2001
Page No : 1

Groups Printed- Autos, Trucks, Buses

Start Time	US 98 Westbound			Villa Woods Northbound			US 98 Eastbound			Int.	Total
	Left	Thru	U-trn	Left	Right	U-trn	Thru	Right	U-trn		
07:00	2	691	0	8	3	0	179	3	0		886
07:15	0	633	0	4	0	0	272	1	0		910
07:30	0	576	1	1	1	0	282	0	0		861
07:45	7	464	2	4	2	0	287	7	0		773
Total	9	2364	3	17	6	0	1020	11	0		3430
08:00	2	441	0	4	4	0	265	2	0		718
08:15	9	411	2	4	3	0	268	5	0		702
08:30	4	432	1	5	1	0	239	3	1		686
08:45	8	338	3	12	3	0	269	1	0		634
Total	23	1622	6	25	11	0	1041	11	1		2740
*** BREAK ***											
16:00	7	377	2	4	5	0	435	3	0		833
16:15	9	363	1	1	7	0	464	4	0		849
16:30	5	404	2	5	5	0	433	6	0		860
16:45	9	390	2	4	7	0	484	5	0		901
Total	30	1534	7	14	24	0	1816	18	0		3443
17:00	13	387	4	6	4	0	532	5	0		951
17:15	8	356	6	3	0	0	595	2	0		970
17:30	8	364	4	2	4	0	569	1	0		952
17:45	5	353	3	1	2	0	495	1	0		860
Total	34	1460	17	12	10	0	2191	9	0		3733
Grand Total	96	6980	33	68	51	0	6068	49	1		13346
Apprch %	1.4	98.2	0.5	57.1	42.9	0.0	99.2	0.8	0.0		
Total %	0.7	52.3	0.2	0.5	0.4	0.0	45.5	0.4	0.0		



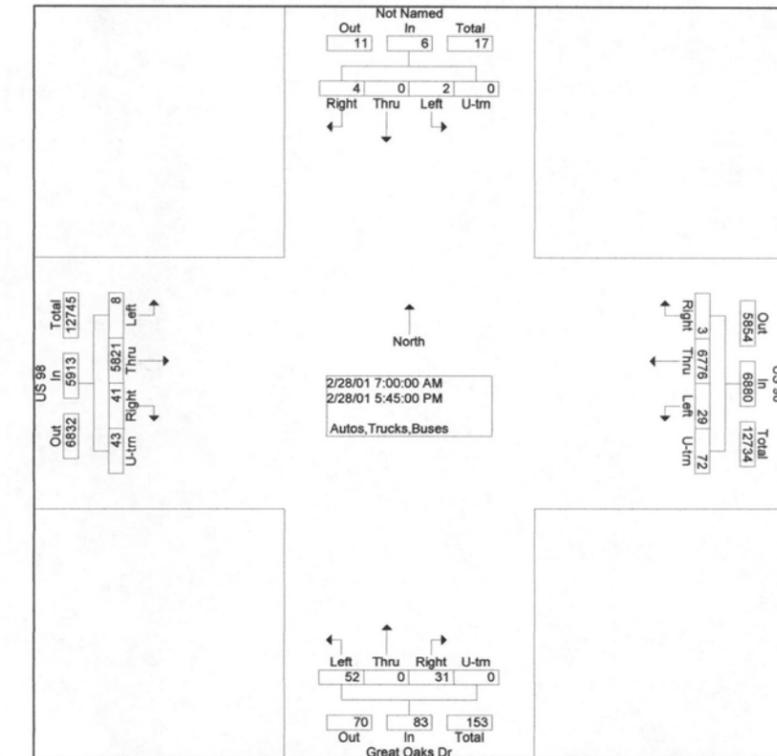
INTERSECTION: 4 US 98 @ Great Oaks Dr

SOUTHERN TRAFFIC SERVICES, INC.
2911 WESTFIELD RD
GULF BREEZE, FLORIDA 32561
800-786-3374

File Name : 13564
Site Code : 34613564
Start Date : 02/28/2001
Page No : 1

Groups Printed- Autos, Trucks, Buses

Start Time	US 98 Southbound				US 98 Westbound				Great Oaks Dr Northbound				US 98 Eastbound				Int.	Total
	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn		
07:00	1	0	1	0	2	655	0	1	13	0	1	0	0	178	0	2	854	
07:15	0	0	0	0	0	600	0	3	1	0	0	0	1	263	5	1	874	
07:30	0	0	1	0	2	559	0	4	2	0	1	0	1	288	1	0	859	
07:45	0	0	0	0	2	455	0	4	5	0	1	0	0	291	2	0	760	
Total	1	0	2	0	6	2269	0	12	21	0	3	0	2	1020	8	3	3347	
08:00	0	0	0	0	0	440	1	3	5	0	1	0	0	259	1	0	710	
08:15	0	0	0	0	2	409	0	1	3	0	1	0	0	266	0	0	692	
08:30	0	0	0	0	3	430	0	4	1	0	6	0	1	240	0	3	688	
08:45	0	0	0	0	1	363	0	3	4	0	2	0	0	265	1	1	640	
Total	0	0	0	0	6	1642	1	11	13	0	10	0	1	1030	2	4	2720	
*** BREAK ***																		
16:00	0	0	1	0	2	364	0	6	3	0	3	0	2	437	5	5	828	
16:15	0	0	0	0	5	349	1	6	3	0	1	0	0	429	4	1	799	
16:30	0	0	1	0	2	383	1	5	1	0	1	0	0	421	1	1	817	
16:45	0	0	0	0	2	373	0	9	1	0	1	0	1	452	5	4	848	
Total	0	0	2	0	11	1469	2	26	8	0	6	0	3	1739	15	11	3292	
17:00	0	0	0	0	0	369	0	6	3	0	2	0	0	510	4	8	902	
17:15	0	0	0	0	4	348	0	7	1	0	1	0	0	543	6	7	917	
17:30	0	0	0	0	2	339	0	6	4	0	5	0	0	518	4	4	882	
17:45	1	0	0	0	0	340	0	4	2	0	4	0	2	461	2	6	822	
Total	1	0	0	0	6	1396	0	23	10	0	12	0	2	2032	16	25	3523	
Grand Total	2	0	4	0	29	6776	3	72	52	0	31	0	8	5821	41	43	12882	
Apprch %	33.3	0.0	66.7	0.0	0.4	98.5	0.0	1.0	62.7	0.0	37.3	0.0	0.1	98.4	0.7	0.7		
Total %	0.0	0.0	0.0	0.0	0.2	52.6	0.0	0.6	0.4	0.0	0.2	0.0	0.1	45.2	0.3	0.3		



