Local Road Safety Plan – Supplemental Planning Analysis

MISSISSIPPI GULF COAST VISION ZERO ACTION PLAN

For

Hancock, Harrison, and Jackson Counties

June 2023

Mississippi Gulf Coast Vision Zero Action Plan

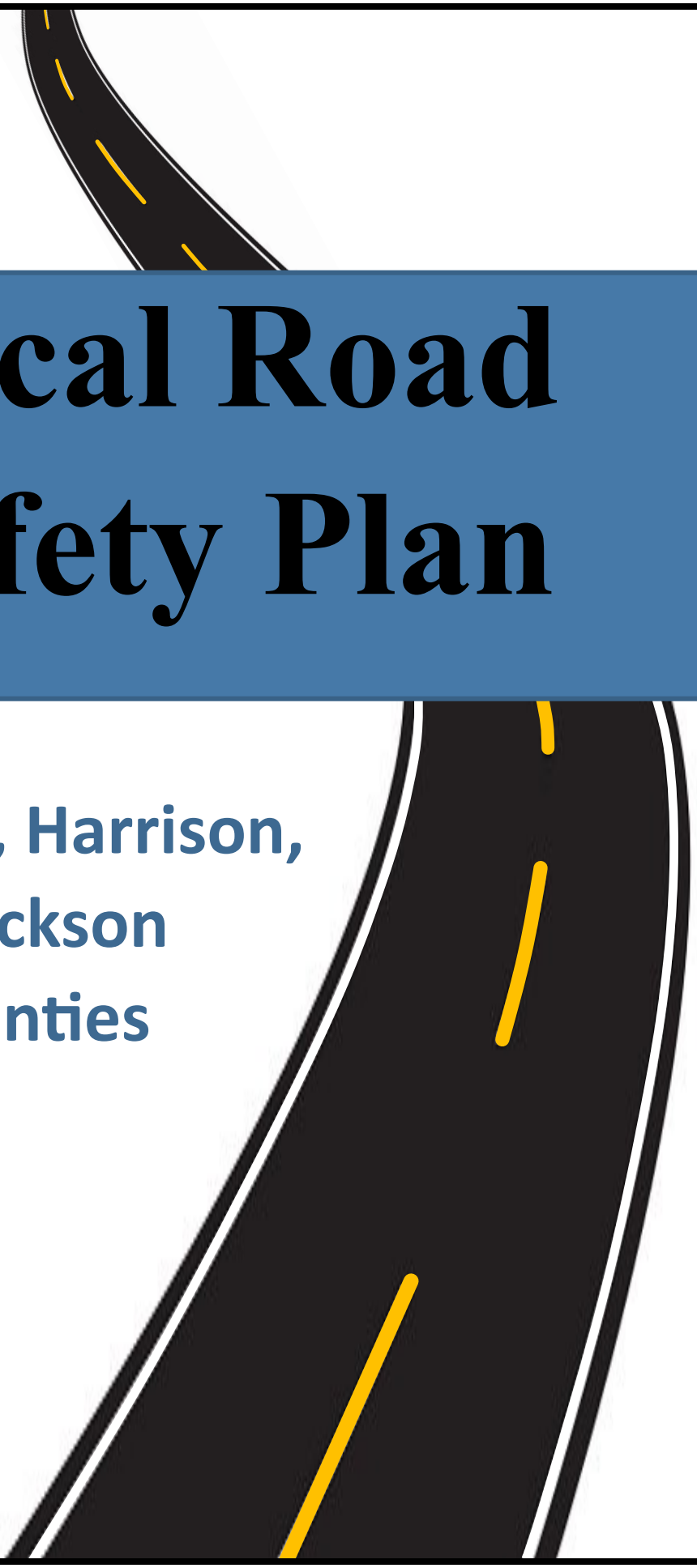
Local Road Safety Plan – Supplemental Planning Analysis

The local road safety planning process began in 2019 in a partnership between the Mississippi Department of Transportation (MDOT) and the Gulf Regional Planning Commission (GRPC). Through this partnership, a consultant engineer was hired and five-years of fatal, life threatening, and moderate injury (also known as KAB) crash data was analyzed across Hancock, Harrison, and Jackson counties. This analysis led to the development of emphasis areas. The process for developing a LRSP began with data analysis to identify trends and areas of concern. The consultant analyzed a 5-year period (2014 to 2018) of data that focused on fatal, life threatening, and moderate injury crashes only. Emphasis areas were identified from the analyzed data and stakeholders were convened to gather input. Countermeasures were identified to aid community leaders in reducing and preventing future crashes.

A supplemental planning analysis has been completed to make the LRSP meet the criteria established for the SS4A Action Plan. The updated document will include the SS4A Action Plan Components. The Mississippi Gulf Coast region has an eligible Action Plan in place to apply for Implementation Grants from USDOT's Safe Streets and Roads for All (SS4A) grant program. **The complete document is divided into two sections. The first is the Local Road Safety Plan (LRSP) and second is the Supplemental Planning Analysis. Both together is the Gulf Coast Vision Zero Safety Plan.**

Local Road Safety Plan

Hancock, Harrison, & Jackson Counties



Partners

Federal Highway Administration (FHWA)

Mississippi Department of Transportation (MDOT)

Gulf Regional Planning Commission (GRPC)

Tice Engineering, Inc.

Community Stakeholders

Table of Contents

Table of Contents

List of Figures

Introduction and Background

Purpose

The local road safety plan (LRSP) is intended to provide local leaders with a tool to address and improve safety for road users within the three lower counties which make up the Mississippi Gulf Coast. This plan outlines emphasis areas identified through the planning process and countermeasures that can be used by local leaders to effectively reduce crash frequency and severity as well as fatalities along local roadways.

Local Road Safety Plan History

The local road safety planning process began in 2019 in a partnership between Mississippi Department of Transportation (MDOT) and the Gulf Regional Planning Commission (GRPC). Through this partnership, a consultant engineer was hired and five-years of fatal, life threatening, and moderate injury (also known as KAB) crash data was analyzed across Hancock, Harrison, and Jackson counties. This analysis led to the development of emphasis areas.

The development of the LRSP was not without hurdles. COVID-19 effectively halted progress in 2020 when GRPC was preparing to set up stakeholder meetings. By 2021, the project was back on track with modified meeting protocols.

Local Road Safety Plan

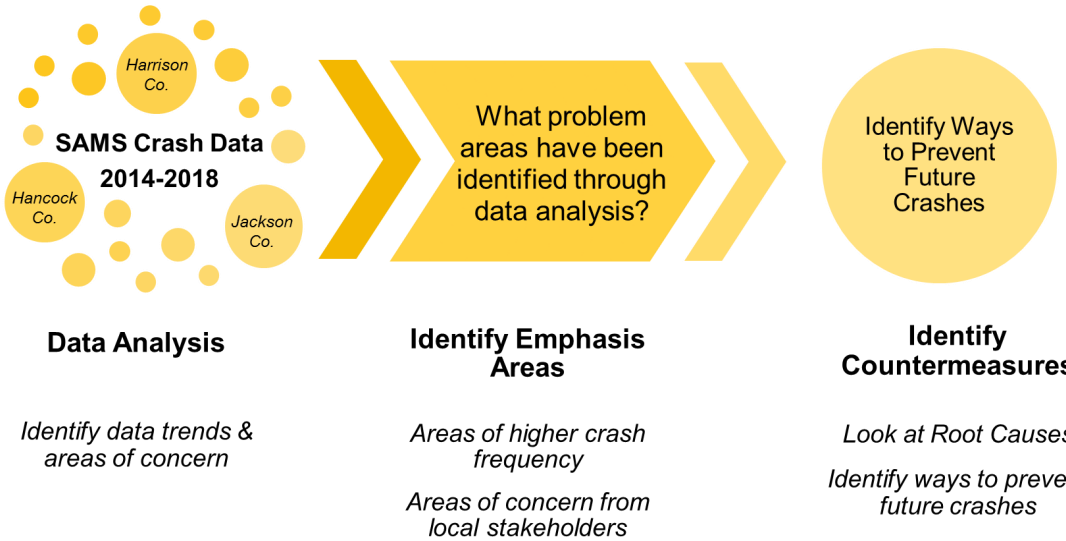
A local road safety plan provides a framework for identifying, analyzing, and prioritizing roadway safety improvements.

Process

The process for developing a LRSP began with data analysis to identify trends and areas of concern. The consultant analyzed a 5-year period (2014 to 2018) of data that focused on fatal, life threatening, and moderate injury crashes only. Emphasis areas were identified from the analyzed data and stakeholders were convened to gather input. Countermeasures were identified to aid community leaders in reducing and preventing future crashes. A graphic depiction of the planning process is provided in Figure 1.1.

The LRSP only includes local city and county roads, omitting all state-maintained roadways or roadway segments. For the purposes of this plan, the focus will remain primarily with local roadways. MDOT developed a plan for state roadways in 2019. Their plan addresses the state's goals for reducing crashes and fatalities on state-maintained roads.

Figure 1.1 Local Road Safety Planning Process



Prior Strategies and Emphasis Areas

The Mississippi Gulf Coast Metropolitan Planning Organization (MPO) includes Gulfport, Pascagoula, Diamondhead, and the urban areas in -between. GRPC performs the principal planning and programming functions of the Gulf Coast MPO. In 2014, the Gulf Coast MPO launched a safety program, *Get To B*. The goal of this program is to reduce roadway crashes and reduce crash injury severity through the implementation of safety projects and activities. The *Get To B* projects and activities include improvements in Engineering, Enforcement, Education and Emergency Services.

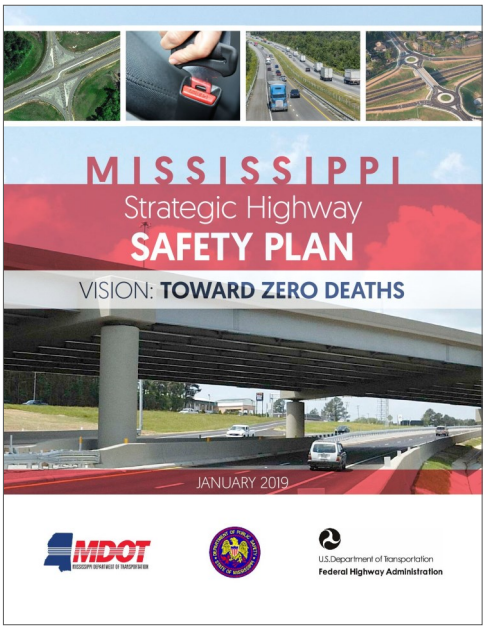
In addition to the *Get To B* safety program, the MPO implements and updates a long-range Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), Congestion Management Process (CMP), freight planning, and technical studies. Many of these studies have overlapping goals and strategies that promote improvements to safety, reduction of fatalities, and mitigation of crash severity along the roadways of the Mississippi Gulf Coast.

State Strategies

In 2019, the State of Mississippi updated their Strategic Highway Safety Plan (SHSP). This plan includes implementing strategies that will reduce fatal and serious injury crashes in Mississippi with special focus on unlicensed drivers, impaired drivers, unbelted vehicle occupants, road departure crashes and intersection crashes. The ultimate goal of Mississippi's SHSP is to reduce traffic fatalities by 25% by 2023 with the ultimate goal of driving fatalities to zero.

In addition to the SHSP, the Mississippi Department of Transportation (MDOT), has a continued commitment to funding highway safety. Among some of these projects are:

- reducing traffic conflicts (i.e., roundabouts and restricted crossing U-turns),
- reducing lane departures (i.e., roadway edge line treatment),
- implementation of the circuit rider program to provide technical assistance and training to local roadway officials,
- implementation of laws to address passenger seat belts and distracted driving,
- increased enforcement activities,
- public education campaigns (i.e. Drive Sober or Get Pulled Over and Click It or Ticket), and
- driver safety education programs (i.e., Survive Your Drive).



Critical Emphasis Areas

Crash Emphasis Areas

Safety Analysis Management System (SAMS) crash data, Mississippi Uniform Crash Reports (MUCRs), and aerial photography were reviewed and analyzed to identify emphasis areas, to understand trends, and to develop countermeasures for the reported crashes. For the initial analysis, all 3,285 state and local road crash points were analyzed. Once emphasis areas were identified, all analysis focused on the 1,502 crashes occurring on local roads only.

Through the initial data analysis of state and local road crash points, trends quickly appeared which showed just under half of the crashes and fatalities recorded during the five-year period were categorized as lane departure. Sixty percent (60%) of all crashes occurred in daylight and more than 80% occurred under dry road conditions. There were 441 DUIs reported during the study period, with almost half of those crashes occurring at night. Fatalities were attributed to 332 crashes, with almost half of fatalities also categorized as lane departure crashes. A matrix of the state and local road crash data analysis can be found in the Appendix of this report for all crashes and is also available by county.

The state and local road data was then sorted into 17 emphasis areas focused on fatalities and serious injuries (see Figure 1.2). These emphasis area totals were further broken down to state roads, county roads and city roads. Based on the results of this analysis, the critical Emphasis Areas for local roads in Hancock, Harrison, and Jackson counties are as follows:

Type	Percentage
Lane Departure Crashes	44.84%
Intersection Crashes	39.91%
Aggressive Driving & Speed Related Drivers	24.40%
Rear End, Slow, or Stop Crashes	16.65%
Young Drivers (Under 21)	16.03%
Angle Crashes	14.28%
Older Drivers (65 and Older)	12.70%
Motorcycle Crashes	10.20%
Pedestrian & Bicycle Fatalities & Injuries	9.66%

Each of the nine critical emphasis areas was further evaluated using the SAMS data and MUCRs to geographically map crash locations and develop "heat" maps which showed the frequency of crashes along the Mississippi Gulf Coast, both in urban and rural areas. These maps

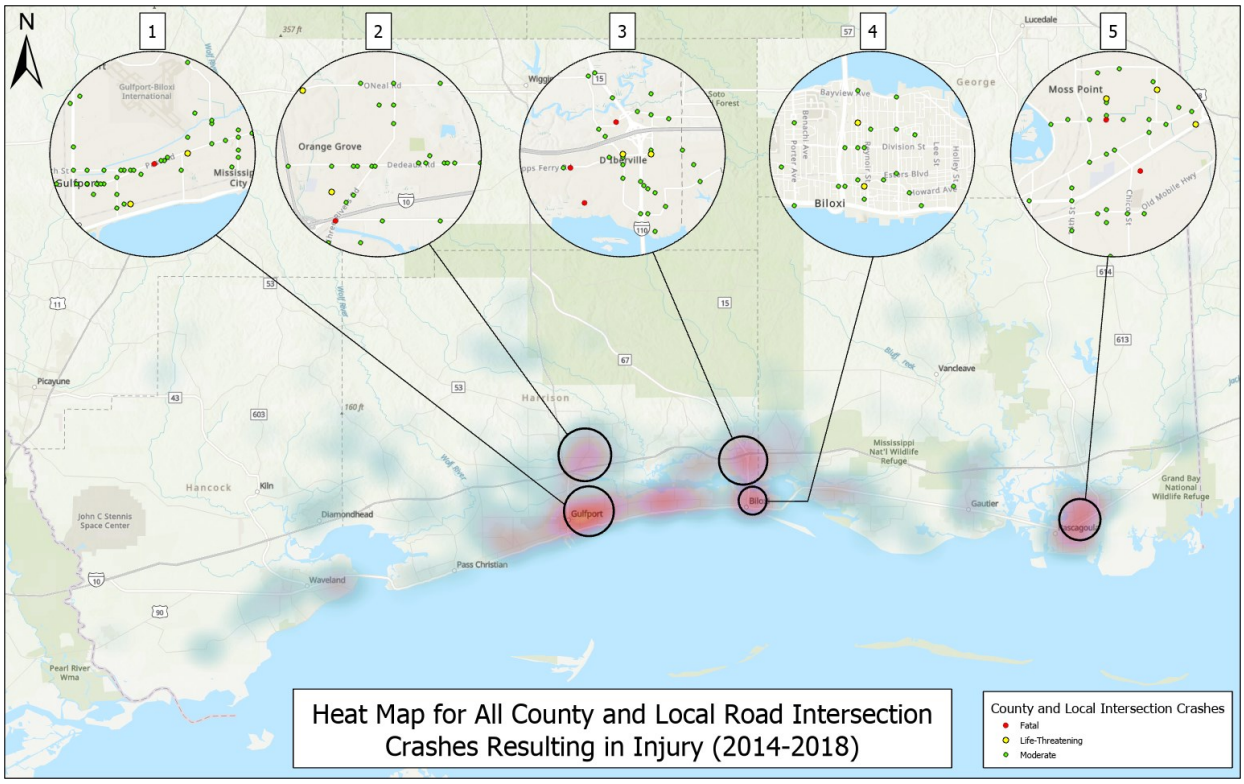
Figure 1.2 Jackson, Harrison, & Hancock County Fatalities and Serious Injuries by Emphasis Area

Emphasis Area		3-County Total (All Roads)		State Roads (Interstate, US, & State		County Roads		City Streets	
		Percent	No.	Percent	No.	Percent	No.	Percent	No.
Drivers	Young Drivers (under 21)	16.03%	737	6.98%	321	3.76%	173	4.28%	197
	Unlicensed Drivers	7.89%	363	4.15%	191	0.67%	31	2.72%	125
	Older Drivers (65 and older)	12.70%	584	7.46%	343	1.24%	57	2.91%	134
	Aggressive Driving and Speed Related	24.40%	1122	14.18%	652	4.61%	212	5.18%	238
	Impaired Driving (drug and alcohol)	7.29%	335	3.96%	182	1.46%	67	1.63%	75
	Inattentive, Distracted, Asleep Drivers	1.98%	91	0.80%	37	0.57%	26	0.59%	27
	Unbelted Occupants	8.57%	394	4.48%	206	1.54%	71	2.44%	112
Special Users	Pedestrian Fatalities and Injuries	7.64%	251	3.32%	109	0.73%	24	3.59%	118
	Bicycle Fatalities and Injuries	2.44%	80	0.73%	24	0.24%	8	1.46%	48
Vehicles	Motorcycle Crashes	10.20%	425	5.35%	223	1.92%	80	2.74%	114
Highways	Train Crashes	0.33%	11	0.03%	1	0.00%	0	0.30%	10
	Lane Departure Crashes	44.84%	1,473	20.46%	672	12.33%	405	12.05%	396
	Intersection Crashes	39.91%	1,311	22.07%	725	4.38%	144	13.46%	442
	Angle Crashes	14.28%	469	8.34%	274	1.43%	47	4.51%	148
	Left Turn Same Roadway Crashes	9.22%	303	6.36%	209	0.55%	18	2.31%	76
	Overturn Crashes	2.16%	71	1.25%	41	0.30%	10	0.61%	20
	Rear End Slow or Stop Crashes	16.65%	547	12.85%	422	0.82%	27	2.98%	98

Source: Department of Public Safety Crash Database/SAMS

Notes:
1. *Drivers and Special Users Emphasis Area Categories are individual fatalities and serious injuries.*
2. *Vehicles and Highway Emphasis Area Categories are fatal and serious injury crashes.*
3. *Data includes all fatal, life threatening and moderate injury crashes for Hancock, Harrison, and Jackson Counties from 2014 through 2018.*

Figure 1.3 Sample Heat Map for Intersection Crashes



and the emphasis area data collected were used to develop public presentations with community stakeholders.

Additional Emphasis Areas

While all crashes are significant and have a lasting impact to those who are involved, it is not always feasible to focus efforts on relatively small reoccurrences. However, this section of the report will briefly discuss some other emphasis areas which did not meet the report threshold. The evaluations of the additional emphasis areas includes both state and local roads.

Left Turn Same Roadway Crashes

Left Turn Same Roadway crashes made up just over 9% of the crashes in the study area. These crashes are the result of two vehicles traveling on the same roadway prior to one turning left. This may occur while passing the other vehicle or when meeting the other vehicle. A majority (73%) of these crashes happened at an intersection, with four left turn same roadway crashes resulting in fatalities.

The roadways with the most Left Turn Same Roadway crashes were:

- Gautier-Vancleave Road - 60% occurred as a vehicle was attempting to enter I-10 west ramp.
- Dedeaux Road - 40% occurred near Dye Road.
- Popp's Ferry Road - 43% involved a motorcycle and 29% (2 crashes) occurred at Cedar Lake Road
- Pass Road - largest number of left turn same roadway crashes. A majority (76%) of crashes occurred where the vehicle had a dedicated left turn lane and more than half (52%) occurred at a light-controlled intersection. Almost 24% involved a motorcycle.

Unbelted Occupants

Unbelted occupant crashes accounted for just under 9% of the crashes in the study area. Just under 11% of unbelted occupant crashes resulted in a fatality, with 21% occurring in evening hours

and less that 13% occurring at intersections. Four unbelted crashes were also associated with trains and another four were associated with pedestrians.

State-maintained roadways accounted for approximately 40% of unbelted occupant crashes. Pass Road was the largest local road contributor with approximately 5% of the reported unbelted occupant crashes. Another combined 5% of unbelted crashes were located on five other major local roads, Three Rivers Road, Dedeaux Road, 28th Street in Gulfport, Creosote Road, and Cedar Lake Road.

Unlicensed

Unlicensed driver crashes were almost 8% of the crashes reported. Of crashes that involved an unlicensed driver, almost 10% resulted in a fatality and another 8% resulted in life threatening injuries. While more than half (57%) of unlicensed driver involved in a crash were on the road during daylight hours, 68% of the fatalities associated with these drivers occurred at night. with 28% involving a pedestrian or bicycle.

Impaired Driving

Impaired Driving accounted for more than 7% of all crashes in the study area. Approximately 15% of impaired driving crashes resulted in fatalities and another 9% resulted in life threatening injuries. Almost 25% of the fatalities involved a pedestrian. Most (67%) impaired driver crashes occurred at night.

Distracted Driving

Distracted driving was reported in less than 2% of all accidents that occurred in the study period. As discussed during almost all of the stakeholder meetings, the State of Mississippi does not have a distracted driving law. In 2015, Mississippi passed a law to ban texting while driving, but there is no definitive way for an officer to prove a driver is texting without seeing it first hand or the driver admitting to the infraction. Without the technology in place to accurately identify cell phone use, a distracted driving law would be just as hard to report and prosecute as the texting ban. As a result of the difficulties associated with identifying distracted driving, it is widely assumed that the reported instances of distracted driving are lower than what actually occur.

Train

Train crashes accounted for only 0.33% of all accidents that occurred within the study period. While this percentage is small, a majority of the accidents could have been avoided. Of the 19 crashes that involved trains, 15 deaths occurred. All eight vehicle and train crashes occurred at a signalized intersection in which the train engineer also utilized his horn to warn the driver. In one instance, the driver drove around the activated crossing arms prior to being hit. In the 11 pedestrian and train collisions, a horn was specifically reported as being used in 45% of the cases. In almost all of the reported train encounters, the driver or pedestrian was reported as not paying attention to the warnings provided by the train or the signalized intersection.

Data Quality

Data accuracy and quality in crash reporting play a vital role in understanding crashes and developing meaningful countermeasures to reduce serious and fatal crashes.

MDOT has worked with Mississippi Department of Public Safety (MDPS) to make improvements to the reporting software to reduce erroneous data entry. One example of such improvement is the automatic input of GPS (global positioning systems) coordinates for the crash in lieu of manual location entry by the responding officer. Some of these improvements have made the officers' jobs easier, while others have seemingly made it more difficult. Many officers expressed concern over the length of the report and the time required to complete all of the components since the system was updated. MDOT will continue to coordinate with MDPS to better understand issues that officers are facing while reporting crashes as well as ensuring officers understand the importance of the information being requested by the software.

Another change to the reporting system is MDOT's redefining A-injury crashes from Life Threatening to Suspected Serious Injury as required to be in compliance with MMUCC IV edition. The new definition is already resulting in an increased number of A-injury crashes statewide.

All system improvements were made after 2018 when the data for this report was gathered.

Stakeholder Meetings

Background

Once critical emphasis areas were identified and analyzed, a list of potential stakeholders was established. More than 150 stakeholders were invited to attend the four emphasis area meetings. As shown in Figure 1.4, the four meetings included 33 stakeholders from 23 different departments or organizations.

Figure 1.4 Stakeholders

Stakeholders	
Biloxi Bicycle Works	Heritage Trails Partnership
City of Biloxi Police Department	Jackson County Board of Supervisors
City of Diamondhead	Jackson Co. Civic Action Committee, Inc.
City of Diamondhead Police Department	Jackson County School District
City of D'Iberville	Long Beach School District
City of Gautier Police Department	MDOT - District 6
City of Gulfport Public Works	Mississippi Highway Patrol
City of Ocean Springs	Pass Christian Public School District
Federal Highway Administration	SMPDDD
Gulf Coast Bicycle Club	United States Air Force/SFS
Harrison County	University of Southern Mississippi (USM)
Harrison County Active Living	

Meeting Details

Four meetings were held over three days to cover the nine critical emphasis areas identified. The meetings were held at the CTA - Gulfport Transit Center conference room from June 22, 2021 to June 24, 2021.

Stakeholder

People, groups, or organizations with an interest in or a role to play in the transportation network. Stakeholders can include governmental officials, city and county departments, first responders, community groups, or concerned citizens.

Stakeholder Meetings:

Tuesday, June 22, 2021
AM Session - Lane Departure Crashes
Young and Old Drivers

PM Session - Intersection and Angle Crashes

Wednesday, June 23, 2021
AM Session - Aggressive Driving & Speeding
Rear End, Slow or Stop Crashes

Thursday, June 24, 2021
PM Session - Motorcycle
Pedestrian & Bicycle Crashes

During the stakeholder meetings, a brief presentation was given to provide an overview of the purpose of the meetings along with some of the data analysis already conducted. Stakeholders were given an opportunity to provide feedback, including suggested countermeasures to reduce fatalities and severity of crashes in each critical emphasis area. The meetings ended with a review of the feedback received. Feedback from the stakeholder meetings can be found in the Appendix along with handouts and other meeting documents.

Priority Safety Strategies

In the previous section, crash data was evaluated within identified priority locations. Each location was analyzed to determine potential countermeasures to improve safety on a specific local roadway or intersection. The Priority Safety Strategies section will summarize the potential countermeasures for intersection, lane departure, pedestrian and bicycle crashes.

Reducing Intersection Crashes

Intersection Crashes made up 39% of the total crashes reported in the five year study period. While these strategies were developed from the twenty-three priority areas, these strategies can be utilized for any intersections where crashes frequently occur.

Strategy 1: Modify existing signals to include a flashing yellow arrow and regulatory signage.

Several intersection crashes in priority areas involved a left turning vehicle. At many of these intersections, the left turn movement is controlled with a circular green light and signage that cautioned "Left Turn Yield on Green". Accident reports indicated both drivers claimed right-of-way at the time of the accident.

An inattentive driver may perceive the circular green light as a protected left turn even with signage requires the vehicle to yield to oncoming traffic. A flashing yellow arrow is more intuitive to drivers which will more consistently convey the message that the left turn movement must yield to opposing traffic.

Strategy 2: Modify existing intersection to include dedicated left turn lane.

Some of the intersection crashes in priority areas were the result of a left turning vehicle which shared the lane with through traffic. Providing a dedicated left turn lane reduces the confusion of drivers often reported in crash reporting regarding right-of-way and signalization. In addition, it removes the left turning traffic from the through lane reducing the potential for rear-end crashes.

Strategy 3: Refresh intersection pavement markings.

While not noted as a direct cause of any crash reported in the study period, many of the intersections in the priority areas had faded pavement markings. Well defined pavement markings are crucial to drivers. They provide drivers with the roadway alignment, where they need to stop, delineate pedestrian crossings, and demarcate other roadway hazards. Faded pavement markings can lead to driver confusion and are typically an inexpensive improvement to the roadway.

Strategy 4: Upgrade signals to include backplate and retroreflective border.

At least two of the crashes in priority areas reported the sun as prevalent factor in the crash. Intersecting roads that are in an east-west orientation may need backplates on signals to reduce glare from the rising and setting sun. Lights with backplates may also need retroreflective borders to make the signals easier to see at night.

Strategy 5: Provide advanced warning for stop-controlled intersections.

A few of the intersection crashes in the priority areas resulted from drivers running stop signs. While many of these were DUI-related, a review of the areas concluded that most of these intersections also lacked advance warning of the stop-controlled intersection. Installation of a "Stop Ahead" warning sign and/or transverse rumble strips would be an inexpensive improvement to intersections.

Strategy 6: Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals, where warranted.

Pedestrian accidents accounted for 8% of intersection crashes. Intersections which contain pedestrian crashes should be evaluated to determine if the volume of pedestrian traffic would warrant sidewalks extensions, crosswalks, and pedestrian signals. Many of the intersections with pedestrian crashes had faded crosswalk pavement markings that need to be refreshed.

Existing crosswalks that do not lead to sidewalks or lead to sidewalks that are not ADA compliant should be upgraded to include sidewalks and ramps that carry pedestrians safely away from the intersection.

Strategy 7: Provide for safe vehicle recovery in run off road scenarios.

Roadways that do not provide a safety edge and provide no shoulder for vehicles to easily recover from running off the road should be upgraded. One crash reported a vehicle that ran off the road and was unable to recover. Roadways within the priority areas without curb and gutter should be evaluated to ensure they have a safety edge and that they provide an adequate shoulder for vehicle recovery.

A roadway safety edge provides a beveled asphalt edge that provides the driver an opportunity to safely recover when the vehicle leaves the roadway. In addition, a visual analysis of the intersection concluded that the roadside ditches appear steep and possibly unrecoverable for the driver. Evaluate intersections in priority areas without curb and gutters to determine if they have an adequate shoulder and that roadside ditches are not too steep. Deep ditches may make crash severity worse by causing vehicles to overturn. Consider enclosing roadside ditches that can not be improved due to right-of-way restrictions.

Strategy 8: Increase police presence at intersections which routinely have aggressive drivers or drivers that fail to obey traffic signs/signals.

Driver behavior is a large component of safer roads and intersections. When drivers do not obey roadway traffic signs and signals, get behind the wheel under the influence of drugs or alcohol, or drive aggressively, accidents occur that have little to do with roadway design. It is in these instances that we rely on police officers to enforce the law and provide a presence that deters poor driving behavior. Increasing police presence includes a myriad of tools such as increasing police patrols in targeted areas, utilizing radar speed signs, roadway checkpoints, and other similar tools.

Strategy 9: Reduce speeds through major intersections where routine aggressive driving is reported.

The speed through an intersection that sees an excessive number of speed-related crashes may need to be evaluated. Reducing speeds through intersections allows drivers more time to react to regulatory signage and safety measures in place. An alternative to speed limit reduction would be the placement of speed feedback signs or radar speed signs that can alert drivers to speeds that exceed the posted speed limit.

Strategy 10: Evaluate priority intersections for implementation of a roundabout.

Evaluate priority intersection locations to determine if a roundabout may reduce crash frequency and severity without compromising intersection efficiency.

Reducing Lane Departure Crashes Along Rural Local Roads

Rural Lane Departure crashes made up 28% of the total crashes reported in the five year study period. These strategies were developed from the thirty priority areas identified in the previous section; however, these strategies can be used for all rural, local roads.

Strategy 1: Refresh pavement markings and install raised pavement markers.

While not noted as a direct cause of any crash reported in the study period, an evaluation of the lane departure crash priority roadways noted faded pavement markings. Well defined pavement markings are critical to drivers. They help drivers see the roadway edge and centerline in poor visibility, dimly lit, or unlit driving conditions. They often are also used to demarcate other roadway hazards. Faded pavement markings can lead to driver confusion and are typically an inexpensive improvement to the roadway. The addition of raised pavement markers help better define pavement markings and can serve as an audible warning of a driver leaving the travel lane.

Strategy 2: Install longitudinal rumble strips.

Longitudinal rumble strips on the road edge or along the center line of the road that are milled into the pavement. They provide an auditory and vibratory alert to drivers that they have left the travel lane. For the purposes of this report, longitudinal rumble strip countermeasures for rural roadways most often refer to edge rumble strips. This is a relatively low-cost countermeasure that has been shown to significantly reduce single vehicle, run off road fatal crashes on rural roads. Center line rumble strips have shown to reduce head-on fatal crashes more than 50% along rural roads.

Strategy 3: Install curve warning delineation

Drivers losing control of a vehicle in a curve or crossing the centerline in a curve was a significant problem on rural roadways in priority areas. Providing curve delineation is a low-cost counter-measure that can reduce lane departure accidents. Curve delineation includes advanced warning signs, chevron signs in the curve, retroreflective strips on sign posts, and in-lane curve warning pavement markings. Several rural road curves had at least one type of curve delineation; however, the roadway should be evaluated to determine if incorporating multiple curve delinea-tion methods in a single curve would have a greater effect in reducing lane departure frequen-cy and severity.

Strategy 4: Provide for safe vehicle recovery in run off road scenarios.

Roadways that do not provide a safety edge and provide no shoulder for vehicles to easily recover from running off the road should be upgraded.

A roadway safety edge provides a beveled asphalt edge the provides the driver an opportunity to safely recover when the vehicle leaves the roadway. In addition, roadways with inadequate shoulders or steep roadside ditches can make recovery difficult if not impossible.

Roadway segments that reported run off road right crashes should be evaluated to ensure they have a safety edge and that they provide an adequate shoulder for vehicle recovery. Steep roadside ditches should be regraded to reduce steep slopes.

Strategy 5: Establish regulations for unpaved commercial and industrial driveways.

At least one rural roadway reported a crash related to migration of dirt and debris from an unpaved industrial driveway. Many businesses and industries in rural areas construct unpaved driveways for access to properties. When constructed, they are often hardened with stone or gravel to provide a roadway structure and to provide an area to deposit dirt and debris from the wheels of large equipment and trucks. Mainte-nance of these unpaved driveways is often overlooked and results in dirt and debris tracked onto local roadways. This debris can cause unsafe driving conditions for vehicles and can result in an accident or fatality.

Local governments should consider regulations for the construction and maintenance of unpaved driveways. These regulations should include providing paved aprons, a minimum length of hardened surface leading to paved roadways, or a requirement for truck wash down areas to be used prior to large trucks and equipment entering local roads. The regulation should also include the ability of the local government to enforce the requirements and the ability to clean up debris deposited on local roadways at the expense of the property owner.

Reducing Lane Departure Crashes Along Urban Local Roads

Urban Lane Departure crashes made up 25% of the total crashes reported in the five year study period. These strategies were developed from the thirty priority areas identified in the previous section; however, these strategies can be used for all urban, local roads.

Strategy 1: Refresh pavement markings and install raised pavement markers.

While not noted as a direct cause of any crash reported in the study period, an evaluation of the lane departure crash priority roadways noted faded pavement markings. Well defined pavement markings are critical to drivers. They help drivers see the roadway edge and centerline in poor visibility, dimly lit, or unlit driving conditions. They often are also used to demarcate other roadway hazards. Faded pavement markings can lead to driver confusion and are typically an inexpensive improvement to the roadway. The addition of raised pavement markers help better define pavement markings and can serve as an audible warning of a driver leaving the travel lane.

Strategy 2: Install longitudinal rumble strips, raised medians, and delineators.

This strategy focuses on providing a delineation of opposing traffic lanes. Center line longitudinal rumble strips provide an auditory and vibratory alert to drivers that they have left the travel lane. Along roadways with right-of-way restrictions this may be the most feasible option to reduce lane departure crashes. Delineators are another option when right-of-way restrictions prevent a separa-tion of opposing lanes.

If right-of-way is available or if the roadway

contains a continuous two way left turn lane, raised medians can be used to delineate opposing traffic lanes and reduce lane departure crashes. Additional benefits of raised medians are traffic calming and providing areas of refuge for pedestrians crossing wide roadways.

Strategy 3: Install curve warning delineation

Similar to rural roadways, drivers loosing control of a vehicle in a curve or crossing the centerline in a curve was a problem on urban roadways in priority areas. Providing curve delineation is a low-cost countermeasure that can reduce lane departure accidents. Curve delineation includes advanced warning signs, chevron signs in the curve, retroreflective strips on sign posts, and in-lane curve warning pavement markings. Several curves had at least one type of curve delineation; however, the roadway should be evaluated to determine if incorporating multiple curve delineation methods in a single curve would have a greater effect in reducing lane departures.

Strategy 4: Reduce speeds along roadways where routine aggressive driving is reported.

Speeding and aggressive driving is often a contributing cause of lane departure crashes. In areas where speeding is a recurring problem, municipalities may want to evaluate roadways and determine if reducing the speed limit through curves, at intersections, or in high traffic areas would reduce the frequency and severity of lane departure crashes.

Strategy 5: Provide advanced warning for stop-controlled intersections.

A few of the urban lane departure crashes were the result of drivers running stop signs, specifically at T-intersections. While many of these were DUI-related, a review of the areas concluded that in most of these crashes the roadway lacked advance warning of the stop-controlled intersection. Installation of a "Stop Ahead" warning sign and/or transverse rumble strips would be an inexpensive improvement and could significantly reduce instances of drivers failing to stop.

Strategy 6: Evaluate bridge guardrails to ensure they meet current safety standards.

At least one fatality within the study period was related to a bridge guardrail penetrating a vehicle. Evaluate bridge crossings and guardrails to ensure they meet current safety standards and prioritize the replacement of guardrails and warning devices that do not. In addition, ensure guardrails are properly visible with retroreflective warning signs.

Strategy 7: Increase patrols in areas with where DUIs are a frequent concern.

Increase enforcement in areas where DUIs reoccur. DUIs typically occur in the evening hours after 6:00 p.m.. DUI enforcement should include motorized vehicles, bicycle users, and pedestrians.

Reducing Crashes Related to Pedestrian and Bicycles

Pedestrian and Bicycle Crashes made up 13% of the total crashes and 27% of the total fatalities reported in the five year study period, with 142 pedestrian crashes and 56 bicycle crashes. In this report, 20 pedestrian priority areas and four bicycle priority areas were analyzed. Because the countermeasures tended to overlap, pedestrian and bicycle countermeasures are summarized together.

Strategy 1: Improve roadway lighting.

The inability of a driver to see a pedestrian or bicycle was a common theme in accident reports. Upgrading lighting in commercial corridors, where higher traffic volumes occur, is essential in keeping pedestrian and bicycle users safe. The Federal Highway Administration reports that proper intersection lighting can reduce pedestrian crashes up to 42%.

Lighting in neighborhoods and residential areas should be evaluated to ensure a balance between providing safe areas for pedestrian movement and the quality of life of the homeowners.

Strategy 2: Construct new or extend/connect existing sidewalks.

Sidewalk connectivity ensures pedestrians have the ability to safely walk between points of interest. Many of the priority areas included segments of sidewalk infrastructure but failed to provide complete connections. In many cases, pedestrian users left paths/trails in the grassed shoulders or medians where they made the connections. The crash data also identified areas where new sidewalk construction should be evaluated. Because a sidewalk typically places a buffer between the pedestrian and vehicles,

construction of a new sidewalk can significantly reduce crashes with pedestrians walking along the roadway.

Strategy 3: Refresh crosswalk pavement markings.

During the evaluation of several intersection pedestrian crashes, faded crosswalk markings were noted as a potential contributing factor. Visible crosswalks encourage pedestrians to cross at designated areas and provides vehicles with a warning of anticipated pedestrian activity. Because vehicles frequently drive over crosswalk pavement markings, they fade quicker than other traffic markings. Ensuring crosswalk pavement markings are visible and complete should enhance the safety of pedestrians at intersections.

Strategy 4: Break up continuous turn lanes with raised medians for pedestrian refuge or provide mid block crossing islands.

Raised medians and crossing islands serve multiple purposes. They provide the pedestrian a safe place to evaluate traffic midway across the road and they serve as a traffic calming device for speeding traffic. Roadway crossing was a significant cause of pedestrian crashes in the study area, specifically mid block crossing. Because of the complexity of these roadways, both the pedestrian and the vehicle struggle to always accommodate each other.