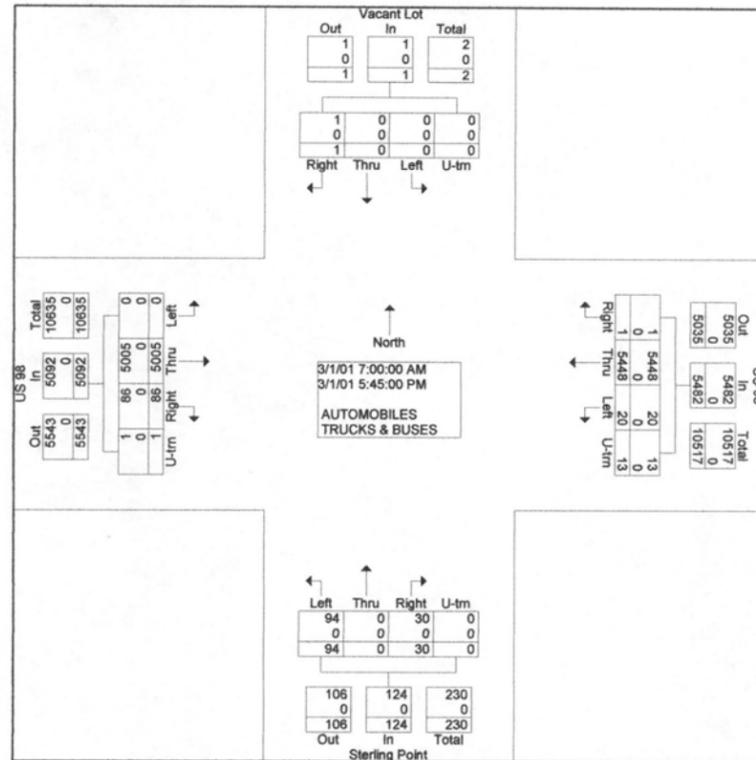
SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

INTERSECTION: 5 US 98 @ Sterling Point

File Name : 13565b
 Site Code : 00013565
 Start Date : 03/01/2001
 Page No : 1

Groups Printed- AUTOMOBILES - TRUCKS & BUSES

Start Time	Vacant Lot Southbound				US 98 Westbound				Sterling Point Northbound				US 98 Eastbound				Int. Total	
	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn		
07:00	0	0	0	0	0	407	0	1	11	0	0	0	0	180	2	0	0	651
07:15	0	0	0	0	0	403	0	1	10	0	1	0	0	234	2	0	0	651
07:30	0	0	0	0	1	321	0	1	7	0	2	0	0	223	3	0	0	558
07:45	0	0	0	0	1	352	1	1	3	0	1	0	0	255	3	0	0	617
Total	0	0	0	0	2	1483	1	4	31	0	4	0	0	892	10	0	0	2427
08:00	0	0	0	0	0	337	0	0	5	0	0	0	0	229	5	0	0	576
08:15	0	0	0	0	1	284	0	1	9	0	1	0	0	212	5	0	0	513
08:30	0	0	0	0	1	310	0	2	5	0	1	0	0	244	3	0	0	566
08:45	0	0	0	0	3	350	0	4	6	0	1	0	0	236	4	0	0	604
Total	0	0	0	0	5	1281	0	7	25	0	3	0	0	921	17	0	0	2259
*** BREAK ***																		
16:00	0	0	0	0	1	341	0	0	5	0	4	0	0	420	7	0	0	778
16:15	0	0	0	0	2	341	0	0	3	0	3	0	0	438	3	1	0	791
16:30	0	0	0	0	0	343	0	0	3	0	3	0	0	378	5	0	0	732
16:45	0	0	0	0	2	359	0	1	4	0	5	0	0	428	5	0	0	804
Total	0	0	0	0	5	1384	0	1	15	0	15	0	0	1664	20	1	0	3105
17:00	0	0	0	0	0	336	0	0	11	0	5	0	0	394	8	0	0	754
17:15	0	0	0	0	5	354	0	1	3	0	1	0	0	435	14	0	0	813
17:30	0	0	0	0	3	317	0	0	5	0	1	0	0	356	10	0	0	692
17:45	0	0	1	0	0	293	0	0	4	0	1	0	0	343	7	0	0	649
Total	0	0	1	0	8	1300	0	1	23	0	8	0	0	1528	39	0	0	2908
Grand Total	0	0	1	0	20	5448	1	13	94	0	30	0	0	5005	86	1	0	10699
Approch %	0.0	0.0	100.0	0.0	0.4	99.4	0.0	0.2	75.8	0.0	24.2	0.0	0.0	98.3	1.7	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.2	50.9	0.0	0.1	0.9	0.0	0.3	0.0	0.0	46.8	0.8	0.0	0.0	



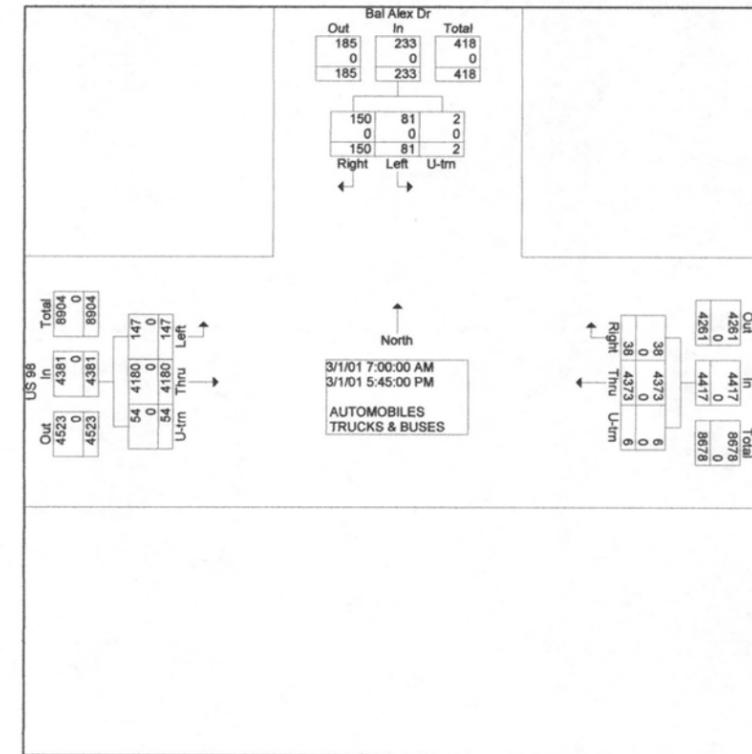
SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

INTERSECTION: 6 US 98 @ Bal Alex

File Name : 13566b
 Site Code : 01356356
 Start Date : 03/01/2001
 Page No : 1

Groups Printed- AUTOMOBILES - TRUCKS & BUSES

Start Time	Bal Alex Dr Southbound			US 98 Westbound				US 98 Eastbound				Int. Total
	Left	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	
07:00	6	22	0	0	337	1	0	6	178	0	1	551
07:15	13	17	0	0	309	3	0	10	213	0	3	568
07:30	4	7	1	0	259	2	0	7	179	0	6	465
07:45	5	8	0	0	266	4	2	7	197	0	6	498
Total	28	54	1	0	1171	10	2	30	767	0	19	2082
08:00	5	7	0	0	192	0	0	4	146	0	1	355
08:15	2	6	0	0	228	3	1	6	160	1	3	410
08:30	4	7	0	0	201	5	0	9	175	0	2	403
08:45	2	6	0	0	309	4	1	4	202	0	8	536
Total	13	26	0	0	930	12	2	23	683	1	14	1704
*** BREAK ***												
16:00	4	2	0	0	291	2	1	15	335	0	5	655
16:15	3	11	0	0	318	1	1	12	373	0	3	722
16:30	10	7	0	1	297	1	0	10	339	0	1	666
16:45	4	7	1	0	321	0	0	10	349	0	2	694
Total	21	27	1	1	1227	4	2	47	1396	0	11	2737
17:00	3	12	0	0	303	2	0	12	327	0	4	663
17:15	5	3	0	0	281	7	0	11	373	0	1	681
17:30	7	21	0	0	230	0	0	13	313	0	3	587
17:45	4	7	0	0	231	3	0	11	321	0	2	579
Total	19	43	0	0	1045	12	0	47	1334	0	10	2510
Grand Total	81	150	2	1	4373	38	6	147	4180	1	54	9033
Approch %	34.8	64.4	0.9	0.0	99.0	0.9	0.1	3.4	95.4	0.0	1.2	
Total %	0.9	1.7	0.0	0.0	48.4	0.4	0.1	1.6	46.3	0.0	0.6	

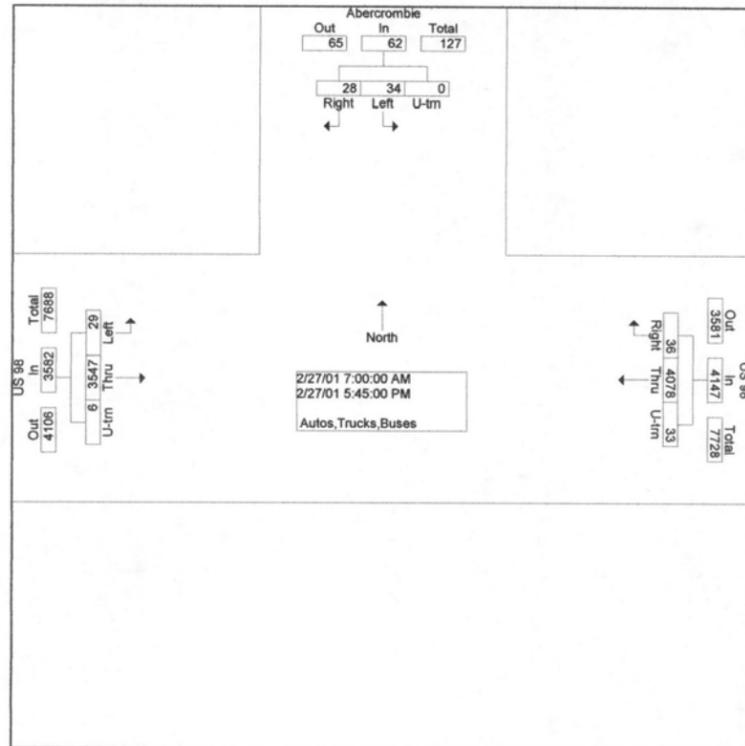


SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

INTERSECTION: 7 US 98 @ Abercrombie

File Name : 13567
 Site Code : 34513567
 Start Date : 02/27/2001
 Page No : 1

Start Time	Abercrombie Southbound			US 98 Westbound			US 98 Eastbound			Int.	Total
	Left	Right	U-trn	Thru	Right	U-trn	Left	Thru	U-trn		
07:00	2	2	0	260	0	1	2	142	0		409
07:15	3	2	0	288	1	1	3	182	1		481
07:30	1	3	0	222	3	0	1	168	0		398
07:45	3	2	0	250	1	2	2	215	0		475
Total	9	9	0	1020	5	4	8	707	1		1763
08:00	4	2	0	214	4	2	0	159	2		387
08:15	4	1	0	246	2	3	0	180	0		436
08:30	3	4	0	275	2	1	0	199	0		484
08:45	1	3	0	253	0	6	0	168	1		432
Total	12	10	0	988	8	12	0	706	3		1739
*** BREAK ***											
16:00	0	0	0	287	0	3	4	269	0		563
16:15	0	1	0	248	4	1	6	283	0		543
16:30	1	0	0	305	4	3	2	294	0		609
16:45	5	2	0	253	4	3	2	238	0		507
Total	6	3	0	1093	12	10	14	1084	0		2222
17:00	1	0	0	255	1	2	0	252	0		511
17:15	3	1	0	246	3	2	2	285	0		542
17:30	1	3	0	247	3	2	2	266	1		525
17:45	2	2	0	229	4	1	3	247	1		489
Total	7	6	0	977	11	7	7	1050	2		2067
Grand Total	34	28	0	4078	36	33	29	3547	6		7791
Approch %	54.8	45.2	0.0	98.3	0.9	0.8	0.8	99.0	0.2		
Total %	0.4	0.4	0.0	52.3	0.5	0.4	0.4	45.5	0.1		