Roadways, like Pass Road, have so much hard-scape (roadways, parking lots, etc.) that it makes it easier for vehicles to speed and harder for pedestrians to cross. By breaking up the continuous center turn lanes along these roads with raised medians or crossing islands, it forces the driver to slow down and become aware of their surroundings. Conversely, these areas provide an opportunity for pedestrians to focus on one direction of traffic at a time. When they are able to find a refuge in the center of the road that is not a turn lane or open travel lane, they can make more calculated decisions.

Areas with frequent pedestrian crossings should be evaluated to determine if a mid block crossing island is warranted. Unlike the raised median, the crossing island would feature a crosswalk to warn vehicles of potential pedestrian activity and provide an ADA-accessible path in the island to accommodate handicapped users.

Strategy 5: Evaluate the feasibility of a road diet.

Road diets are the reduction and reconfiguration of vehicular travel lanes within a road segment to provide better mobility and access for all users. Several road segments were recommended for evaluation for a road diet due to right-of-way restrictions and for alternative transportation access needs. By reducing travel lanes in these segments, community leaders have the opportunity to focus on provide bicycle lanes or refuge islands, or dedicated left turn lanes at busy intersections. As a secondary effect, road diets typically have a traffic calming effect which reduces vehicle speeds.

Strategy 6: Install pedestrian warning signs in high pedestrian trafficked areas.

Pedestrian warning signs can be used in high pedestrian traffic areas to warn motorist of pedestrian activity. The warning signs can be used in conjunction with crosswalks to provide motorists advanced warning of an intersection crosswalk. Careful consideration should be given to the use of signs to ensure that they are not overused nor create visual clutter to the point they are not heeded.

Strategy 7: Reduce speeds along roadways where routine aggressive driving is reported.

Speeding and aggressive driving is often a contributing cause pedestrian and bicycle crashes. In areas where speeding is a recurring problem, municipalities may want to evaluate roadways and determine if reducing the speed limit through high traffic areas would reduce the frequency and severity of crashes. If speed limits cannot be lowered, more enforcement should be considered.

Strategy 8: Construct multi-use pathways where pedestrian and bicycle crashes overlap to separate pedestrian and bicycle traffic from motorized vehicles.

Much like a sidewalk, multi-use pathways provide a separation between motorized vehicles and pedestrians and bicycles. Multi-use pathways were recommended in areas that appeared to have available right-of-way and which did not already provide for dedicated pedestrian or bicycle facilities. Alternatively, the multi-use pathway can be split into a sidewalk and a dedicated bike lane. Ensure pedestrian and bicycle facilities provide complete, continuous connections between destinations.

Strategy 9: Provide crosswalks, curb ramps and pedestrian signals at signalized intersections.

Along multiple roadways, sidewalks ended abruptly and intersections provided crosswalks that didn't access sidewalks or had non-compliant or non-existent curb ramps. An evaluation of sidewalks, crosswalks, and pedestrian signals should be completed in priority areas. This may have already been completed with an ADA Transition Plan for public rights-of-way. This evaluation should include a prioritized plan to bring all intersections into compliance and provide pedestrian signals at signalized intersections.

Strategy 10: Provide educational opportunities for pedestrian and bicycle users.

Based on the accident reports reviewed, many pedestrian and bicycle users lacked knowledge that would make sharing the road with motorized vehicles safer. By providing educational opportunities for pedestrians and bicycle users, communities can make a roadways safer for all modes of transportation.

Educational meetings should be focused in priority areas and conducted through community organizations, such as neighborhood watch, neighborhood associations, churches, and summer camps. These event can also serve as a useful community outreach tool for police officers. Consider incorporating pedestrian and bicycle safety into school programs such as Driver's Education. Provide brochures and pamphlets to police officers to hand out to pedestrian and bicycle users for impromptu educational trainings while on patrol.

The majority of pedestrian and bicycle accidents involved adults and should be the focus group of educational information provided. However, educational opportunities should also be provided to children and young adults.

Strategy 11: Install enhanced crosswalks at high pedestrian traffic crossings and advanced warning of pedestrian crossings.

In areas that see significant pedestrian crossing activity, enhanced crosswalks and signing may be required. This can include flashing pedestrian warning signs, advanced roadway pavement markings, raised crosswalk, flashing crosswalks, and other similar treatments.

Priority Locations

After emphasis areas were identified and stakeholder feedback was received, additional analysis of the crash data was completed to identify priority locations.

This analysis began by identifying roadways where most crashes occurred during the study period. Crashes occurred on 516 local roads; however, less than 20 crashes were reported on 98% of roadways. Figure 1.5 provides a list of the local roads that experienced 20 or more crashes.

Figure 1.5 Crash Location by Roadway

County	Street	No. of Crashes
Harrison	Pass Road	118
Harrison	Popp's Ferry Road	47
Harrison	Three Rivers Road	31
Jackson	Gautier Vancleave Road	34
Harrison	Lamey Bridge Road	27
Harrison	28th Street	26
Jackson	Lemoyne Boulevard	22
Harrison	Dedeaux Road	21
Jackson	Tucker Road	20

While the initial analysis was important to identify local roads where most crashes occur, the data was further analyzed to determine priority locations along roadway segments under each emphasis area that resulted in a significant number of crashes. These priority segments were evaluated to develop countermeasures which can be used to develop roadway projects that could potentially reduce the frequency and severity of future accidents.

Priority Location

A roadway segment or intersection that is given emphasis in prioritization due to patterns of fatal or suspected serious injury crashes, or patterns of certain crash types that may lead to higher risk for injury should they continue.

Intersection Crashes

Priority locations within the intersection crash emphasis area were based on three (3) or more crashes at a single intersection. Approximately 39% of all local crashes were reported at intersections, with 16% of those resulting in fatality and almost 42% of the crashes resulted in moderate injuries. Figure 1.6 provides a breakdown of intersection crashes by crash type.

Figure 1.6 Intersection Crash Breakdown by Crash Type

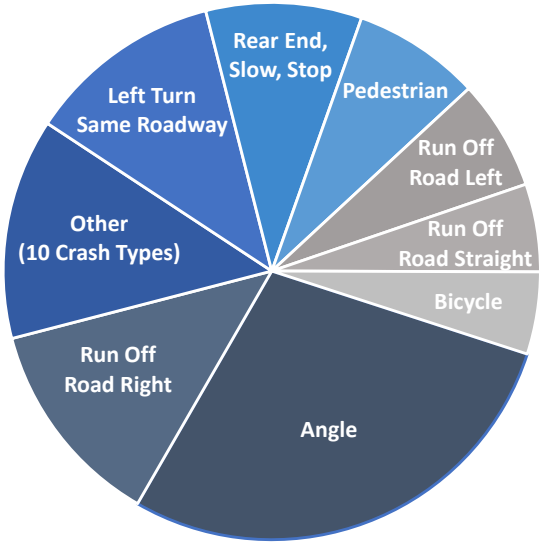


Figure 1.7 provides a list of the priority locations for intersection crashes that occurred within the study period. An analysis of each intersection priority location is provided along with possible countermeasures.

Figure 1.7 Intersection Crash Priority Areas

Intersection	County	City	No. of Crashes	Rural/Urban Designation	Functional Class	Traffic Control Type
Pass Rd & Popp's Ferry Rd	Harrison	Biloxi	5	Urban	Other Principal Arterial	Signalized
Pass Rd & 8th Ave	Harrison	Gulfport	4	Urban	Other Principal Arterial	Signalized
Pass Rd & Gulf Ave	Harrison	Gulfport	4	Urban	Other Principal Arterial	Minor Road Stop
Three Rivers Rd & Dedeaux Rd	Harrison	Gulfport	4	Urban	Minor Arterial	Signalized
Jefferson Ave & Macphelah St	Jackson	Moss Point	4	Urban	Major Collector	Signalized
Popp's Ferry Rd & Atkinson Rd/ Old Bay Road	Harrison	Biloxi	4	Urban	Other Principal Arterial	Signalized
Pass Rd & Eisenhower Dr/ Goose Pointe Blvd	Harrison	Biloxi	3	Urban	Other Principal Arterial	Signalized
Pass Rd & Big Lake Rd	Harrison	Biloxi	3	Urban	Other Principal Arterial	Signalized
Pass Rd & Cowan Rd (MS 605)	Harrison	Gulfport	3	Urban	Other Principal Arterial	Signalized
Pass Rd & Veterans Ave	Harrison	Biloxi	3	Urban	Other Principal Arterial	Signalized
Pass Rd & Courthouse Rd	Harrison	Gulfport	3	Urban	Other Principal Arterial	Signalized
Popp's Ferry Rd & Vee St	Harrison	Biloxi	3	Urban	Other Principal Arterial	Minor Road Stop (T)
Three Rivers Rd & O'Neal Rd	Harrison	Gulfport	3	Urban	Major Collector	Signalized
Lamey Bridge Rd & Mallet Rd/ Sangani Blvd	Harrison	D'Iberville	3	Urban	Minor Arterial	Signalized
Government St & Halstead Rd	Jackson	Ocean Springs	3	Urban	Minor Arterial	All Way Stop (T)
Ingalls Ave & Chicot St	Jackson	Pascagoula	3	Urban	Minor Arterial	Minor Road Stop (T)
Vidalia Rd & 16th Section Rd	Harrison	n/a	3	Rural	Major Collector	Minor Road Stop (T)
Caillavet St & Division St	Harrison	Biloxi	3	Urban	Minor Arterial	Signalized
Tucker Rd/Washington Ave & Cook Rd/Seaman Rd	Jackson	n/a	3	Urban	Minor Arterial	Signalized
Old Mobile Avenue & Chicot St	Jackson	Pascagoula	3	Urban	Minor Arterial	Signalized
Old Hwy 67 & Old Hwy 15	Harrison	Biloxi	3	Rural	Minor Arterial	Minor Road Stop (T)

Lane Departure Crashes

Lane departure crashes are the result of a vehicle leaving the travel lane and are recorded in crash data as a Run Off Road-Right, Run Off Road-Left, Run Off Road-Straight, Sideswipe, or Head On. From the data provided, more than 53% of crashes reported during the study period were categorized as lane departure crashes, with over 42% categorized as single vehicle lane departure crashes. Approximately 8% of lane departure crashes were fatal. Nine percent (9%) were life threatening and remaining 83% were moderate-injury.

Unlike the other emphasis areas, lane departure crashes were separated into rural and urban crashes. In rural areas, lane departure crashes are more indicative of the roadway (i.e., curves, etc.) and in urban areas crashes typically point towards driver behavior (i.e., distracted drivers, etc.).

For lane departure, this report will look at the top 30 rural and urban priority locations based on the number of injury inducing crashes per mile within a particular roadway segment. Roadway segments were determined through the identification of crash clusters along a given route.

Urban vs. Rural

Urban areas will include all areas within the boundary of the Metropolitan Planning Organization (MPO).

Rural areas will include all areas within the three county study area outside the MPO boundary.

Rural Lane Departure Crashes

Approximately 28% of all crashes were categorized as rural lane departure, with 84% of those being single vehicle lane departures. Rural lane departure crashes account for 40% of local road fatalities and just over 40% of life threatening injuries.

Figure 1.8 provides a list of the top 30 priority locations for rural lane departure crashes that occurred within the study period. An analysis of each location is provided after the table along with possible countermeasures.

Figure 1.8 Rural Lane Departure Crash Priority Areas

Route	County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile	Functional Class
Old River Road - Segment 1	Jackson	Granada Rd to Wade Vancleave Rd	5	0.9	5.56	Major Collector
Shaw Road	Harrison	MS Hwy 53 to Morgan Lane Rd	4	1.0	4.00	Minor Collector
Kenneth Cole Road	Jackson	MS Hwy 57 to Blue Grass Lane	3	0.8	3.75	Minor Collector
Lower Bay Road - Segment 2	Hancock	Clermont Rd to US Hwy 90	7	1.9	3.68	Major Collector
County Farm Road - Segment 2	Harrison	I-10 to Wildflower Rd	2	0.6	3.33	Minor Arterial
East Wortham Road	Harrison	US Hwy 49 to Hwy 67	12	4.2	2.86	Major Collector
Saracennia Rd - Segment 2	Jackson	Kings Rd to Coda Rd	3	1.1	2.73	Major Collector
Lamey Bridge Rd - Segment 2	Harrison	MS Hwy 67 to Palm Ridge Dr	9	3.8	2.37	Major Collector

Figure 1.8 Rural Lane Departure Crash Priority Areas (continued)

Route	County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile	Functional Class
Old US Hwy 49 - Segment 2	Harrison	Fish Hatchery Rd to Wortham Dr	4	1.7	2.35	Minor Collector
W. Wortham Road - Segment 2	Harrison	Borzik Rd to Sky Lane	3	1.3	2.31	Major Collector
Old US Hwy 49 - Segment 1	Harrison	W. Wortham Rd to Desoto Park Rd	3	1.3	2.31	Minor Collector
Saucier Lizana Rd - Segment 1	Harrison	MS Hwy 53 to W. Wortham Rd	9	4.2	2.14	Major Collector
Lily Orchard Rd	Jackson	Nutbank Rd to Dunn Rd	3	1.5	2.00	Local Road
W. Wortham Rd - Segment 1	Harrison	Owen Ladner Rd to Gaylord Rd	4	2.4	1.67	Major Collector
Big Creek Rd	Harrison	Alcede Lizana Rd to Cable Bridge Rd	4	2.6	1.54	Local Road
Tucker Rd	Jackson	Cook Rd to Daisy Vestry Rd	5	3.3	1.52	Minor Arterial
Saracennia Rd - Segment 1	Jackson	Greenfields Rd to Jackson Co. Rd 33	5	3.4	1.47	Major Collector
Wolf River Rd	Harrison	Jake Bell Rd to Cable Bridge Rd	6	4.6	1.30	Major Collector
Edwin Ladner Rd	Harrison	16th Section Rd to Vidalia Rd	5	3.9	1.28	Major Collector
Tanner Williams Rd	Jackson	MS Hwy 613 to MS/AL State Line	8	6.3	1.27	Major Collector
Firetower Rd - Segment 2	Harrison	I-10 to Vidalia Rd	6	4.8	1.25	Major Collector
Caesar Necaise Rd	Hancock	Hancock Co Line to Wendell Ladner Rd	10	8.0	1.25	Major Collector
Vidalia Rd - Segment 1	Harrison	Cuevas Delisle Rd to Firetower Rd	7	5.8	1.21	Major Collector
Forts Lake Rd	Jackson	Independence Rd to MS/AL State Line	6	5.3	1.13	Major Collector
Seaman Road - Segment 2	Jackson	Lake Forest Dr to Jim Ramsay Rd	9	8.1	1.11	Major Collector
Kiln Delisle Rd - Segment 1	Hancock/ Harrison	Menge Ave to I-10	5	4.6	1.09	Major Collector
Vidalia Rd - Segment 2	Harrison	Firetower Rd. to F. Malley Rd	4	3.7	1.08	Major Collector
Gautier Vancleave Rd - Segment 2	Jackson	Martin Bluff Rd to MS Hwy 57	6	5.9	1.02	Minor Arterial
Wade Vancleave Rd	Jackson	Fish Lake Rd to MS Hwy 63	4	4.0	1.00	Major Collector
County Farm Rd - Segment 1	Harrison	Landon Rd to John Clark Rd	5	5.1	0.98	Minor Arterial

Urban Lane Departure Crashes

Approximately 25% of all crashes were categorized as urban lane departure, with 71% of those being single vehicle lane departures. Urban lane departure crashes account for 16% of local road fatalities and just over 26% of life threatening injuries.

Figure 1.9 provides a list of the top 30 priority locations for urban lane departure crashes that occurred within the study period. An analysis of each location is provided after the table along with possible countermeasures.

Figure 1.9 Urban Lane Departure Crash Priority Areas

Route	City/County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile	Functional Class
Three River Rd - Segment 2	Gulfport	Lavelle Drive to Mustang Place	5	1.0	5.0	Major Collector
Macphelah Road	Moss Point/ Pascagoula	Shortcut Road to Meridian Street	4	1.0	4.00	Major Collector
Jordan Road	Jackson Co.	Seaman Road to Georgia Street	4	1.0	4.00	Local Road
Popp's Ferry Road - Segment 1	Biloxi	Pass Rd to Causeway Drive	6	1.7	3.53	Other Principal Arterial
Pass Road - Segment 3	Biloxi	Popp's Ferry Rd to Ploesti Dr	9	2.6	3.46	Other Principal Arterial
Jefferson Avenue	Moss Point	River Road to 2nd Street	5	1.5	3.33	Major Collector
Martin Bluff Rd - Segment 1	Gautier	Stanfield Point Rd to Brookside Dr	5	1.5	3.33	Major Collector
Gautier Vancleave Rd - Segment 1	Gautier	US Hwy 90 to Martin Bluff Rd	7	2.1	3.33	Other Principal Arterial
Cook Road	Jackson Co.	Mallet Rd/Thomas St to Tucker Rd	4	1.4	2.86	Local Road
Pass Road - Segment 2	Gulfport/ Biloxi	MS Hwy 605 to Popp's Ferry Rd	8	3.0	2.67	Other Principal Arterial
Lemoyne Boulevard	D'Iberville	Lamey Bridge Rd to Riviera Dr	6	2.3	2.61	Minor Arterial
Beachview Dr	Jackson Co	Old Walnut Rd to Seacliff Blvd	4	1.6	2.50	Major Collector
Chicot Street	Pascagoula	Ingalls Ave to Shortcut Rd	5	2.0	2.50	Minor Arterial
Popp's Ferry Rd - Segment 3	Biloxi/ D'Iberville	Cedar Lake Rd to Lamey Bridge Rd	6	2.6	2.31	Other Principal Arterial
Beatline Road	Long Beach	W. Railroad St. to Hickory Dr	4	1.8	2.22	Minor Arterial
Popp's Ferry Rd - Segment 2	Biloxi	Causeway Dr to Cedar Lake Rd	6	2.9	2.07	Other Principal Arterial
Martin Bluff Rd - Segment 2	Gautier	Gautier Vancleave Rd to I-10	4	2.0	2.00	Major Collector
Pass Road - Segment 1	Gulfport	US Hwy 49 to MS Hwy 605	8	4.2	1.90	Other Principal Arterial

Figure 1.9 Urban Lane Departure Crash Priority Areas (continued)

Route	City/County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile	Functional Class
28th St - Segment 1	Long Beach	Red Creek Rd to Canal Rd	6	3.5	1.71	Minor Arterial
Lamey Bridge Rd - Segment 1	D'Iberville	I-10 to Lickskillet Rd	3	1.8	1.67	Major Collector
Daisy Vestry Road	Jackson Co.	Cook Road to Tucker Rd	5	3.1	1.61	Major Collector
Seaman Rd - Segment 1	Jackson Co	Tucker Rd to Lake Forest Dr	4	2.7	1.48	Major Collector
Three Rivers Rd - Segment 1	Gulfport	Airport Rd to Dedeaux Rd	3	2.2	1.36	Minor Arterial
28th Street - Segment 2	Gulfport	Canal Rd to Pass Rd	5	3.7	1.35	Minor Arterial
Dedeaux Road	Gulfport	US Hwy 49 to MS Hwy 605	5	4.1	1.22	Minor Arterial
Menge Avenue	Harrison Co.	E. 2nd Street to Red Creek Rd	3	2.5	1.20	Minor Arterial
Canal Road - Segment 2	Harrison Co.	1-10 to John Clark Rd	4	3.4	1.18	Minor Arterial
Ocean Springs Road	Ocean Springs	Bienville Blvd to MS Hwy 57	5	4.5	1.11	Minor Arterial
Old Spanish Trail	Ocean Springs	MS Hwy 57 to Ladnier Rd	5	4.6	1.09	Minor Arterial
Canal Rd - Segment 1	Harrison Co.	28th Street to I-10	3	2.8	1.07	Minor Arterial

Pedestrian and Bicycle Crashes

Pedestrian and bicycle crashes include crashes where at least one pedestrian or bicycle were involved in a crash that resulted in moderate, life-threatening, or fatal injuries. For the purposes of SAMs data, both a pedestrian and bicycle are counted as a vehicle in the crash report.

Approximately 55% of all pedestrian and bicycle crashes occur in darkness or low-light conditions, with 34% occurring in dark-unlit conditions (occurring at night in a location without street lights). During a review of crash data, many witnesses reported pedestrians and bicyclists not utilizing reflective clothing and equipment as a contributing cause of the crash. As a result, a general recommendation for all priority areas will be to continue or increase educational training efforts with alternative transportation users.

Pedestrian Crashes

This report will focus on the top 20 pedestrian priority locations. Approximately 10% of all local crashes involved pedestrians, with 20% of those resulting in fatalities and 70% in moderate injuries.

Figure 1.10 provides a list of the priority locations for pedestrian crashes that occurred within the study period. An analysis of each priority location is provided along with possible countermeasures.

Figure 1.10 Pedestrian Priority Areas

Route	City/County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile
Pass Road - Segment 2	Gulfport	250' W of Ford St to Varnado Lane	4	0.20	20.00
Veterans Boulevard	Pascagoula	400' South to 400' North of Shortcut Rd	3	0.15	20.00
Central Avenue	D'Iberville	Sunset Drive to Bay Shore Drive	2	0.10	20.00
14th Street Service Road	Pascagoula	Denny Avenue to Dead End	2	0.10	20.00
Irish Hill Drive	Biloxi	Travia Avenue to Rodenberg Avenue	2	0.19	10.53
Lamey Bridge Road - Segment 1	D'Iberville	Toncrey Road to Big Bridge Road	3	0.32	9.38
Three Rivers Road - Segment 1	Gulfport	Seaway Road to 250' N of Angela Dr.	5	0.70	7.14
Waveland Avenue	Waveland	Donlard Street to Spruce Street	2	0.35	5.71
Courthouse Road - Segment 1	Gulfport	30th Street to 250' N of Pass Road	2	0.48	4.17
33rd Street	Gulfport	24th Avenue to 26th Avenue	2	0.50	4.00
East Old Pass Road	Long Beach/ Gulfport	North Cleveland Avenue to 44th Avenue	5	1.75	2.86
Tucker Road	Jackson Co.	400' S of Parker Road to McClelland Road	3	1.13	2.65
Ingalls Avenue	Pascagoula	8th Street to Chicot Street	2	1.23	1.63
Pineville Road	Long Beach	Ashley Lane to Seal Avenue	2	1.43	1.40
Pass Road - Segment 3	Biloxi	Fernwood Road to Ploesti Drive	5	3.70	1.35
Pass Road - Segment 1	Gulfport	US Highway 49 to MS Highway 605	5	4.20	1.19
Dedeaux Road	Gulfport	US Highway 49 to Jessica Drive	4	3.40	1.18
Lemoyne Boulevard	Jackson Co.	Bienville Drive to Laura Acres Drive	2	2.2	0.91
28th Street	Long Beach/ Gulfport	Simmons Drive to 18th Avenue	3	3.86	0.79
Government Street	Ocean Springs	Washington Avenue to Ridgeview Drive	3	4.51	0.67

Bicycle Crashes

Bike priority locations were developed from bicycle crashes found within pedestrian priority areas as well as any significant clusters of bicycle crashes.

Approximately 4% of all local crashes involved bicycles, with 88% of those resulting in moderate injuries and only one (2%) resulting in a fatality.

Figure 1.11 provides a list of the priority locations for pedestrian crashes that occurred within the study period. An analysis of each priority location is provided along with possible countermeasures.

Figure 1.11 Bicycle Priority Areas

Route	City/County	Route Segment Limits	No. of Crashes	Approx. Route Length (mile)	Crashes Per Mile
Ingalls Avenue	Pascagoula	Belair Street to Chicot Street	3	0.70	4.29
Tucker Road	Jackson Co.	Parker Road to McClelland Road	3	1.0	3.00
Howard Avenue	Biloxi	I-110 Overpass to Oak Street	4	1.6	2.45
Pass Road	Gulfport/ Biloxi	Gulf Avenue to Popp's Ferry Road	3	5.5	0.55

Supplemental Planning Analysis

The local road safety planning process began in 2019 in a partnership between the Mississippi Department of Transportation (MDOT) and the Gulf Regional Planning Commission (GRPC). Through this partnership, a consultant engineer was hired, and five years of fatal, life-threatening, and moderate injury (also known as KAB) crash data was analyzed across Hancock, Harrison, and Jackson counties. This analysis led to the development of emphasis areas. The process of developing a LRSP began with data analysis to identify trends and areas of concern. The consultant analyzed a 5-year period (2014 to 2018) of data that focused on fatal, life-threatening, and moderate injury crashes only. Emphasis areas were identified from the analyzed data, and stakeholders were convened to gather input. Countermeasures were identified to aid community leaders in reducing and preventing future crashes.

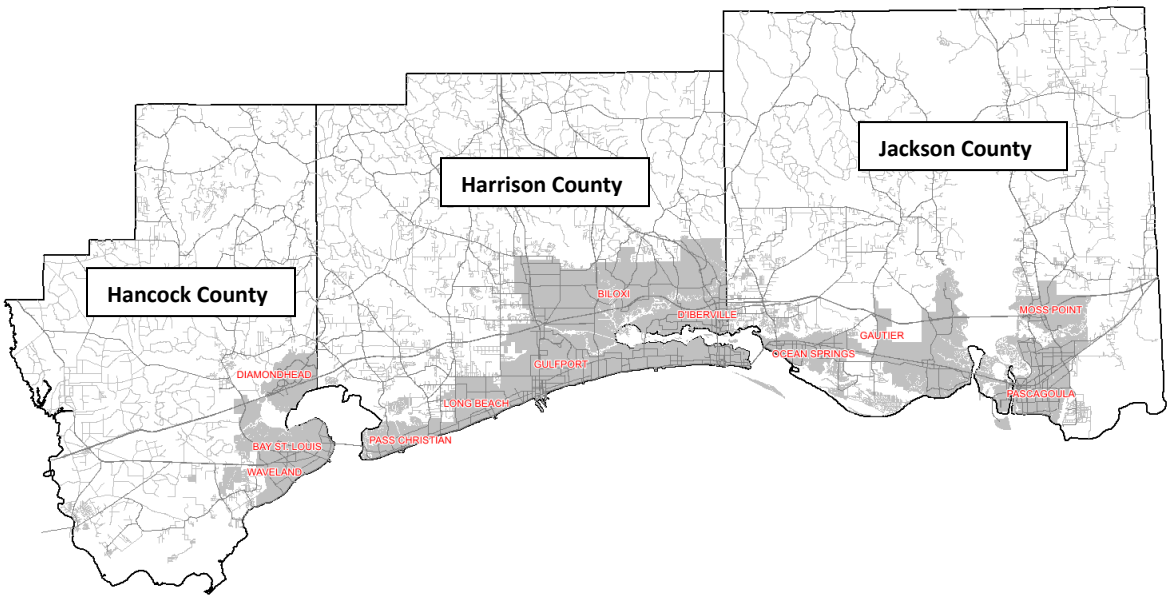
A supplemental planning analysis has been completed to make the LRSP meet the criteria established for the SS4A Action Plan. The updated document will include the SS4A Action Plan Components. The Mississippi Gulf Coast region has an eligible Action Plan in place to apply for Implementation Grants from USDOT's Safe Streets and Roads for All (SS4A) grant program.

The jurisdictions in the Mississippi Gulf Coast region are:

Hancock County - Waveland, Bay Saint Louis, Diamondhead

Harrison County - Pass Christian, Long Beach, Gulfport, Biloxi, D'Iberville

Jackson County - Ocean Springs, Gautier, Pascagoula, and Moss Point.



Total Population for Hancock, Harrison, and Jackson County

396,400

2016-2020 Fatalities in Hancock, Harrison, and Jackson County

310

Average Annual Fatality Rate per 100,000 population 2016-2020 in Hancock, Harrison, and Jackson County

15.6

Fatality Analysis Reporting System (FARS)

Introduction

The Gulf Coast MPO set a goal of zero serious and fatal injuries by the year 2045. The Vision Zero Action Plan sets out actions for GRPC and local governments to implement over the next 5 years. The Action Plan includes programs and projects with data-informed, systematic, and equitable approaches that make more effective use of current resources.

Supplemental planning analyses are used to enhance and update the existing plan. GRPC uses an assessment framework to help methodically consider Safe System objectives in road infrastructure projects. The primary focus is on the assessment of infrastructure, and this means that there is a stronger emphasis on "**Safe Roads**" and "**Safe Speeds**", and "**Safe Road Users**." and in many cases "Safe Vehicles" will be outside the direct control of this framework, but they may be able to influence others who do have the ability to influence these aspects of the system. The same applies to elements relating to "Post-Crash Care."

Vision Zero Approach to Road Safety

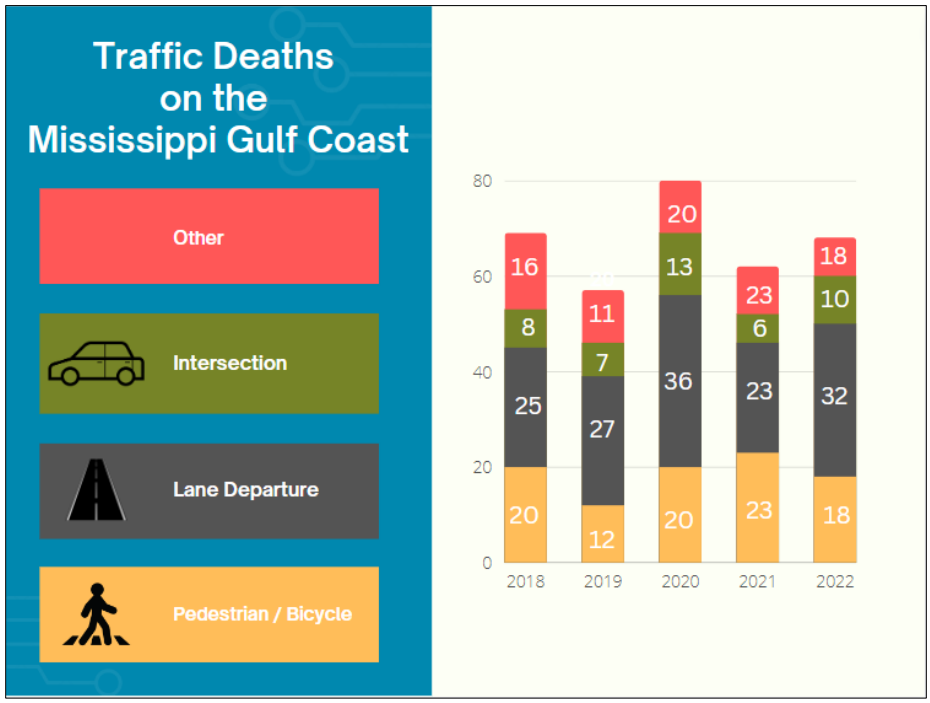
Traffic deaths and severe injuries are preventable and unacceptable.
Protecting human lives takes priority over all other objectives of the road system.
The transportation system should be designed so mistakes are not fatal.
Solutions must be collaborative, and data driven.

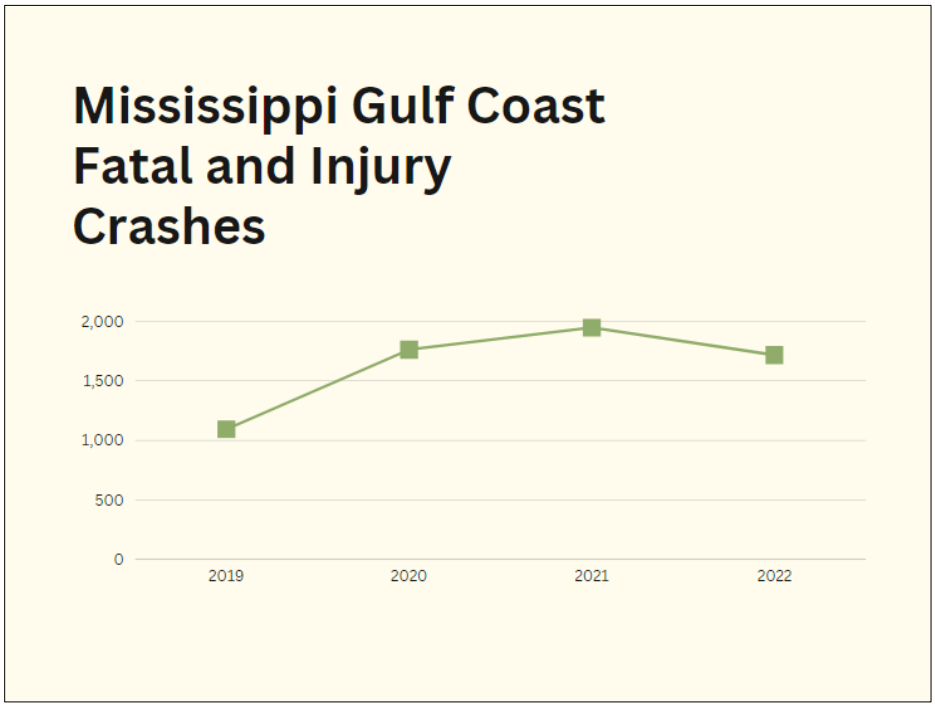
This Vision Zero Action Plan is:

Short-term—focused on the next five years.
Outcome-driven—outlines strategies with specific, measurable action items.
A living document—will be continuously tracked, evaluated, and updated.

Current State of Gulf Coast Road Safety

Every life lost on Gulf Coast roads is more than a statistic. Each death represents a mother, daughter, father, brother, or dear friend that had their life cut short. The goal of this Action Plan is to identify a strategic pathway to work together to build a Gulf Coast without traffic deaths.





Mississippi Gulf Coast
Metropolitan Planning Organization

A RESOLUTION OF THE MISSISSIPPI GULF COAST METROPOLITAN PLANNING ORGANIZATION TO ADOPT "VISION ZERO"

Whereas the Mississippi Gulf Coast Metropolitan Planning Organization has a direct influence on the promotion of transportation safety in the Gulf Coast region; and

Whereas the Mississippi Gulf Coast Metropolitan Planning Organization is aware of the escalating number of deaths due to crashes, including the year 2020, when fewer vehicles were on the roads; and

Whereas the Federal Highway Administration and the Federal Transit Administration have adopted the Safe Systems Principles to achieve *Vision Zero*, which is the goal of zero deaths and serious injuries due to traffic crashes; and

Whereas the Safe Systems Principles include the elements of (1) addressing the safety of all road users, including non-motorized road users (2) supporting vehicle designs that minimize collisions (3) reducing roadway speeds to reduce the force of impact during a collision (4) changing roadway designs to reduce the severity of crashes that occur, and (5) prioritizing high-quality post-crash care and in-depth post-crash traffic incident analysis; and

Whereas the Mississippi Gulf Coast Metropolitan Planning Organization has a Transportation Safety Program that directly supports the federal transportation initiative of *Vision Zero*, and the Mississippi Department of Transportation's safety mission: *Towards Zero Deaths*; and

Whereas the Mississippi Gulf Coast Metropolitan Planning Organization affirms that death and serious injury from crashes should never be considered with indifference, nor should the risk of such outcomes be accepted as inevitable; and

Whereas the Metropolitan Transportation Plan (MTP 2045) encompasses the long-term transportation priorities, goals, and projects for the Mississippi Gulf Coast Region;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

On March 9, 2023, the Mississippi Gulf Coast Metropolitan Planning Organization (MPO) hereby adopted *Vision Zero* to guide transportation planning, policy, and decision-making to reach the regional goal of achieving zero deaths and serious injuries due to crashes by the year 2045.

Attest:

Kenneth Yarrow
Executive Director, GRPC

Mayor Billy Hewes
Mississippi Gulf Coast MPO Chairman

Complete Streets

On September 24, 2015 the Transportation Policy Committee of the Mississippi Gulf Coast MPO adopted an initial Complete Streets policy for the region. In response to the new guidance and new safety data, the MPO has revised the regional Complete Streets policy in 2023 with updated design resources for making streets safer and more accessible for bicyclists and pedestrians, while also maintaining realistic and reasonable expectations for the implementation process.

The Policy relies on guidance from FHWA's Bikeway Selection Guide that provides guidance for how motor vehicle volume and speed can be taken into consideration to determine a suitable bike facility. The higher the speed and volume of a road, the more protection is recommended for bicyclists. Shared lanes with proper signage and markings are recommended for the lowest speeds and volumes. Bike lanes for low speeds and low to moderate volumes. Separation provided by separated bike lanes or shared use paths is needed to provide comfort to the average user in moderate to high speeds and high volumes conditions. The recommended facility types in this policy are recommended for the less experienced, less confident, bicyclist. It is understood that highly confident bicyclists may not desire these types of protective facilities.

High Injury Network

The High Injury Network (HIN) highlights the roads with the highest injury and fatal crash rates. Prioritizing safety modifications at these high crash locations has the highest potential to move the Gulf Coast towards its 2045 Vision Zero goal. The High Injury Network will be used to allocate funds for capital improvement projects and prioritize other traffic safety efforts. The priority safety areas that were identified in the Local Road Safety Plan (LRSP) are listed here.

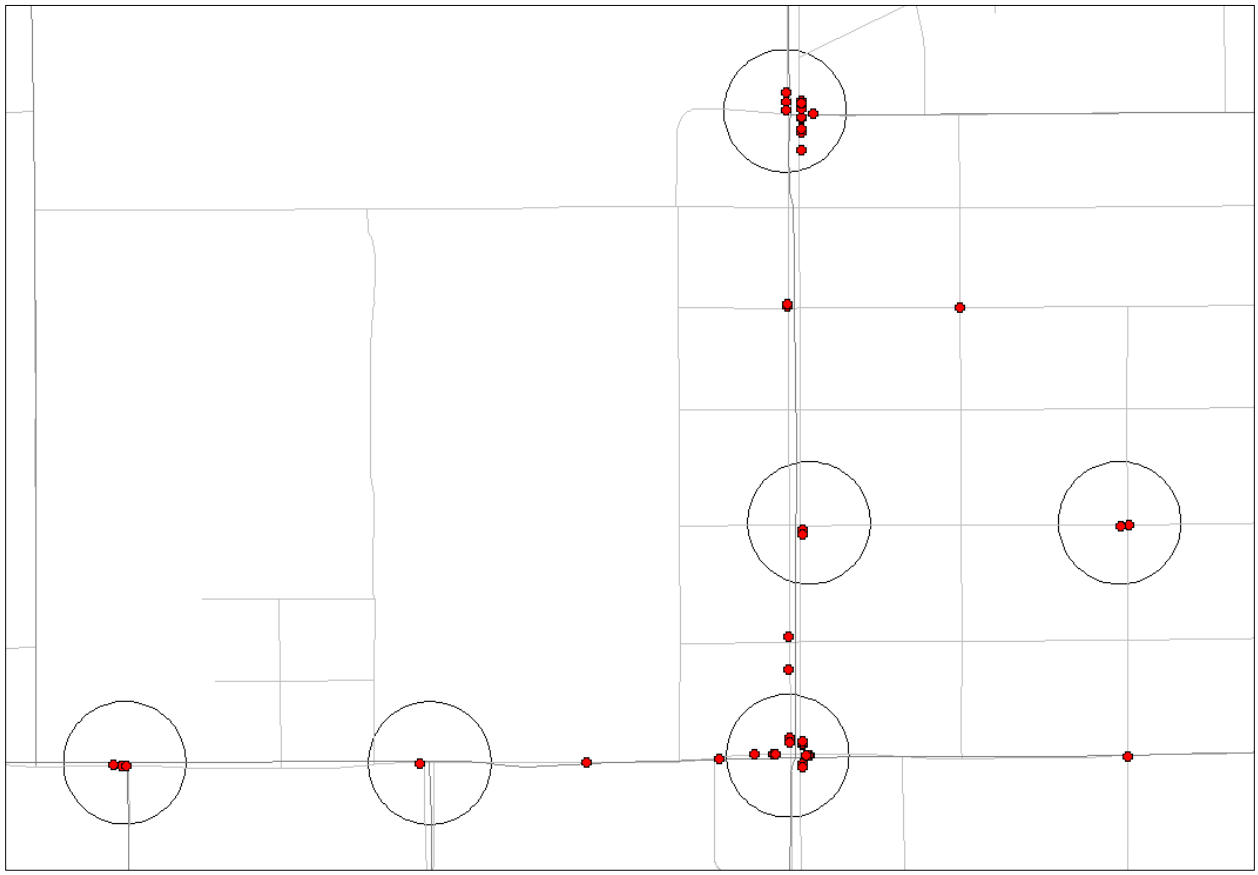
Using the same emphasis areas identified in the LRSP of "Intersections" and "Pedestrians and Bicycles". The supplemental planning effort identified more safety priority areas based on 2020 to 2022 crash data. Using GIS software, fatal and injury crash rates were identified for each intersection in the three county planning area regardless of ownership. The intersections with the highest crash rates were selected as priority safety concern intersections. Pedestrian and bicycle crashes were also analyzed, and clusters of crashes were identified as a Pedestrian Bicycle High Injury Network.