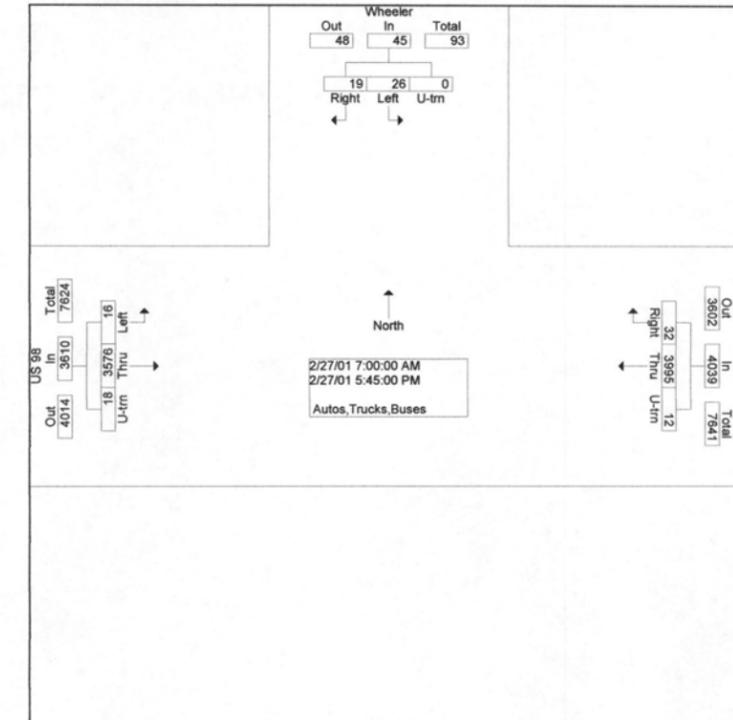


SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

INTERSECTION: 8 US 98 @ Wheeler

File Name : 13568
 Site Code : 34613568
 Start Date : 02/27/2001
 Page No : 1

Start Time	Wheeler Southbound			US 98 Westbound			US 98 Eastbound			Int.	Total
	Left	Right	U-trn	Thru	Right	U-trn	Left	Thru	U-trn		
07:00	2	0	0	246	1	0	2	149	2		402
07:15	4	3	0	304	1	0	0	177	1		490
07:30	3	2	0	222	4	0	1	163	0		395
07:45	0	1	0	252	2	0	0	216	0		471
Total	9	6	0	1024	8	0	3	705	3		1758
08:00	2	0	0	216	0	0	0	172	0		390
08:15	0	3	0	241	1	2	0	175	3		425
08:30	1	0	0	263	1	0	0	202	1		468
08:45	0	0	0	252	0	0	2	180	1		435
Total	3	3	0	972	2	2	2	729	5		1718
*** BREAK ***											
16:00	2	0	0	263	0	1	1	263	0		530
16:15	0	2	0	266	1	0	2	285	1		557
16:30	2	2	0	292	2	0	1	296	1		596
16:45	4	2	0	235	8	0	0	234	1		484
Total	8	6	0	1056	11	1	4	1078	3		2167
17:00	2	0	0	251	8	1	3	277	4		546
17:15	1	4	0	231	1	0	0	267	1		505
17:30	1	0	0	241	1	2	3	267	0		515
17:45	2	0	0	220	1	6	1	253	2		485
Total	6	4	0	943	11	9	7	1064	7		2051
Grand Total	26	19	0	3995	32	12	16	3576	18		7694
Approch %	57.8	42.2	0.0	98.9	0.8	0.3	0.4	99.1	0.5		
Total %	0.3	0.2	0.0	51.9	0.4	0.2	0.2	46.5	0.2		



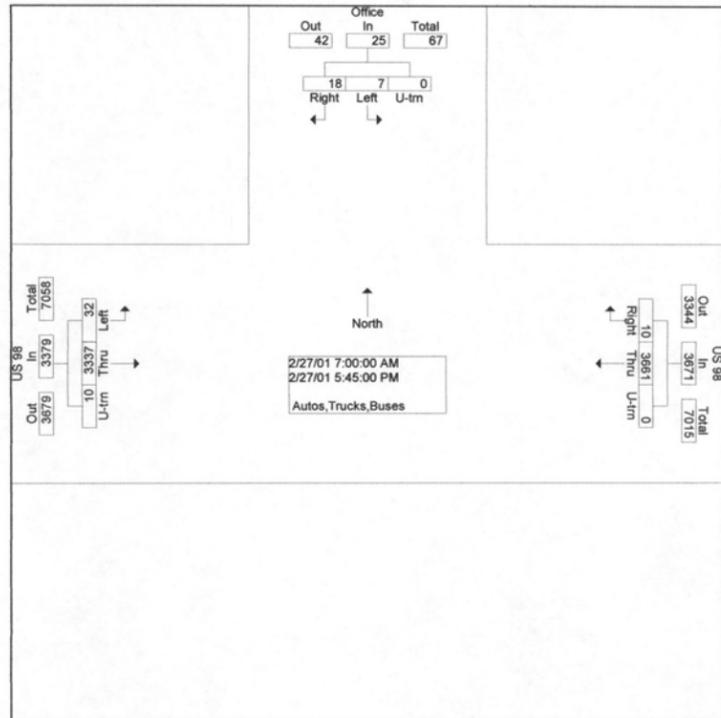
SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

File Name : 13569
 Site Code : 00013569
 Start Date : 02/27/2001
 Page No : 1

INTERSECTION: 9 Median Break w/o Mustan

Groups Printed- Autos, Trucks, Buses

Start Time	Office Southbound			US 98 Westbound			US 98 Eastbound			Int. Total
	Left	Right	U-trn	Thru	Right	U-trn	Left	Thru	U-trn	
07:00	0	0	0	254	0	0	2	251	9	516
07:15	0	0	0	144	0	0	2	205	0	351
07:30	0	0	0	215	0	0	0	181	0	396
07:45	0	0	0	155	0	0	7	193	1	356
Total	0	0	0	768	0	0	11	830	10	1619
08:00	1	0	0	205	1	0	4	229	0	440
08:15	0	0	0	218	0	0	0	272	0	490
08:30	0	1	0	198	2	0	2	209	0	412
08:45	0	1	0	161	1	0	1	197	0	361
Total	1	2	0	782	4	0	7	907	0	1703
*** BREAK ***										
16:00	0	0	0	275	0	0	0	205	0	480
16:15	0	0	0	283	2	0	2	189	0	476
16:30	2	0	0	273	1	0	2	242	0	520
16:45	1	2	0	249	0	0	1	227	0	480
Total	3	2	0	1080	3	0	5	863	0	1956
17:00	2	3	0	267	1	0	2	189	0	464
17:15	0	6	0	268	1	0	2	202	0	479
17:30	1	4	0	266	1	0	3	187	0	462
17:45	0	1	0	230	0	0	2	159	0	392
Total	3	14	0	1031	3	0	9	737	0	1797
Grand Total	7	18	0	3661	10	0	32	3337	10	7075
Approch %	28.0	72.0	0.0	99.7	0.3	0.0	0.9	98.8	0.3	
Total %	0.1	0.3	0.0	51.7	0.1	0.0	0.5	47.2	0.1	



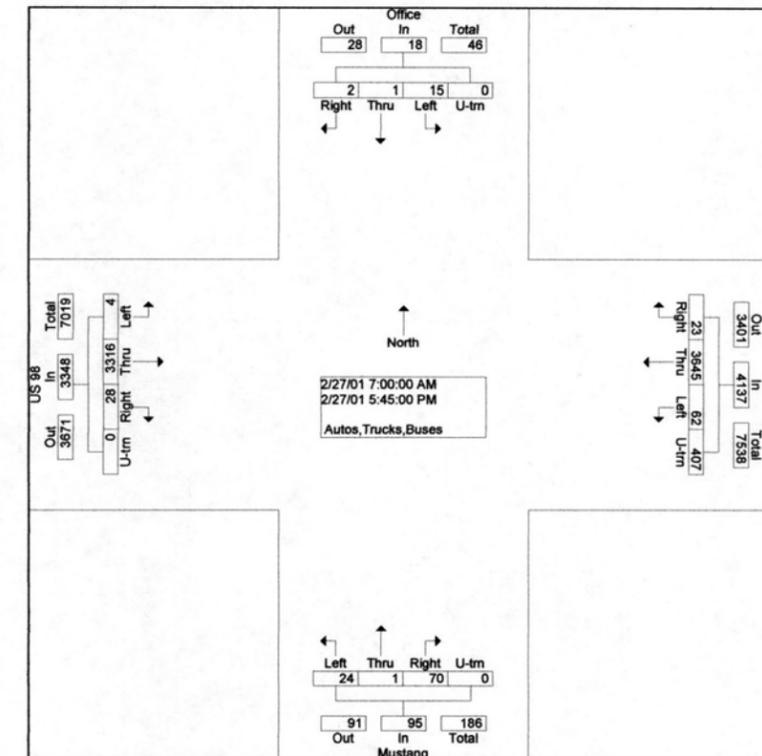
SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

File Name : 135610
 Site Code : 15135610
 Start Date : 02/27/2001
 Page No : 1

INTERSECTION: 10 US 98 @ Mustang

Groups Printed- Autos, Trucks, Buses

Start Time	Office Southbound				US 98 Westbound				Mustang Northbound				US 98 Eastbound				Int. Total
	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	
07:00	0	1	0	0	1	250	0	48	4	0	8	0	0	250	1	0	563
07:15	0	0	0	0	2	144	0	44	0	0	8	0	0	204	1	0	403
07:30	1	0	0	0	1	215	0	25	0	0	8	0	0	179	2	0	431
07:45	2	0	0	0	2	155	0	30	0	0	6	0	0	193	0	0	388
Total	3	1	0	0	6	764	0	147	4	0	30	0	0	826	4	0	1785
08:00	0	0	0	0	0	206	7	27	0	0	3	0	0	229	1	0	473
08:15	1	0	0	0	1	211	4	25	7	0	4	0	0	268	4	0	525
08:30	2	0	0	0	2	199	1	18	1	0	7	0	0	206	3	0	439
08:45	2	0	0	0	2	161	4	25	1	0	4	0	0	194	3	0	396
Total	5	0	0	0	5	777	16	95	9	0	18	0	0	897	11	0	1833
*** BREAK ***																	
16:00	2	0	0	0	3	275	1	13	0	0	2	0	0	204	1	0	501
16:15	0	0	0	0	6	284	1	15	1	0	3	0	0	187	2	0	499
16:30	3	0	0	0	6	272	1	27	2	0	5	0	0	244	0	0	560
16:45	0	0	1	0	6	245	1	15	3	0	2	0	0	223	5	0	501
Total	5	0	1	0	21	1076	4	70	6	0	12	0	0	858	8	0	2061
17:00	0	0	1	0	6	267	1	24	0	1	2	0	3	186	2	0	493
17:15	0	0	0	0	8	266	0	23	3	0	1	0	0	202	2	0	505
17:30	0	0	0	0	11	265	2	27	2	0	3	0	0	188	1	0	499
17:45	2	0	0	0	5	230	0	21	0	0	4	0	1	159	0	0	422
Total	2	0	1	0	30	1028	3	95	5	1	10	0	4	735	5	0	1919
Grand Total	15	1	2	0	62	3645	23	407	24	1	70	0	4	3316	28	0	7598
Approch %	83.3	5.6	11.1	0.0	1.5	88.1	0.6	9.8	25.3	1.1	73.7	0.0	0.1	99.0	0.8	0.0	
Total %	0.2	0.0	0.0	0.0	0.8	48.0	0.3	5.4	0.3	0.0	0.9	0.0	0.1	43.6	0.4	0.0	

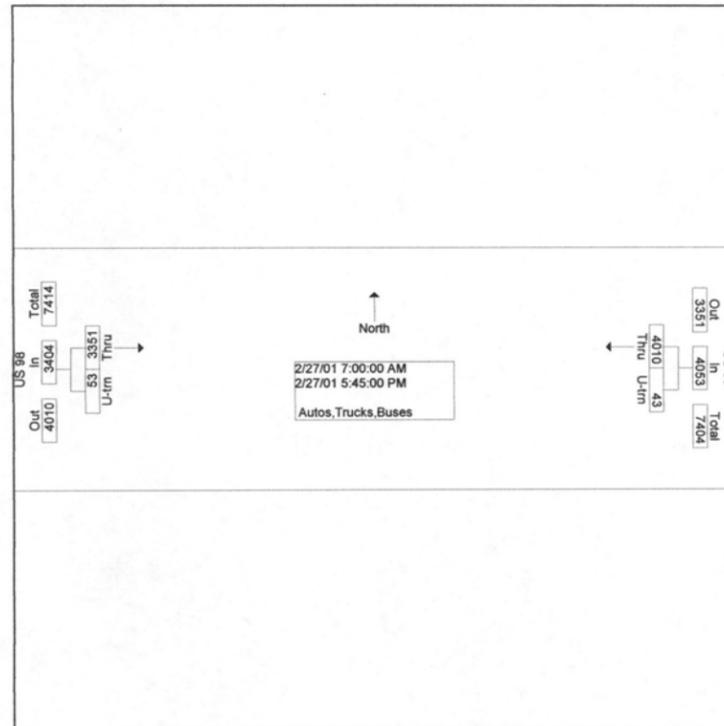


SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

File Name : 13569
 Site Code : 00135611
 Start Date : 02/27/2001
 Page No : 1

Groups Printed- Autos, Trucks, Buses

Start Time	US 98 Westbound		US 98 Eastbound		Int. Total
	Thru	U-trn	Thru	U-trn	
07:00	293	4	256	2	555
07:15	187	1	208	4	400
07:30	239	4	186	2	431
07:45	185	3	199	2	389
Total	904	12	849	10	1775
08:00	225	6	228	4	463
08:15	230	3	270	3	506
08:30	212	1	214	4	431
08:45	183	4	195	5	387
Total	850	14	907	16	1787
*** BREAK ***					
16:00	279	1	202	6	488
16:15	299	5	187	3	494
16:30	293	2	250	2	547
16:45	254	3	223	2	482
Total	1125	11	862	13	2011
17:00	297	1	182	6	486
17:15	290	2	202	1	495
17:30	295	1	186	5	487
17:45	249	2	163	2	416
Total	1131	6	733	14	1884
Grand Total	4010	43	3351	53	7457
Approch %	98.9	1.1	98.4	1.6	
Total %	53.8	0.6	44.9	0.7	



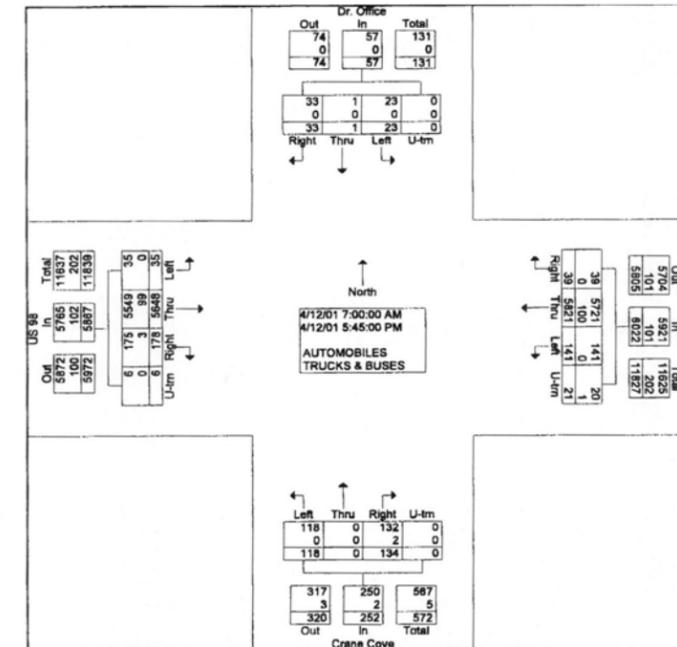
SOUTHERN TRAFFIC SERVICES, INC.
 2911 WESTFIELD RD
 GULF BREEZE, FLORIDA 32561
 800-786-3374

Intersection: US 98 @ Crane Cove
 Note: A large movie theater is being bu
 Crave Cove Blvd. The curb cuts are on C