Intersections - *Local Road Safety Plan (LRSP)*

INTERSECTION	AGENCY	CRASHES	RURAL
Pass Rd & Popp's Ferry Rd	Biloxi	5	No
Pass Rd & 8th Ave	Gulfport	4	No
Pass Rd & Gulf Ave	Gulfport	4	No
Three Rivers Rd & Dedeaux Rd	Gulfport	4	No
Jefferson Ave & Macphelah St	Moss Point	4	No
Popp's Ferry Rd & Atkinson Rd	Biloxi	4	No
Pass Rd & Eisenhower Dr	Biloxi	3	No
Pass Rd & Big Lake Rd	Biloxi	3	No
Pass Rd & Cowan Rd (MS 605)	Gulfport	3	No
Pass Rd & Veterans Ave	Biloxi	3	No
Pass Rd & Courthouse Rd	Gulfport	3	No
Popp's Ferry Rd & Vee St	Biloxi	3	No
Three Rivers Rd & O'Neal Rd	Gulfport	3	No
Lamey Bridge Rd & Mallet Rd/Sangani Blvd	D'Iberville	3	No
Government St & Halstead Rd	Ocean Springs	3	No
Ingalls Ave & Chicot St	Pascagoula	3	No
Vidalia Rd & 16th Section Rd	Harrison Co	3	Yes
Caillavet St & Division St	Biloxi	3	No
Tucker Rd/Washington Ave & Seaman Rd	Jackson Co	3	Yes
Old Mobile Avenue & Chicot St	Pascagoula	3	No
Old Hwy 67 & Old Hwy 15	Biloxi	3	Yes

Intersections - *Supplemental Planning Analysis*

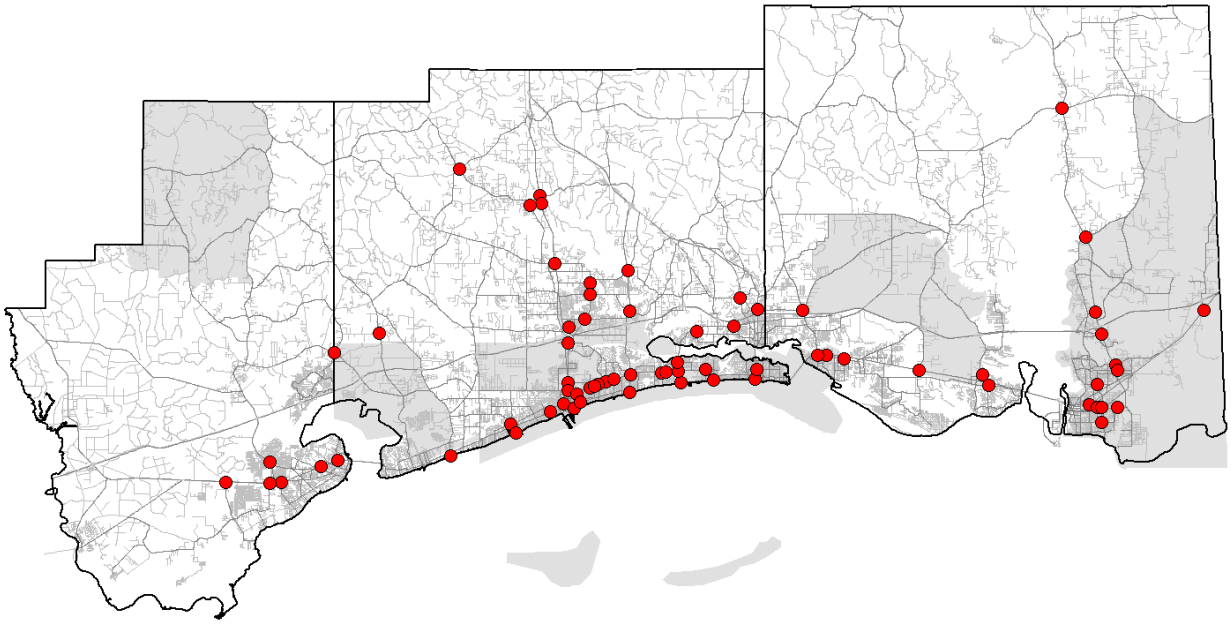
Using GIS software, each intersection in the three counties was assigned a crash rate based on the number of fatality and injury crashes in the 3-year study period and the amount of entering traffic. The intersections with the highest crash rates were identified as priority intersections for safety concerns.



Intersection	Agency	Crashes	Rate	Rural
I-110 & US 90	Biloxi	24	Very High	No
US 90 & Cowan Rd	Gulfport	19	Very High	No
MS 605 & John Ross Rd	Gulfport	14	Very High	No
MS 605 & Three Rivers Rd	Harrison Co	13	Very High	Yes
MS 63 & Dr. Martin Luther King Dr	Moss Point	12	Very High	No
MS 63 & Dutch Bayou Road	Moss Point	12	Very High	No
Community Road & David St	Gulfport	9	Very High	No
US 49 & West Wortham Rd*	Harrison Co	9	Very High	Yes
US 90 & Dunbar Ave	Bay St Louis	8	Very High	No
US 49 & East Wortham Rd*	Harrison Co	8	Very High	Yes
Rodriguez St & I-110 Exit 2	DIberville	5	Very High	No
42nd Ave & West Railroad St	Gulfport	7	Very High	No

US 90 & Lakeshore Rd	Hancock Co	6	Very High	Yes
Duckworth Rd & Three Rivers Rd	Gulfport	5	Very High	No
East Railroad St & Pratt Ave	Gulfport	4	Very High	No
Saucier Lizana Rd & W Wortham Rd	Harrison Co	4	Very High	Yes
Pineville Road & Old Pass Rd	Long Beach	3	Very High	No
Old Hwy 49 & West Wortham Rd	Harrison Co	3	Very High	Yes
Orchard Rd & Bayou Cassotte Pkwy	Pascagoula	3	Very High	No
US 49 & Creosote Rd	Gulfport	24	High	No
US 49 & 28th St	Gulfport	16	High	No
US 49 & 34th St	Gulfport	14	High	No
US 90 & Beauvoir Rd	Biloxi	14	High	No
US 49 & MS 53	Gulfport	11	High	No
US 90 & Kiln Waveland Cutoff	Waveland	10	High	No
Pass Rd & Washington Ave	Gulfport	9	High	No
MS 63 & Grierson Street	Moss Point	9	High	No
US 90 & 20th Ave*	Gulfport	8	High	No
30th Ave and 17th St	Gulfport	7	High	No
MS 63 & Old Saracennia Road	Moss Point	7	High	No
Pass Rd & 8th Ave	Gulfport	6	High	No
MS 63 & MS 614	Jackson Co	6	High	Yes
US 90 & Franklin Creek Rd	Jackson Co	5	High	Yes
Caillavet St & Division Street	Biloxi	5	High	No
Pass Rd & 18th Ave	Gulfport	4	High	No
Popps Ferry Rd & Lamey St	DIberville	4	High	No
Kiln Delisle Rd & Kapalama Rd	Hancock Co	2	High	Yes
US 90 & Washington Ave	Ocean Springs	13	Moderate	No
US 90 & 14th Street*	Pascagoula	11	Moderate	No
US 90 & MS 57	Ocean Springs	11	Moderate	No
US 90 & Rodenberg Ave	Biloxi	11	Moderate	No
US 90 & MLK Jr Ave*	Ocean Springs	10	Moderate	No
US 90 & Jeff Davis Ave	Long Beach	6	Moderate	No
MS 603 & Central Ave	Bay St Louis	5	Moderate	No
US 90 & Drinkwater Rd	Bay St Louis	5	Moderate	No
MS 63 & MS 613	Jackson Co	5	Moderate	Yes
US 90 & Lower Bay Rd	Waveland	4	Moderate	No
Old Spanish Trl & Ladnier Rd	Gautier	4	Moderate	No
US 90 & Menge Ave	Pass Christian	4	Moderate	No
Pass Rd & Hewes Ave	Gulfport	4	Moderate	No
Old Mobile Hwy & Eden St	Pascagoula	3	Moderate	No
Gau-Vancleave Rd & Valley Wood Dr	Gautier	3	Moderate	No

Crashes Rate:: Very High High Moderate



LRSP and Supplemental Planning Analysis Intersections

Lane Departures (Rural) - *Local Road Safety Plan (LRSP)*

ROUTE	COUNTY	CRASHES	LENGTH	PER MILE
Old River Road - Granada Rd to Wade Vancleave Rd	Jackson	5	0.9	5.56
Shaw Road - MS Hwy 53 to Morgan Lane Rd	Harrison	4	1.0	4.00
Kenneth Cole Road MS Hwy 57 to Blue Grass Lane	Jackson	3	0.8	3.75
Lower Bay Road - Clermont Rd to US Hwy 90	Hancock	7	1.9	3.68
County Farm Road - I-10 to Wildflower Rd	Harrison	2	0.6	3.33
East Wortham Road - US Hwy 49 to Hwy 67	Harrison	12	4.2	2.86
Saracennia Rd - Kings Rd to Coda Rd	Jackson	3	1.1	2.73
Lamey Bridge Rd - MS Hwy 67 to Palm Ridge Dr	Harrison	9	3.8	2.37
Old US Hwy 49 - Fish Hatchery Rd to Wortham Dr	Harrison	4	1.7	2.35
W. Wortham Road Borzik Rd to Sky Lane	Harrison	3	1.3	2.31
Old US Hwy 49 - W. Wortham Rd to Desoto Park Rd	Harrison	3	1.3	2.31
Saucier Lizana Rd - MS Hwy 53 to W. Wortham Rd	Harrison	9	4.2	2.14
Lily Orchard Rd - Nutbank Rd to Dunn Rd	Jackson	3	1.5	2.00
W. Wortham Rd - Owen Ladner Rd to Gaylord Rd	Harrison	4	2.4	1.67
Big Creek Rd - Alcede Lizana Rd to Cable Bridge Rd	Harrison	4	2.6	1.54
Tucker Rd - Cook Rd to Daisy Vestry Rd	Jackson	5	3.3	1.52
Saracennia Rd - Greenfields Rd to Jackson Co. Rd 33	Jackson	5	3.4	1.47
Wolf River Rd - Jake Bell Rd to Cable Bridge Rd	Harrison	6	4.6	1.30
Edwin Ladner Rd - 16th Section Rd to Vidalia Rd	Harrison	5	3.9	1.28
Tanner Williams Rd - MS Hwy 613 to MS/AL State Line	Jackson	8	6.3	1.27
Firetower Rd - I-10 to Vidalia Rd	Harrison	6	4.8	1.25
Caesar Necaise Rd- Hancock Co Line to Wendell Ladner Rd	Hancock	10	8.0	1.25
Vidalia Rd - Cuevas Delisle Rd to Firetower Rd	Harrison	7	5.8	1.21
Forts Lake Rd - Independence Rd to MS/AL State Line	Jackson	6	5.3	1.13
Seaman Road - Lake Forest Dr to Jim Ramsay Rd	Jackson	9	8.1	1.11
Kiln Delisle Rd - Menge Ave to I-10	Harrison	5	4.6	1.09
Vidalia Rd - Firetower Rd. to F. Malley Rd	Harrison	4	3.7	1.08
Gautier Vancleave Rd - Martin Bluff Rd to MS Hwy 57	Jackson	6	5.9	1.02
Wade Vancleave Rd-Fish Lake Rd to MS Hwy 63	Jackson	4	4.0	1.00
County Farm Rd- Landon Rd to John Clark Rd	Harrison	5	5.1	0.98

Lane Departures (Urban) - *Local Road Safety Plan (LRSP)*

ROUTE	AGENCY	CRASHES	LENGTH	PER MILE
Three Rivers Road – Lavelle Dr to Mustard Pl	Gulfport	5	1.0	5.0
Macphelah Road – Shortcut Rd to Meridian St	Moss Point	4	1.0	4.0
Jordan Road – Seaman Rd to Georgia St	Jackson Co	4	1.0	4.0
Popp's Ferry Road – Pass Rd to Causeway Dr	Biloxi	6	1.7	3.53
Pass Road – Popps Ferry Rd to Ploesti Dr	Biloxi	9	2.6	3.46
Jefferson Avenue – River Rd to Second St	Moss Point	5	1.5	3.33
Martin Bluff Road – Stanfield Point Rd to Brookside Dr	Gautier	5	1.5	3.33
Gautier Vancleave Road – US 90 to Martin Bluff Rd	Gautier	7	2.1	3.33
Cook Road – Mallet Rd to Tucker Rd	Jackson Co	4	1.4	2.86
Pass Road – MS 605 to Popps Ferry Rd	Biloxi	8	3.0	2.67
Lemoyne Boulevard – Lamey Bridge Rd to Riviera Dr	DIberville	6	2.3	2.61
Beachview Drive – Old Walnut Rd to Seacliff Blvd	Jackson Co	4	1.6	2.5
Chicot Street – Ingalls Ave to Shortcut Rd	Pascagoula	5	2.0	2.5
Popp's Ferry Road – Cedar Lake Rd to Lamey Bridge Rd	DIberville	6	2.6	2.31
Beatline Road – W Railroad St to Hickory Dr	Long Beach	4	1.8	2.22
Popp's Ferry Road – Causeway Dr to Cedar Lake Rd	Biloxi	6	2.9	2.07
Martin Bluff Road – Gautier Vancleave Rd to I-10	Gautier	4	2.0	2.00
Pass Road – US 49 to MS 605	Gulfport	8	4.2	1.9
28th Street – Red Creek Rd to Canal Rd	Long Beach	6	3.5	1.71
Lamey Bridge Road – I-10 to Lickskillet Rd	DIberville	3	1.8	1.67
Daisy Vestry Road – Cook Rd to Tucker Rd	Jackson Co	5	3.1	1.61
Seaman Road – Tucker Rd to Lake Forest Dr	Jackson Co	4	2.7	1.48
Three Rivers Road – Airport Rd to Dedeaux Rd	Gulfport	3	2.2	1.36
28th Street – Canal Rd to Pass Rd	Gulfport	5	3.7	1.35
Dedeaux Road – US 49 to MS 605	Gulfport	5	4.1	1.22
Menge Avenue – 2nd St to Red Creek Rd	Harrison Co	3	2.5	1.2
Canal Road – I-10 to John Clark Rd	Harrison Co	4	3.4	1.18
Ocean Springs Road – US 90 to MS 57	Ocean Springs	5	4.5	1.11
Old Spanish Trail – MS 57 to Ladnier Rd	Gautier	5	4.6	1.09
Canal Road – 28th St to I-10	Harrison Co	3	2.8	1.07

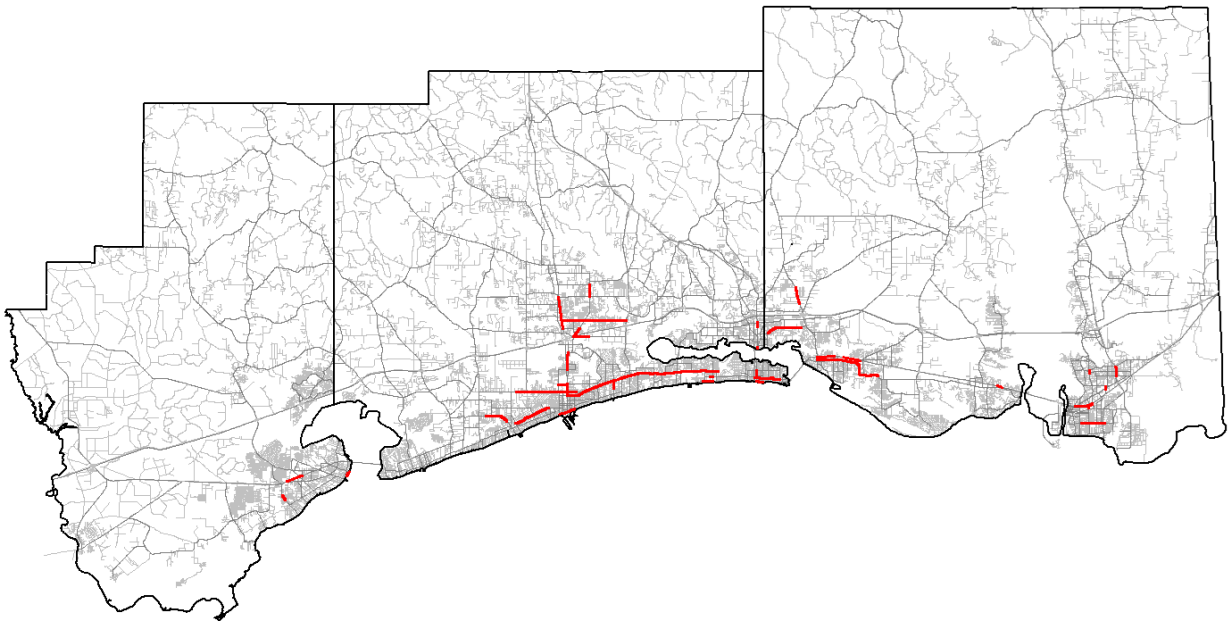
Pedestrian and Bicycle - *Local Road Safety Plan (LRSP)*

ROUTE	AGENCY	CRASHES	LENGTH	PER MILE	RURAL
Pass Rd - 250' W of Ford St to Varnado Ln	Gulfport	4	0.20	20.00	No
Veterans Blvd - 400' South to 400' North of Shortcut Rd	Pascagoula	3	0.15	20.00	No
Central Ave - Sunset Dr to Bay Shore Dr	D'Iberville	2	0.10	20.00	No
14th St Service Rd – Denny Ave to Dead End	Pascagoula	2	0.10	20.00	No
Irish Hill Dr - Travia Ave to Rodenberg Ave	Biloxi	2	0.19	10.53	No
Lamey Bridge Rd - Toncrey Rd to Big Bridge Rd	D'Iberville	3	0.32	9.38	No
Three Rivers Rd - Seaway Rd to 250' N of Angela Dr	Gulfport	5	0.70	7.14	No
Waveland Ave - Donlard St to Spruce St	Waveland	2	0.35	5.71	No
Courthouse Rd - 30th St to 250' N of Pass Rd	Gulfport	2	0.48	4.17	No
33rd St - 24th Ave to 26th Ave	Gulfport	2	0.50	4.00	No
East Old Pass Rd - North Cleveland Ave to 44th Ave	Long Beach	5	1.75	2.86	No
Tucker Rd - 400' S of Parker Rd to McClelland Rd	Jackson Co	3	1.13	2.65	No
Ingalls Ave - 8th St to Chicot St	Pascagoula	2	1.23	1.63	No
Pineville Rd - Ashley Ln to Seal Ave	Long Beach	2	1.43	1.40	No
Pass Rd - Fernwood Rd to Ploesti Dr	Biloxi	5	3.70	1.35	No
Pass Rd - US Hwy 49 to MS Hwy 605	Gulfport	5	4.20	1.19	No
Dedeaux Road - US Highway 49 to Jessica Dr	Gulfport	4	3.40	1.18	No
Lemoyne Blvd - Bienville Dr to Laura Acres Dr	Jackson Co	2	2.2	0.91	No
28th St - Simmons Dr to 18th Ave	Long Beach	3	3.86	0.79	No
Government St-Washington Ave to Ridgeview Dr	Ocean Springs	3	4.51	0.67	No
Ingalls Avenue - Belair Street to Chicot Street (Bicycle)	Pascagoula	3	0.70	4.29	No
Tucker Road - Parker Road to McClelland Road (Bicycle)	Jackson Co.	3	1.0	3.00	No
Howard Avenue - I-110 Overpass to Oak Street	Biloxi	4	1.6	2.45	No
Pass Road - Gulf Avenue to Popp's Ferry Road (Bicycle)	Gulfport/ Biloxi	3	5.5	0.55	No

Pedestrian and Bicycle - *Supplemental Planning Analysis*

ROUTE	AGENCY	CRASHES	LENGTH	PER MILE	RURAL
Main St – Elder St to Jackson Ave	Moss Point	4	0.16	25	No
Pass Rd – Rodenberg Ave to Iberville Dr	Biloxi	3	0.24	12.5	No
Ingalls Ave – Chicot St to Geerkin St	Pascagoula	2	0.24	8.3	No
Beach Blvd – Main St to Union St	Bay St Louis	3	0.26	11.5	No
US 90 – Treasure Bay Casino to Rodenberg Ave	Biloxi	7	0.64	10.9	No
Caillavet St – Division St to Esters Blvd	Biloxi	3	0.31	9.7	No
Pass Rd – A Ave to Washington Ave	Gulfport	4	0.49	8.2	No
US 90 – Caillavet St to Main St	Biloxi	11	0.41	8.1	No
US 90 – Johnston Rd to trailer park	Gautier	3	0.4	7.5	No
Pass Rd – US 49 to 20th Ave	Gulfport	4	0.42	9.5	No
US 90 – Telephone Rd to Hospital Rd	Pascagoula	8	1.15	7	No
MS 63 – Grierson St to Frederick St	Moss Point	4	0.57	7	No
US 49 – 34th St to Pass Rd	Gulfport	5	0.75	6.7	No
Pass Rd – 28th St to Chicago Ave	Gulfport	6	0.8	7.5	No
Pass Rd – Big Lake Rd to Beauvoir Rd	Biloxi	6	0.95	6.3	No
US 49 – MLK Jr Ave to Airport Rd	Gulfport	6	1.11	5.4	No
Dedeaux Rd – Jessica Dr to MS 605	Gulfport	3	0.7	4.3	No
US 90 – 33rd Ave to 20th Ave	Gulfport	4	0.98	4.1	No
Three Rivers Rd – Oneal Rd to Duckworth Rd	Gulfport	3	0.74	4.05	No
US 90 – Old Spanish Trl to McLaurin St	Waveland	2	1.06	1.89	No
US 49 – Oneal Rd to Community Rd	Gulfport	6	1.98	3	No
US 90 – MS 609 to Holcomb Blvd	Ocean Springs	3	1.08	2.8	No
US 90 – Halstead Rd to Ocean Springs Rd	Ocean Springs	3	1.06	2.8	No
Seaway Rd – Three Rivers Rd to 1 mile east	Gulfport	1	1	1	No
Old Hwy 49 – Landon Rd to Lyman	Gulfport	NA	NA	NA	No

Crashes Per Mile: Very High High Moderate



Pedestrian and Bicycle High Injury Network

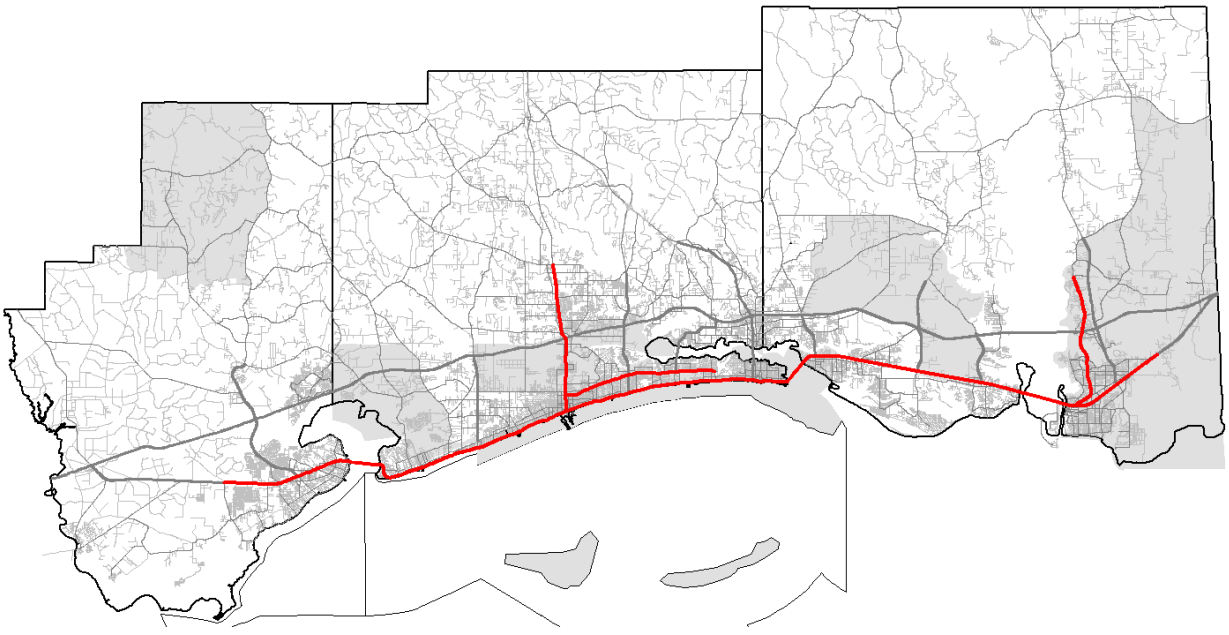
Strategy: Installing pedestrian safety enhancements and focusing on closing network gaps with sidewalks in high demand areas for people walking, rolling, or using mobility assisted devices.

Corridors - Pedestrian and Bicycle

Due to the linearity of urban development in the Mississippi Gulf Coast region, north-south mobility is very important to provide movement between the two major travel east-west corridors—Interstate 10 and US Highway 90--spanning the three coastal counties from Alabama to Louisiana. Particular attention should be made to improvements to the mobility corridors because of the high daily traffic that occurs on them.

An analysis of pedestrian and bicycle crash data from 2020 to 2022 provides a look at where many bicycle and pedestrian fatalities and injuries are occurring. Four mobility corridors in particular, have more than their fair share of pedestrian and bicycle crashes. **US 90, US 49, Pass Road,** and **MS 613** and therefore have been identified as **High Injury Corridors (HIC)**. During the years 2020 to 2022, there were 348 pedestrian and bicycle crashes resulting fatality or injury in the Gulf Coast urban area. 145 (41%) of these crashes occurred on the four corridors identified. Funding allocation to improved linkages, lighting, and pedestrian and bicycle infrastructure projects on these corridors will make a significant impact on reducing fatalities and injuries from crashes and will help the Gulf Coast reach its Vision Zero goal by 2045.

Strategy: Prioritize transforming High Injury Corridors (HIC) serving as major mobility corridors into a Complete Street with safety improvements to control speed, provide safe crossing, and separate non-motorized users with a multiuse path or protected bicycle lane.

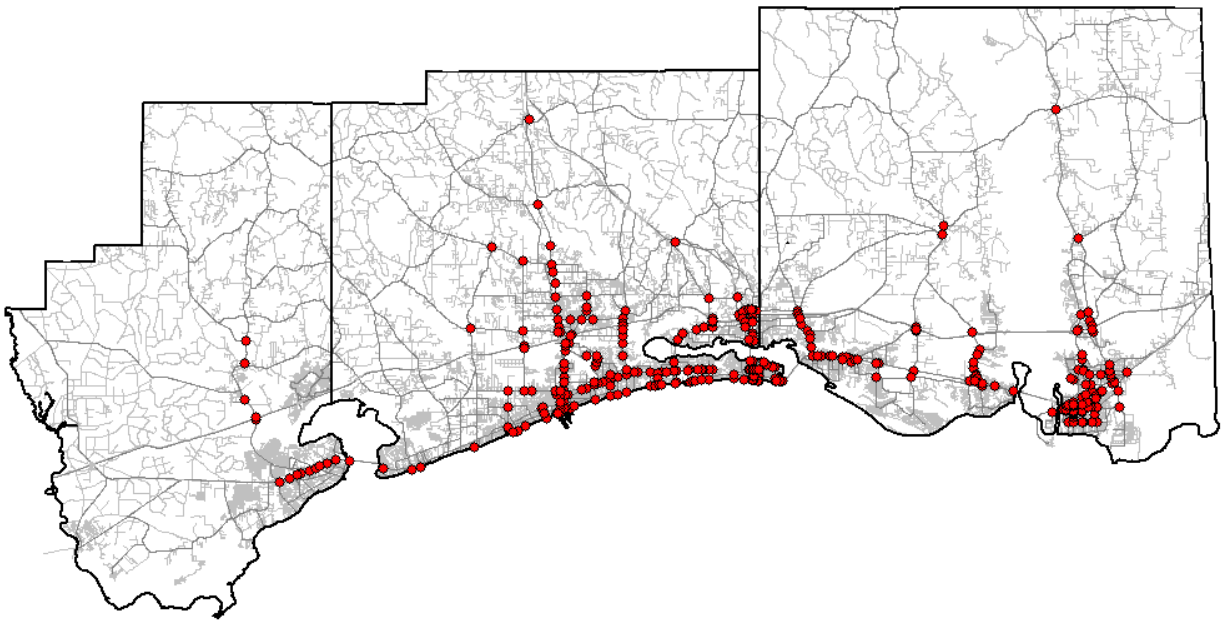


Pedestrian and Bicycle High Injury Corridors (HIC) and Disadvantaged Areas

High Injury Corridors - Intersections

To prevent intersection crashes occurring from the driver's view being weakened by the sun, it is important to remove the traffic signals from unpredictable guidewires that cause signals to hang crooked and mount them on mast arms for proper placement at the intersection and upgrade the signals with backing plates to help block the sun. This should be done at every intersection that does not meet this standard.

Strategy: Upgrade intersections with signal backing plates and mast arms.

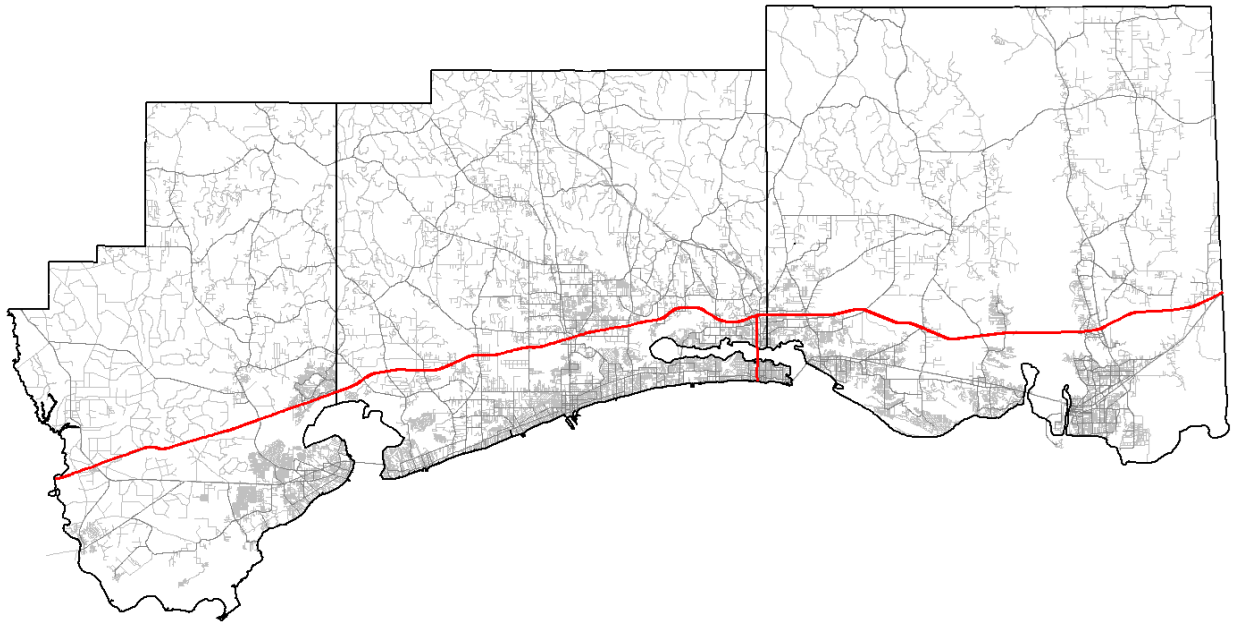


Gulf Coast Traffic Signals

High Injury Corridors – Interstate Barrier

Interstate 10 is a physical barrier to bicycle and pedestrian mobility. The interstate corridor located along the Mississippi Gulf Coast was constructed about 50 years ago as a rural freeway just north of the populated areas. As the coastal community has grown in population to the north, the interstate has become a barrier. Development is beginning to move north around the interchanges, which has created congestion for vehicular traffic and has become an obstacle for bicycle and pedestrian traffic. There is a need to modernize Gulf Coast interchanges to provide ways for non-motorized modes to get across the barriers caused by the interstate either by improvements to underpasses, overpasses, interchange improvements, or pedestrian and bicycle bridges.

Strategy: Use pedestrian and bicycle bridges to overcome the barrier to pedestrian and bicycle mobility caused by the I-10 and I-110 Interstate.



Gulf Coast Interstate Corridors

Emphasis Areas and Action Plan

Outlined by the **Safe System Approach**, the Action Plan identifies safety concerns in the following emphasis areas: Intersections, Lane Departures, Pedestrians, Bicycles. Future updates to this Action Plan will include Speeding and Distracted Driving. The Action Plan will be updated every three years as new crash data becomes available.

Safe Roads – Intersections

Mid-term	Develop traffic signal timing plans.	→	Implement a corridor timing plan.
Short-term	Plan, design, and develop intersection projects.	→	Construct one intersection project per year.
Long-term	Plan, design, and develop street lighting projects.	→	Construct one intersection lighting project every two years.
Mid-Term	Perform a roundabout feasibility study on the top 20 intersections identified.	→	Construct roundabouts for the top five intersections.
Short-term	Plan, design, and develop signal upgrade projects for backing plates and mast arms.	→	Complete the upgrade of three intersection traffic signal a year.

Safe Roads - Lane Departures

Short-term	Plan, design, and develop projects to improve visibility and awareness.	→	Construct region-wide lane departure projects.

Safe Roads – Pedestrians and Bicycles

Short-term	Plan, design, and develop crosswalk projects.	→	Construct six improved crosswalks every two years.
Short-term	Plan, design, and develop sidewalks projects.	→	Construct half a mile of sidewalk each year.
Long-term	Plan, design, and develop multiuse pathway or protected bike projects for the High Injury Mobility Corridors (US 90, Pass Road, US 49, MS 613)	→	Implement a half a mile of projects lane each year for High Injury Mobility Corridors.
Mid-term	Plan, design, and develop pedestrian and bicycle bridge or underpass projects.	→	Construct a pedestrian bridge or underpass project every 3 years
Mid-term	Plan, design, and develop bike lane projects.	→	Construct half a mile of bicycle lanes each year.
Short-term	Plan, design, and develop pavement marking and signage for shared lanes.	→	Construct one mile of shared lane projects every two years.

Safe Speeds – Speed

Supplemental Planning Analysis #2	TBD

Safe Road Users – Distracted Driving

Supplemental Planning Analysis #2	TBD

Community and Stakeholder Engagement

The supplemental planning analysis included reaching out to the stakeholders from the LRSP planning effort. The Gulf Coast Metropolitan Planning Organization Transportation Technical Coordinating Committee (TCC) provided valuable comments that lead to the development of some systemic safety projects. The TCC will provide oversight and monitoring to progress to implement the Action Plan.