File Name : 13789
 Site Code : 00013789
 Start Date : 04/12/2001
 Page No : 1

Groups Printed- AUTOMOBILES - TRUCKS & BUSES

Start Time	Dr. Office Southbound				US 98 Westbound				Crane Cove Northbound				US 98 Eastbound				Int. Total
	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	Left	Thru	Right	U-trn	
07:00	1	0	0	0	10	337	0	0	7	0	3	0	1	203	7	0	569
07:15	0	0	0	0	9	324	5	0	8	0	4	0	3	212	6	0	571
07:30	1	0	1	0	7	348	3	1	8	0	5	0	2	215	5	0	596
07:45	0	0	1	0	9	332	1	2	5	0	5	0	6	210	8	0	579
Total	2	0	2	0	35	1341	9	3	28	0	17	0	12	840	26	0	2315
08:00	1	0	0	0	6	355	0	3	6	0	3	0	6	252	14	0	646
08:15	0	0	4	0	17	337	2	1	8	0	8	0	3	241	14	1	636
08:30	4	0	6	0	14	354	8	2	9	0	15	0	6	268	18	0	704
08:45	6	0	6	0	15	336	4	4	9	0	10	0	7	277	19	1	694
Total	11	0	16	0	52	1382	14	10	32	0	36	0	22	1038	65	2	2680
*** BREAK ***																	
16:00	0	0	2	0	6	377	0	0	7	0	17	0	0	490	11	0	910
16:15	1	0	3	0	5	399	2	3	8	0	13	0	1	417	9	2	863
16:30	3	0	0	0	4	395	1	2	4	0	12	0	0	473	14	0	908
16:45	2	1	3	0	9	363	2	1	9	0	11	0	0	475	13	1	890
Total	6	1	8	0	24	1534	5	6	28	0	53	0	1	1855	47	3	3571
17:00	2	0	3	0	4	390	1	0	8	0	6	0	0	437	5	1	857
17:15	1	0	2	0	11	417	1	0	5	0	8	0	0	509	10	0	964
17:30	0	0	0	0	3	378	1	2	10	0	5	0	0	524	14	0	937
17:45	1	0	2	0	12	379	8	0	7	0	9	0	0	445	11	0	874
Total	4	0	7	0	30	1564	11	2	30	0	28	0	0	1915	40	1	3632
Grand Total	23	1	33	0	141	5821	39	21	118	0	134	0	35	5648	178	6	12198
Approch %	40.4	1.8	57.9	0.0	2.3	96.7	0.6	0.3	46.8	0.0	53.2	0.0	0.6	96.3	3.0	0.1	
Total %	0.2	0.0	0.3	0.0	1.2	47.7	0.3	0.2	1.0	0.0	1.1	0.0	0.3	46.3	1.5	0.0	



Appendix B – Highway Capacity Software (HCS) Intersection Analysis Summary

**Highway Capacity Analysis of Median Modifications
AM Peak Hour**

Intersection (ID Number)	Existing				Proposed			
	Volume (veh/hr)	Delay (sec)	Queue Length ⁽³⁾ (feet)	LOS	Volume (veh/hr)	Delay (sec)	Queue Length ⁽³⁾ (feet)	LOS
Bayshore Road (#5)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	20	37.4	25	E	20	37.4	25	E
WB L	13	10.8	25	B	13	10.8	25	B
NB LTR / R ⁽¹⁾	51	⁽²⁾		F	51	13.4	25	B
SB LTR / R ⁽¹⁾	122	684.5	325	F	122	158.5	200	F
Sanibell Lane (#9)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	10	27.8	25	D	10	27.8	25	D
WB L	0	0	25	A	9	10.9	25	B
SB LR / R	103	193.7	200	F	103	71.5	125	F
Villa Woods Circle (#10)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
WB L	12	10.9	25	B	12	10.9	25	B
NB LR / R	23	26.3	25	D	23	13	25	B
Sanibell Lane (#9)					<i>Full Median Opening</i>			
EB L					10	27.8	25	D
WB L					12	10.8	25	B
SB LR / R					103	207.2	200	F
Villa Woods Circle (#10)					<i>Closed Median Opening</i>			
EB L								
NB LR / R					23	13.1	25	B
Great Oaks Drive (#11)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	5	26.1	25	D	5	26.6	25	D
WB L	18	11.1	25	B	18	11.1	25	B
NB LTR / R	24	40.2	25	E	24	13.2	25	B
SB LTR / R	3	71.6	25	F	3	28.1	25	D
Sterling Point Drive (#35)	<i>Full Median Opening</i>				<i>Closed Median Opening</i>			
EB L	0	0	0	N/A				
WB L	6	10.3	25	B				
NB LTR / R	35	25.7	25	D	35	12.5	25	B
SB LTR / R	0	0	0	N/A	0	0	0	N/A
Bal Alex Avenue (#41)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	49	12.7	25	B	49	12.7	25	B
WB L	2	9.6	25	A	2	9.7	25	A
SB LR / R	82	22.6	50	C	82	16.2	25	C
Harvest Village W (#84)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	7	9.7	25	A	7	9.7	25	A
WB LT	0	0	0	N/A	10	10.3	25	B
SB LR / R	3	13.1	25	B	3	11.3	25	B
Mustang Street (#85)	<i>Full Median Opening</i>				<i>Closed Median Opening</i>			
WB L	100	11.2	25	B				
NB LTR / R	27	16.3	25	C	27	12.3	25	B
SB LTR / R	5	26.6	25	D	5	11.4	25	B
Coral Street (#85A)	<i>Closed Median Opening</i>				<i>Full Median Opening</i>			
EB L					20	9.7	25	A
SB R / LR	190	14	50	B	190	21	75	C

⁽¹⁾ Lane usage under proposed scenario

⁽²⁾ Delay exceeds capacity such that delay is larger than 999 seconds/vehicle

⁽³⁾ Assumes vehicle length = 25 feet

**Highway Capacity Analysis of Median Modifications
PM Peak Hour**

Intersection (ID Number)	Existing				Proposed			
	Volume (veh/hr)	Delay (sec)	Queue Length ⁽³⁾ (feet)	LOS	Volume (veh/hr)	Delay (sec)	Queue Length ⁽³⁾ (feet)	LOS
Bayshore Road (#5)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	71	15	25	B	71	15	25	B
WB L	17	24.2	25	C	17	24.2	25	C
NB LTR / R ⁽¹⁾	31	88.1	50	F	31	28.9	25	D
SB LTR / R ⁽¹⁾	61	61.3	75	F	61	17.2	25	C
Sanibell Lane (#9)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	63	15.8	25	C	63	15.8	25	C
WB L	2	21.7	25	C	2	22.1	25	C
SB LR / R	43	35.8	50	E	43	17.5	25	C
Villa Woods Circle (#10)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
WB L	54	28.4	50	D	54	28.4	50	D
NB LR / R	30	68.7	50	F	30	27.9	25	D
Sanibell Lane (#9)					<i>Full Median Opening</i>			
EB L					63	15.8	25	C
WB L					56	27.9	50	D
SB LR / R					43	⁽²⁾		F
Villa Woods Circle (#10)					<i>Closed Median Opening</i>			
EB L								
NB LR / R					30	29.3		D
Great Oaks Drive (#11)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	24	14.4	25	B	24	14.5	25	B
WB L	36	24.7	25	C	36	24.7	25	C
NB LTR / R	18	96.7	50	F	18	25	25	C
SB LTR / R	0	0	0	N/A	0	0	0	N/A
Sterling Point Drive (#35)	<i>Full Median Opening</i>				<i>Closed Median Opening</i>			
EB L	1	13.4	25	B				
WB L	6	16.5	25	C				
NB LTR / R	30	49	50	E	30	20.1	25	C
SB LTR / R	0	0	0	N/A	0	0	0	N/A
Bal Alex Avenue (#41)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	54	13.3	25	B	54	13.3	25	B
WB L	1	13.5	25	B	1	13.6	25	B
SB LR / R	57	23.6	25	C	57	16	25	C
Harvest Village W (#84)	<i>Full Median Opening</i>				<i>Directional Median Opening</i>			
EB L	5	11.3	25	B	5	11.3	25	B
WB LT	0	0	25	N/A	26	10.3	25	B
SB LR / R	5	18.2	25	C	5	13.2	25	B
Mustang Street (#85)	<i>Full Median Opening</i>				<i>Closed Median Opening</i>			
WB L	91	10.9	25	B				
NB LTR / R	18	16	25	C	18	12	25	B
SB LTR / R	6	33.3	25	D	6	13.3	25	B
Coral Street (#85A)	<i>Closed Median Opening</i>				<i>Full Median Opening</i>			
EB L					19	11.8	25	B
SB R / LR	140	16.6	25	C	140	27.1	75	D

⁽¹⁾ Lane usage under proposed scenario

⁽²⁾ Delay exceeds capacity such that delay is larger than 999 seconds/vehicle

⁽³⁾ Assumes vehicle length = 25 feet

Appendix C – City of Gulf Breeze Corridor Management Study

**US 98 ACCESS MANAGEMENT RECOMMENDATIONS
CITY OF GULF BREEZE**

Revised June 10, 1999, Per City Council Comments

I. US 98 (From Pensacola Bay Bridge to Fairpoint Drive)

- A) The second median opening from the Bridge (median opening to the immediate west of the Holiday Inn driveway) is not directly aligned to serve an adjacent land use. Realignment to serve the westernmost Holiday Inn Driveway for lefts out, or closure are recommended.
- B) At the Holiday Inn entrance, the median opening effectively serves only Holiday Inn, since the Bay Bridge driveway on the north side of US 98 is gated and not utilized except by emergency vehicles. The eastbound left turn storage lane provides limited service to land use on the north side of US 98. The full median opening may, however, provide the safest U-turn opportunity within Segment I. (Items IA and IB should be considered jointly). The width and configuration of this opening may require modification. The adequacy of the eastbound right turn lane length at the Holiday Inn entrance should also be evaluated.
- C) Prohibit lefts out of the Shopping Center/Innerlight driveway by modifying the median opening and/or the driveway opening. **(Review)**

II. US 98 (From Fairpoint Drive to CR 399)

- A) 1) Close center median opening immediately west of Hoffman Drive to prohibit lefts out of Hoffman Drive and Delchamps; 2) Construct a channelized island on Hoffman Drive to prohibit eastbound right turns from cutting across Hoffman Drive into the Circle K driveway; and 3) Construct curbing along Hoffman to separate parking area for Fish Market site.
- B) At Andrew Jackson Trail (AJT), construct a westbound right turn deceleration lane on US 98, and improve turning radius into AJT. Upon implementation of item II.G, close median opening to prohibit lefts into and out of AJT. Continue to allow westbound lefts into Hoffman.
- C) Add an eastbound right-turn storage lane on US 98 at Gulf Breeze Elementary School entrance.
- Revised* D) Implement the New School Road Concept from Daniel Drive to US 98 at the Middle School Entrance. Install a new traffic signal and construct a drop-off bay at the pedestrian overpass. (When this improvement is completed, the median openings at Daniel Drive and Andrew Jackson Trail can be closed). Bring Daniel Drive up to standard (i.e., curb and gutter, etc.).

June 10, 1999
Hamilton Smith & Associates, Inc.

- Revised* E) Modify center median and construct necessary turn lanes on US 98 at the New School Road. Specifically, construct an eastbound left turn lane and westbound right turn lane.
- F) Modify Middle School driveway to align with New School Road, and improve turning radii.
- G) At Daniel Drive, construct a westbound right turn (deceleration) lane on US 98 and improve turning radius into Daniel Drive. Install a "No U-turn" sign for westbound traffic at Daniel Drive median opening.
- H) Improve High School driveway opening, once Daniel Drive median cut has been closed.
- I) Close the first median opening west of Shoreline Drive. **(Review)**
- J) At Shoreline Drive, construct an eastbound right turn deceleration lane on US 98 and improve turning radius. Also extend length of northbound left and right turn storage lanes on Shoreline Drive.
- K) Implement the service road concept (interconnected circulation among businesses north of US 98) from McClure Drive to Skating Rink and connecting to Daniel Drive at rear of properties.
- L) At Shoreline Drive, extend westbound left turn storage lane on US 98 to accommodate a.m. lefts. (Alternately, new traffic signal at New School Road will reduce the number of lefts during peak hours, and may eliminate the need for this improvement).
- M) Consider the merging of westbound vehicles from the Pensacola Beach off-ramp attempting to turn left onto Shoreline Drive. **(Review)**