Appendix

Appendix A: Data Analysis

Appendix B: Stakeholder Meetings

Appendix C: Maps

Appendix A-1: Crash Matrices & Emphasis Areas

HANCOCK, HARRISON, & JACKSON COUNTY SUMMARY
COASTAL COUNTY LOCAL ROAD SAFETY PLAN

	No. of Crashes	No. of Vehicles Involved	No. of Injuries (SAMS)	No. of Fatalities	DUI Involved	Located at Intersection	Crash Type: Angle	Bicycle	Left Turn Same Roadway	Overturn	Pedestrian	Rear End Slow or Stop	Train	Lane Departures	Miscellaneous	Crash Location: Roadway	Roadside	Off Roadway	Median	Shoulder	Gore	Light Conditions: Daylight	Dark-Unlit	Dark-Lit	Dawn/Dusk	Road Conditions: Dry	Wet/Water	Slush/Snow/Ice	Mud/Dirt/Oil	SAMS Injury Severity: 1	2	3
Totals	3,285	5,801	5,338	332	441	1,311	469	80	303	71	251	547	11	1,473	80	2,281	93	766	111	32	2	1,970	638	590	87	2,710	552	15	8	292	230	2,763
Reported Time																																
12am-6am	444	674	618	69	143	115	19	4	17	7	46	56	0	280	15	240	18	146	25	11	2	16	215	198	15	357	84	1	2	59	40	345
6am-6pm	1,950	3,559	3,273	141	118	834	355	60	181	49	88	367	7	803	40	1,429	50	404	57	10	0	1,816	47	35	50	1,607	330	9	4	124	117	1,709
6pm-12am	891	1,568	1,447	122	180	362	95	16	105	15	117	124	4	390	25	612	25	214	29	11	0	136	376	357	22	746	138	5	2	109	73	709
Reported Date (January 1, 2014 – December 31, 2018)																																
Jan	232	399	352	23	34	93	30	1	20	2	20	40	1	112	6	150	7	64	8	3	0	103	65	60	4	160	42	10	0	23	18	191
Feb	244	420	359	38	40	96	28	7	22	9	18	36	1	116	6	165	7	61	7	4	0	137	63	39	5	209	33	0	2	32	17	195
Mar	283	487	478	29	36	117	40	8	27	6	25	36	2	128	11	193	5	73	8	3	1	175	50	52	6	225	57	0	1	24	28	231
April	290	524	467	23	28	120	51	7	33	7	12	48	2	127	3	207	10	64	7	2	0	198	43	43	6	241	49	0	0	22	20	248
May	295	513	483	32	41	123	46	7	27	11	23	48	0	126	7	208	5	65	15	2	0	198	38	52	7	251	42	0	2	25	21	249
June	293	525	469	25	45	116	36	11	25	6	16	48	1	141	9	195	13	67	12	5	1	186	39	50	8	226	65	0	2	23	19	251
July	320	563	583	19	41	130	51	8	25	5	15	55	1	151	9	227	8	66	14	5	0	227	40	42	11	263	57	0	0	18	27	275
Aug	274	479	451	21	34	106	39	3	20	8	26	52	0	120	6	195	6	66	6	1	0	186	46	39	3	220	54	0	0	19	17	238
Sept	238	430	398	27	31	107	32	6	31	4	18	52	0	91	4	172	11	49	5	1	0	140	46	46	6	201	37	0	0	23	14	201
Oct	309	557	487	41	38	124	44	11	31	4	28	50	0	129	12	215	7	71	11	5	0	158	74	68	9	281	28	0	0	37	19	253
Nov	259	448	398	24	37	92	35	5	18	9	25	40	0	122	5	160	10	59	10	0	0	133	61	52	13	229	29	0	1	22	17	220
Dec	248	457	413	30	36	87	36	6	24	0	25	42	3	110	2	174	4	61	8	1	0	119	73	47	9	184	59	5	0	24	13	211
Injury Severity																																
1	292	546	198	332	45	64	30	5	11	2	65	29	6	141	2	198	5	79	9	1	0	121	123	43	5	252	39	0	1			
2	230	375	375	0	48	76	24	9	15	1	27	20	0	128	6	143	8	69	11	1	0	119	60	45	6	202	26	2	0			
3	2,763	4,880	4,765	0	348	1,171	415	65	277	68	159	498	5	1,204	72	1,940	82	618	91	30	2	1,730	455	502	76	2,256	487	13	7			
Road Condition																																
Dry	2,710	4,814	4,387	289	371	1,114	402	73	253	61	225	451	9	1,164	72	1,909	76	614	83	27	2	1,646	518	475	71							
Mud/Dirt/Oil	8	11	13	1	2	2	0	0	0	1	0	0	0	5	2	4	1	3	0	0	0	5	2	1	0							
Slush/Snow/Ice	15	24	32	0	2	2	0	0	0	0	0	0	0	15	0	7	0	7	1	0	0	7	4	4	0							
Wet/Water	552	952	906	42	66	193	67	7	50	9	26	96	2	289	6	361	16	143	27	5	0	312	114	110	16							
Light Condition																																
Daylight	1,972	3,572	3,350	139	127	859	356	59	189	55	73	361	7	822	48	1,430	50	416	64	10	0											
Dark-Unlit	638	1,059	912	137	154	142	40	10	26	5	99	98	4	347	9	380	15	205	23	15	0											
Dark-Lit	590	1,024	950	51	145	283	61	9	62	10	72	75	0	259	22	415	23	124	21	5	2											
Dawn/Dusk	87	146	126	5	15	27	12	2	6	1	7	13	0	45	1	56	5	21	3	2	0											
Crash Location																																
Roadway	2,281	4,687	4,074	231	252	1,142	469	74	303	67	233	544	8	511	72																	
Roadside	93	107	119	6	20	18	0	2	0	1	5	0	0	84	1																	
Off Roadway	766	833	935	85	142	133	0	0	0	2	10	0	3	746	5																	
Median	111	120	170	9	22	12	0	0	0	0	1	1	0	107	2																	
Shoulder	32	52	38	1	5	4	0	4	0	1	2	2	0	23	0																	
Gore	2	2	2	0	0	2	0	0	0	0	0	0	0	2	0																	
Crash Type																																
Angle	469	976	954	37	26	412																										
Bicycle	80	162	76	6	4	38																										
Left Turn Same Roadway	303	639	684	11	15	250																										
Overturn	71	80	98	2	1	25																										
Pedestrian	251	535	216	68	52	80																										
Rear End Slow or Stop	547	1,329	1,122	40	66	204																										
Train	11	20	46	9	1	0																										
Lane Departure	1,473	1,937	2,038	157	269	267																										
Miscellaneous	80	122	104	2	7	35																										
Located at Intersection	1,311	2,602	2,450	73	149																											

Jackson, Harrison, & Hancock County Fatalities and Serious Injuries by Emphasis Area

Emphasis Area		3-County Total (All Roads)		State Roads (Interstate, US, & State Rtes)		County Roads		City Streets	
		Percent	No.	Percent	No.	Percent	No.	Percent	No.
Drivers	Young Drivers (under 21)	16.03%	737	6.98%	321	3.76%	173	4.28%	197
	Unlicensed Drivers	7.89%	363	4.15%	191	0.67%	31	2.72%	125
	Older Drivers (65 and older)	12.70%	584	7.46%	343	1.24%	57	2.91%	134
	Aggressive Driving and Speed Related	24.40%	1122	14.18%	652	4.61%	212	5.18%	238
	Impaired Driving (drug and alcohol)	7.29%	335	3.96%	182	1.46%	67	1.63%	75
	Inattentive, Distracted, Asleep Drivers	1.98%	91	0.80%	37	0.57%	26	0.59%	27
	Unbelted Occupants	8.57%	394	4.48%	206	1.54%	71	2.44%	112
Special Users	Pedestrian Fatalities and Injuries	7.64%	251	3.32%	109	0.73%	24	3.59%	118
	Bicycle Fatalities and Injuries	2.44%	80	0.73%	24	0.24%	8	1.46%	48
Vehicles	Motorcycle Crashes	10.20%	425	5.35%	223	1.92%	80	2.74%	114
Highways	Train Crashes	0.33%	11	0.03%	1	0.00%	0	0.30%	10
	Lane Departure Crashes	44.84%	1,473	20.46%	672	12.33%	405	12.05%	396
	Intersection Crashes	39.91%	1,311	22.07%	725	4.38%	144	13.46%	442
	Angle Crashes	14.28%	469	8.34%	274	1.43%	47	4.51%	148
	Left Turn Same Roadway Crashes	9.22%	303	6.36%	209	0.55%	18	2.31%	76
	Overturn Crashes	2.16%	71	1.25%	41	0.30%	10	0.61%	20
	Rear End Slow or Stop Crashes	16.65%	547	12.85%	422	0.82%	27	2.98%	98

Source: Department of Public Safety Crash Database/SAMS

Notes:
1. Drivers and Special Users Empasis Area Categories are individual fatalities and serious injuries.
2. Vehicles and Highway Emphasis Area Categories are fatal and serious injury crashes.
3. Data includes all fatal, life threatening and moderate injury crashes for Hancock, Harrison, and Jackson Counties from 2014 through 2018.

HANCOCK COUNTY SUMMARY
COASTAL COUNTY LOCAL ROAD SAFETY PLAN

								Crash Type								Crash Location						Light Conditions				Road Conditions				SAMS Injury Severity		
	No. of Crashes	No. of Vehicles Involved	No. of Injuries (SAMS)	No. of Injuries (MUCR)	No. of Fatalities	DUI Involved	Located at Intersection (within 1,000')	Angle	Bicycle	Left Turn Same Roadway	Overturn	Pedestrian	Rear End Slow or Stop	Train	Lane Departure	Miscellaneous	Roadway	Roadside	Off Roadway	Median	Shoulder	Gore	Daylight	Dark-Unlit	Dark-Lit	Dawn/Dusk	Dry	Wet/Water	Slush/Snow/Ice	Mud/Dirt/Oil	1	2	3
Totals	**466**	**778**	**782**	**793**	**48**	**72**	**169**	**62**	**8**	**40**	**6**	**19**	**83**	**1**	**235**	**12**	**286**	**9**	**139**	**26**	**6**	**0**	**323**	**95**	**43**	**5**	**392**	**73**	**0**	**1**	**45**	**35**	**386**
Reported Time																																	
12am-6am	55	81	74	74	5	26	11	1	0	0	0	3	13	0	37	1	27	2	23	2	1	0	3	34	17	1	48	7	0	0	5	6	44
6am-6pm	310	531	533	539	25	21	115	49	7	31	5	9	54	1	145	9	201	6	78	22	3	0	298	5	4	3	266	44	0	0	25	24	261
6pm-12am	101	166	175	180	18	25	43	12	1	9	1	7	16	0	53	2	58	1	38	2	2	0	22	56	22	1	78	22	0	1	15	5	81
Reported Date (January 1, 2014 – December 31, 2018)																																	
Jan	35	58	59	59	0	2	21	7	0	3	0	0	8	0	17	0	23	1	11	0	0	0	22	9	4	0	27	8	0	0	0	3	32
Feb	37	63	52	52	3	9	10	5	1	3	1	2	6	0	19	0	25	0	10	2	0	0	26	10	1	0	30	7	0	0	3	3	31
Mar	43	67	85	86	2	3	13	7	0	2	1	1	5	0	26	1	24	0	18	1	0	0	32	6	4	1	33	10	0	0	2	4	37
April	32	47	50	50	2	6	8	5	0	1	0	1	5	0	20	0	18	0	13	3	0	0	24	4	4	0	27	5	0	0	2	2	28
May	47	79	92	94	8	8	14	5	1	3	3	1	8	0	26	0	28	1	15	3	0	0	36	9	2	0	39	5	0	0	7	4	36
June	45	79	68	69	5	9	17	8	0	5	0	4	6	0	21	1	29	2	11	1	2	0	29	10	6	0	37	7	0	1	5	3	37
July	48	78	96	96	2	7	20	9	1	2	0	1	8	0	25	2	27	3	15	3	0	0	38	4	5	1	40	8	0	0	2	7	39
Aug	35	65	54	55	7	2	14	3	0	4	0	4	8	0	15	1	25	0	9	0	1	0	24	7	3	1	31	4	0	0	7	2	26
Sept	37	55	56	57	3	6	17	3	1	6	1	0	5	0	20	1	19	2	12	3	1	0	30	6	1	0	34	3	0	0	3	0	34
Oct	51	93	84	86	11	9	18	2	3	8	0	3	11	0	20	4	33	0	11	5	2	0	27	16	8	0	47	4	0	0	9	6	36
Nov	26	43	42	42	1	7	10	3	1	1	0	0	9	0	11	1	16	0	8	2	0	0	16	7	2	1	23	3	0	0	1	1	24
Dec	30	51	44	47	4	4	7	5	0	2	0	2	4	1	15	1	21	0	6	3	0	0	19	7	3	1	24	6	0	0	4	0	26
Injury Severity																																	
1	45	81	28	39	48	8	7	4	0	2	0	8	5	0	26	0	27	0	14	4	0	0	22	18	5	0	41	4	0	0			
2	35	55	53	53	0	6	12	5	3	1	0	4	3	0	19	0	21	2	12	0	0	0	23	9	3	0	34	1	0	0			
3	388	642	701	701	0	58	150	53	5	37	6	7	75	1	190	12	238	7	113	22	6	0	278	68	35	5	317	68	0	1			
Road Condition																																	
Dry	392	668	644	652	44	65	143	52	7	31	6	19	75	0	191	11	248	8	109	21	6	0	278	76	34	4							
Mud/Dirt/Oil	1	1	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0							
Slush/ Snow/Ice	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Wet/Water	73	109	136	139	4	7	26	10	1	9	0	0	8	1	43	1	38	1	29	5	0	0	45	18	9	1							
Light Condition																																	
Daylight	323	545	562	568	22	24	126	50	5	33	6	7	55	1	156	10	205	6	86	23	3	0											
Dark-Unlit	95	150	141	146	20	31	19	7	2	2	0	7	22	0	55	0	50	2	38	2	3	0											
Dark-Lit	43	75	76	76	5	16	21	3	1	5	0	5	6	0	21	2	28	0	14	1	0	0											
Dawn/Dusk	5	8	9	9	0	1	3	2	0	0	0	0	0	0	3	0	3	1	1	0	0	0											
Crash Location																																	
Roadway	286	563	543	554	29	37	146	62	7	40	5	18	82	1	71	10																	
Roadside	9	10	19	19	0	4	1	0	0	0	1	0	0	0	8	0																	
Off Roadway	139	144	167	167	15	28	19	0	0	0	0	0	0	0	138	1																	
Median	26	30	46	46	4	3	3	0	0	0	0	0	1	0	25	1																	
Shoulder	6	11	7	7	0	0	0	0	1	0	0	1	0	0	4	0																	
Gore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																	
Crash Type																																	
Angle	62	124	130	132	4	4	51																										
Bicycle	8	16	8	8	0	1	4																										
Left Turn Same Roadway	40	83	87	87	2	1	33																										
Overturn	6	6	15	15	0	0	1																										
Pedestrian	19	42	16	16	8	3	7																										
Rear End Slow or Stop	83	187	176	178	6	13	30																										
Train	1	2	1	1	0	0	0																										
Lane Departure	235	300	329	336	28	48	36																										
Miscellaneous	12	18	20	20	0	2	7																										
Located at Intersection	169	321	330	333	8	19																											

Hancock County Fatalities and Serious Injuries by Emphasis Area

Emphasis Area		Hancock County Total		State Roads Hancock County		County Roads Hancock County		City Street Hancock County	
		Percent	No.	Percent	No.	Percent	No.	Percent	No.
Drivers	Young Drivers (under 21)	17.37%	115	9.37%	62	5.44%	36	2.42%	16
	Unlicensed Drivers	5.14%	34	3.63%	24	0.76%	5	0.76%	5
	Older Drivers (65 and older)	14.65%	97	11.48%	76	1.06%	7	1.51%	10
	Aggressive Driving and Speed Related	23.11%	153	16.47%	109	2.87%	19	3.32%	22
	Impaired Driving (drug and alcohol)	7.70%	51	4.83%	32	1.36%	9	1.51%	10
	Inattentive, Distracted, Asleep Drivers	2.57%	17	1.66%	11	0.45%	3	0.45%	3
	Unbelted Occupants	9.67%	64	6.19%	41	1.06%	7	1.21%	8
Special Users	Pedestrian Fatalities and Injuries	4.08%	19	1.93%	9	0.43%	2	1.72%	8
	Bicycle Fatalities and Injuries	1.72%	8	0.64%	3	0.21%	1	0.86%	4
Vehicles	Motorcycle Crashes	7.63%	47	4.87%	30	2.11%	13	0.65%	4
Highways	Train Crashes	0.21%	1	0.00%	0	0.00%	0	0.21%	1
	Lane Departure Crashes	50.43%	235	27.04%	126	7.51%	35	15.88%	74
	Intersection Crashes	36.27%	169	24.46%	114	4.94%	23	6.87%	32
	Angle Crashes	13.30%	62	10.30%	48	1.07%	5	1.93%	9
	Left Turn Same Roadway Crashes	8.58%	40	8.37%	39	0.00%	0	0.21%	1
	Overturn Crashes	1.29%	6	1.07%	5	0.00%	0	0.21%	1
	Rear End Slow or Stop Crashes	17.81%	83	16.09%	75	0.00%	0	1.72%	8

Source: Department of Public Safety Crash Database/SAMS

Notes:
1. Drivers and Special Users Empasis Area Categories are individual fatalities and serious injuries.
2. Vehicles and Highway Emphasis Area Categories are fatal and serious injury crashes.
3. Data includes all fatal, life threatening and moderate injury crashes for Hancock County from 2014 through 2018.

HARRISON COUNTY SUMMARY
COASTAL COUNTY LOCAL ROAD SAFETY PLAN

								Crash Type								Crash Location						Light Conditions				Road Conditions				SAMS Injury Severity		
	No. of Crashes	No. of Vehicles Involved	No. of Injuries (SAMS)	No. of Injuries (MMUCR)	No. of Fatalities	DUI Involved	Located at Intersection	Angle	Bicycle	Left Turn Same Roadway	Overturn	Pedestrian	Rear End Slow or Stop	Train	Lane Departure	Miscellaneous	Roadway	Roadside	Off Roadway	Median	Shoulder	Gore	Daylight	Dark-Unlit	Dark-Lit	Dawn/Dusk	Dry	Wet/Water	Slush/Snow/Ice	Mud/Dirt/Oil	1	2	3
Totals	1,649	2,933	2,694	2,737	150	208	696	252	41	159	49	158	228	8	707	47	1,195	45	348	46	14	1	982	272	354	41	1,347	289	7	6	133	107	1,409
Reported Time																																	
12am-6am	213	329	285	296	30	73	59	10	1	12	3	33	14	0	131	9	128	4	63	11	6	1	6	85	116	6	170	41	0	2	26	19	168
6am-6pm	973	1,783	1,655	1,677	64	50	443	192	33	81	35	55	164	6	386	21	744	25	183	17	4	0	903	26	21	23	786	179	5	3	54	57	862
6pm-12am	463	821	754	764	56	85	194	50	7	66	11	70	50	2	190	17	323	16	102	18	4	0	73	161	217	12	391	69	2	1	53	31	379
Reported Date (January 1, 2014 – December 31, 2018)																																	
Jan	113	200	162	167	16	16	43	16	1	10	1	14	15	1	51	4	78	2	26	5	2	0	46	28	35	2	86	22	5	0	16	7	90
Feb	113	194	176	181	15	14	49	13	2	11	6	10	14	0	51	6	82	5	25	0	1	0	64	24	22	3	95	16	0	2	12	5	96
Mar	140	241	247	251	17	19	51	18	4	13	5	18	16	2	56	8	102	4	27	6	1	0	83	23	31	3	113	26	0	1	13	14	113
April	150	279	249	258	13	13	66	30	1	13	6	7	26	2	63	2	111	5	30	2	2	0	99	19	29	3	121	29	0	0	13	6	131
May	151	267	230	233	13	14	71	34	4	15	7	17	19	0	49	6	117	0	24	8	2	0	98	16	33	4	131	19	0	1	11	10	130
June	147	261	250	250	6	23	66	21	7	14	4	8	18	1	68	6	102	5	32	6	1	1	102	13	29	3	110	36	0	1	6	9	132
July	162	284	275	284	7	22	65	23	4	14	4	10	23	1	80	3	115	3	34	7	3	0	114	21	22	5	129	33	0	0	7	19	136
Aug	148	248	242	243	7	22	60	24	0	11	6	18	18	0	69	4	104	3	37	4	0	0	102	18	27	1	118	30	0	0	6	10	132
Sept	115	220	200	201	11	14	57	19	4	17	1	13	24	0	35	2	89	6	19	1	0	0	84	20	28	3	92	23	0	0	11	8	96
Oct	142	251	226	228	15	18	62	18	7	17	3	15	18	0	62	2	102	3	33	3	1	0	70	29	39	4	127	15	0	0	14	6	122
Nov	144	255	219	221	13	19	47	17	3	11	6	18	17	0	69	3	104	7	30	3	0	0	75	29	35	5	129	14	0	1	12	7	125
Dec	124	235	218	220	17	14	49	19	4	13	0	12	20	1	54	1	89	2	31	1	1	0	83	32	24	5	98	26	2	0	12	6	106
Injury Severity																																	
1	133	256	118	151	150	21	41	19	2	6	2	37	12	4	48	2	99	1	32	1	0	0	52	48	29	4	106	24	0	1			
2	107	177	183	183	0	21	37	12	4	8	0	14	7	0	57	5	71	1	28	6	1	0	57	22	26	2	94	12	1	0			
3	1,409	2,498	2,393	2,393	0	166	618	221	35	145	47	107	209	4	601	40	1,025	43	288	39	13	1	873	202	299	35	1,145	253	6	5			
Road Condition																																	
Dry	1,347	2,402	2,212	2,242	123	177	598	219	37	135	40	137	183	7	549	40	986	36	280	34	10	1	806	218	269	34							
Mud/Dirt/Oil	6	9	9	9	1	2	1	0	0	0	1	0	0	0	3	2	4	1	1	0	0	0	4	1	1	0							
Slush/Snow/Ice	7	14	16	16	0	0	0	0	0	0	0	0	0	0	7	0	4	0	2	1	0	0	4	1	2	0							
Wet/Water	289	508	457	470	26	29	97	33	4	24	8	21	45	1	148	5	201	8	65	11	4	0	168	52	62	7							
Light Condition																																	
Daylight	982	1,790	1,702	1,722	62	53	456	196	34	90	38	46	155	6	389	28	745	25	187	21	4	0											
Dark-Unlit	272	467	391	407	53	57	63	20	1	13	1	53	36	2	142	4	169	5	79	15	4	0											
Dark-Lit	354	610	546	562	31	90	163	31	5	54	9	55	32	0	154	14	257	12	70	9	5	1											
Dawn/Dusk	41	66	55	56	4	8	14	5	1	2	1	4	5	0	22	1	24	3	12	1	1	0											
Crash Location																																	
Roadway	1,195	2,422	2,118	2,152	113	129	620	252	40	159	46	149	228	7	272	42																	
Roadside	45	53	60	60	1	7	8	0	1	0	0	3	0	0	40	1																	
Off Roadway	348	388	428	435	35	62	60	0	0	0	2	5	0	1	337	3																	
Median	46	50	74	74	1	8	5	0	0	0	0	1	0	0	44	1																	
Shoulder	14	19	15	15	0	2	2	0	0	0	1	0	0	0	13	0																	
Gore	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0																	
Crash Type																																	
Angle	252	535	527	543	24	14	227																										
Bicycle	41	83	40	40	2	1	21																										
Left Turn Same Roadway	159	335	378	380	6	11	130																										
Overturn	49	56	59	59	2	1	19																										
Pedestrian	158	338	139	144	39	36	55																										
Rear End Slow or Stop	228	551	438	442	16	19	88																										
Train	8	14	45	45	7	0	0																										
Lane Departure	707	947	1,010	1,026	52	121	134																										
Miscellaneous	47	74	58	58	2	5	22																										
Located at Intersection	696	1,408	1,306	1,326	45	78																											

Harrison County Fatalities and Serious Injuries by Emphasis Area

Emphasis Area		Harrison County Total		State Roads (Interstate, US, & State Rtes)		County Roads		City Street	
		Percent	No.	Percent	No.	Percent	No.	Percent	No.
Drivers	Young Drivers (under 21)	15.64%	367	6.31%	148	2.51%	59	5.71%	134
	Unlicensed Drivers	8.82%	207	4.05%	95	0.43%	10	3.96%	93
	Older Drivers (65 and older)	13.04%	306	5.88%	138	1.24%	29	4.39%	103
	Aggressive Driving and Speed Related	23.57%	553	11.98%	281	4.39%	103	6.69%	157
	Impaired Driving (drug and alcohol)	6.52%	153	3.32%	78	1.02%	24	1.96%	46
	Inattentive, Distracted, Asleep Drivers	1.79%	42	0.60%	14	0.43%	10	0.72%	17
	Unbelted Occupants	8.74%	205	3.79%	89	1.19%	28	3.88%	91
Special Users	Pedestrian Fatalities and Injuries	9.58%	158	3.82%	63	0.42%	7	5.34%	88
	Bicycle Fatalities and Injuries	2.49%	41	0.61%	10	0.00%	0	1.88%	31
Vehicles	Motorcycle Crashes	11.96%	250	6.12%	128	1.44%	30	4.26%	89
Highways	Train Crashes	0.49%	8	0.00%	0	0.00%	0	0.49%	8
	Lane Departure Crashes	42.87%	707	18.68%	308	10.73%	177	13.46%	222
	Intersection Crashes	42.21%	696	20.80%	343	3.34%	55	18.01%	297
	Angle Crashes	15.28%	252	7.76%	128	0.91%	15	6.61%	109
	Left Turn Same Roadway Crashes	9.64%	159	5.76%	95	0.55%	9	3.34%	55
	Overturn Crashes	2.97%	49	1.52%	25	0.42%	7	1.03%	17
	Rear End Slow or Stop Crashes	13.83%	228	8.79%	145	0.79%	13	4.24%	70

Source: Department of Public Safety Crash Database/SAMS

Notes:
1. Drivers and Special Users Empasis Area Categories are individual fatalities and serious injuries.
2. Vehicles and Highway Emphasis Area Categories are fatal and serious injury crashes.
3. Data includes all fatal, life threatening and moderate injury crashes for Harrison County from 2014 through 2018.

JACKSON COUNTY SUMMARY
COASTAL COUNTY LOCAL ROAD SAFETY PLAN

	No. of Crashes	No. of Vehicles Involved	No. of Injuries (SAMS)	No. of Injuries (MUCR)	No. of Fatalities	DUI Involved	Located at Intersection	Crash Type: Angle	Bicycle	Left Turn Same Roadway	Overturn	Pedestrian	Rear End Slow or Stop	Train	Lane Departure	Miscellaneous	Crash Location: Roadway	Roadside	Off Roadway	Median	Shoulder	Gore	Light Conditions: Daylight	Dark-Unlit	Dark-Lit	Dawn/Dusk	Road Conditions: Dry	Wet/Water	Slush/Snow/Ice	Mud/Dirt/Oil	SAMS Injury Severity: 1	2	3
Totals	1,170	2,090	1,862	1,894	134	161	446	155	31	104	16	74	236	2	531	21	800	39	279	39	12	1	665	271	193	41	971	190	8	1	114	88	968
Reported Time																																	
12am-6am	176	264	259	268	34	44	45	8	3	5	4	10	29	0	112	5	85	12	62	12	4	1	7	96	65	8	139	36	1	0	28	15	133
6am-6pm	667	1,245	1,085	1,094	52	47	276	114	20	69	9	24	149	0	272	10	484	19	143	18	3	0	617	16	10	24	555	107	4	1	45	36	586
6pm-12am	327	581	518	532	48	70	125	33	8	30	3	40	58	2	147	6	231	8	74	9	5	0	41	159	118	9	277	47	3	0	41	37	249
Reported Date (January 1, 2014 – December 31, 2018)																																	
Jan	84	141	131	132	7	16	29	7	0	7	1	6	17	0	44	2	49	4	27	3	1	0	33	28	21	2	67	12	5	0	7	8	69
Feb	94	163	131	135	20	17	37	11	4	6	2	6	16	1	46	0	58	2	26	5	3	0	47	29	16	2	84	10	0	0	17	9	68
Mar	100	179	146	148	10	14	43	15	4	12	0	6	15	0	45	2	67	1	28	1	2	1	60	21	17	2	79	21	0	0	9	10	81
April	108	198	168	169	8	9	46	16	6	19	1	4	17	0	44	1	80	5	21	2	0	0	75	20	10	3	93	15	0	0	7	12	89
May	97	167	161	166	11	19	38	7	2	9	1	5	21	0	51	1	63	4	26	4	0	0	64	13	17	3	81	15	0	1	7	7	83
June	101	185	151	156	14	13	33	7	4	8	2	4	24	0	52	2	64	6	24	5	2	0	65	18	15	5	79	22	0	0	12	7	82
July	110	201	212	214	10	12	45	19	3	9	1	4	24	0	46	4	85	2	17	4	2	0	75	15	15	5	94	16	0	0	9	1	100
Aug	81	168	155	159	7	10	32	12	3	5	2	6	26	0	38	1	66	3	20	2	0	0	60	21	9	1	71	20	0	0	6	5	80
Sept	86	155	142	144	13	11	33	10	1	8	2	5	23	0	36	1	64	3	18	1	0	0	46	20	17	3	75	11	0	0	9	6	71
Oct	116	213	177	182	15	11	44	24	1	6	1	10	21	0	47	6	80	4	27	3	2	0	61	29	21	5	107	9	0	0	14	7	95
Nov	89	150	137	137	10	11	35	15	1	6	3	7	14	0	42	1	60	3	21	5	0	0	42	25	15	7	77	12	0	0	9	9	71
Dec	94	171	151	152	9	18	31	12	2	9	0	11	18	1	41	0	64	2	24	4	0	0	37	34	20	3	64	27	3	0	8	7	79
Injury Severity																																	
1	114	207	52	84	134	16	16	7	4	3	0	20	12	2	66	0	72	4	33	4	1	0	47	57	9	1	103	11	0	0			
2	88	143	139	139	0	21	27	7	2	6	1	9	10	0	52	1	51	3	29	5	0	0	39	29	16	4	74	13	1	0			
3	968	1,740	1,671	1,671	0	124	403	141	25	95	15	45	214	0	413	20	677	32	217	30	11	1	579	185	168	36	794	166	7	1			
Road Condition																																	
Dry	971	1,744	1,531	1,559	122	128	373	131	29	87	15	69	193	2	424	21	675	32	225	28	11	1	552	224	152	33							
Mud/Dirt/Oil	1	1	2	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0							
Slush/Snow/Ice	8	10	16	16	0	2	2	0	0	0	0	0	0	0	5	0	3	0	5	0	0	0	3	3	2	0							
Wet/Water	190	335	313	317	12	30	70	24	2	17	1	5	43	0	98	0	122	7	49	11	1	0	99	44	39	8							
Light Condition																																	
Daylight	667	1,237	1,086	1,096	55	50	277	110	20	68	11	20	151	0	277	10	480	19	143	20	3	0											
Dark-Unlit	271	442	380	399	64	66	60	13	7	11	4	39	40	2	150	5	161	8	88	6	8	0											
Dark-Lit	193	339	334	337	14	39	99	27	3	23	1	12	37	0	84	6	130	11	40	11	0	1											
Dawn/Dusk	41	72	62	62	1	6	10	5	1	4	0	3	8	0	20	0	29	1	8	2	1	0											
Crash Location																																	
Roadway	800	1,682	1,413	1,439	89	86	376	155	27	104	16	66	234	0	178	20																	
Roadside	39	44	40	44	5	9	9	0	1	0	0	2	0	0	36	0																	
Off Roadway	279	301	342	343	35	62	54	0	0	0	0	5	0	2	271	1																	
Median	39	40	50	51	4	11	4	0	0	0	0	0	0	0	39	0																	
Shoulder	12	22	16	16	1	3	2	0	3	0	0	1	2	0	6	0																	
Gore	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0																	
Crash Type																																	
Angle	155	317	297	297	9	6	134																										
Bicycle	31	63	28	28	4	2	13																										
Left Turn Same Roadway	104	221	219	223	3	3	87																										
Overturn	16	18	24	24	0	0	5																										
Pedestrian	74	156	61	61	21	13	18																										
Rear End Slow or Stop	236	591	508	513	18	34	88																										
Train	2	4	0	0	2	1	0																										
Lane Departure	531	690	698	722	77	100	97																										
Miscellaneous	21	30	26	26	0	0	6																										
Located at Intersection	446	873	814	817	20	52																											

Jackson County Fatalities and Serious Injuries by Emphasis Area

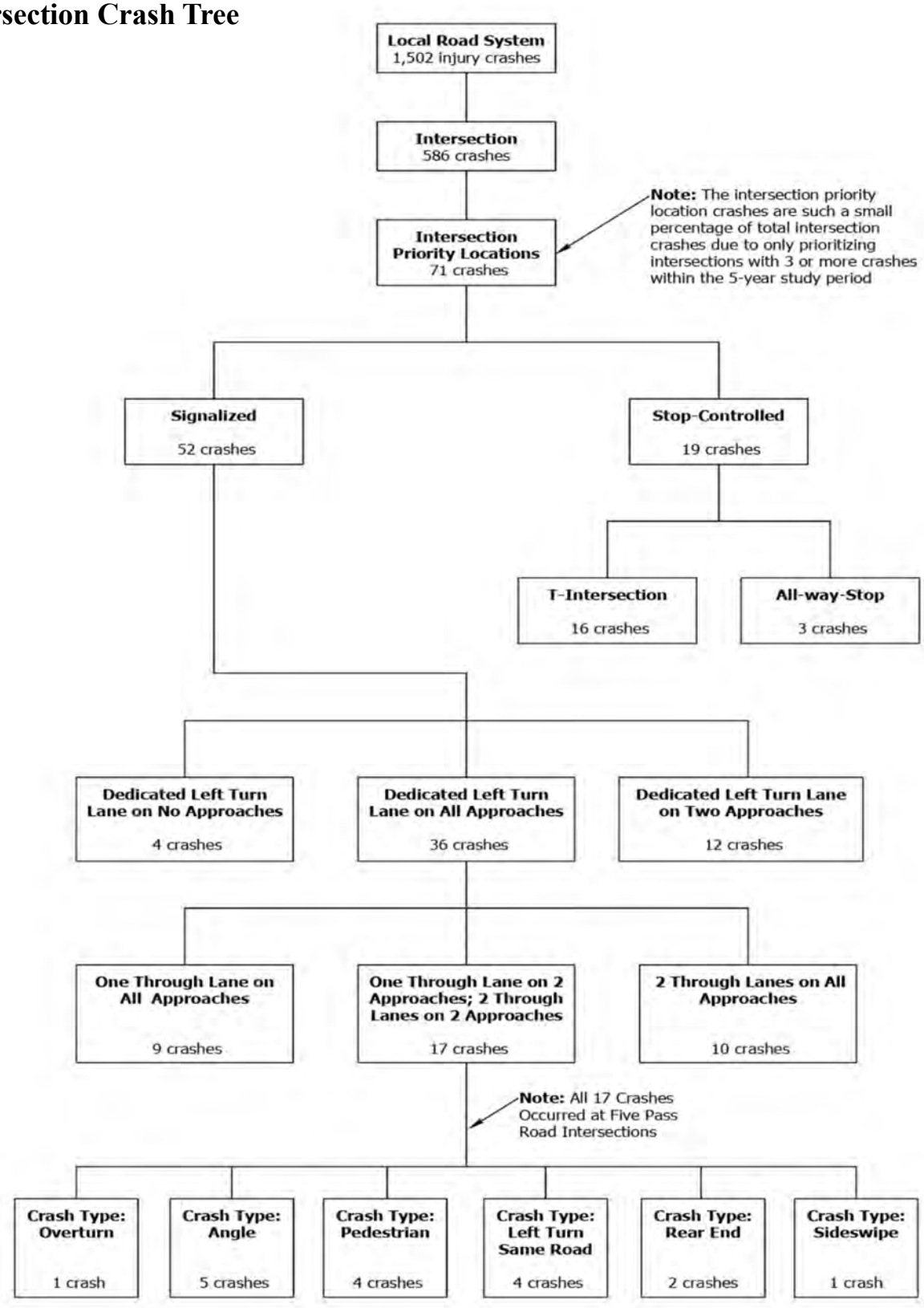
Emphasis Area		Jackson County Total		State Roads (Interstate, US, & State Rtes)		County Roads		City Street	
		Percent	No.	Percent	No.	Percent	No.	Percent	No.
Drivers	Young Drivers (under 21)	16.04%	255	6.98%	111	4.91%	78	2.96%	47
	Unlicensed Drivers	7.67%	122	4.53%	72	1.01%	16	1.70%	27
	Older Drivers (65 and older)	11.38%	181	8.11%	129	1.32%	21	1.32%	21
	Aggressive Driving and Speed Related	26.16%	416	16.48%	262	5.66%	90	3.71%	59
	Impaired Driving (drug and alcohol)	8.24%	131	4.53%	72	2.14%	34	1.19%	19
	Inattentive, Distracted, Asleep Drivers	2.01%	32	0.75%	12	0.82%	13	0.44%	7
	Unbelted Occupants	7.86%	125	4.78%	76	2.26%	36	0.82%	13
Special Users	Pedestrian Fatalities and Injuries	6.32%	74	3.16%	37	1.28%	15	1.88%	22
	Bicycle Fatalities and Injuries	2.65%	31	0.94%	11	0.60%	7	1.11%	13
Vehicles	Motorcycle Crashes	8.76%	128	4.45%	65	2.53%	37	1.44%	21
Highways	Train Crashes	0.17%	2	0.09%	1	0.00%	0	0.09%	1
	Lane Departure Crashes	45.38%	531	20.34%	238	16.50%	193	8.55%	100
	Intersection Crashes	38.12%	446	22.91%	268	5.64%	66	9.57%	112
	Angle Crashes	13.25%	155	8.38%	98	2.31%	27	2.56%	30
	Left Turn Same Roadway Crashes	8.89%	104	6.41%	75	0.77%	9	1.71%	20
	Overturn Crashes	1.37%	16	0.94%	11	0.26%	3	0.17%	2
	Rear End Slow or Stop Crashes	20.17%	236	17.26%	202	1.20%	14	1.71%	20

Source: Department of Public Safety Crash Database/SAMS

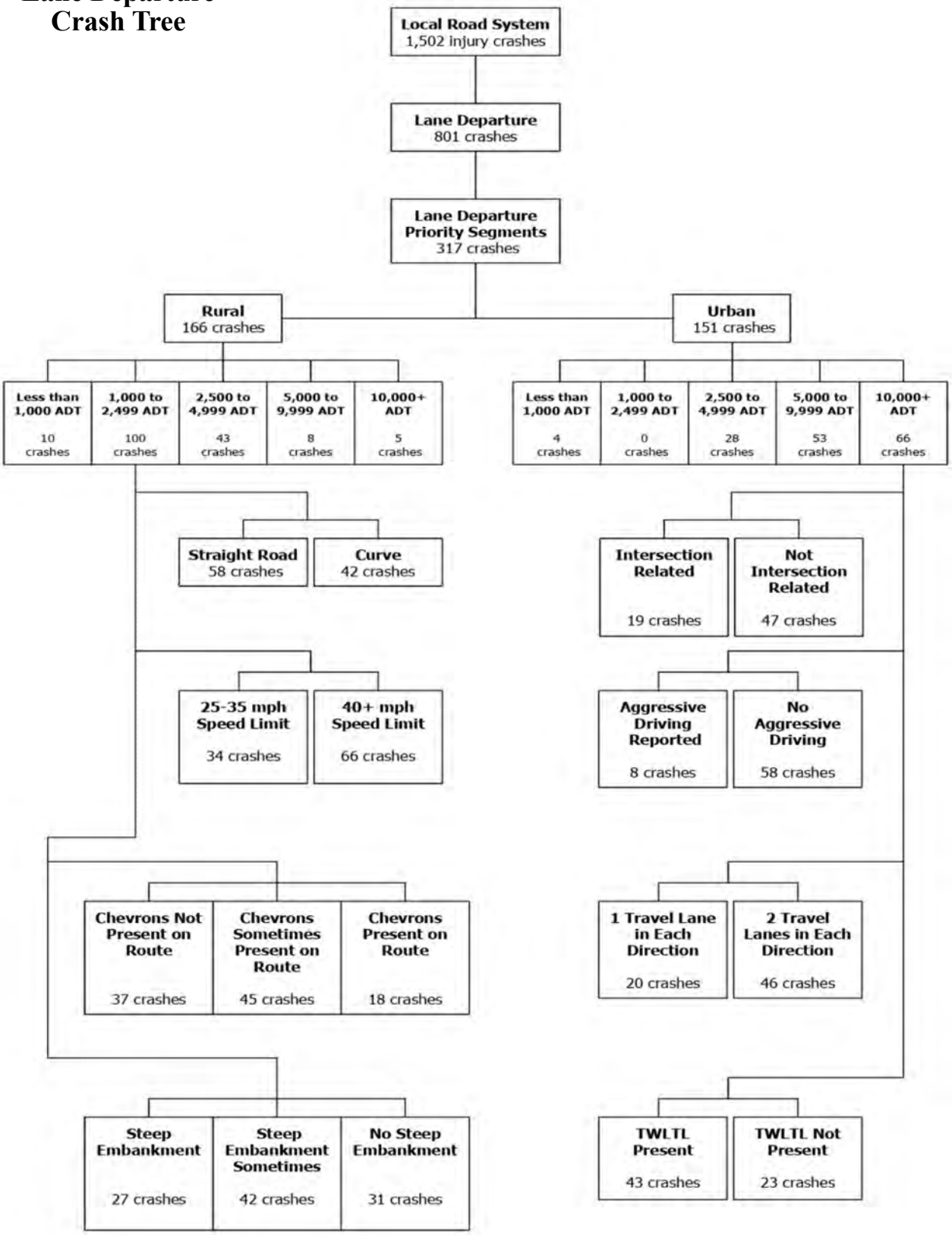
Notes:
1. Drivers and Special Users Empasis Area Categories are individual fatalities and serious injuries.
2. Vehicles and Highway Emphasis Area Categories are fatal and serious injury crashes.
3. Data includes all fatal, life threatening and moderate injury crashes for Jackson County from 2014 through 2018.