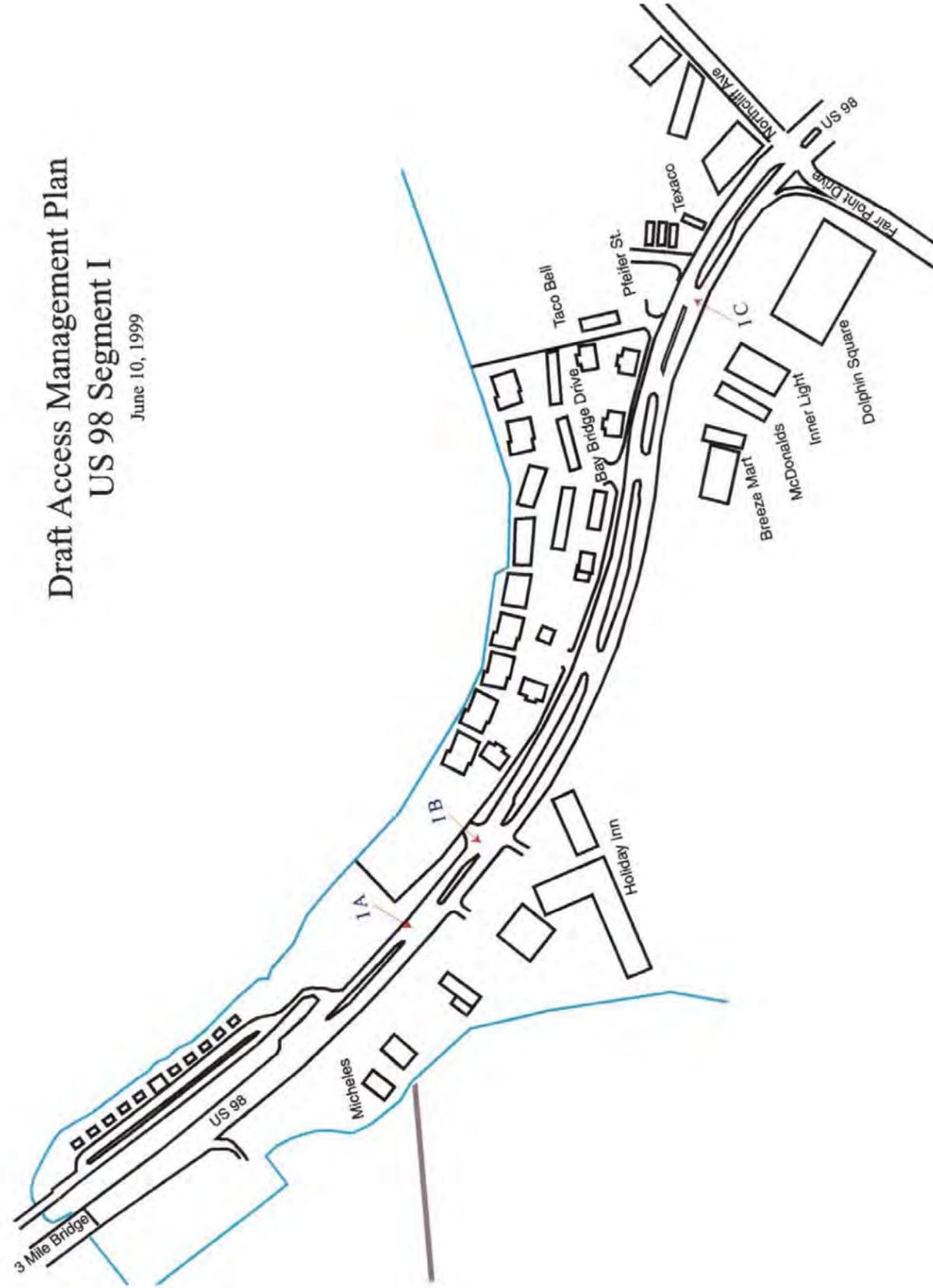
III. US 98 (From CR 399 to Naval Live Oaks)

- A) At St. Francis Drive, construct a right turn deceleration lane on US 98 with improved turning radius. Continue to allow eastbound lefts into St. Francis. Prohibit eastbound and westbound U-turns by constructing "No U-turn" signs. In the event that lefts out of St. Francis continue to be allowed, construct an eastbound acceleration lane on US 98.
- B) At median opening across from Ace Hardware, modify median opening to allow both eastbound and westbound lefts into the adjacent properties, but to prohibit lefts out. To accommodate eastbound lefts into proposed new development north of US 98, the median opening may need to be modified and an eastbound deceleration lane provided. For new development and redevelopment, driveway modifications to prohibit lefts out can also be an effective access management technique. **(Review)**
- C) Promote a service road concept (interconnected circulation between businesses located north of US 98) from NovaCare (Baptist Hospital) to proposed development adjoining St. Francis Drive.

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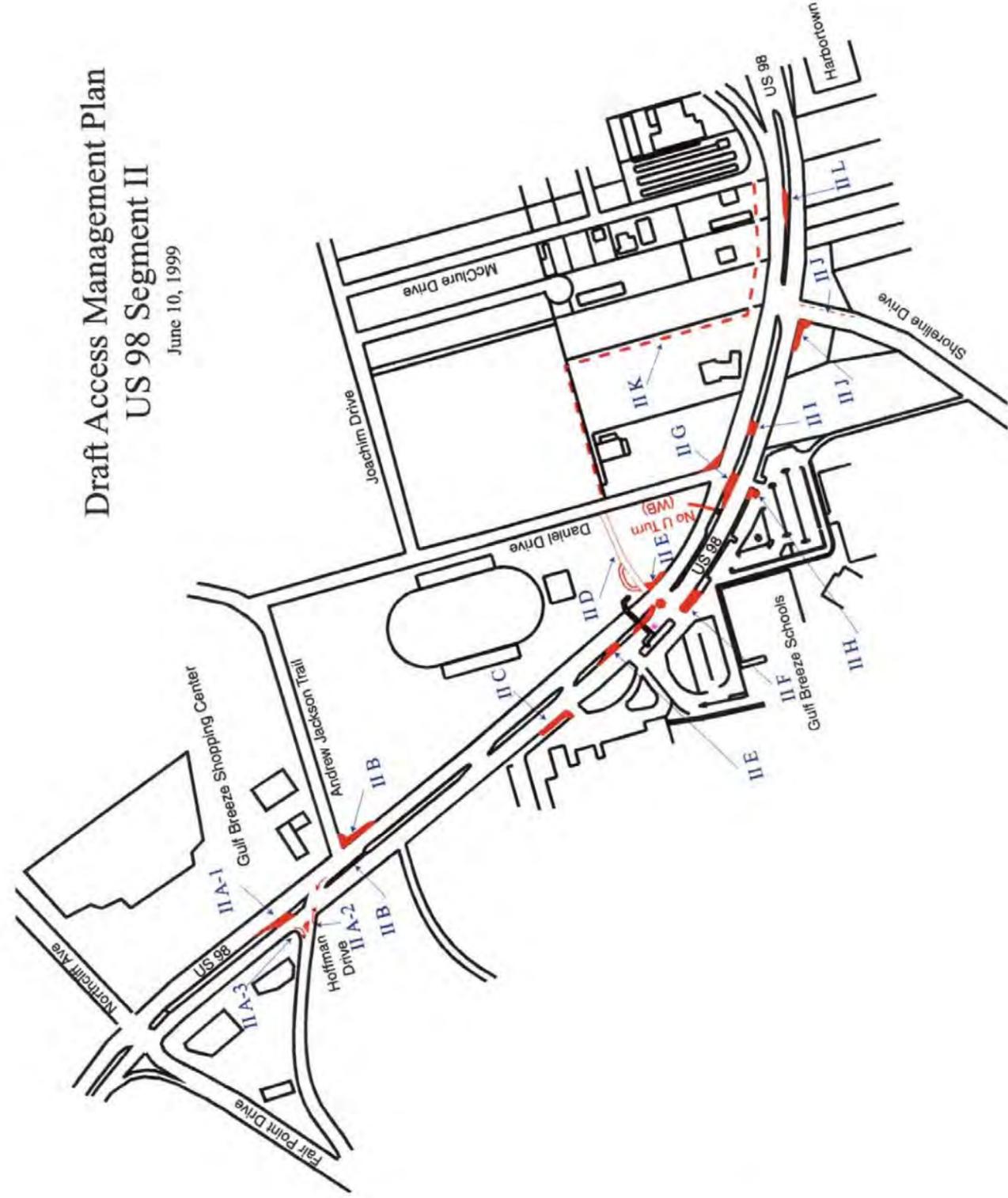
Draft Access Management Plan
US 98 Segment I

June 10, 1999



Draft Access Management Plan
US 98 Segment II

June 10, 1999



Draft Access Management Plan US 98 Segment III

June 10, 1999