Appendix A-2: Priority Crash Analysis

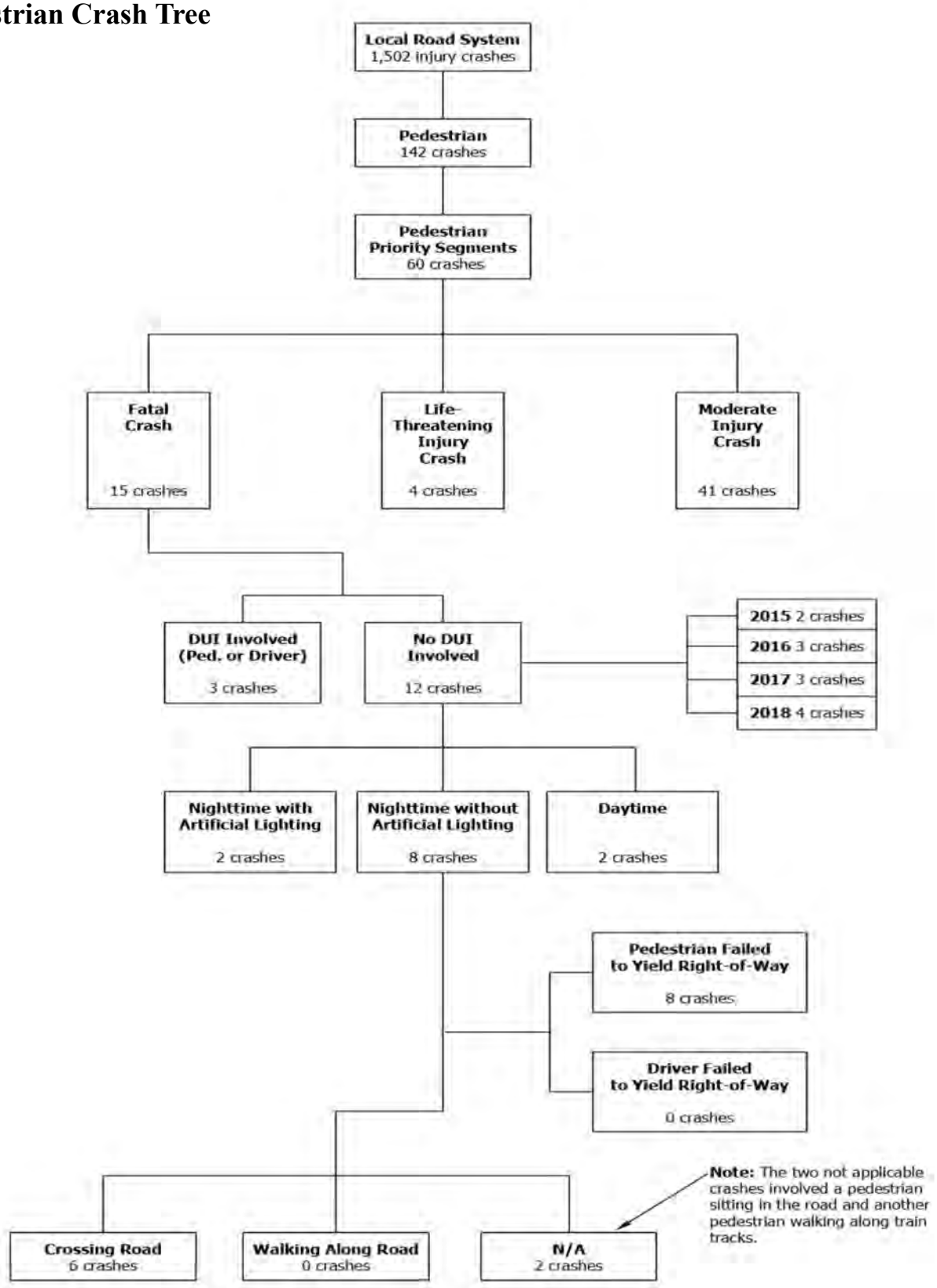
Intersection Crash Tree



Lane Departure Crash Tree



Pedestrian Crash Tree



Appendix A-3: Priority Location Analysis - Intersection Crashes

Pass Road & Popp's Ferry Road

Biloxi, Harrison County

Land Use & Intersection Configuration

Pass Road and Popp's Ferry Road are two principal arterials that intersect in Biloxi. The intersection is highly commercialized with existing shopping centers and outparcel developments on the north side and commercial and outparcel development on the south side of the roadway. Both corridors are primarily commercial beyond the intersection. At this intersection, the Pass Road approaches consist of two through lanes and a left turn lane, with the right turn movement sharing the outside through lane. The Popp's Ferry Road approaches consist of a right turn lane, a left turn lane, and a third lane that is shared by an additional left run movement and a through movement. The signal control for the Popp's Ferry Road approaches operates as a split phase; Popp's Ferry Road to the south of this intersection is lightly traveled and drops down to one lane in each direction. There are sidewalks and painted pedestrian crosswalks for all approaches of this intersection, but there are no pedestrian signals.

Crash Analysis

Pass Road and Popp's Ferry Road saw the highest and second highest crash frequency, respectively, of all local roadways in the study. At this particular intersection, five crashes occurred in the 5-year study period. Three out of five occurred in dark-lit conditions, one in dark-unlit and the remaining crash was in daylight. Two of the five crashes were left turn same roadway, one sideswipe crash related to a medical emergency, one pedestrian crash outside the painted crosswalk, and one angle crash.

Possible Countermeasures

- Upgrade signal to a flashing yellow arrow with required signage to reiterate the need for the left turn movement to yield to opposing traffic.

Pass Road & 8th Avenue

Gulfport, Harrison County

Land Use & Intersection Configuration

The Pass Road and 8th Avenue intersection is commercialized with small commercial businesses at to the north and southeast. Central Elementary School is located in the southwest corner of the intersection. The intersection is signalized and contains a striped crosswalk and pedestrian signal on the west side connecting the elementary school to the north side of Pass Road. The intersection is skewed which can create complications for users. Pass Road is four lanes at this intersection and 8th Avenue is two lanes. 8th Avenue is primarily residential with the exception of its intersection with Pass Road.

Crash Analysis

Five crashes occurred at this intersection in the 5-year study period. Three crashes were categorized as angle crashes, one was a rear end slow or stop crash and one was a left turn same roadway crash. While three of the crashes occurred in daylight, two of the crashes specifically noted setting sun conditions as a contributing factor of the crash. Of special note, the five crashes that occurred at this intersection included one younger driver, three older drivers, two unlicensed drivers, one unbelted driver, one aggressive driver, and one DUI. No other crashes occurred on 8th Avenue within the study period.

Possible Countermeasures

- Upgrade signals to include backplates with retroreflective yellow boarder strip to counteract glare from rising and setting sun.

Pass Road & Gulf Avenue

Gulfport, Harrison County

Land Use & Intersection Configuration

The Pass Road and Gulf Avenue intersection is commercialized with small commercial land uses at each corner of the intersection and a private student bus transportation business (First Student, Inc.) on the northeast side of the intersection. The intersection is not signalized and does not provide any marked crosswalks or pedestrian signals.

Pass Road is four lanes at this intersection and Gulf Avenue is two lanes. Gulf Avenue is primarily residential to the south and dead ends to the north just beyond First Student, Inc. No other crashes occurred on Gulf Avenue within the study period.

Crash Analysis

Four crashes occurred at this intersection in the 5-year study period. The four crashes were categorized as pedestrian, bicycle, angle, and rear end, slow or stop. Three of the four crashes occurred in daylight, with the rear end, slow, or stop crash occurring in dark-lit conditions. Three of the four accidents occurred when a westbound vehicle impacted another vehicle/bicycle attempting to go northbound on Gulf Avenue.

Possible Countermeasures

- Implementation of a left turn lane may have prevented these crashes, but may not be cost effective based on the crash frequency and severity.
- Construction of a sidewalk along Gulf Avenue south of Pass Road may have prevented the pedestrian crash, but pedestrian traffic volumes are unknown and may not warrant the construction cost.

Three Rivers Road & Dedeaux Road

Gulfport, Harrison County

Land Use & Intersection Configuration

The Three Rivers Road and Dedeaux Road intersection is commercialized with a church to the northwest, a gas station to the southwest, a branch bank to the southeast, and a small strip center to the northeast. The intersection is skewed which can create complications for users. It is also signalized but contains no striped crosswalks or pedestrian signals. Three Rivers Road is four lanes at this intersection with a dedicated right turn lane and dedicated left turn lane. Dedeaux Road is five lane with a channelized right turn and dedicated left turn lane. Both Three Rivers Road and Dedeaux Road have a mix of commercial, high-density residential, and single family residential beyond the intersection.

Crash Analysis

Four crashes occurred at this intersection in the 5-year study period. The crashes represent about a quarter of the total accidents on both roadways. All four of the crashes resulted in moderate injuries and all occurred after 3:30 p.m. Two of the crashes were angle crashes, which occurred during the day. One was left turn same roadway, dark-lit conditions, and the other was left turn cross traffic, dark-unlit conditions.

Possible Countermeasures

- Dedeaux Road was widened after February 2017. The intersection should be re-evaluated to determine if the improvements have reduced moderate injury crashes.

Jefferson Avenue & Macphelah Road

Moss Point, Jackson County

Land Use & Intersection Configuration

The Jefferson Avenue and Macphelah Road intersection is residential to the east, has a church to the southwest, and a wooded lot on the northwest. The intersection is signalized with no pedestrian protections. Jefferson Avenue is a divided four lane road and Macphelah is a two lane road at the intersection. Jefferson Avenue serves as a connector road between Highway 613 and Shortcut Road, which connects to Highway 63. Macphelah remains primarily residential to the north and connects to Shortcut Road to the south.

Crash Analysis

Four crashes occurred at this intersection in the 5-year study period, which represents half of the crashes on Macphelah Street and 40% of the crashes on Jefferson Avenue. Three of the crashes were moderate injury and one crash resulted in a fatality. Two of the crashes were categorized as angle crashes and were caused by failure to yield right-of-way. The other two crashes were left turn same roadway. The moderate injury left turn same roadway crash was a failure to yield right-of-way as the light was turning yellow. The fatal left turn same roadway involved a motorcycle traveling at a high rate of speed hitting a car turning across traffic.

Possible Countermeasures

- Install signage on Jefferson Avenue to indicate that left turns are prohibited or left turns should yield on green to reinforce the yield requirement for left turn movements.

Popp's Ferry Road & Atkinson Road/Old Bay Road
Biloxi, Harrison County

Land Use & Intersection Configuration

The Popp's Ferry Road and Atkinson Road/Old Bay Road intersection is primarily residential. The intersection is signalized and contains a striped crosswalks and pedestrian signal on the south, east, and west side of the intersection.

Popp's Ferry Road is four lane at the intersection with a dedicated right turn and left turn lanes. Atkinson Road is two lanes with a channelized right turn to the north Old Bay Road is two lanes.

Crash Analysis

Four crashes occurred at this intersection in the 5-year study period. One crash was a head-on collision on Popp's Ferry due to a driver falling asleep. A rear end, slow, or stop crash occurred on northbound Popp's Ferry at a red light. The other two crashes occurred when a southbound vehicle turned left in front of a motorcycle traveling northbound.

Possible Countermeasures

Evaluate left turn signals at intersection. Upgrade signal, as needed, with flashing yellow arrow.

Pass Road & Eisenhower Drive/Goose Pointe Boulevard

Biloxi, Harrison County

Land Use & Intersection Configuration

The Pass Road and Eisenhower Dr/Goose Pointe Blvd intersection is commercial to the south and residential to the north. A large commercial strip mall is located to the southeast of the intersection with outparcel commercial development. The intersection is signalized and contains a striped crosswalks and pedestrian signals at each corner. Pass Road consists of two through lanes in each direction and a left turn lane for both approaches. The eastbound approach to Pass Road has a right turn storage lane for vehicles turning southbound onto Eisenhower Drive. Goose Pointe Boulevard, to the north, serves as the sole access road for the gated community. Goose Pointe Boulevard has one northbound lane and two southbound lanes, which has a left turn lane and one lane for through or right turn. Eisenhower Drive, to the south, is four lanes with a dedicated right turn lane and dedicated left turn lane.

Crash Analysis

Three moderate crashes occurred at this intersection in the 5-year study period. These crashes represent all the crashes on Goose Point Boulevard, 67% of the crashes on Eisenhower Drive, and only 5% of the crashes on Pass Road. All three crashes occurred between 4:30 p.m. and 5:45 p.m. and involved a driver going westbound on Pass Road. The first crash involved a pedestrian crossing who did not yield to the pedestrian signal. The second crash was a rear end slow or stop in which a vehicle stopped at a red light was rear-ended by a vehicle failing to stop. The last accident was categorized as a left turn same roadway crash in which the westbound driver failed to yield right-of-way while turning left.

Possible Countermeasures

- Implement a flashing yellow arrow to reduce confusion over yielding right-of-way during left turn movements.

Pass Road & Big Lake Road

Biloxi, Harrison County

Land Use & Intersection Configuration

The Pass Road and Big Lake Road is commercialized, with Big Lake Road serving as a connector road between single-family residential and the Pass Road commercial corridor. The intersection is signalized and contains a striped crosswalks and pedestrian signals all four corners. Pass Road is five lanes at this intersection with a dedicated center turn lane. Big Lake Road is three lane with a dedicated left turn lane.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the accidents were categorized as angle crashes. One involved an aggressive driver who ran a red light and the other involved a driver who had a seizure. The third crash was a left turn same roadway crash involving a DUI driver who failed to yield right-of-way.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Pass Road & Cowan Road (MS 605)

Gulfport, Harrison County

Land Use & Intersection Configuration

The Pass Road and Cowan Road is heavily commercialized. The intersection is signalized and contains a striped crosswalks, pedestrian signals and pedestrian refuge medians in the channelized turn lanes. Pass Road is six lanes to the west with a channelized right turn lane and two dedicated left turn lanes. It is seven lanes to the east with a dedicated right turn lane with channelization and two dedicated left turn lanes. Cowan Road is seven lanes with a dedicated right turn lane and two dedicated left turn lanes. Cowan Road widens just beyond the intersection to include a dedicated bike lane.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash was an older driver who experienced a medical emergency, the second crash involved a head on DUI, and the third crash was a westbound driver on Pass Road running a red light hitting a eastbound driver turning left onto Cowan-Lorraine Road.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Pass Road & Veterans Avenue

Biloxi, Harrison County

Land Use & Intersection Configuration

The Pass Road and Veterans Avenue intersection has some small commercial and office land uses to the south and has the Biloxi National Cemetery to the north. The intersection is signalized and contains a striped crosswalk to the north and east and pedestrian signals at each corner, except the southwest. Pass Road is five lanes at this intersection with a dedicated center turn lane. Veterans Avenue is three lane with a dedicated right turn lane on the north and a dedicated left turn lane on the south. Veterans Avenue is largely undeveloped to the south but does provide connectivity to US Highway 90.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash was a rear end slow or stop crash where a vehicle rear ended a vehicle stopped at a red light on a wet roadway. The second crash involved a motorcycle skidding out from under the driver as they were turning left from Veterans Avenue to westbound Pass Road. The third crash occurred when an aggressive driver used the left turn lane to go around stopped traffic, ran a red light and struck another vehicle who had the right-of-way.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Pass Road & Courthouse Road

Gulfport, Harrison County

Land Use & Intersection Configuration

The Pass Road and Courthouse Road intersection is heavily commercialized. The intersection is skewed which can cause some confusion for the user. It is also signalized with crosswalks and pedestrian signals on each corner. Pass Road is five lanes at this intersection with a dedicated center turn lane. Courthouse Road is three lanes to the north with a dedicated left turn lane and four lanes on the south with a dedicated right and left turn lanes. Courthouse is residential to the north and primarily commercialized to the south. Gulfport High School is located on Courthouse Road south of Pass Road.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash occurred when a vehicle attempted to cross Courthouse Road south of Pass Road from one driveway and enter a driveway on the opposite side of the road. The second crash involved a DUI pedestrian and a vehicle leaving a parking lot on Courthouse Drive north of Pass Road. The driver blamed the sun for not seeing the pedestrian. The third crash involved a pedestrian crossing Pass Road mid block.

Possible Countermeasures

- Refresh striping including crosswalks.
- Construct a sidewalk on Courthouse Road north of Pass Road.
- Reduce speed through this intersection.

Popp's Ferry Road & Vee Street

Biloxi, Harrison County

Land Use & Intersection Configuration

The Popp's Ferry Road and Vee Street intersection is a mixture of residential and small commercial. The intersection is stop-controlled with a crosswalk across Vee Street only. Popp's Ferry Road is five lanes with a dedicated center turn lane and Vee Street is two lanes. Vee Street T's into Popp's Ferry on the south side for a single family residential development.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash was an angle crash in which the driver on Vee Street pulled out in front of a driver on Popp's Ferry Road in the left eastbound lane. The second crash involved an older driver on Popp's Ferry turning left onto Vee Street in front of a motorcycle. The third crash involved a driver who was aggressive and unbelted; the driver was t-boned at the intersection.

Based on the information provided in the crash reports, a majority of these crashes were driver error.

Possible Countermeasures

- Refreshing the existing striping and add raised pavement markers to alert drivers when they leave their travel lane.
- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Three Rivers Road & O'Neal Road

Gulfport, Harrison County

Land Use & Intersection Configuration

The Three Rivers Road and O'Neal Road intersection is primarily small community commercial. The intersection is signalized and does not have any pedestrian protection. Three Rivers Road is two lanes to the north and three lanes to the south with a dedicated right turn lane. O'Neal Road is two lanes. Both roads are predominately residential in the area with O'Neal Road providing a connection between Highway 40 and Highway 605. Three Rivers Elementary School is located approximately a mile north of the intersection.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first accident involved a motorcycle traveling eastbound on O'Neal Road ran a red light, striking a vehicle driving northbound on Three Rivers Road. The second accident was a run off road right that occurred south of the intersection; the vehicle struck a concrete culvert in the ditch. The third accident involved a motorcycle that ran off the road on the right while turning left from O'Neal road (westbound) onto Three Rivers Road (southbound).

Possible Countermeasures

- Evaluate crashes along Three Rivers Road to determine if the frequency and severity of run-off road crashes warrant the cost of closing in the drainage ditches along the road or a segment of the road to provide an adequate roadway shoulder.
- Evaluate safety edge of roadway.
- Evaluate sight lines at intersection.

Lamey Bridge Road & Mallet Road/Sangani Boulevard

D'Iberville, Harrison County

Land Use & Intersection Configuration

The Lamey Bridge Road and Mallet Rd/Sangani Boulevard intersection is heavily commercialized with medium and large strip commercial developments and "big box" stores directly feeding the transportation network. The intersection is signalized and contains striped crosswalks and pedestrian signals on the south and east sides of the intersection. Sangani Boulevard, on the west side of the intersection, is five lanes with a dedicated right turn lane and left turn lane. Mallett Road, on the east side of the intersection, is three lanes with a dedicated left turn lane. Lamey Bridge Road is four lanes on the north side with a dedicated left turn lane and a channelized right turn lane. Lamey Bridge Road is five lanes on the south with a dedicated left turn lane and a dedicated right turn lane into a channelized right turn.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first accident occurred when a westbound driver on Mallet Road failed to yield right-of-way while turning left onto southbound Lamey Bridge Road. The second accident involved a vehicle on Lamey Bridge Road whose brakes went out, causing the driver to run a red light and hit a westbound vehicle on Mallet Road. The last accident was the result of an unsecured dog riding in the vehicle stepping on the driver's gas pedal.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Government Street & Halstead Road

Ocean Springs, Jackson County

Land Use & Intersection Configuration

The Government Street and Halstead Road intersection is light office commercial and residential use. The intersection is not signalized and does not have any pedestrian accommodations. Government Street and Halstead Road are both two lanes at the intersection. Government Street serves as an east-west corridor south of the railroad, connecting commercial developments, schools, and residential neighborhoods. Halstead Road is a north-south road that terminates at Government Street on the north and East Beach Drive on the South.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the accidents at this intersection involved a DUI. The first was a young driver who rear ended another vehicle in the westbound lane of Government Street. The second DUI crash was a run-off road straight. The third crash reported at this intersection was an aggressive, unlicensed driver who reported blacking out prior to rear-ending another vehicle in the eastbound lane of Government Street.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Ingalls Avenue & Chicot Street

Pascagoula, Jackson County

Land Use & Intersection Configuration

Ingalls Avenue and Chicot Street is a T-intersection that is stop-controlled at Chicot Street. The intersection is a surrounded by community commercial businesses and residential beyond the intersection. Ingalls Avenue runs east -west and has two through lanes in either direction. Chicot Street runs north-south and has two lanes going north and two lanes going south, one a dedicated right turn lane and the other a dedicated left turn lane. Directly south of the Chicot Street and Ingalls Avenue intersection is a gas station and discount liquor and wine store.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the accidents were run off road straight crashes that involved DUI. The third crash was a pedestrian fatality crossing Ingalls Avenue from Chicot Street.

Possible Countermeasures

- Install advance warning for the T-intersection and stop sign on Chicot Street to alert drivers to prepare to stop.
- Evaluate the pedestrian activity at the intersection to determine if construction of sidewalks along Chicot Street is justified as well as a crosswalk on Chicot Street and Ingalls Avenue to allow residents to safely access local businesses.

Vidalia Road & 16th Section Road

Harrison County

Land Use & Intersection Configuration

Vidalia Road and 16th Section Road is a T-intersection that is stop-controlled at 16th Section Road. Land use surrounding the intersection is categorized as undeveloped. 16th Section Road is two-lane and runs east-west. Vidalia Road runs north-south and is two-lane.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the crashes were DUIs on 16th Section Road that ran-off road straight. The third crash was a run-off road right in which two southbound drivers on Vidalia Road attempted to turn right onto 16th Section Road at a high rate of speed on wet pavement.

Possible Countermeasures

- Increase/enhance intersection warning signage and install transverse rumble strips

Caillavet Street & Division Street

Biloxi, Harrison County

Land Use & Intersection Configuration

Caillavet Street and Division Street is a signalized intersection with pedestrian crosswalks and signals. The intersection is primarily commercial with the I-110/Highway 15 interchange 500 feet to the west. Caillavet Street runs north-south connecting Highway 90 at MGM Stadium to Biloxi Back Bay. It is two lanes in either direction with an additional left turn storage at the approaches. Division Street runs east-west connecting residential and commercial development to the interstate. East of Caillavet, Division Street has a right turn only and through lane and has a left turn storage lane entering the intersection and a single lane existing the intersection. On the West side of Caillavet, Division Street has a left turn only and a shared through and right turn lane entering the intersection and a single lane exiting the intersection.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the crashes were left turn same roadway. One accident occurred with a vehicle traveling southbound on Caillavet Street turning left onto Division Street and the other occurred with a vehicle traveling northbound and turning left onto Division Street. The third accident was an angle crash involving a DUI that ran a red light.

Possible Countermeasures

- Division Street was under construction during a portion of the study area and was subsequently widened. The intersection should be re-evaluated to determine if the improvements have reduced moderate injury crashes.

Tucker Road/Washington Avenue & Cook Road/Seaman Road

Jackson County

Land Use & Intersection Configuration

Land use at this intersection is highway commercial providing access to several hotels, restaurants, and a gas station. Beyond the intersection, Tucker Road (north), Cook Road (west), and Seaman Road (east) are primarily large lot residential or vacant. Washington Avenue (south) provides access to I-10 and a commercial corridor in Ocean Springs. The intersection is signalized and contains no pedestrian facilities or signals. Tucker Road (north) is four lanes with a left turn storage lane at the intersection. Cook Road (west) is two lanes and expands to include a left turn only lane, through lane, and right turn only lane at the intersection. Seaman Road is two lanes, but expands to include a left turn only and a shared left turn, through, and right turn lane at the intersection. Washington Avenue is a divided four-lane roadway with a left turn storage lane and a right turn lane from the westbound off ramp to the intersection going northbound and a right turn lane from the intersection to the I-10 westbound on ramp going southbound.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. Two of the crashes occurred as a vehicle westbound from Seaman Road was struck by a northbound vehicle who ran a red light. One driver was reported as an older driver. The third crash involved a motorcycle traveling northbound on Tucker Avenue striking a vehicle leaving a gas station to go southbound which did not yield right-of-way.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Old Mobile Avenue & Chicot Street

Pascagoula, Jackson County

Land Use & Intersection Configuration

The Old Mobile Avenue and Chicot Street intersection is commercialized with a signal. The signals at the northeast and southwest corner of the intersection include a push button for pedestrian crossing, but no pedestrian walk signal. The intersection does not have crosswalks, but does have an ADA accessible ramp on the southwest for the sidewalk extending west down Old Mobile Avenue and a ramp and sidewalk extending north on the east side of Chicot Street. Old Mobile Avenue runs east-west and is three lanes with a left only turn lane. Chicot Street runs north-south and is four lanes.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash involved a vehicle eastbound on Old Mobile Avenue traveling at a high rate of speed that ran the red light and hit a turning vehicle. The other two crashes involved a vehicle southbound on Chicot Street turning left who struck a northbound vehicle. The three crashes resulted in three moderate injuries.

Possible Countermeasures

- Upgrade Chicot Street at the intersection to include a dedicated left turn lane with yellow flashing arrow and signage.

Old Highway 67 & Old Highway 15

Biloxi, Harrison County

Land Use & Intersection Configuration

The intersection of Old Highway 67 and Old Highway 15 is undeveloped, but serve as major arterials connecting to commercial areas. Old Highway 67 runs east-west and is two lanes. Old Highway 15 runs north-south and is two lanes and is channelized at its intersection with Old Highway 67.

Crash Analysis

Three crashes occurred at this intersection in the 5 -year study period. The first crash occurred when a northbound driver sideswiped another northbound driver on Old Highway 15. The driver of the offending vehicle was reported with erratic behavior before overturning in a separate crash. No follow-up was provided in the crash report for the behavior. The second crash was a vehicle fleeing from the police. The third crash was a miscalculation of timing when a northbound driver turning left on Old Highway 15 pulled out in front of a eastbound driver on Old Highway 67.

Based on the crash data, all crashes at this intersection were due to driver error.

Possible Countermeasures

- Increase police presence at intersections where aggressive driving and failure to obey traffic signals continues to be significant contributing factors to crashes.

Appendix A-4: Priority Location Analysis - Rural Lane Departure

Old River Road - Segment 1

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential lots. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Between Wade Vancleave Road and Granada Road, Old River Road is a two lane road segment with a continuous double yellow centerline and a continuous white edge stripe on both sides of the road.

Crash Analysis

Five lane departure crashes occurred on this 0.9-mile segment within the study period. One crash resulted in two fatalities related to a DUI and aggressive driving. All other crashes resulted in moderate injuries. Three of the crashes, including the fatality, were related to the vehicle running off the road to the right. There were two head on crashes associated with the curves south of Polly Lake Road.

Possible Countermeasures

- Old River Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced injury related crashes.

Shaw Road

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential lots. There are no other intersecting roadways between MS Highway 53 and Morgan Lane Road. Between MS Highway 53 and Morgan Lane Road, Shaw Road is a two lane road segment with a continuous white edge stripe on both sides of the road and a double yellow line in the center. Raised pavement markers are also found along this segment in the centerline of the roadway.

Crash Analysis

Four lane departure crashes occurred on this 1.0-mile segment during the study period. One run off road right crash occurred just south of Morgan Lane Road when an aggressive driver ran off the road and hit a tree and resulted in a fatality.

Three crashes occurred within 500 feet of each other, and included two run off road left crashes and one run off road right crash. The two run off road left crashes involved younger drivers on wet pavement loosing control of their vehicle in the curve. One hit a tree and the other hit a fence. The run off road right crash at the clustered location was an older driver who lost control in the curve. They initially ran off the road on the right, overcorrected and left the road on the left before striking a tree and fence.

Possible Countermeasures

- The clustered crash site on Shaw Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Kenneth Cole Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is undeveloped with a commercial node near MS Highway 57 and some residential near Blue Grass Lane. Old River Road is the only intersection road within this segment and connects north to Poticaw Bayou Road. Between MS Highway 57 and Blue Grass Lane, Kenneth Cole Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Three lane departure crashes occurred on this 0.8-mile segment during the study period, which included one run off road right crash, one run off road left crash and one head on crash.

The run off road right crash occurred on a curve; the driver crossed the center line, overcorrected and ran off the right side of the road before rolling over. This resulted in three moderate injuries. The run off road right crash occurred when the driver ran off the road to the right, overcorrected and then ran off the road to the left hitting several trees. The head on crash occurred around 3:00 a.m. with a younger westbound driver crossed the centerline of the road and hit another vehicle. This resulted in the only fatality on this segment.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips.
- Install curve warning delineation.

Lower Bay Road - Segment 2

Hancock County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways, with the exception of Old Gainsville Road which provides connection to US Highway 90. Between US Highway 90 and Clermont Road, Lower Bay Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe.

Crash Analysis

Seven lane departure crashes occurred on this 1.9-mile segment during the study period. This accounts for half of the crashes that occurred on Lower Bay Road during the study period. Five of the seven were single vehicle crashes. Six crashes were evenly split between run off road left and run off road right and one crash was a sideswipe. The single sideswipe crash involved a distracted driver crossing the centerline and striking a motorcycle. Two of the run off road left crashes involved aggressive drivers and the third lost control of their vehicle in a curve near Holly Street when they saw a garbage truck stopped in the road. One of the run off road right crashes was a motorcycle that left the roadway in a straight-a-way, the other two crashes involved DUIs. Based on crash data, a majority of crashes reported were driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

County Farm Road - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial uses that rely on access to the interstate, including travel centers, small industrial uses (i.e., warehouses and distribution centers). Intersecting roads within this segment are generally for access to commercial/industrial development and do not loop or provide access to other roadways. Between I-10 and Wildflower Road, County Farm Road is primarily a two lane road segment with good pavement markings. Pavement markings begin to fade near to Wildflower Road. Dedicated turn lanes are provided both north and south of the truck stop/ travel center.

Crash Analysis

Two lane departure crashes occurred on this 0.6-mile segment during the study period. The head on crash resulted in a fatality and was caused when a southbound vehicle crossed the roadway centerline and hit a northbound vehicle. The other crash along this roadway segment was a single-vehicle run off road right crash caused by the driver's medical emergency.

Possible Countermeasures

- Since the data was collected, the road segment has been modified to include a stripped yellow buffer to provide separation between north-bound and southbound lanes at the location of the fatality. The roadway should be re-evaluated to determine if the improvements have reduced crashes in this area.

East Wortham Road

Harrison County

Land Use & Roadway Configuration

Land use along East Wortham Road between US Highway 49 and MS Highway 67 is primarily low density residential. The intersection of East Wortham Road and Turan Road/Palmer Creek Drive is community commercial. The other major road intersection is at Tradition Parkway.

This portion of East Wortham Road is a two lane road segment with a double yellow centerline or skip stripe with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Twelve lane departure crashes occurred on this 4.2-mile segment during the study period. This accounts for all of the crashes that occurred on East Wortham Road during the study period. Eleven of the crashes resulted in moderate injuries while the twelfth crash resulted in a fatality.

Nine of the lane departure crashes were categorized as run off road right. Three of these crashes, including the fatality occurred at the Laya Branch bridge crossing west of Scarborough Road. The fatal crash involved an aggressive driver. Four run off road right crashes occurred with 2,000 feet east and west of Turan Road.

The two sideswipe crashes were located within 1,500 feet of each other and were the result of the vehicle crossing the centerline in a curve east of Turan Road. One drive was noted in the police report as being distracted.

The run off road straight crash was at the intersection of US Highway 49 and was the result of the driver not seeing the stop sign due to fog.

Possible Countermeasures

- From aerial imagery, East Wortham Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Saracennia Road - Segment 2

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential lots. There are no major intersecting roads within this segment. All connections are generally for access to residential development. Between Kings Road and Coda Road, Saracennia is a two lane road segment with a double yellow or skip centerline with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Three single vehicle lane departure crashes occurred on this 1.1-mile segment during the study period.

The first crash was categorized as run off road left. The driver crossed the centerline on a straight section of road before leaving the road for unknown reasons and striking a fence, culvert and tree.

The other two crashes were run off road right. One was the result of the driver crossing the centerline, overcorrecting and running off the road, overturning, and then being ejected. This resulted in a moderate injury. The other run off road right involved a younger driver who overturned in a ditch at Tammy Lane when they ran off the road to avoid a car stopped in the road without brake lights. Based on crash data, a majority of crashes reported were driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Lamey Bridge Road - Segment 2

Harrison County

Land Use & Roadway Configuration

This portion of Lamey Bridge Road has some residential development, but primarily serves as a connector for dense residential developments and larger roads and commercial areas. This portion of Lamey Bridge Road also provides direct access to D'Iberville High School. Major intersecting roads include White Plains Road which connects to MS Highway 15, Big John Road which connects to MS Highway 67. Between MS Highway 67 and Palm Ridge Drive, Lamey Bridge Road is a two lane road segment with a double yellow or skip centerline with raised pavement markers and a continuous white edge stripe. Turn lanes are provided at D'Iberville High School and at the intersection of Lamey Bridge Road and MS Highway 67.

Crash Analysis

Nine single vehicle lane departure crashes occurred on this 3.8-mile segment during the study period. Five were moderate injury, two were life-threatening, and two were fatal, resulting in three fatalities.

Four of the crashes were run off road left. The first crash involved a DUI and the second crash involved a younger, aggressive driver who lost control of their vehicle in a curve on wet road conditions. The third involved a driver that crossed the centerline before leaving the road and hitting a culvert. The fourth crash resulted in a fatality when the driver ran off the end of a curve and struck a tree.

Five crashes were run off road right. The first was a motorcycle that lost control in a curve, two crashes involved a distracted driver who blacked out, and a fourth crash involved a DUI. The last crash resulted in a fatality and involved a motorcycle leaving the roadway and the driver being thrown from the vehicle when attempting to recover.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Old US Highway 49 - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally undeveloped with a sparse residential and a few light industrial uses. Intersecting roads within this segment generally provide connection to US Highway 49. Between Wortham Road and Fish Hatchery Road, Old Highway 49 is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe.

Crash Analysis

Four single vehicle lane departure crashes occurred on this 1.7-mile segment during the study period. All were moderate injury crashes.

Three crashes were categorized as run off road left. One was a DUI and another was a younger driver that lost control in a curve. The third crash was a driver who lost control on a straight section of roadway and ran off the road, hitting fences and a power pole.

One crash was categorized as a run off road right. The younger driver ran off the road to the right in a straight section, over corrected twice before running off the road again and over turned.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

West Wortham Road - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is single family residential. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Between Borzik Road and Sky Lane, West Wortham Road is a two lane road segment with a continuous double yellow centerline with raised pavement markers and a continuous white edge stripe. Between 2015 and 2017, West Wortham Road between Borzik Road and Northrop Drive was repaved and edge rumble strips were added.

Crash Analysis

Three lane departure crashes occurred on this 1.3-mile segment during the study period. Two were DUI-related.

A single run off road left crash involved a DUI and aggressive driving. The two other crashes were categorized as head on. One involved a DUI driver attempting to pass another vehicle in a no passing zone and the other involved a westbound driver crossing the centerline in a curve east of Longwood Drive. Based on crash data, a majority of the crashes reported were driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers east of Northrop Drive.
- Install curve warning delineation.

Old US Highway 49 - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally undeveloped to the east and residential on to the west. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Between Desoto Park Road and West Wortham Road, Old Highway 49 is a two lane road segment with a double yellow or skip stripe centerline.

Crash Analysis

Three single vehicle lane departure crashes occurred on this 1.3-mile segment during the study period. All were moderate injury crashes.

One crash was categorized as run off road left and occurred on wet roads at night when the driver ran off the road in a curve south of Desoto Park Road. Two of the crashes were categorized as run off road right. One was an aggressive driver in a curve and the other was a driver just north of West Wortham that ran off the road for unknown reasons before impact.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Saucier Lizana Road - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential or agricultural residential. Two major intersecting roads within this segment are Herman Ladner Road which connects to MS Highway 53 and Houston Ladner Road which connects to West Wortham Road. Between West Wortham Road and MS Highway 53, Saucier Lizana Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a white edge stripe.

Crash Analysis

Nine single vehicle lane departure crashes occurred on this 4.2-mile segment during the study period. All were moderate injury crashes with the exception of one fatal crash.

Three of the crashes were categorized as run off road left. Two were distracted and one was an aggressive driver who lost control of their vehicle in a curve.

Six of the crashes were categorized as run off road right. One was a DUI, another involved a driver swerving to avoid hitting a dog, two were aggressive (one older and one younger drover), and the fatal crash was a motorcycle fleeing police. The last run off road right crash involved a vehicle running off the road and hitting a tree.

Based on the crash data provided, a majority of the crashes were driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Lily Orchard Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential lots. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Between Nutbank Road and Dunn Road, Lily Orchard Road is a two lane road segment with a double yellow centerline or skip stripe and raised pavement markers. No edge stripe is provided.

Crash Analysis

Three single vehicle lane departure crashes occurred on this 1.5-mile segment during the study period. All were moderate injury crashes.

The single run off road left crash involved a northbound motorcycle just north of Augusta Road.

One of the run off road right crashes involved a dog in the vehicle distracting the driver and the other one involved a driver running off the road in a straight section of road, losing control of the vehicle, and overturning.

Possible Countermeasures

- Evaluate roadside ditch which may promote overturning.
- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

West Wortham Road - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential. There is only one major intersecting road in this segment, Saucier Lizana Road, the other roads are used for accessing residential development and do not loop or provide access to other roadways. Between Owen Ladner Road and Gaylord Road, West Wortham Road is a two lane road. In 2015, this portion of West Wortham Road appeared to only have a centerline stripe. Between 2015 and 2017, West Wortham Road was restriped. The improvements may have added a edge rumble strip, but it is not visible in aerial imagery.

Crash Analysis

Four single vehicle lane departure crashes occurred on this 2.4-mile segment during the study period. All were moderate injury crashes with the exception of one life-threatening crash.

The single run off road left crash was a DUI and two of the three run off road right crashes were DUIs. The only non-DUI crash on this segment occurred with an older driver left the road on a straight section for unknown reasons and hit a tree.

Possible Countermeasures

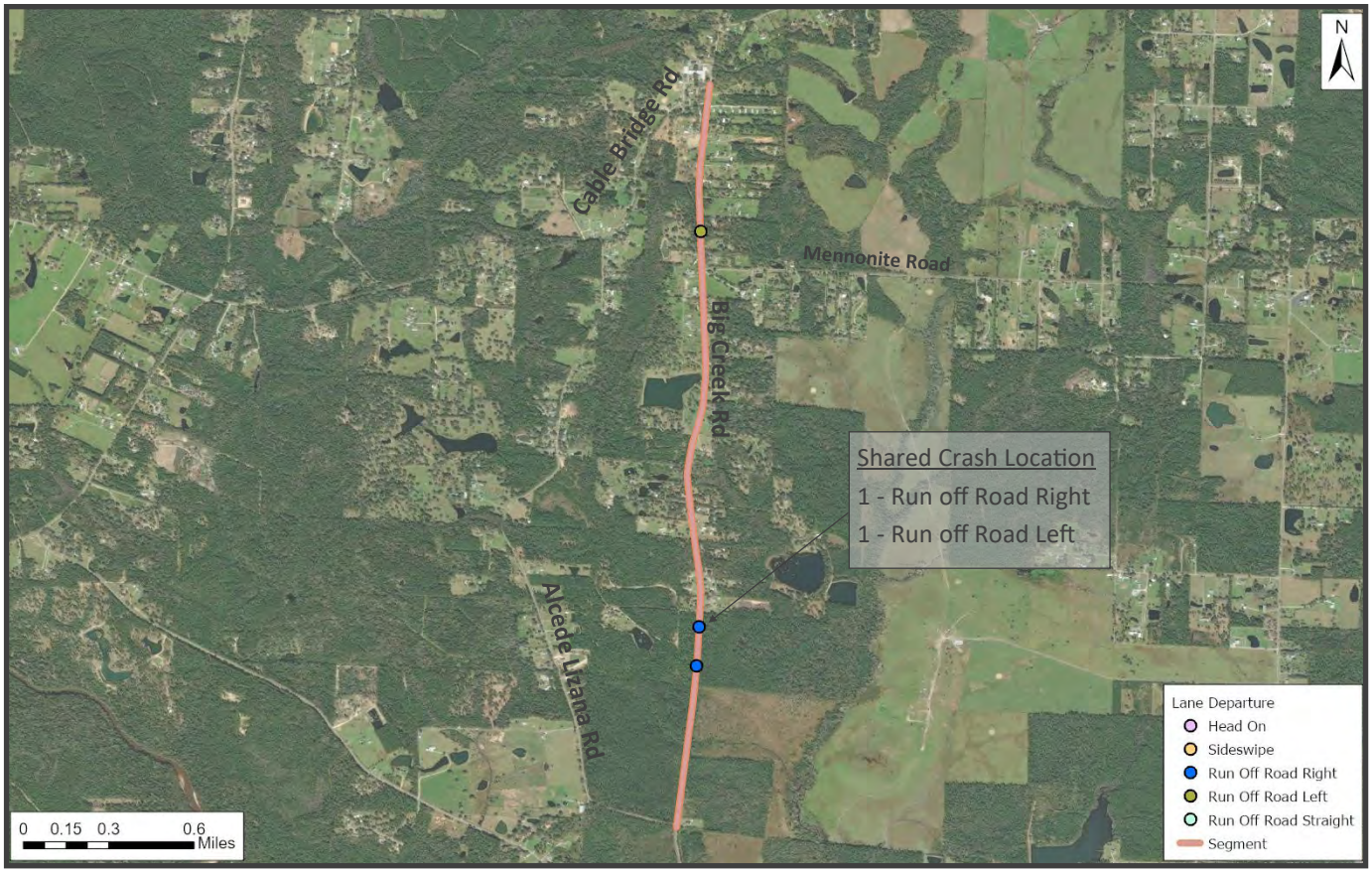
- From aerial imagery, West Wortham Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Big Creek Road

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is residential. The only other major road that intersects Big Creek Road in this segment is Mennonite Road which connects to County Farm Road. Between Alcede Lizana Road and Cable Bridge Road, Big Creek Road is a two lane road segment with a double yellow centerline or skip stripe with raised pavement markers and a continuous white edge stripe.



Crash Analysis

Four single vehicle lane departure crashes occurred on this 2.6-mile segment during the study period. All were moderate injury crashes with the exception of one life-threatening crash.

There were two run off road left crashes and two run off road right crashes. The first crash involved a younger driver passing a vehicle when they ran off the road on the left side; they overcorrected, lost control of the vehicle, and overturned. The second run off road left crash was life threatening after the driver crossed the centerline and hit a tree. The two run off road right crashes occurred when a vehicle ran off a straight segment of the road, overcorrected and ran off the left side of the road. Both of these crashes occurred at the same point with the drivers going in opposite directions.

Possible Countermeasures

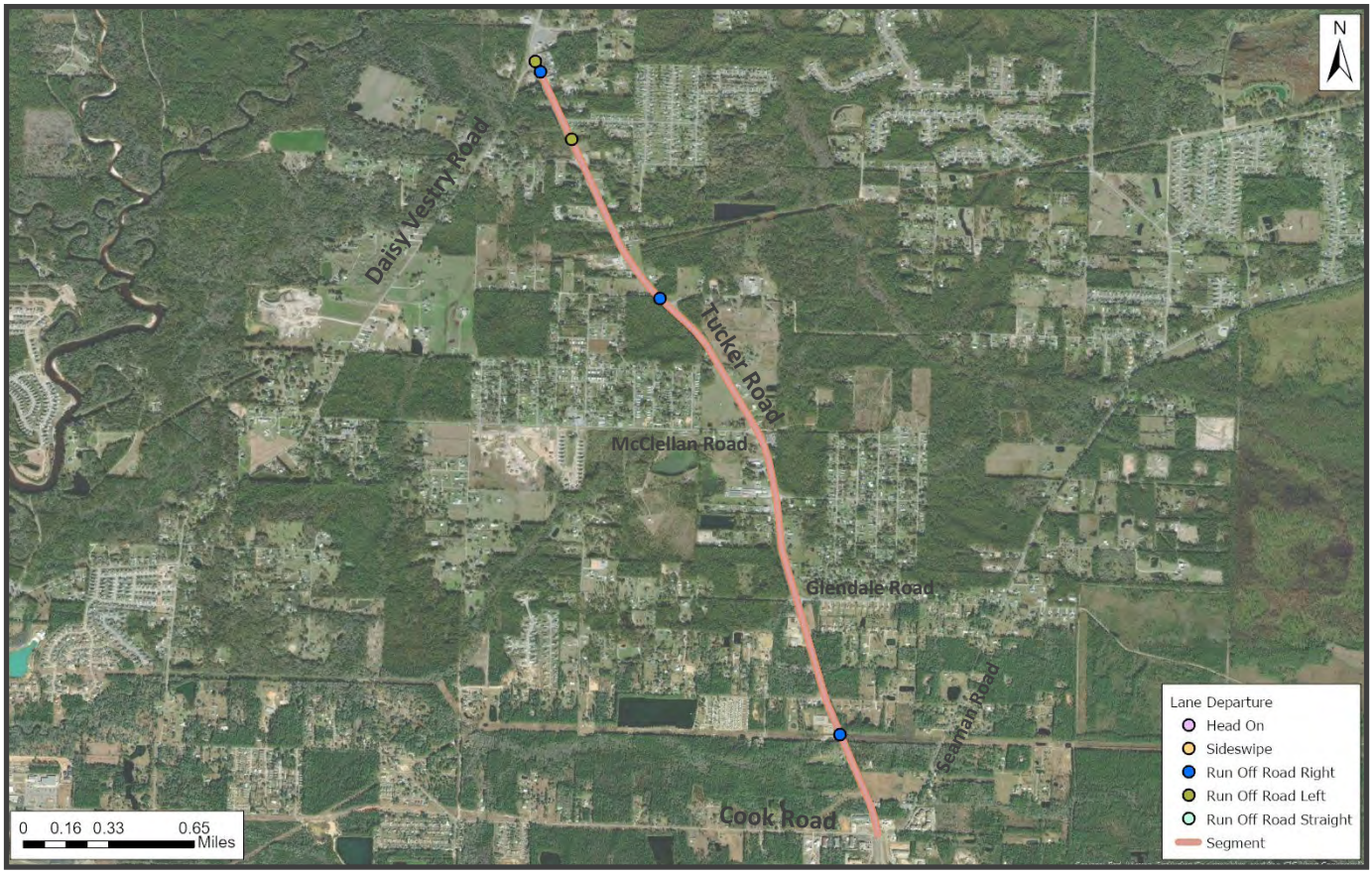
- Evaluate roadside ditches, steep with very small shoulder, which may cause recovery issue.
- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Tucker Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with some commercial uses. Major intersecting roads within this segment are McClellan Road which connects to Daisy Vestry Road, Glendale Road which connects to Seaman Road. Between Cook Road and McClellan Road, Tucker Road is a five lane road with a dedicated center turn lane. From McClellan Road to Daisy Vestry Road, Tucker Road is a three lane road with a dedicated center turn lane.



Crash Analysis

Five single vehicle lane departure crashes occurred on this 3.3-mile segment during the study period.

Three of the crashes were categorized as run off road right. One was a DUI, one was a distracted driver that had a medical issue, and the third involved an aggressive driver in a curve at Daisy Vestry Road and Tucker Road.

Two of the crashes were categorized as run off road left. The first was a northbound driver who crossed the continuous two-way left turn lane and continued off the road and hit a culvert. The second crash involved a younger, unlicensed driver that lost control of the vehicle just south of the Daisy Vestry Road intersection and hit a guard rail before overturning.

Possible Countermeasures

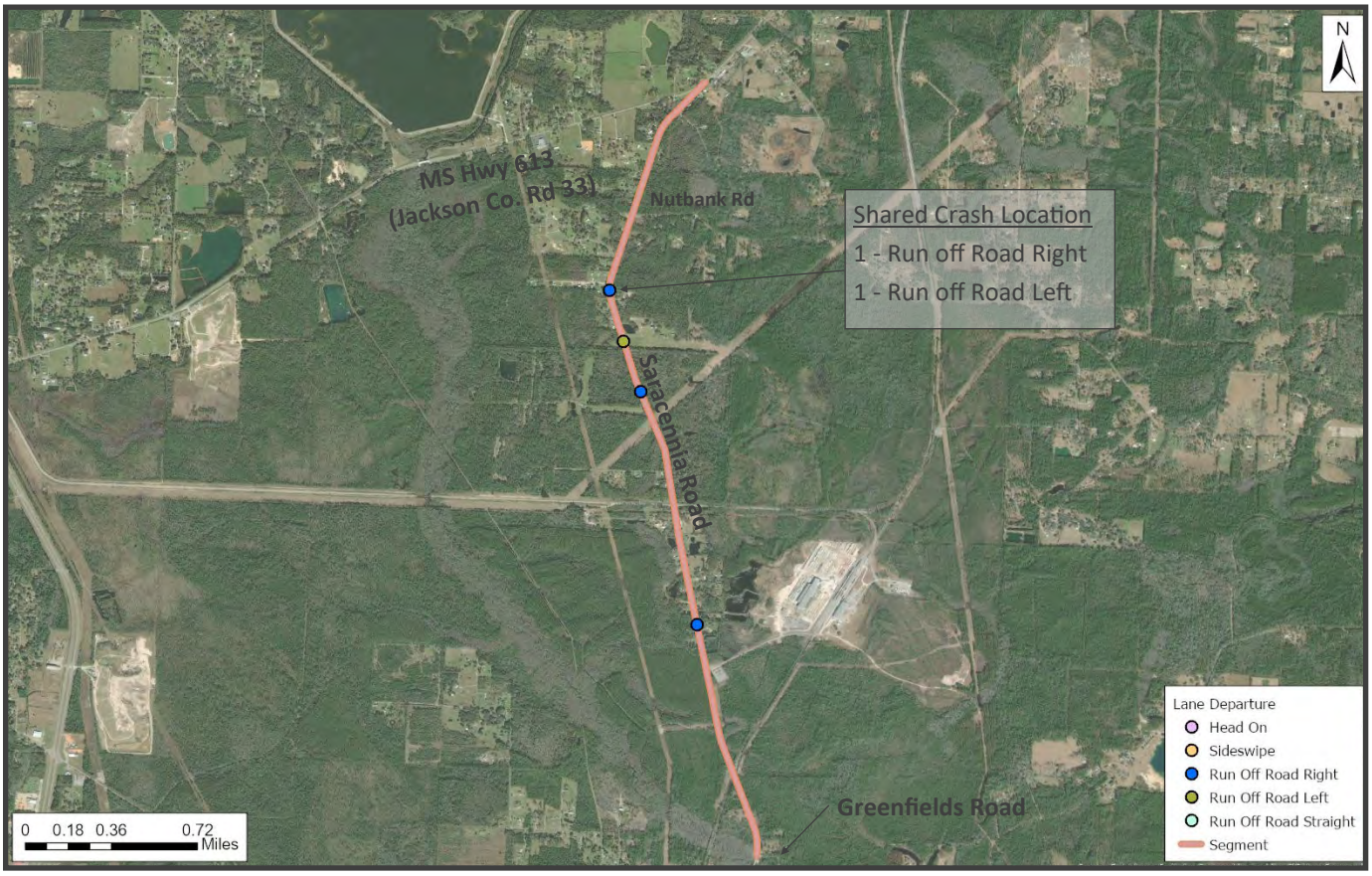
- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Saracennia Road - Segment 1

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is largely undeveloped with some residential and industrial uses. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other major roadways. Between Greenfield Road and MS Highway 613, Saracennia Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe.



Crash Analysis

Five single vehicle lane departure crashes occurred on this 3.4-mile segment during the study period. All were moderate injury crashes.

Two crashes were run off road left and three were run off road right. Three crashes (1 left and 2 right) were drivers reaching for items in the car or attempting to avoid an animal in the road. One run off road left crash occurred with a southbound driver lost control in a curve and overturned. One run off road right crash occurred on a straight section of roadway when the driver overcorrected, ran off the road, and hit a tree.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Wolf River Road

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential or agricultural residential. Big Creek Road is the only major intersecting road within this segment and connects to Highway 53. Between Cable Bridge Road and Jake Bell Road, Wolf River Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe and rumble strips.

Crash Analysis

Six lane departure crashes occurred on this 4.6-mile segment during the study period. Three crashes resulted in moderate injuries and the other three crashes resulted in 4 fatalities.

The single run off road left crash involved a motorcycle that lost control in a curve. The single head on crash involved a younger driver fatality and occurred when the driver lost visual of the roadway due to dust tracked onto the road from the adjacent dirt pit's unpaved driveway.

There were four run off road right crashes which were associated with driver error. The first was due to a driver avoiding an oncoming vehicle crossing the centerline, the second occurred when a vehicle towing another vehicle lost control (fatality), the third involved a mechanical issue with a car, and the final crash resulted in two fatalities when the unbelted occupants crashed while fleeing from the police.

Possible Countermeasures

- Add centerline raised pavement markers.
- Install curve warning delineation.
- Consider adopting standards for unpaved commercial/industrial driveways that would limit tracking of debris onto paved roadways.

Edwin Ladner Road

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential or agricultural residential. Major intersecting roads within this segment are JP Ladner Road which connects to Vidalia Road and Cable Bridge Road as well as Firetower Road which connects to MS Highway 603. Between Vidalia Road and 16th Section Road, Edwin Ladner Road is a two lane road segment with double yellow or skip stripe centerline and a continuous white edge stripe. Between 2015 and 2017, approximately 800 feet on either side of S. Battle Road was repaved and striped.

Crash Analysis

Five lane departure crashes occurred on this 3.9-mile segment during the study period. All crashes resulted in moderate injuries.

Two of the crashes were categorized as run off road left. One was the result of the driver reaching for something before overcorrecting. The second was a driver swerving to avoid an oncoming vehicle in their lane.

Two of the crashes were categorized as run off road right, one in which the driver of the single vehicle attempting to cause harm to theirself. The second run off road right crash was caused by the driver losing control in a curve.

The final crash was a head on collision involving an aggressive DUI driver.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Tanner Williams Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily agricultural residential. The only major intersecting road with Tanner Williams Road is Tanner Chapel Road which connects to MS Highway 612. Between MS Highway 613 and the state line, Tanner Williams Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Eight lane departure crashes occurred on this 6.3-mile segment during the study period. All crashes resulted in moderate injuries, except for one crash which resulted in two fatalities.

Only one crash was categorized as run off road left which was caused by an oily substance on the road. Seven crashes were categorized as run off road right. Two involved a DUI, one was due to ice on the roadway, and two (including one of the DUIs) were related to vehicles avoiding a head on collision with vehicles in their lane. One of the crashes involved a vehicle losing control in a curve on wet pavement and the only fatal crash was a westbound vehicle running off the road in a curve. The vehicle was estimated to be speeding.

Possible Countermeasures

- From aerial imagery, Tanner Williams Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Firetower Road - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with some industrial and commercial uses. There are no major intersecting roadways within this segment of Firetower Road. However, Firetower Road does provide access to Waste Management's Pecan Grove Subtitle D landfill. Between Vidalia Road and I-10, Firetower Road is a two lane road segment with a centerline with raised pavement markers and an edge stripe.

Crash Analysis

Six lane departure crashes occurred on this 4.8-mile segment during the study period.

One crash was a run off road straight in which an older driver didn't stop and continued straight at Vidalia Road. One crash was run off road right in which a southbound driver ran off the road in a curve. Two crashes were categorized as run off road left and both involved aggressive driving and one resulted in a fatality; both were in a curve and one was on wet pavement. Two crashes were categorized as sideswipe; both occurred on straight sections of roadway and one involved an older driver.

Possible Countermeasures

- From aerial imagery, Firetower Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Caesar Necaise Road

Hancock County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential and agricultural residential. Anner Road, Necaise Anner Road, and Leetown Road intersect this roadway segment, but do not provide any connections to other major roadways. Other intersecting roads within this segment are generally for access to residential development.

Between Wendell Ladner Road and Hancock County Line just east of Bouie Road, Caesar Necaise Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe. Some curves have edge raised pavement markers.

Crash Analysis

Ten lane departure crashes occurred on this 8.0-mile segment during the study period. All crashes resulted in moderate injuries except for one life-threatening crash.

The single sideswipe crash was caused by a distracted driver. The single head on crash was the result of a younger driver losing control of their vehicle in a curve on wet pavement.

Four crashes were categorized as run off road right. Three of the crashes involved driver error, including two medical emergencies (one unlicensed) and one aggressive driver. The fourth crash was a younger driver swerving to avoid a car in their lane.

Four crashes were categorized as run off road left. Two were noted as distracted or aggressive drivers. The third was a younger driver who left the road for unknown reasons and the fourth crash resulted in life threatening injuries when an eastbound cement truck crossed the centerline, struck the bridge guardrail, and flipped over the bridge.

Possible Countermeasures

- From aerial imagery, Caesar Necaise Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Vidalia Road - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with some commercial and recreational uses. Intersecting roads within this segment include 16th Section Road, East and West Dubuisson Road, Bradley Road, Cunningham Road, and Kiln Delisle Road. Between Firetower Road and Cuevas Delisle Road, Vidalia Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe.

Crash Analysis

Seven lane departure crashes occurred on this 5.8-mile segment during the study period. Five were moderate injury and two were life threatening.

One crash resulted in 2 life threatening injuries when an older driver hit another vehicle head on. Another crash was categorized as sideswipe and involved a younger driver passing a turning ATV. Two crashes were categorized as run off road right. One involved an aggressive driver on wet pavement and the second involved a younger driver who lost control of their vehicle and overturned. Three crashes were categorized as run off road left. One involved a mechanical issue with the vehicle, a second involved an aggressive DUI driver, and the third crash involved a driver who crossed the centerline, overcorrected, left the road again and overturned.

Possible Countermeasures

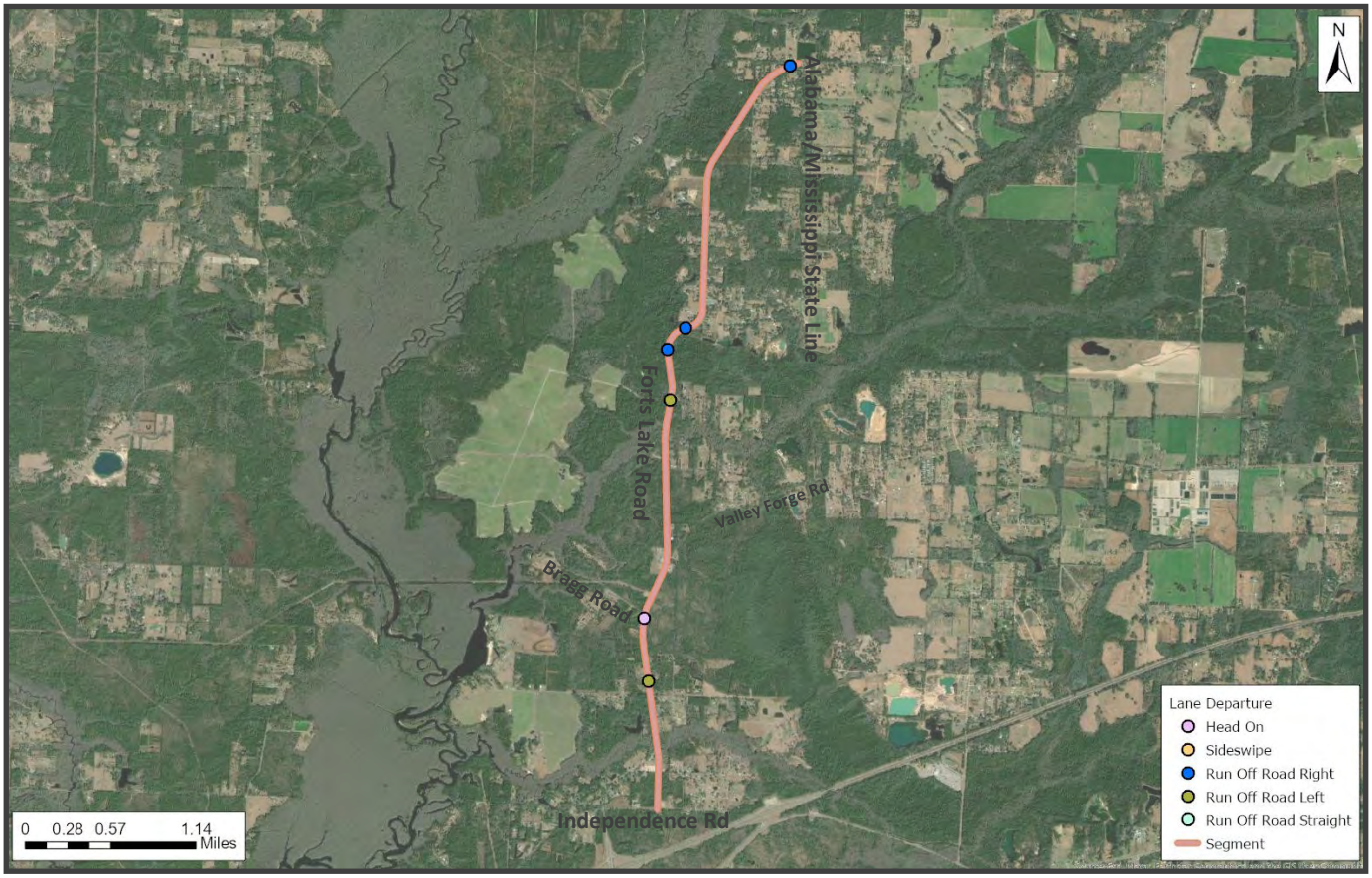
- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Install curve warning delineation.

Forts Lake Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential, with large areas of undeveloped land. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Valley Forge Road intersects with this segment and leads into Alabama Old Pascagoula Road (AL Highway 28). Between the AL/MS state line and Independence Road, Forts Lake Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a continuous white edge stripe with rumble strip.



Crash Analysis

Six lane departure crashes occurred on this 5.3-mile segment during the study period.

The first crash was fatal and involved a vehicle hitting an 18-wheeler head on. Two crashes were categorized as run off road left. One involved an aggressive driver that sustained life threatening injuries and the second resulted in a fatality when the southbound driver hit a private driveway embankment, overturned, and was ejected.

Three crashes were categorized as run off road right. One involved a mechanical failure, one involved an aggressive driver, and the third involved a driver that hit several signs and off road objects.

Possible Countermeasures

- From aerial imagery, Forts Lake Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Seaman Road - Segment 2

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential or agricultural residential with some industrial uses. Seaman Road provides direct access to the Jackson County Rubbish Landfill, the Jackson County Solid Waste Department, and the Jackson County Utility Authority wastewater treatment facility. Intersecting roads include Ridgeland Road and Antioch Road that provide minor connections and Old Fort Bayou Road that connects to Jim Ramsay Road to the north and Washington Avenue (MS Hwy 609) to the south. Between Jim Ramsay Road and Lake Forest Drive, Seaman Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Nine lane departure crashes occurred on this 8.1-mile segment during the study period. All crashes resulted in moderate injuries except the one fatal crash.

Two crashes were categorized as head on. One was caused by a dog in the vehicle and the other occurred when a driver ran off the road to the right, over-corrected, crossed the centerline, and hit an opposing vehicle.

Three crashes were categorized as run off road left. One was an eastbound driver leaving the road in a curve, one was a westbound driver crossing the centerline, and the third was a fatal DUI.

Four crashes were categorized as run off road right. Two were associated with drivers that fell asleep, one was an aggressive driver, and the fourth was a garbage truck that ran off the road.

Possible Countermeasures

- From aerial imagery, Seaman Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Kiln Delisle Rd - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is industrial near I-10 and generally residential along the remaining segment. The Delisle Elementary School, the district school building, and some commercial businesses are located at the intersection of Kiln Delisle Rd and Vidalia Rd. Intersecting roads within this segment are generally for access to residential or industrial development and do not loop or provide access to other roadways, except for Vidalia Rd/W Wittman Rd and Lobouy Road. Between I-10 and Menge Avenue, Kiln Delisle Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe. The road does divide into a boulevard with a truck crossing at the Chemours Company near I-10. The striping east of Vidalia Rd was updated between 2015 and 2016 and the geometrics of the Vidalia Rd/Kiln Delisle Road intersection geometry were upgraded between 2013 and 2015.

Crash Analysis

Five lane departure crashes occurred on this 4.6-mile segment during the study period.

A single sideswipe crash involved an aggressive motorcycle driver in a curve. Four run off road right crashes included aggressive drivers. One older aggressive driver lost control in a curve and was unable to recover due to the gravel shoulder. All others crashes occurred in straight sections of the road.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips.
- Install curve warning delineation.

Vidalia Rd - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate residential lots with commercial nodes. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways. Between F. Malley Road and Firetower Road, Vidalia Road is a two lane road segment with a double yellow or skip stripe centerline with raised pavement markers and a continuous white edge stripe.

Crash Analysis

Four lane departure crashes occurred on this 3.7-mile segment during the study period.

Two of the crashes were categorized as run off road left. One was the result of an animal in the road and the other involved an aggressive driver.

Two of the crashes were categorized as run off road right and both were on wet pavement. A life threatening injury was sustained when an aggressive and unlicensed driver hit a tree. The second crash included an unbelted driver in a curve that swerved to avoid a vehicle in their lane.

Possible Countermeasures

- From aerial imagery, Vidalia Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Gautier Vancleave Rd - Segment 2

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally undeveloped with residential and small commercial nodes at each end. The Mississippi Sandhill Crane National Refuge has direct access from this segment. Interstate 10 is the only major intersecting roadway within this segment. Between Martin Bluff Road and I-10, Gautier Vancleave Road begins as a 5-lane road and quickly tapers to a 4-lane road. This section of roadway features yellow skip stripes and a continuous white edge stripe. Between I-10 and MS Highway 57, Gautier Vancleave Road tapers to a two lane road segment with a double yellow centerline or skip stripe with raised pavement markers and a continuous white edge stripe and rumble strip.

Crash Analysis

Six single vehicle lane departure crashes occurred on this 5.9-mile segment during the study period.

One crash was categorized as run off road straight and involved a driver running a stop sign. One crash was categorized as run off road left and involved a southeast driver losing control of their vehicle and overturning. The remaining four crashes were run off road right. One involved a distracted driver, two involved vehicles in a curve, and the fourth crash involved an unlicensed and aggressive driver in a curve that impacted a tree and had a life threatening injury.

Possible Countermeasures

- From aerial imagery, Gautier Vancleave Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Wade Vancleave Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally undeveloped land. There are no major intersecting roads within this segment. Between Fish Lake Road and MS Highway 63, Wade Vancleave Road is a two lane road segment with a double yellow or skip stripe centerline and a continuous white edge stripe.

Crash Analysis

Four single vehicle lane departure crashes occurred on this 4.0-mile segment during the study period. All crashes resulted in moderate injuries, except for one fatality.

All four crashes were categorized as run off road left. The fatal crash involved a DUI driver hitting a guardrail before coming to rest in a lake. A second DUI crash occurred on wet pavement. The other two crashes involved younger drivers. One was attempting to pass another vehicle in a no passing zone when they lost control of their vehicle. The other was driving aggressively in a curve.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips.
- Install curve warning delineation.

County Farm Road - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally estate or agricultural residential. Several community facilities are located on the north end of this segment including the Harrison County Fairgrounds, a soccer complex, senior center, and emergency shelter. A community commercial node is located at Landon Road and some light industrial uses can be found along the roadway. Intersecting roads within this segment are generally for access to residential development and do not loop or provide access to other roadways with the exception of Robinson Road which connects to Canal Road. Between Landon Road and John Clark Road, County Farm Road is a two lane road segment with centerline edge stripe.

Crash Analysis

Five single vehicle lane departure crashes occurred on this 5.1-mile segment during the study period. All crashes resulted in moderate injuries.

Two of the crashes were categorized as run off road left. One was the result of an aggressive driver and the second was caused by a vehicle pulling out in front of a southbound driver.

Three of the crashes were categorized as run off road right. Two were caused by aggressive drivers, one younger and unlicensed and the other a DUI. The third crash was a vehicle ran off the road in a curve and lost control of the vehicle.

Possible Countermeasures

- From aerial imagery, County Farm Road has received some improvements since the reported crashes occurred. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Appendix A-5: Priority Location Analysis-Urban Lane Departure

Three Rivers Road - Segment 2

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mix between residential and commercial. Intersecting roads within this segment generally provide access to residential development; however, O'Neal Road does serve as an east-west connector for US Highway 49 and MS Highway 605. Between Dedeaux Road and Mays Road, Three Rivers Road is a three lane road segment with a continuous center turn lane. North of Mays Road, Three Rivers Road reduces to two lanes.

Crash Analysis

Five single vehicle lane departure crashes occurred on this 1.0-mile segment. All five crashes were categorized as run off road right. The first crash involved a driver avoiding an animal in the road. Two crashes involved motorcycles who lost control prior to leaving the roadway at night. The last two crashes involved drivers who lost control of their vehicles before leaving the roadway and striking a culvert, one experienced mechanical failure.

Based on the crash data, a majority of the crashes on this segment of Three Rivers Road were associated with driver error.

Possible Countermeasures

- Evaluate crashes along Three Rivers Road to determine if the frequency and severity of run-off road crashes warrants the cost of closing in the drainage ditches along the road or a segment of the road to provide an adequate roadway shoulder.

Macphelah Street

Moss Point & Pascagoula, Jackson Co.

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with commercial uses near Shortcut Road. Intersecting roads within this segment connect to residential development, except Jefferson Avenue which connects to commercial development along Highway 613. Between Shortcut Road and Meridian Street, Macphelah Street is a two lane road segment with a continuous centerline and edge stripe.

Crash Analysis

Four lane departure crashes occurred on this 1.0-mile segment. Two crashes were categorized as run off road left, one sideswipe, and one head on.

The first run off road left was the result of the driver turning off of Shortcut Road onto Macphelah Road too sharply and loosing control of the vehicle. This is a channelized right turn and witnesses reported the driver speeding. The second run off road left has no apparent cause, no witnesses, and the driver was unable to report due to injuries. The sideswipe crash occurred when a younger driver was attempting to pass two vehicles, one of which was turning left. The head on crash caused life threatening injuries and involved an older driver.

Possible Countermeasures

- Based on aerial imagery, from 2013 to 2017, Macphelah Road was unstriped and was striped between 2019 and 2022. The roadway should be re-evaluated to determine if these improvements have reduced moderate injury crashes.

Jordan Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is residential. Intersecting roads within this segment generally provide access to residential development and do not loop or provide access to other roadways, with the exception of Seaman Road. Between Seaman Road and Georgia Street, Jordan Road is a two lane road segment with a continuous double yellow centerline and a continuous white edge stripe on both sides of the road.

Crash Analysis

Four lane departure crashes occurred on this 1.0-mile segment. Three crashes were reported as head on and the fourth crash was reported as run off road left.

One of the head on occurred in the curve near the intersection of Georgia Street and was reported as a DUI. The other two head on crashes occurred in the curve near Lake Forest Drive, one of which was reported as a DUI. The run off road left was also in the same curve as the two head on crashes and was the result of the driver swerving to avoid a vehicle that had crossed into their lane.

Possible Countermeasures

- Based on aerial imagery, from 2013 to 2017, Jordan Road was unstriped. Jordan Road was overlaid and striped between 2017 and 2019. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Popp's Ferry Road - Segment 1

Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with commercial uses at the intersection with Pass Road. Intersecting roads within this segment generally connect to more residential development. This roadway includes the Popp's Ferry Bridge which has a metal grate drawbridge section for boat passage. At Pass Road, Popp's Ferry Road is four lanes, including two through lanes, a continuous center turn lane, a continuous right turn lane on the east side. Popp's Ferry reduces to two lanes over the bridge and widens again to three lanes past Causeway Drive. Popp's Ferry Road has curb and gutter and a sidewalk on both sides of the road from Pass Road north to the Popp's Ferry Bridge. At the bridge, the sidewalk is restricted to the east side and remains on the east side north of the bridge to Causeway Drive.

Crash Analysis

Six lane departure crashes occurred on this 1.7-mile segment. Two crashes were categorized as sideswipe, two were categorized as head on, and two were categorized as run off road left.

Three crashes were directly related to the metal bridge grating during wet driving conditions at night. The first was a sideswipe and the other two were run off road left, one with a DUI and the other with a younger driver. The second side-swipe occurred on the north side of the bridge, when a northbound vehicle with an older driver drifted into the southbound lane. The two head on crashes were related to a DUI and a driver falling asleep at the wheel.

Based on the crash data, a majority of the crashes on Pass Road were associated with driver error.

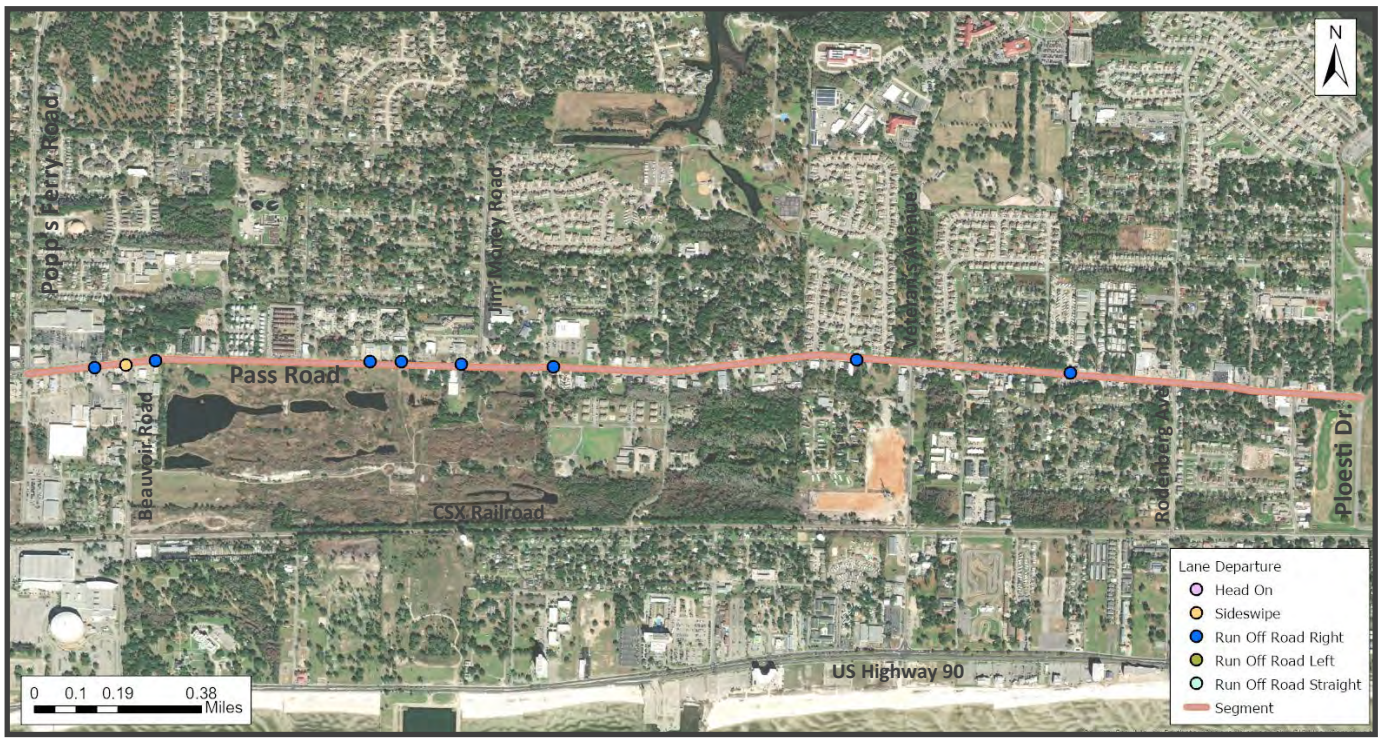
Possible Countermeasures

- Alternatives are currently being considered for the bridge.

Pass Road - Segment 3
Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally small commercial. Intersecting roads to the north are generally for access to residential development. Intersecting roads to the south connect to US Highway 90 along the beach. Pass Road dead ends at Ploesti Drive which is located on Keesler Air Force Base. Between Popp's Ferry Road and Ploesti Drive, Pass Road is five lanes with four through lanes and a continuous center turn lane. Pass Road has edge and travel lane pavement markings. This segment of Pass Road has curb and gutter for the entire segment. Sidewalks appear on both the north and south side of the street from Popp's Ferry Road to Jim Money Road. From Jim Money Road to Ploesti Drive the sidewalk shifts primarily to the north side with sporadic segments along the south side.



Crash Analysis

Nine lane departure crashes occurred on this 2.6-mile segment. Eight crashes were reported as run off road right and the other as a sideswipe.

Five of the run off road right were caused by a medical emergency, mechanical failure, or the driver being asleep at the wheel. Two additional run off road crashes had no obvious cause. The final run off road crash resulted in a fatality which was caused by an aggressive and unlicensed driver. The sideswipe crash involved a driver under 21 and a DUI.

Based on the crash data, a majority of the crashes on Pass Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Jefferson Avenue

Moss Point, Jackson County

Land Use & Roadway Configuration

Jefferson Avenue is a mixture of residential, small commercial, government, and light industrial uses. Intersecting roads within this segment generally provide access to residential development, with the exception of Highway 613 and Veterans Boulevard which connect to commercial development. Between River Road and Highway 613, Jefferson Avenue is two lane with a continuous double yellow centerline and a continuous white edge stripe. Between Highway 613 and 2nd Street, Jefferson Avenue widens to a four lane boulevard with edge center lane striping.

Crash Analysis

Five lane departure crashes occurred on this 1.5-mile segment. Four of the crashes involved a single-vehicle and were categorized as run off road right. One was run off road left which involved two vehicles. All resulted in moderate injuries.

All five crashes occurred in darkly lit conditions (dusk, dawn, or dark-lit). Of the four run off road right crashes, one was distracted, one was speeding, and one had a DUI and suspended license. The run off road left crash driver lost control of their vehicle prior to overturning.

Based on the crash data, a majority of the crashes on Pass Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Martin Bluff Road - Segment 1

Gautier, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is residential. Intersecting roads within this segment generally provide access to residential development and do not loop or provide access to other roadways. Martin Bluff Road provides the only entrance and exit for approximately 2,000 acres of residential homes, recreation, and community commercial businesses. Between Brookside Drive and Stanfield Point Road, Martin Bluff Road is a two lane road segment with a continuous double yellow centerline and a continuous white edge stripe. A sidewalk was constructed in 2021 along Martin Bluff Road from Stanfield Point Road to Little Bend Place.

Crash Analysis

Five single vehicle lane departure crashes occurred on this 1.5-mile segment. All five crashes were categorized as run off road right and resulted in moderate injuries. Two crashes occurred near Rosemont Drive, with one avoiding a pedestrian in the road and the other resulting in an overturned vehicle. Two crashes occurred near Broadmoor Drive, with one being related to a distracted driver and the other reported swerving to avoid an oncoming vehicle in their lane. The final crash was near Hastings Road in which a driver ran into the ditch and hit a manhole.

Possible Countermeasures

- A new sidewalk was constructed in 2021 for a portion of this segment. The roadway should be re-evaluated to determine if this improved pedestrian-vehicle interactions.
- Install longitudinal rumble strips to alert drivers leaving their travel lane.
- Install curve warning delineation.
- Reduce speed limit.

Gautier Vancleave Rd - Segment 1

Gautier, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of commercial, educational, and residential uses. Intersecting roads within this segment generally provide access to residential development, with the exception of roads accessing Gautier High School, Singing River Elementary School, the Jackson County Campus of MGCCC, and Dolphin Road that provide access to commercial development. Between US Highway 90 and Martin Bluff Road, Gautier Vancleave Road is five lane roadway with a continuous center turn lane. A sidewalk is provided from Valleywood Drive to Martin Bluff Road on the east side of the roadway. The roadway has curb and gutter with continuous edge striping and center lane striping.

Crash Analysis

Seven lane departure crashes occurred on this 2.1-mile segment. Four crashes were categorized as run off road left and three were categorized as run off road right.

The first run off road left crash involved a driver thought to be unconscious before the crash. The second was a motorcycle driving southbound in a northbound lane prior to running off the road, striking a utility pole and being ejected. The third involved a driver with a medical issue. The fourth involved a driver with a DUI who lost control of their vehicle on wet pavement while turning onto Gautier Vancleave Road.

The first run off road right crash was a vehicle avoiding another vehicle who ran a red light. The second was a driver that ran off the road, struck two trees and was ejected. The driver had life threatening injuries. The third was a southbound vehicle that left the roadway for unknown reasons and resulted in a fatality.

Based on the crash data, a majority of the crashes on the segment of Gautier Vancleave Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Cook Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with highway commercial uses near Tucker Road. Mallett Road and Tucker Road are the only major intersections within this segment. At the time of the reported crashes, Cook Road was a two lane road with continuous center and edge stripes. Since 2018, the road has been reconstructed to connect to the new Mallett Road alignment.

Crash Analysis

Four lane departure crashes occurred on this 1.4-mile segment.

Two crashes were categorized as run off road left; one involved a driver falling asleep at the wheel and the other involved a driver hydroplaning on wet pavement. One crash was categorized as run off road right with no explanation of the cause and the final crash was a sideswipe crash. All crashes resulted in moderate injuries.

Possible Countermeasures

- From aerial imagery, a segment of Cook Road appears to have been reconstructed to a boulevard that connects to the new Mallett Road alignment. All of the reported crashes occurred in this reconstructed area. The roadway should be reevaluated to determine if the improvements have reduced moderate injury crashes.

Pass Road - Segment 2

Gulfport & Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. Intersecting roads on the north side of this segment generally provide access to residential development. Major intersecting roads on the south side of this segment connect to US Highway 90.

Between Lorraine Road and Tropical Cove, Pass Road is four lanes with the exception of the intersections at Lorraine Road and Anniston Avenue. Between Tropical Cove and Popp's Ferry Road, Pass Road is a five lanes with a continuous center turn lane with edge striping and center lane striping.

Pass Road has curb and gutter and sidewalks on both the north and south side of the roadway from approximately Debuys Road to Popp's Ferry Road. Segments of sidewalk are provided by new development west of Debuys Road.

Crash Analysis

Eight lane departure crashes occurred on this 3.0-mile segment. Three crashes were categorized as head on, three were run off road left, one was run off road right, and one was a sideswipe. Four of the crashes were related to medical emergencies and one was a DUI. One run off road left crash was the result of a car hydroplaning on wet roads and another was an unlicensed driver. The final crash was a head on crash that resulted in a fatality when the vehicle drifted into oncoming traffic.

Based on the crash data, a majority of the crashes on this segment of Pass Road were associated with driver error.

Possible Countermeasures

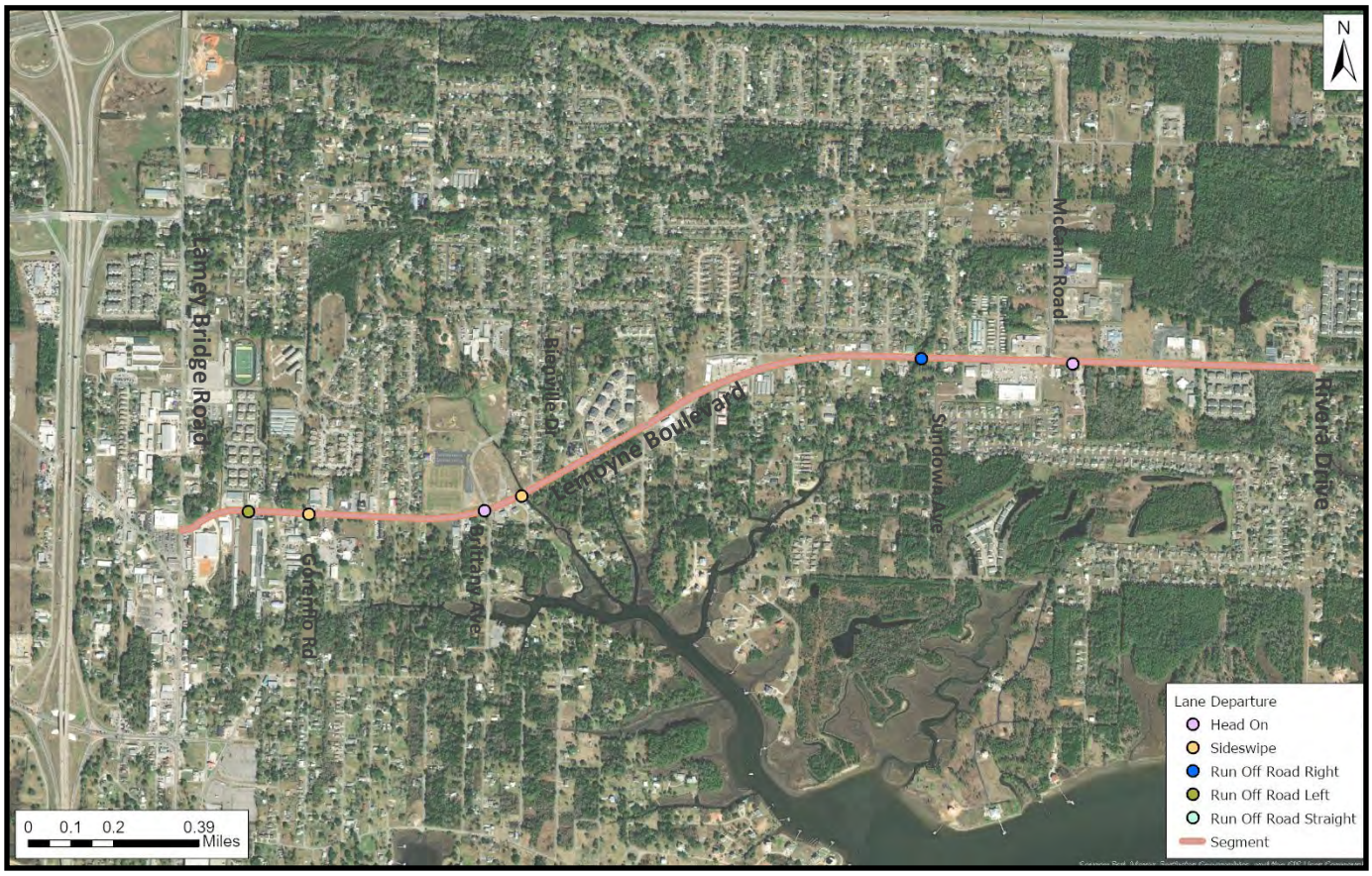
- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Lemoyne Boulevard

D'Iberville, Harrison County & Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. Intersecting roads within this segment generally provide access to residential development. Between Lamey Bridge Road and Brittany Avenue, Lemoyne Boulevard is a four lane road segment. From Brittany Avenue to Rivera Drive, Lemoyne Boulevard is to five lanes with a continuous center turn lane. Lemoyne Boulevard has curb and gutter and a sidewalk on the north side of the road from the Public Library (east of McCann Road) to the Soccer Complex at Brittany Avenue. The roadway also has a continuous edge striping and center lane striping.



Crash Analysis

Six lane departure crashes occurred on this 2.3-mile segment resulting in all moderate injuries. Three crashes involved DUIs, including a head on, a run off road left, and a run off road right. The second head on crash involved a distracted younger driver who crossed the centerline for unknown reasons. The two remaining crashes were categorized as sideswipes; one involved an eastbound driver hitting another eastbound vehicle while trying to turn and one involved an older driver who lost control of their vehicle on the wet road before crossing the roadway centerline.

Based on the crash data, a majority of the crashes on Lemoyne Boulevard were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Beachview Drive

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is residential lots. Intersecting roads within this segment generally provide access to additional residential development. Between Old Walnut Road and Neptune Avenue, Beachview Drive is a two lane road segment with a continuous double yellow centerline and a continuous white edge stripe.

Crash Analysis

Four lane departure crashes occurred on this 1.6-mile segment. One crash was categorized as run off road straight and the other three were run off road right. The head on crash involved a younger driver who crossed the center line. One of the run off road right involved a DUI, the second was a driver who lost control of their vehicle on a wet road and overturned. The final run off road right crash resulted in a fatality when the driver hit a bridge guardrail head on.

Possible Countermeasures

- Install center and longitudinal rumble strips to alert drivers leaving their travel lane.
- Evaluate bridge guardrails to ensure they meet current standards.

Chicot Street

Pascagoula, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of commercial and residential, with commercial uses concentrated at intersections. Intersecting roads within this segment generally provide access to residential development, with the exception of Old Mobile Avenue which serves as an east-west connector between Market Street and Highway 611. Between Shortcut Road and US Highway 90, Chicot Street is three lane with a continuous center turn lane and striping. From US Highway 90 to Ingalls Avenue, Chicot Street is a four lane road segment with a continuous center-line markings and a continuous white edge stripe. Chicot Street has curb and gutter and a relatively continuous sidewalk primarily on the east side of the road, but shifting to the west side of the road south of Old Mobile Highway and terminating at Scovel Avenue.

Crash Analysis

Five single vehicle crashes occurred on this 2.0-mile segment. Three crashes were categorized as run off road right and two were run off road straight. Three crashes involved DUIs, including the two run off road straight crashes which occurred at the intersection of Chicot Street and Ingalls Avenue. One of the run off road right crashes involved a distracted driver who was driving aggressively. The final run off road right crash involved a driver who passed out.

Based on the crash data, all of the crashes on Chicot Street were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.
- Add advance warning signs and transverse rumble strips prior to stop sign at Chicot Street and Ingalls Avenue.

Popp's Ferry Road - Segment 3

Biloxi & D'Iberville, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of commercial and residential. West of D'Iberville Boulevard, intersecting roads generally provide access to residential development. D'Iberville Boulevard, Lamey Bridge Road and I-110 are generally commercial. Between Cedar Lake Road and Lamey Street, Popp's Ferry Road is a four lane road with a continuous center turn lane. This section of roadway includes curb and gutter and a continuous sidewalk on the north and south sides of the road. Between Lamey Street and D'Iberville Boulevard, Popp's Ferry Road is three lanes with a continuous center turn lane. This segment also has curb and gutter; however, no sidewalks. East of D'Iberville Boulevard, Popp's Ferry Road transitions from five to seven lanes of traffic with curb and gutter and limited sidewalks.

Crash Analysis

Six lane departure crashes occurred on this 2.6-mile segment. Three crashes were categorized as run off road left, one was run off road right, and two were head on. Two of the run off road left crashes involved DUIs and the third involved a driver asleep at the wheel. The run off road right crash involved a driver veering off the road onto a steep slope, hitting a fence and ultimately a tree. The two head on crashes resulted in life threatening injuries and a fatality.

Based on the crash data, several of the crashes on this segment of Popp's Ferry Road were associated with driver error.

Possible Countermeasures

- A section of Popp's Ferry was widened from a two-lane road to a four-lane boulevard after one of the run off road right crashes. This section of roadway should be re-evaluated to determine if it has reduced crash severity.
- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Beatline Road

Long Beach, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway primarily residential with commercial nodes at either end. Intersecting roads within this segment generally provide access to additional residential development. Between Hickory Drive and W. Railroad Street, Beatline Road is a two lane road segment with a continuous centerline and edge stripes.

Crash Analysis

Four single vehicle lane departure crashes occurred on this 1.8-mile segment and all resulted in moderate injuries. Three crashes were run off road right and on was run off road left. The first run off road right crash involved an aggressive driver who overturned their vehicle. The second crash involved a texting driver who was unbelted and overturned their vehicle. The third crash involved a driver who struck a utility pole, continued driving again and then ran off the road a second time in a ditch. The run off road left crash involved a driver with a medical emergency.

Based on the crash data, a majority of the crashes on Beatline Road were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

Popp's Ferry Road - Segment 2

Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial with most residential occurring west of Jam Lane and the most commercial occurring east of Jam Lane. Intersecting roads west of Jam Lane primarily provide access to residential developments. Jam Lane, Indian Drive, and Cedar Lake Road are major intersecting roads in this segment and provide access to Biloxi High School, Biloxi Junior High School, and the AJ Holloway Sports Complex. Between Causeway Drive and North County Club Lane, Popp's Ferry Road is a three lane road segment with a continuous center turn lane. At North Country Club Lane, Popp's Ferry Road widens to five lanes with a continuous center lane. This segment of Popp's Ferry Road has curb and gutter and sidewalks on both sides of the road, except for a 2,000' gap on the north side of the road near Tommy Munro Drive.

Crash Analysis

Six lane departure crashes occurred on this 2.9-mile segment. One crash was categorized as sideswipe, two were categorized as run off road left and the other three were head on crashes. The sideswipe crash involved a driver with a medical condition. Both run off road left crashes involved an unbelted driver; the first was driving aggressively and the second lost control of their vehicle before striking a curb and a tree. The three head on crashes included a texting driver texting, an aggressive and unbelted driver, and a driver in a vehicle experiencing mechanical problems.

Based on the crash data, a majority of the crashes on this segment of Popp's Ferry Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Martin Bluff Road - Segment 2

Gautier, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential. Intersecting roads within this segment generally provide access to residential development and do not loop or provide access to other roadways. Between Gautier Vancleave Road and I-10, Martin Bluff Road is a two lane road segment, with the exception of a 500 foot segment near Martin Bluff Elementary School which widens to three lanes with a continuous center turn lane.

Crash Analysis

Four lane departure crashes occurred on this 2.0-mile segment. Two crashes were categorized as run off road left and the other two were categorized as run off road right. Two crashes involved DUIs, one involved a driver avoiding an animal in the roadway, and the last crash involved a younger, aggressive driver who lost control of their vehicle.

Based on the crash data, all of the crashes on this segment of Martin Bluff Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

Pass Road - Segment 1

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. Major intersection roads include Hewes Avenue, Courthouse Road, Teagarden Road, and Cowan Road which all provide access to commercial development, US Highway 90 and the beach. Other intersecting roads within this segment generally provide access to residential development. Between US Highway 49 and Courthouse Road, Pass Road is a four lane road with no median. From Courthouse Road to Teagarden Road, Pass Road widens to five lanes with a continuous center turn lane. From Teagarden Road to Cowan Road, Pass Road is again four lanes. Pass Road has a mixture of areas with curb and gutter and those without. Sidewalks are intermixed along the roadway in front of businesses.

Crash Analysis

Eight lane departure crashes occurred on this 4.2-mile segment. Three crashes were categorized as sideswipe, two were run off road left, two were run off road right, and one was a head on crash.

The first sideswipe involved an elderly driver pulling over because of foggy windows and struck the vehicle in the next lane. The second was related to a mid-block U-turn. The third was a westbound driver who crossed the center line in icy conditions. The first run off road left crash involved a vehicle avoiding a sideswipe and the second was an aggressive driver losing control of their vehicle. Both run off road right crashes were medical emergencies and the head on crash involved a DUI. Based on the crash data, all of the crashes on this segment of Pass Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.

28th Street - Segment 1

Long Beach, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial uses. Intersecting roads within this segment generally provide access to additional residential development. Between Red Creek Road and Canal Road, 28th Street is a two lane road segment with a continuous centerline and edge stripe.

Crash Analysis

Six lane departure crashes occurred on this 3.5-mile segment. Four crashes were categorized as run off road left, one was sideswipe, and one was head on.

The first run off road left crash was a medical emergency, the second was a DUI, and the third was the result of a vehicle avoiding an accident with another vehicle. The fourth run off road left crash resulted in a fatality after the vehicle crossed the centerline and went off the road. The sideswipe crash occurred when a vehicle was passing several vehicles and hit a vehicle making a left turn. The head on crash was the result of a younger, distracted driver. Based on the crash data, a majority of the crashes on this segment of 28th Street were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips or raised pavement markers to alert drivers leaving their travel lane.

Lamey Bridge Road - Segment 1

D'Iberville, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily residential to the north and primarily heavy commercial to the south. Intersecting roads north of Cypress Creek Drive generally provide access to residential development. Sangani Boulevard and Mallett Road provide access to the interstate and more commercial development. Between I-10 and Sangani Boulevard, Lamey Bridge Road is four lanes. North of Sangani Boulevard, Lamey Bridge Road narrows to two lanes providing turn lanes at major intersections.

Crash Analysis

Three lane departure crashes occurred on this 1.8-mile segment. The first crash was categorized as run off road left in which a northbound driver crossed the centerline and hit a bridge railing. The driver was unconscious and there were not witnesses to the accident. The second crash was a head on crash in which the driver lost control in a curve. The final crash was a sideswipe in which a driver was passing vehicles in a no passing zone when it hit a vehicle turning left.

Possible Countermeasures

- Install center and longitudinal rumble strips, raised medians, or delineators to alert drivers leaving their travel lane.
- Install curve warning delineation.

Daisy Vestry Road

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential. Intersecting roads within this segment generally provide access to residential development. Between Cook Road and Tucker Road, Daisy Vestry Road is a two lane road segment with a continuous centerline and edge striping.

Crash Analysis

Five lane departure crashes occurred on this 3.1-mile segment. Four crashes were categorized as run off road right and the fifth crash was run off road left.

Three of the run off road right crashes involved a DUI, one of which resulted in two fatalities. The fourth run off road right crash involved a southbound driver avoiding a northbound driver who crossed into their lane. The single run off road left crash was the result of the driver crossing the centerline, left the roadway, and struck a tree.

Based on the crash data, a majority of the crashes on Daisy Vestry Road were associated with driver error.

Possible Countermeasures

- Install center and longitudinal rumble strips or raised pavement markers to alert drivers leaving their travel lane.

Seaman Road - Segment 1
Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with highway commercial uses near Tucker Road. Intersecting roads within this segment provide access to residential development. Between Tucker Road and Lake Forrest Drive, Seaman Road is a two lane road segment with a continuous centerline and edge stripe.

Crash Analysis

Four lane departure crashes occurred on this 2.7-mile segment. Two crashes were categorized as run off road right, one was a sideswipe, and one was a head on. Three of the crashes on this road segment involved motorcycles.

The first run off road right crash involved a motorcycle that lost control in a curve near Cypress Avenue. The second was a northbound motorcycle driving aggressively near South Street and resulted in a fatality. The sideswipe involved an older motorcycle driver who lost control in a curve near Cypress Avenue and crossed the centerline. The head on crash involved a DUI.

Based on the crash data, several of the crashes on this segment were associated with driver error.

Possible Countermeasures

- Seaman Road appears to have been overlaid after 2017. The roadway should be re-evaluated to see if the improvements have improved roadway safety.
- Advanced warning and chevrons were placed in the curve near Cypress Avenue in 2017. The curve should be re-evaluated to see if the improvements have reduced similar crashes.

Three Rivers Road - Segment 1

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is mixture of residential, commercial and light industrial uses. Major intersecting roads include Crossroads Parkway, Seaway Road, and Creosote Road which provide direct access to more commercial and industrial businesses. Three Rivers Road begins as a four lane boulevard at Airport Road before quickly transitioning to a five lane road with a continuous center turn lane to Creosote Road. North of Creosote Road, Three Rivers Road is four lane with turn lanes provided at intersections as needed to Crossroads Parkway. From Crossroads Parkway to Dedeaux Road, Three Rivers Road is two lane, widening at the intersection to provide turn lanes. The roadway has curb and gutter from Airport Road to Crossroads Parkway and sidewalks from Airport Road to Creosote Road.

Crash Analysis

Three lane departure crashes occurred on this 2.2-mile segment. Two crashes were categorized as head on and the third crash was a sideswipe.

The first head on involved an older driver who crossed the centerline. The second involved a DUI. The sideswipe crash was a vehicle attempting a mid-block U-turn when it struck a motorcycle.

Based on the crash data, a majority of the crashes that occurred on this segment of Three Rivers Road were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

28th Street - Segment 2

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily commercial with some residential, light industrial, and government uses intermixed. Intersecting roads within this segment provide access to residential development. Between Canal Road and 33rd Avenue, 28th Street is a two lane road segment which widens to include turn lanes for access to the Naval Construction Battalion Center. From 33rd Avenue to 22nd Avenue, 28th Street widens to five lanes with a continuous center turn lane. Between 22nd Avenue and Pass Road, 28th Street returns to a two lane road. 28th Street has sidewalk almost the entire length of this segment and areas with curb and gutter and areas without.

Crash Analysis

Five lane departure crashes occurred on this 3.7-mile segment. Two crashes were categorized as run off road left, one run off road right, one sideswipe, and one head on crash.

The first run off road left crashes involved an aggressive younger driver and the second involved a driver who blacked out. The run off road right crash involved a DUI. The sideswipe crash involved a motorcycle which hit a left turning vehicle while passing. The head on crash involved an unlicensed driver crossing the centerline near 59th Avenue.

Based on the crash data, a majority of the crashes on this segment of 28th Street were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

Dedeaux Road

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential, commercial, and light industrial. Intersecting roads within this segment generally provide access to residential development. Between US Highway 49 and Dede Drive, Dedeaux Road is five lanes with a continuous center turn lane. This section also includes curb and gutter and sidewalks, with a bike lane added from Three Rivers Road to Dede Drive. From Dede Drive to Highway 605, Dedeaux Road is two lanes with no curb and gutter.

Crash Analysis

Five lane departure crashes occurred on this 4.1-mile segment. Two crashes were categorized as head on, two were run off road left, and one was run off road right.

The first head on crash involved an unbelted driver that crossed the centerline of the road. The second crash involved a vehicle being pushed in the turn lane without hazard lights flashing that crossed into the opposing travel lane. The first run off road left crash involved a driver that fell asleep at the wheel and the other involved a driver that was avoiding a rear end crash. The run off road right crash occurred when a vehicle was attempting to avoid striking another vehicle that pulled out in front of them.

Based on the crash data, a majority of the crashes on Dedeaux Road were associated with driver error.

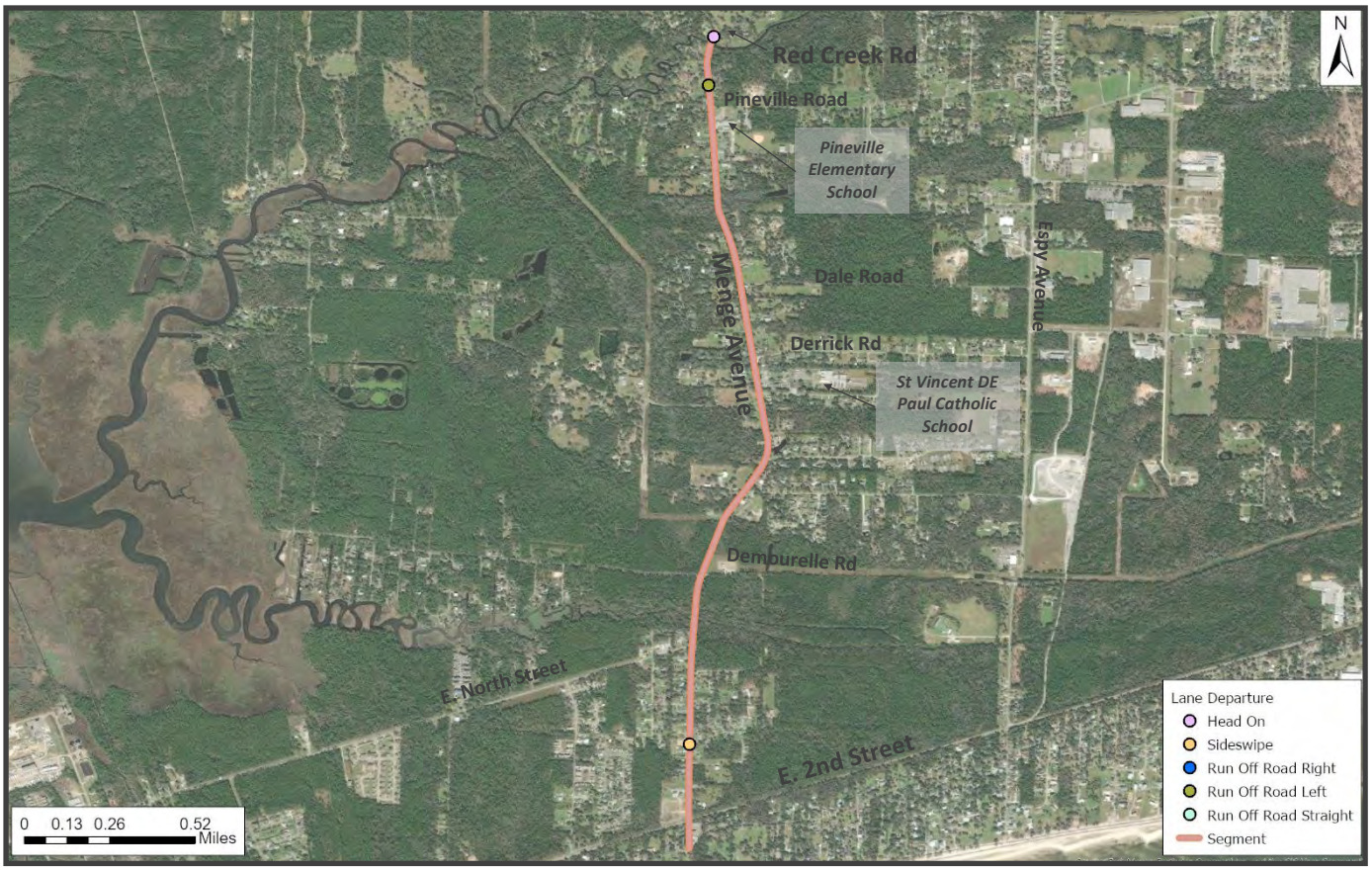
Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

Menge Avenue
Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally residential with some commercial uses. Several roads intersecting Menge Avenue also intersect with Espy Avenue. All other roads provide access to residential development. Between East 2nd Street and Red Creek Road, Menge Avenue is a two lane road segment with a continuous centerline and edge stripes.



Crash Analysis

Three lane departure crashes occurred on this 2.5-mile segment. One crash was categorized as sideswipe, one run off road left, and one head on.

The sideswipe crash involved an emergency vehicle with lights and sirens passing vehicles and striking a car turning left. The run off road left crash involved a medical emergency. The head on crash involved a vehicle running a stop sign due to mechanical failures.

Based on the crash data, all of the crashes on Menge Avenue were associated with driver error.

Possible Countermeasures

- The crashes encountered during this study period were due to events not related to the roadway. The roadway should be re-evaluated to determine if crash frequency and severity warrant Menge Avenue as a priority roadway.

Canal Road - Segment 2

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial uses with some light industrial uses near I-10. Several roads intersecting Canal Road also intersect with Old Highway 49. The remaining intersecting roads generally provide access to residential development. Between Interstate 10 and John Clark Road, Canal Road is a two lane road segment with a continuous centerline and edge.

Crash Analysis

Four lane departure crashes occurred on this 3.4-mile segment. Two crashes were categorized as run off road right, one was run off road left, and one was a head on crash.

The first run off road right crash involved a driver that veered off the road, overcorrected, and crossed the centerline hitting a second vehicle head on. The second run off road right crash involved a younger driver overcorrecting while merging back into the right lane after passing. The run off road left involved an unlicensed driver running a red light due to mechanical failures. The head on crash involved a vehicle that crossed the centerline for unknown reasons.

Based on the crash data, a majority of the crashes on this segment of Canal Road were associated with driver error.

Possible Countermeasures

- A majority of this segment of Canal Road has been overlaid and restriped. The road should be re-evaluated to see if the improvements have reduced moderate injury crashes.

Ocean Springs Road

Ocean Springs, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial, with heavier commercial uses near US Highway 90. Intersecting roads within this segment provide access to residential development with a few connecting to US Highway 90. Between US Highway 90 and MS Highway 57, Ocean Springs Road is a two lane road segment widening at both highways to accommodate turn lanes.

Crash Analysis

Five lane departure crashes occurred on this 4.5-mile segment. Two crashes were categorized as run off road right, two were run off road left, and one was a head on crash.

The first run off road right crash involved a DUI, and the second involved an older driver that hydroplaned on wet pavement. The run off road left crashes involved either a DUI or a driver that fell asleep at the wheel. The head on crash involved a vehicle that lost control while merging into the travel lane from the center turn lane.

Based on the crash data, the crashes on Ocean Springs Road were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

Old Spanish Trail

Ocean Springs, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential, commercial and light industrial. Intersecting roads within this segment generally provide access to residential development, but a few connect to US Highway 90. Between MS Highway 57 and Ladnier Road, Old Spanish Trail is a two lane road segment with a continuous centerline and edge stripe.

Crash Analysis

Five lane departure crashes occurred on this 3.7-mile segment. Three crashes were categorized as run off road left and two were run off road right.

The first run off road left crash involved a younger driver who ran off the road near Gautier Vancleave Road due to poor visibility. The second involved an aggressive driver that lost control of their vehicle before hitting a utility pole. The third crash involved a police pursuit and resulted in a fatality.

The first run off road right crash involved a younger, aggressive driver that overturned near Shell Landing Blvd. The second involved a eastbound driver who lost control of their vehicle before striking a utility pole and two trees.

Based on the crash data, a majority of the crashes on Old Spanish Trail were associated with driver error.

Possible Countermeasures

- Refresh striping and add longitudinal rumble strips and centerline raised pavement markers.

Canal Road - Segment 1

Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mix of residential, commercial, and light industrial. Intersecting roads within this segment provide access to residential development. Between 28th Street and Interstate 10, Canal Road is a two lane road segment with a continuous centerline and edge stripe. The roadway widens approximately 1,000 feet before the interstate ramps to provide for turn lanes for the highway commercial developments and interstate access.

Crash Analysis

Three lane departure crashes occurred on this 2.8-mile segment. Two crashes were categorized as run off road right and the third as a sideswipe.

The first run off road right crash involved a northbound driver near Yazoo Street who began veering out of their lane, overcorrected, and lost control of their vehicle. The second involved an aggressive driver near Racetrack Road who lost control of their vehicle. The sideswipe crash involved a DUI.

Based on the crash data, all of the crashes on this segment of Canal Road were associated with driver error.

Possible Countermeasures

- The north portion of this segment was overlaid and restriped prior 2017. Continue improvements south of Tillman Road. Add edge rumble strips and centerline raised pavement markers to alert drivers when they leave their travel lane.

Appendix A-6: Priority Location Analysis - Pedestrian Crashes

Pass Road - Segment 2

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is small commercial and office. Developments include a retail strip center, wholesale retail, service retail, small commercial, restaurants, banks, and small office. High density residential development can be found on the north side of Pass Road behind commercial development and single family residential borders commercial to the south. This segment of Pass Road is five lanes with a continuous turn lane and curb and gutter. There are no sidewalks along this segment.

Crash Analysis

Four pedestrian crashes occurred within this 0.2-mile segment, three of which resulted in a fatality. All of the accidents occurred between 6:30 p.m. and 8:00 p.m. In most of the crashes the vehicle was eastbound in the right lane and the pedestrian was traveling north to south crossing Pass Road.

The first crash occurred west of Ford Street and was a mid-block crossing and resulted in a moderate injury. The second crash occurred at the intersection of Ford Street when a pedestrian failed to yield right-of-way to a vehicle with a green light. This crash resulted in a fatality. The third crash was mid-block crossing and resulted in a fatality. The last crash was a mid-block crossing which involved a DUI driver who was turning west out of the Dollar General parking lot and struck a pedestrian crossing north to south. This crash also resulted in a fatality.

Possible Countermeasures

- Improve street lighting.
- Break up continuous center turn lane with raised medians to serve as refuge islands for pedestrians crossing wide corridors or consider mid-block crossing islands.
- Evaluate the feasibility of a road diet.
- Install pedestrian warning signs in high pedestrian traffic areas and bus stops.

Veterans Boulevard

Pascagoula, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is large commercial and small commercial. Developments include a Walmart supercenter and several service retail shops. Single family residential neighborhoods can be found along Jefferson Avenue north of this segment, as well as community facilities. South of this segment is more commercial development along US Highway 90.

This segment of Veterans Boulevard is four lanes. There is a small sidewalk that extends from Shortcut Road to the truck entrance of Walmart. This sidewalk extends down Shortcut Road east of Veterans Boulevard.

Crash Analysis

Three pedestrian crashes occurred within this 0.15-mile segment, two of which resulted in moderate injuries and the other was a life threatening injury. All of the accidents occurred between 5:00 p.m. and 10:00 p.m.

The first crash occurred south of Shortcut Road in which the pedestrian was walking southbound along the southbound traffic lane, pulling a shopping cart, when struck by a vehicle. The second crash occurred north of Shortcut Road. The pedestrian was standing in the travel lane in dark clothing. The vehicle driver swerved in an attempt to avoid hitting the pedestrian. The third crash resulted in a life-threatening injury and involved a pedestrian crossing Shortcut Road from north to south when they were hit by a westbound driver on Shortcut Road. The driver fled.

Possible Countermeasures

- Improve street lighting.
- Evaluate pedestrian traffic along this corridor to determine the cost effectiveness of constructing a sidewalk.
- Install pedestrian warning signs in high pedestrian traffic areas without sidewalks.

Central Avenue

D'Iberville, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is heavy commercial and light industrial. Developments include the delivery area for the Scarlet Pearl Casino Resort, cold storage warehouse, and seafood processing. There are some scattered single family residential lots northwest of this segment and residential and small commercial to the north. This segment of Central Avenue is two lanes with no sidewalks.

Crash Analysis

Two pedestrian crashes occurred within this 0.1-mile segment near the intersection of Bay Shore Drive and Central Avenue.

The first crash was the result of the pedestrian holding onto the vehicle while it was attempting to drive northbound on Central Avenue. The second crash involved a truck with boat trailer striking a pedestrian worker directing traffic. The second crash involved a DUI, but both crashes resulted in moderate injuries.

Possible Countermeasures

- The crashes encountered during this study period were due to events not related to the roadway. The roadway should be re-evaluated to determine if crash frequency and severity warrant Central Avenue as a priority roadway.

14th Street Service Road

Pascagoula, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. High density residential uses can be found south of the segment and more commercial to the north.

This segment serves as a service drive for development along the original 14th Street alignment. The street dead ends to the south and provides no direct access to the 14th Street overpass. The roadway provides a deteriorating sidewalk on the west side of the road. From aerial imagery, trails can be seen through the grassed lot beneath the overpass where pedestrians have been traveling to Old Mobile Avenue.

Crash Analysis

Two pedestrian crashes occurred within this 0.10-mile segment with two fatalities. Both fatalities involved trains, one in daylight and one in dark unlit conditions.

In the first train-pedestrian crash, the engineer and conductor saw the pedestrian step onto the train tracks behind Little Caesar's Pizza and head west between the rails of the track. The engineer sounded the horn, but it was not acknowledged by the pedestrian.

The report for the second train-pedestrian crash did not provide any details regarding warnings provided to the pedestrian.

Possible Countermeasures

- After 2019, a small fence has been constructed from behind Little Caesars Pizza west to the ATM in an effort to deter pedestrians from walking along the tracks. This road segment should be re-evaluated to determine if the fence has improved pedestrian safety.
- Determine the feasibility of extending a sidewalk or multi-use pathway between the existing sidewalks on Old Mobile Avenue to the existing sidewalks on Denny Avenue.

Irish Hill Drive

Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is high density residential with small commercial. Developments include a small grocery store at Rodenberg Avenue, storage units, and apartment complexes. North of this segment is a railroad track and more residential development. To the east, high density residential uses continue, while to the west single family residential transitions to commercial uses. To the south is commercial development along the beach and US Highway 90.

In this segment, Irish Hill Drive is a two lane roadway with curb and sidewalk along the south side of the road with the exception of approximately 70 feet across a vacant lot.

Crash Analysis

Two pedestrian crashes occurred within this 0.19-mile segment. Both crashes occurred at night in unlit conditions.

The first crash was the result of the pedestrian searching for a lost dog and kneeling in the middle of the road. The second was a pedestrian crossing mid-block from south to north and being struck by a westbound vehicle.

Possible Countermeasures

- Improve street lighting.
- Install pedestrian warning signs.

Lamey Bridge Road - Segment 1

D'Iberville, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mix of single-family and high-density residential and commercial. North and west of this segment is interstate, east is more residential development, and south transitions to commercial. The D'Iberville Middle School and High School football stadium is located just south of this segment.

This segment of Lamey Bridge Road is a four lane, curb and gutter roadway with no sidewalks.

Crash Analysis

Three pedestrian crashes occurred within this 0.32 -mile segment with one fatality and two moderate injuries. All three crashes occurred after 8:30 p.m.

The first crash involved a pedestrian looking for lost raffle tickets near Toncrey Road which resulted in the only fatality. The second crash involved a pedestrian under the influence of alcohol that fell into the road near Popp's Ferry Road. The third crash was a distracted pedestrian (texting) crossing Big Ridge Road north to south being struck by a southbound vehicle turning left onto Big Ridge Road. The vehicle had a green light and no crosswalk is located at this intersection.

Possible Countermeasures

- Improve street lighting.
- Evaluate the feasibility of constructing a sidewalk along this segment.
- Stripe crosswalks at intersections to encourage pedestrian crossings at designated locations and to alert drivers to potential pedestrian activity.
- Install pedestrian warning signs in high pedestrian traffic areas without sidewalks.

Three Rivers Road - Segment 1

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is mixture of residential, commercial and light industrial uses. The Crossroads Mall is west of this segment and the industrial Seaway Road is south of this segment.

This segment begins as a four lane curb and gutter roadway at Seaway Road and reduces to two lanes with open ditches just north of Crossroads Parkway.

Crash Analysis

Four pedestrian crashes occurred within this 0.7-mile segment with one fatality and three moderate injuries. All three crashes occurred at night.

The first crash involved an older pedestrian who was walking back to a parked vehicle near Seaway Road when they were struck by a vehicle traveling southbound on Three Rivers Road. This crash resulted in the only fatality. The three moderate crashes involved pedestrians walking south on the edge of the southbound lane when they were struck by the mirror of a southbound vehicle. One was near Crossroads Parkway and the other two were near Angela Drive.

Possible Countermeasures

- Improve roadway lighting.
- Evaluate pedestrian traffic along this corridor to determine the cost effectiveness of constructing a sidewalk on the west side of the roadway.
- Install pedestrian warning signs in high pedestrian traffic areas without sidewalks.

Waveland Avenue

Waveland, Hancock County

Land Use & Roadway Configuration

Land use along this portion of the roadway is residential. No commercial developments are found in the immediate area. This segment of Waveland Avenue is a two lane road with open drainage ditches and no sidewalks.

Crash Analysis

Two fatal pedestrian crashes occurred within this 0.35-mile segment. Both occurred in dark-lit conditions.

The first crash was near Spruce Street and was a hit and run. There were no witnesses to the crash.

The second crash was near Donlard Street and involved a pedestrian that laid down in the street and was struck by a vehicle driving below the speed limit.

Possible Countermeasures

- The steepness of the roadway ditches deter pedestrians from walking in the grass, evaluate the volume of pedestrian traffic on the roadway to determine if it warrants a sidewalk or if the ditches can be closed in to provide a better shoulder for pedestrian traffic.

Courthouse Road - Segment 1

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway primarily commercial with some single family residential south of 33rd Street. Development along this segment includes the Hardy Court Shopping Center and Gulfport High School.

This segment begins as four lanes at Pass Road and quickly widens to five lanes with a continuous center turn lane. This segment included curb and gutter and no sidewalks in 2017.

Crash Analysis

Two pedestrian crashes occurred within this 0.84-mile segment and resulted in moderate injuries. Both crashes occurred at night.

The first crash occurred north of Pass Road and involved a vehicle exiting a parking lot and striking a pedestrian under the influence of alcohol. The second crash occurred at the intersection of Perry Street as a vehicle was turning eastbound from Courthouse Road and the pedestrian was crossing Perry Street from north to south while texting.

Possible Countermeasures

- Courthouse Road south of Pass Road was repaved between 2018 and 2019 which included an overlay with striping, sidewalks, multi-use pathways, lighting, crosswalks, and medians south of Perry Street. The roadway should be re-evaluated to determine if the improvements reduced pedestrian crashes.

33rd Street

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this roadway segment is primarily undeveloped with two data storage warehouses on the west end and two commercial businesses on east end. The roadway segment is two lanes with no sidewalk and open ditches.

Crash Analysis

Two pedestrian crashes occurred within this 0.5-mile segment at night and resulted in one life-threatening injury and one moderate injury. These two pedestrian crashes accounted for all the crashes on this roadway during the study period.

The first crash was a moderate injury crash in which two pedestrians were walking west on the shoulder of the right lane of 33rd Street near 34th Avenue. The vehicle was also westbound when it hit the pedestrian.

The second crash was a life-threatening injury involved an aggressive driver and a pedestrian almost in the center of the westbound travel lane.

Possible Countermeasures

- Improve roadway lighting.
- Evaluate the feasibility of constructing a sidewalk connecting residential developments northwest of this segment with commercial development east of this segment.

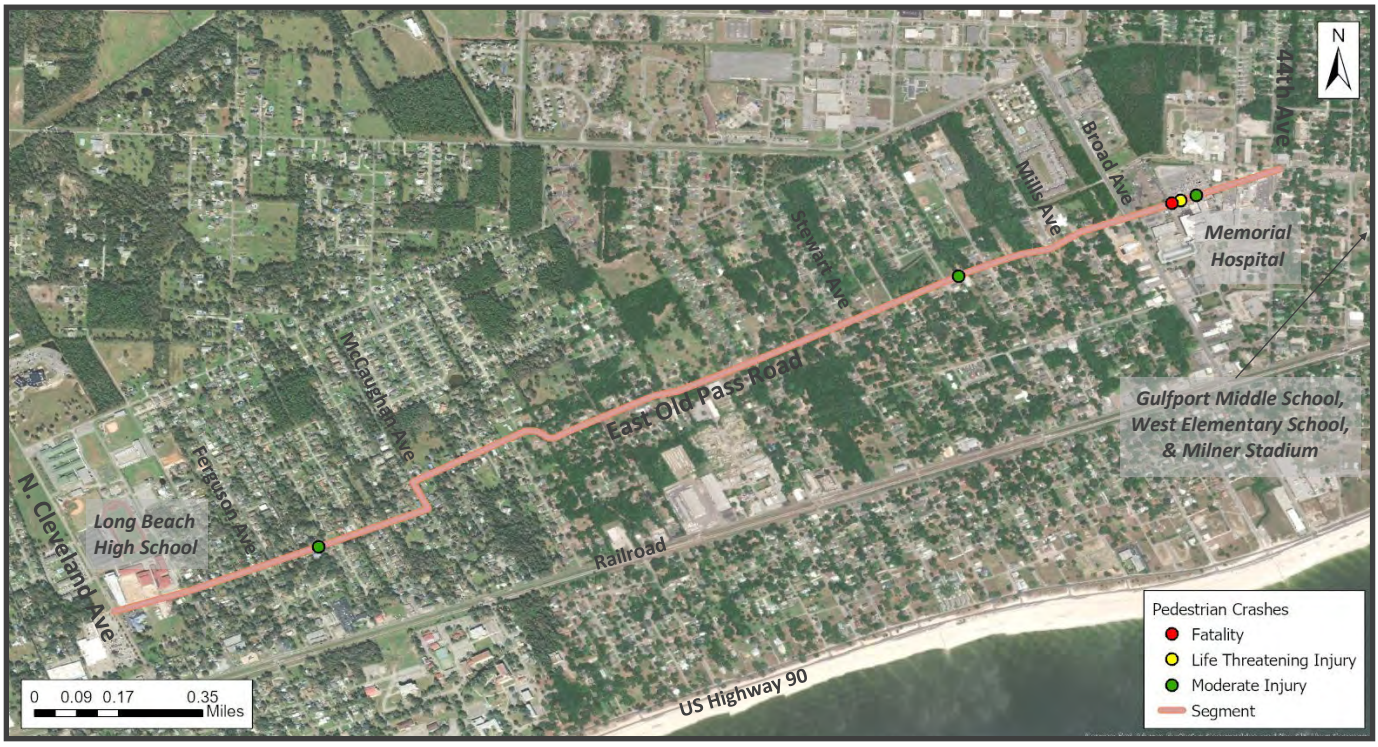
East Old Pass Road

Long Beach & Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily residential with some commercial intermixed. Developments along this segment include Long Beach High School and Memorial Hospital. Gulfport Central Middle School, West Elementary School, and Milner Stadium are located two blocks east of this segment.

This segment of East Old Pass Road is a two lane road. A sidewalk begins on the south side of the road east of Stewart Avenue and extends to 44th Avenue. Curb and Gutter begins at Mills Avenue on the south side of the road and continues, picking up the north side of the road at Broad Avenue, until 44th Avenue.



Crash Analysis

Five pedestrian crashes occurred within this 1.75-mile segment which resulted in three moderate injuries, one life-threatening injury, and one fatality. All crashes occurred between 2:30 p.m. and 8:00 p.m.

The first crash occurred in the eastbound lane in which the pedestrian admitted to stepping in front of the vehicle. The second crash occurred when a westbound vehicle clipped a pedestrian walking westbound on the road edge near Ferguson Avenue. The third crash involved a vehicle eastbound which did not yield to a pedestrian on the crosswalk at Memorial Hospital. The fourth crash was life-threatening and involved a driver westbound near Broad Avenue that stopped for the pedestrian crossing, and after the light turned green struck a pedestrian in dark clothing beginning to cross. The fifth crash involved a westbound vehicle near Broad Avenue who struck a pedestrian sitting in the roadway causing the only fatality.

Possible Countermeasures

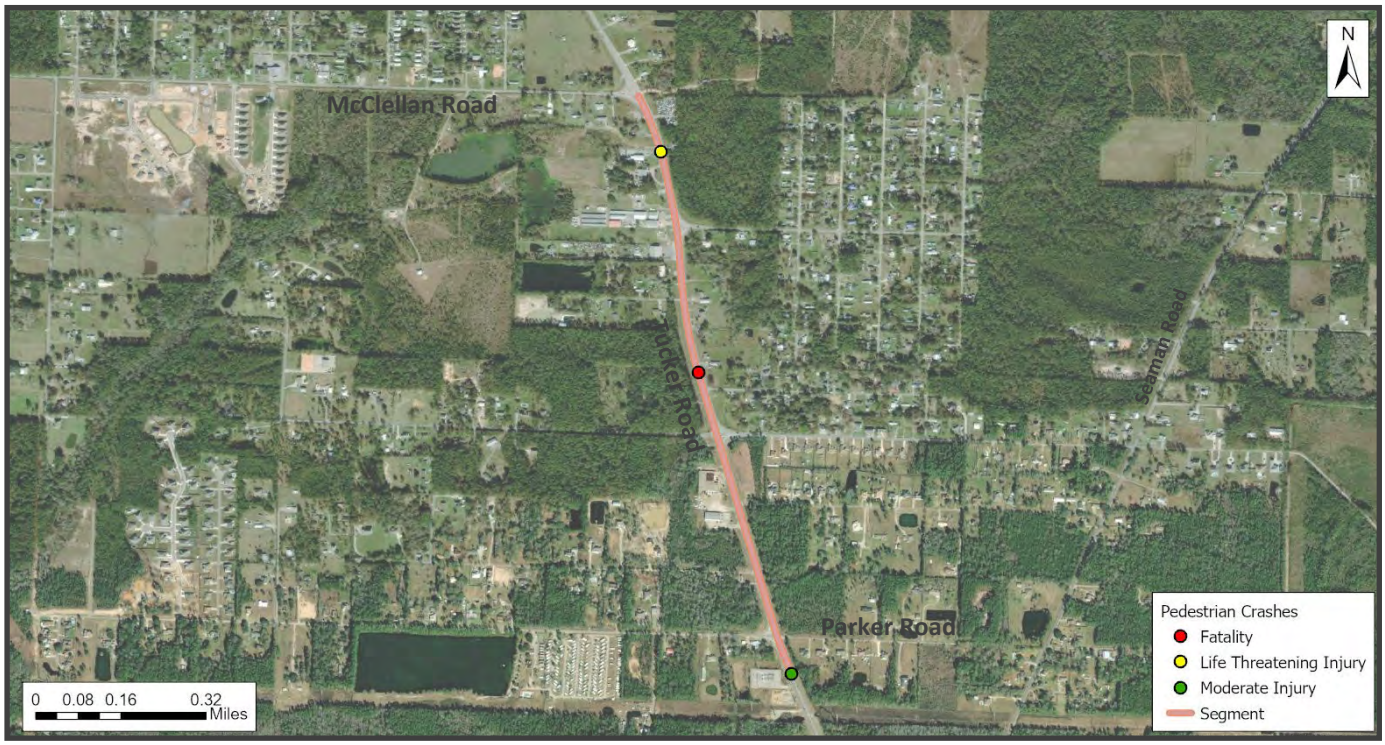
- Improve advanced warning of pedestrian crosswalk at Memorial Hospital.
- Add enhanced signing and pavement markings at crosswalk at Memorial Hospital.
- Reduce speed limit near the hospital.
- Evaluate the cost effectiveness of constructing sidewalk connections along this segment.

Tucker Road
Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily residential on the east side and primarily commercial on the west side. I-10 is south of this segment.

This segment of Tucker Avenue is five lane with a continuous center turn lane. There are no sidewalks along this segment, but there is a wide grassed shoulder.



Crash Analysis

Three pedestrian crashes occurred within this 1.13 - mile segment which resulted in one moderate injury, one life-threatening injury, and one fatality. All crashes occurred in dark-unlit conditions.

The first crash occurred near McClellan Road and involved a pedestrian that walked out into traffic from a nearby residence in an attempt to cross the road from east to west and was struck by a northbound vehicle in the right lane. The crash resulted in a life-threatening injury. The second crash involved a southbound vehicle striking an intoxicated pedestrian walking in the middle of the roadway and resulted in a moderate injury. The third crash involved a southbound vehicle that fatally hit a pedestrian in the center of the southbound lanes. The pedestrian was previously almost hit by another car that turned around to insure the pedestrian was moving out of the roadway when they were hit by the second car.

Three bicycle crashes also occurred in this segment and are analyzed in the bicycle crash analysis section.

Possible Countermeasures

- Improve roadway lighting.
- Evaluate the bicycle and pedestrian traffic along this corridor to determine if the construction of a separated multiuse pathway would be economically feasible.
- Install pedestrian/bicycle warning signs in high traffic areas without sidewalks or bike lanes.

Ingalls Avenue

Pascagoula, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial development with Eastlawn Elementary School located in the middle of the segment. Pascagoula High School is north of this segment.

From 8th Street to Belair Street, Ingalls Avenue is three lanes with a continuous center turn lane. From Belair Street to Chicot Street, Ingalls Avenue is four lanes. The entire segment is curb and gutter, with sections of sidewalk on the north and south side of the street. The longest continuous sidewalk is from east of 14th Street to east of Eden Street.

Crash Analysis

Two pedestrian crashes occurred within this 1.23-mile segment and resulted in one moderate injuries and one fatality. Both occurred in 2018, with one at night and the other early morning.

The first crash occurred near Mantou Street. The driver was turning left from Montou onto Ingalls (westbound) when they struck the pedestrian crossing Ingalls north to south at a low speed resulting in a moderate injury. The fatal crash was located near Chicot Street in which a pedestrian was crossing north to south. An eastbound vehicle passed a turning vehicle and struck the pedestrian.

Three bicycle crashes also occurred between Belair Street and Chicot Street and are analyzed in the bicycle crash analysis section.

Possible Countermeasures

- Complete sidewalk from 8th Street to Chicot Street and provide crosswalks across Ingalls Avenue where appropriate.
- Upgrade existing intersections with crosswalks to include curb ramps
- Install pedestrian/bicycle warning signs in high traffic areas without sidewalks or bike lanes.

Pineville Road

Long Beach, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial development with most of the commercial development centralized east of Willow Creek Drive. Harper McCaughan Elementary School is located along this segment.

This segment of Pineville Road is primarily two lanes, widening to include a center left turn lane at Willow Creek Drive and the commercial area west of Seal Avenue. In 2018, a sidewalk was constructed from Ashley Lane to Willow Creek Drive and connects to the elementary school.

Crash Analysis

Two pedestrian crashes occurred within this 1.43-mile segment which were both moderate injury and both occurred mid-day.

The first crash involved a 5-year old pedestrian running into the road near Seal Avenue. The southbound vehicle was unable to stop before striking the child. The second crash involved a vehicle running off the road, striking a forklift, which in turn struck a pedestrian working at the construction site.

Possible Countermeasures

- Install pedestrian warning signs in high pedestrian traffic areas without sidewalks.

Pass Road - Segment 3

Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is generally commercial with high density residential and some single-family residential intermixed.

The entire segment is five lanes with a continuous center turn lane. The roadway has curb and gutter with a continuous sidewalk on the north and south side of the road from Fernwood Road to just east of Iris Street. The sidewalk continues on the north side from Iris Street until Rodenberg Avenue. Segments of sidewalk are along the remainder of the road but do not interconnect.

Crash Analysis

Five pedestrian crashes occurred within this 3.7-mile segment and resulted in four moderate injuries and one fatality.

The first crash occurred at Eisenhower Drive in which a pedestrian, crossing north to south, ran out in front of a vehicle traveling westbound with right-of-way. The second crash involved a eastbound vehicle near Rodenburg Avenue striking a pedestrian who was under the influence of alcohol and had stepped into the roadway. The third crash occurred at night near in the turn lane of Popp's Ferry Road. The eastbound vehicle was entering the turn lane when they saw a pedestrian standing in the turn lane wearing dark clothing. The vehicle swerved, but was unable to avoid striking the pedestrian. The fourth crash involved a pedestrian in a motorized wheelchair crossing Pass Road and was struck in the center turn lane by a vehicle turning eastbound from a local business parking lot. The fifth crash involved a car turning eastbound from a parking lot near Tara Lane and struck a pedestrian crossing north to south in the center turn lane.

One life-threatening bicycle crash also occurred near Macarthur Avenue and is analyzed in the bicycle crash analysis section.

Possible Countermeasures

- Break up continuous center turn lane with raised medians to serve as refuge islands for pedestrians crossing wide corridors or consider mid-block crossing islands.
- Evaluate the feasibility of a road diet.
- Provided crosswalks and pedestrian signals at signalized intersections.
- Install pedestrian warning signs in high pedestrian traffic areas.

Pass Road - Segment 1

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. The majority of the segment is four lane with a section between Courthouse Road and Teagarden Road widening to five lanes with a continuous center turn lane. The roadway has several segments of sidewalk, but the sidewalk is not continuous and mostly occurs near schools.

Crash Analysis

Five pedestrian crashes occurred within this 4.2-mile segment and all resulted in moderate injuries.

The first crash occurred at Courthouse Road when a pedestrian crossed north to south perpendicular to traffic when a vehicle traveling westbound had a green light. The second crash occurred near Courthouse Road when a vehicle traveling eastbound struck a pedestrian crossing north to south mid-block. The third crash involved a pedestrian running across the road (south to north) near 5th Avenue and was struck by a vehicle traveling eastbound. The fourth crash involved a pedestrian failing to yield right-of-way to a vehicle during a mid-block crossing at night wearing dark clothing. The fifth crash was near 24th Avenue when a pedestrian was struck on the north side of the road by a vehicle turning left from a restaurant onto westbound Pass Road; the pedestrian was intoxicated.

Two moderate injury bicycle crashes also occurred in this segment. One was near Gulf Avenue and the other near E Avenue. Both are analyzed in the bicycle crash analysis section.

Possible Countermeasures

- Break up continuous center turn lane with raised medians to serve as refuge islands for pedestrians crossing wide corridors or consider mid-block crossing islands.
- Evaluate the feasibility of a road diet.
- Provided crosswalks and pedestrian signals at signalized intersections.
- Install pedestrian warning signs in high pedestrian traffic areas.

Dedeaux Road

Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial, with heavier commercial uses towards US Highway 49 and transitioning to more residential uses towards Jessica Drive.

Prior to 2019, this segment was five lanes from US Highway 49 to Three Rivers Road and narrowed to two lanes for the remainder of the segment. By 2019, the road was being reconstructed between Three Rivers Road and Dede Drive.

Dedeaux Road is a mixture of curb and gutter and open ditches with sidewalks mainly found with curb and gutter on the west side of Dedeaux Road and open ditches and no sidewalks towards the east side.

Crash Analysis

Four pedestrian crashes occurred within this 3.4-mile segment and all resulted in moderate injuries. Three of the crashes occurred east of Sharp Boulevard.

The first crash involved a pedestrian attempting to push their vehicle off the roadway when they were struck by another vehicle. The stopped vehicle did not have hazard lights flashing. The second crash involved a younger pedestrian who missed the school bus and attempted to cross Dedeaux Road without yielding to oncoming traffic. The third crash was the only evening crash and it involved a pedestrian walking on the road shoulder with the flow of traffic when they were struck by a vehicle who left the scene. The fourth crash involved two pedestrians crossing the road in the middle right lane being hit by a westbound vehicle; the vehicle was turning left out of a parking lot.

Possible Countermeasures

- Extend existing center line delineators to the end of the turn lane to restrict left turning movement from businesses at the intersection of Dedeaux Road and US Highway 49.
- Install sidewalks leading to pedestrian signals and crosswalks at signalized intersections.
- Extend sidewalks from Dede Drive to Jessica Lane to provide residential development along the roadway access to community businesses.
- Install pedestrian warning signs in high pedestrian traffic areas without sidewalks.

Lemoyne Boulevard

Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is primarily high-density residential and commercial uses with some single-family uses intermixed.

This segment of Lemoyne Boulevard is a five lane curb and gutter roadway with a continuous center turn lane. A continuous sidewalk on the north side of the road extends from Bienville Drive to

Crash Analysis

Two pedestrian crashes occurred within this 2.2-mile segment and resulted in one moderate injury and one fatality. Both were in dark lighting conditions.

The moderate injury crash involved a vehicle striking a pedestrian in the south westbound lane near Laura Acres Drive. The fatal crash involved an eastbound vehicle that struck a pedestrian wearing dark clothing that stepped in front of the vehicle. Officers were already in route to the scene of the accident due to previous reports of the pedestrian being in the road.

Possible Countermeasures

- Improve roadway lighting.
- Break up continuous center turn lane with raised medians to serve as refuge islands for pedestrians crossing wide corridors or consider mid-block crossing islands.
- Evaluate the pedestrian traffic volume along this corridor to determine the feasibility of extending the sidewalk on the north side of the roadway or providing crosswalks and a sidewalk on the south side of the roadway.
- Install pedestrian warning signs in high pedestrian traffic areas.

28th Street

Long Beach & Gulfport, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential, commercial and light industrial. The Naval Construction Battalion Center (NCBC) is the largest development along this segment.

In 2013, 28th Avenue was primarily a two lane road. By 2019, the roadway was expanded between 34th Avenue and 22nd Avenue to be five lanes with a continuous center turn lane. These improvements also expanded the sidewalk network along the roadway.

Crash Analysis

Three pedestrian crashes occurred within this 3.86 -mile segment and resulted in three moderate injuries and two fatalities. The two moderate crashes occurred within 500 feet of each other.

The first crash occurred at night and involved two pedestrians crossing south to north just east of 18th Avenue and were struck by westbound driver. This crash included a DUI, but there is no indication if it was the driver or one of the pedestrians. The second crash involved a west-bound vehicle just west of 18th Avenue that struck a pedestrian crossing the road south to north. Witness and video evidence showed the pedestrian did not look in the direction of the vehicle prior to stepping into the road. The third crash involved a vehicle eastbound at night on 28th Street near Simmons Drive which struck and killed two pedestrians walking westbound in the eastbound lane. The pedestrians were wearing dark colored clothing and the driver was arrested for a DUI.

Possible Countermeasures

- Improve roadway lighting.
- Extend sidewalks to complete connections on north sides of the roadway.
- Install pedestrian warning signs in high traffic areas without sidewalks.

Government Street

Ocean Springs, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial with commercial uses concentrated more on the west side of the segment and residential concentrated on the east side. Major developments along this road segment include a central business district and three schools. A railroad separates Government Street from US Highway 90 on the north. The Ocean Springs High School football stadium is not accessible from Government Street but is immediately north of the segment.

Government Street is predominately a two lane roadway widening to three lanes between Denny Avenue and Bechtel Boulevard. West of Denny Avenue, the street has sidewalks on both sides of the road. East of Denny Avenue at least one side of the road typically has a sidewalk.

Crash Analysis

Three pedestrian crashes occurred within this 4.51 -mile segment and resulted in three moderate injuries and involved two older drivers/ pedestrians and two younger pedestrians.

The first crash occurred at the Washington Avenue intersection and involved a westbound vehicle turning right and striking a pedestrian in a wheelchair using the crosswalk and ramp on the north side of Government Street. The second crash involved a juvenile pedestrian that was struck while crossing the street near Tara Lane. The third crash occurred on the Davis Bayou Bridge and involved an eastbound older driver that struck a younger pedestrian skateboarding in the eastbound lane at night.

Possible Countermeasures

- Refresh striping at Washington Avenue intersection to reinforce crosswalk and travel lane limits.
- In 2017, a signalized crosswalk was constructed near Tara Lane. The intersection should be reevaluated to determine if the improvements have reduced moderate injury crashes.
- In 2019, a sidewalk was extended from the Davis Bayou Bridge approximately 100’ to improve access to the bridge pedestrian path. This location should be reevaluated to determine if the improvements have reduced moderate injury crashes.
- Improve lighting over the Davis Bayou Bridge.

Appendix A-7: Priority Location Analysis - Bicycle Crashes

Ingalls Avenue

Pascagoula, Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial development with Eastlawn Elementary School located along the segment. Colmer Middle School is north of this segment along Eden Street.

From Belair Street to Chicot Street, Ingalls Avenue is four lanes. The entire segment is curb and gutter, with sections of sidewalk on the north and south side of the street.

Crash Analysis

Three bicycle crashes occurred within this 0.7-mile segment and resulted in three moderate injuries.

The first crash occurred near Chicot Street as a eastbound vehicle struck an eastbound cyclist who turned left without warning. The accident occurred at night and the cyclist reported not seeing the vehicle and the bicycle contained no reflective devices. The second crash was an early morning crash that occurred near Belair Street when a vehicle struck a cyclist and drove off. No details were provided on the direction of travel of either vehicle. The third accident occurred at the Belair Street intersection when a northbound cyclist ran a red light and was struck by a westbound vehicle.

Possible Countermeasures

- Host bicycle safety educational workshops at neighborhood meetings or in areas that have a higher occurrence of bicycle accidents.
- Evaluate the bicycle and pedestrian traffic along this corridor to determine if the construction of a separated multiuse pathway would be economically feasible.

Tucker Road
Jackson County

Land Use & Roadway Configuration

Land use along this portion of the roadway primarily residential on the east side and primarily commercial on the west side. I-10 is south of this segment.

This segment of Tucker Avenue is five lane with a continuous center turn lane. There are no sidewalks along this segment, but there is a wide grassed shoulder.

Crash Analysis

Three bicycle crashes occurred within this 1.0-mile segment and resulted in two moderate injuries and one fatality.

The first crash occurred when a northbound vehicle struck a northbound bicycle in the center turn lane at Pine Ridge Road. The accident occurred at night and resulted in a fatality. The second crash occurred when a southbound vehicle struck a bicycle stopped in the same lane north of Suburban Drive. This crash also occurred at night, but only resulted in moderate injuries. The third crash occurred just south of McClelland Road during daylight hours. A bicycle traveling southbound in the center turn lane crossed in front of a southbound vehicle in the far right lane.

Possible Countermeasures

- Host bicycle safety educational workshops at neighborhood meetings or in areas that have a higher occurrence of bicycle accidents.
- Improve roadway lighting.
- Install pedestrian/bicycle warning signs in high traffic areas without sidewalks or bike lanes.
- Evaluate the bicycle and pedestrian traffic along this corridor to determine if the construction of a separated multiuse pathway would be economically feasible.

Howard Avenue

Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is a mixture of residential and commercial with commercial uses concentrated more on the west side of the segment and residential concentrated on the east side. Major developments along this road segment include MGM Stadium directly south, Merit Health hospital, and the Biloxi Civic Center and Public Library.

In 2015, Howard Avenue was predominately two lanes with on-street parking and sidewalks on both sides of the road. There was a one-way segment of road between Reynoir Street and Lameuse Street. In 2019, the roadway has been redeveloped to include a bike lane from Couevas Street west. Currently, construction is occurring on Howard Avenue east of Crawford Street.

Crash Analysis

Four bicycle crashes occurred within this 1.6-mile segment. All four of the crashes occurred during daylight hours and resulted in moderate injuries.

The first crash occurred when an eastbound cyclist traveling in the westbound bike lane struck a vehicle turning left onto Bohn Street from Howard Avenue. The bike lane had directional arrows to show correct traffic flow. The second crash occurred when a vehicle was turning westbound onto Howard Avenue from Crawford Street and struck a westbound cyclist. The vehicle failed to stop at the stop sign. The third crash occurred at the intersection of Nixon Street and fourth at Holley Street. Both crashes were the result of a vehicle not yielding right-of-way to a westbound bicycle.

Possible Countermeasures

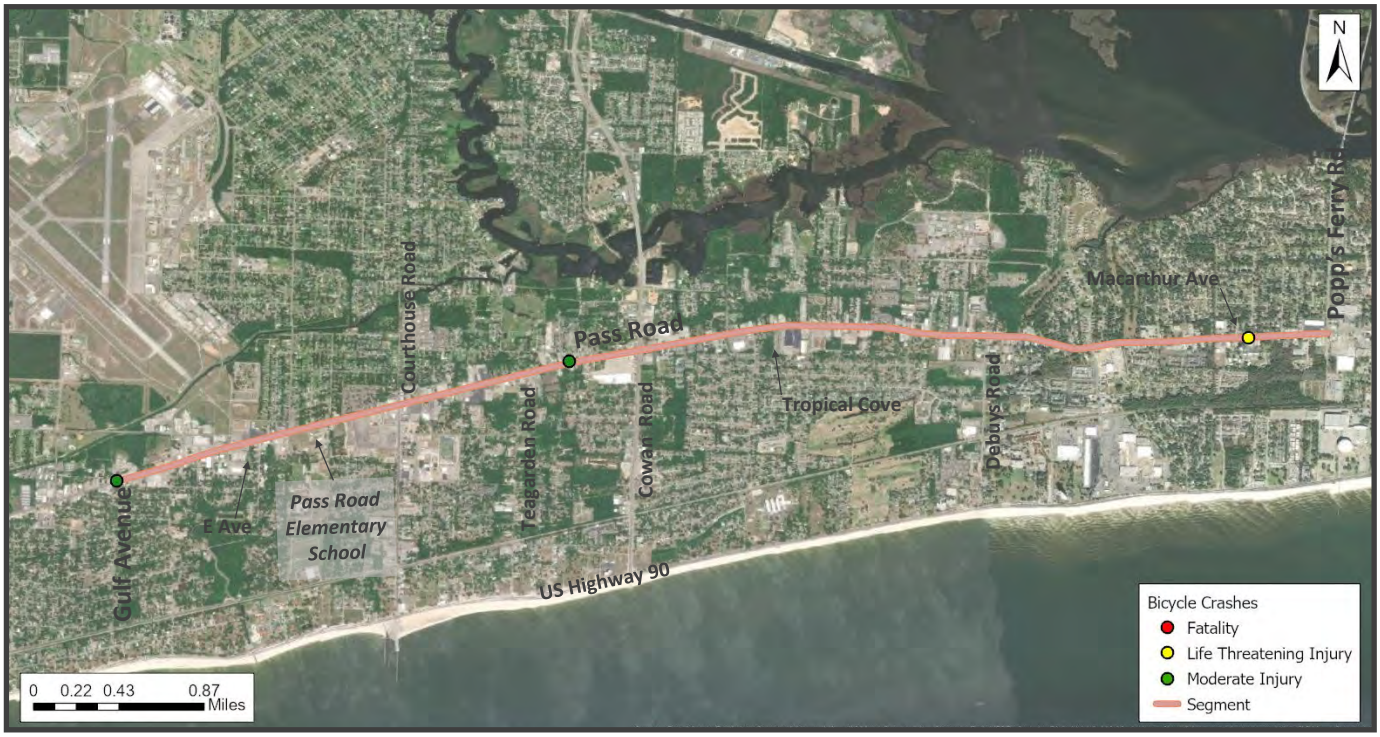
- Several segments of Howard Avenue have been reconstructed since these crashes occurred. Howard Avenue should be re-evaluated to determine if the improvements have reduced bicycle crashes.

Pass Road

Gulfport & Biloxi, Harrison County

Land Use & Roadway Configuration

Land use along this portion of the roadway is commercial. Between Gulf Avenue and Courthouse Road, Pass Road is a four lane road with no median. From Courthouse Road to Teagarden Road, Pass Road widens to five lanes with a continuous center turn lane. From Teagarden Road to Tropical Cove, Pass Road is again four lanes and widens east of Tropical Cove to the end of the segment to five lanes. Pass Road does not have any dedicated bike facilities.



Crash Analysis

Three bicycle crashes occurred within this 5.5-mile segment and resulted in two moderate injuries and one life threatening injury.

The first moderate injury crash occurred when a bicycle traveling eastbound on Pass Road near E Avenue pulled in front of a vehicle traveling eastbound on Pass Road. The second moderate injury crash occurred at Gulf Avenue when a bicycle crossing Pass Road did not yield right-of-way to a westbound vehicle. Rain made it difficult for the driver to see the bicycle in time to stop. The final crash occurred at night and resulted in the life threatening injury. A bicycle was traveling eastbound on Pass Road near Macarthur Avenue when it was struck by an eastbound vehicle who fled the scene.

Possible Countermeasures

- Host bicycle safety educational workshops at neighborhood meetings or in areas that have a higher occurrence of bicycle accidents.
- Improve roadway lighting.
- Install pedestrian/bicycle warning signs in high traffic areas without sidewalks or bike lanes.
- Evaluate the bicycle and pedestrian traffic along this corridor to determine if the construction of a separated multiuse pathway would be economically feasible.

Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Lane Departure

Reducing Fatal And Serious Injury Crashes

LANE DEPARTURE CRASHES

are defined as a crash which occurs after a vehicle crosses an edge line or center line, or otherwise leaves the traveled way. This category encompasses all crashes reported as runoff road (right, left, and straight), head-on, and sideswipe. Lane Departure crashes accounted for 45% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

9% of lane departure crashes resulted in a fatality. Approximately 49% of those fatalities occurred in Jackson County.

79% of lane departure accidents involved only one vehicle with another 19% involving 2 vehicles.

49% of lane departure crashes were reported as run off road right.

23% of lane departure crashes on local roads occurred at intersections.

19% of lane departure crashes also reported aggressive driving behavior.

19% of lane departure crashes also had reported DUIs.

83% of lane departure crashes occurred on dry roadways, while approximate 16% occurred on wet roadways.

55% of lane departure accidents occurred during daylight hours.

16% of lane departure crashes occurred in drivers under 21 years of age

Lane Departure crashes are the largest crash type reported in the study area between 2014-2018. This type was more than two times higher than the next largest category.

The Federal Highway Administration has determined three basic strategies for reducing lane departure crash frequency and severity. These categories are general and should prompt more area specific countermeasures.

Strategy #1: Keep vehicles on roadway

Keeping vehicles in their lane of travel through the implementation of strategies to improve roadway conditions, visibility, and safety.

Ex., rumble strips, reflective signage on curves, etc.

Strategy #2: Provide for safe recovery

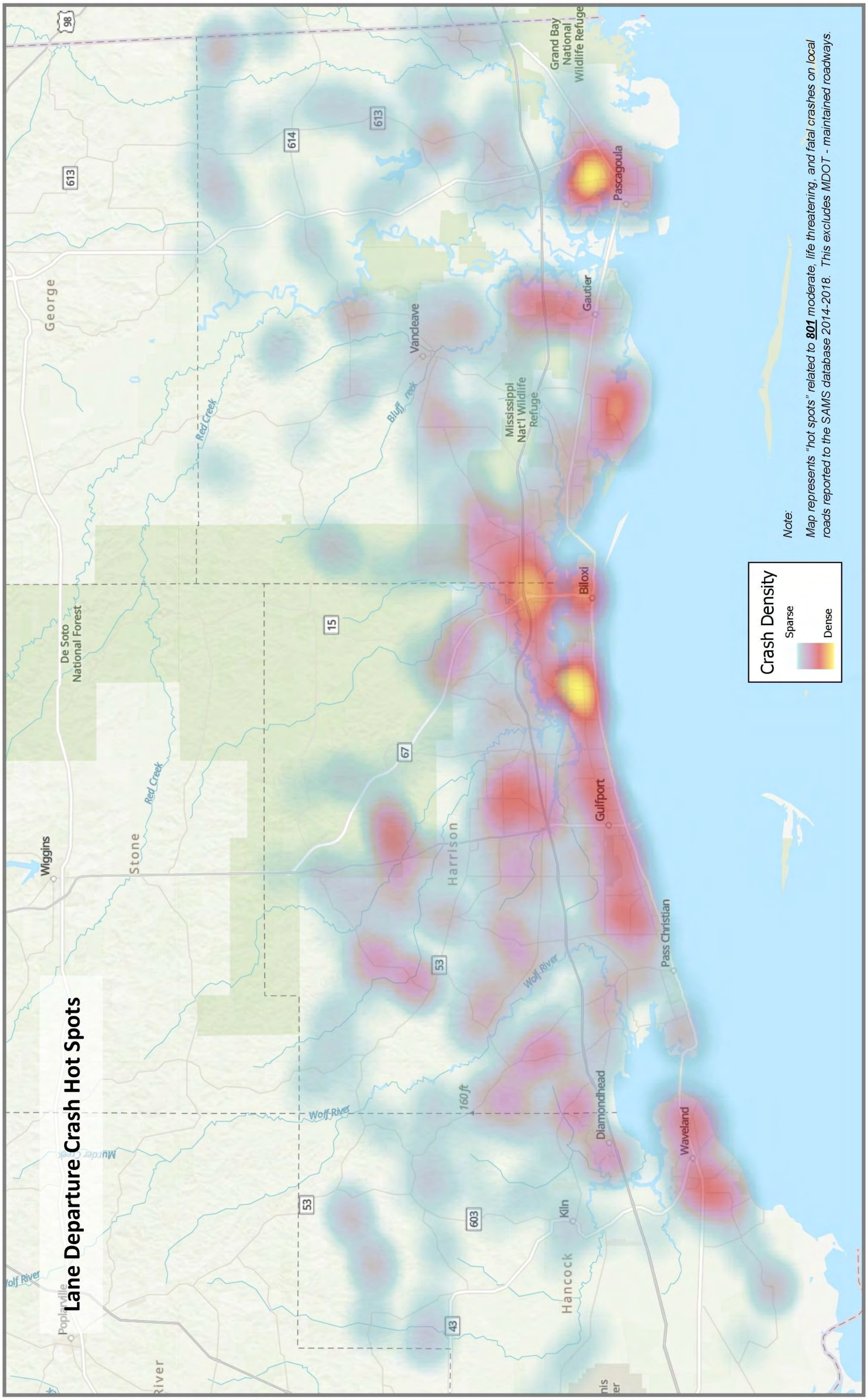
Providing opportunities for vehicles that leave their designated travel lane an opportunity to recover and return to the lane of travel.

Ex., roadway safety edge, clear zone, etc.

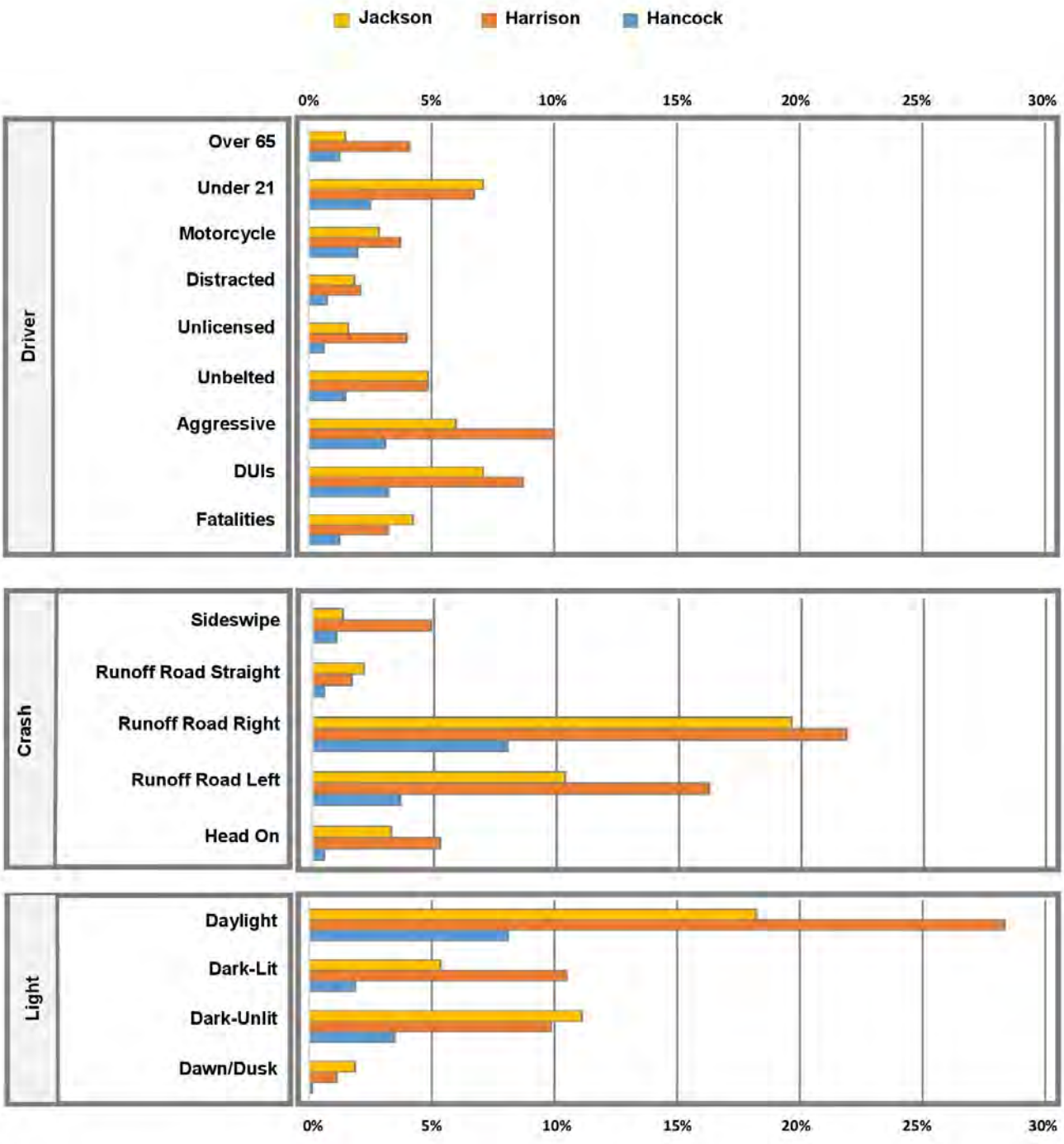
Strategy #3: Reduce crash severity

Providing measures to limit the severity of accidents where vehicles leave the roadway and cannot recover.

Ex., guardrail, traversable drainage structures, clear zones, etc.


Lane Departure Crash Hot Spots
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 801 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.
Grand Bay National Wildlife Refuge
Pascagoula
Gautier
Vancleave
Mississippi Nat'l Wildlife Refuge
Biloxi
Gulfport
Pass Christian
Diamondhead
Waveland
Kiln
Wiggins
Poplarville
George
Stone
Harrison
Hancock
De Soto National Forest
Red Creek
Wolf River
Bluff Creek
160 ft
98
613
614
15
67
53
603
43

Lane Departure Totals



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Intersection & Angle

Reducing Fatal And Serious Injury Crashes

Intersection Crashes

are defined as crashes that occur within the intersection of two roadways. Intersection crashes accounted for approximately 14% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

3% of intersection crashes resulted in fatalities.

31% of intersection crashes were categorized as lane departure followed closely by 28% categorized as angle crashes.

67% of intersection crashes occurred in daylight hours. Approximately 30% occurred at night with 20% of these in lit areas and 11% in unlit areas.

13% of intersection accidents involved a pedestrian or bicycle.

13% of intersections crashes also reported a DUI.

31% of intersection crashes involved a person under 21 (15%) or over 65 (16%).

45% of intersection accidents occurred between 12pm and 6pm, with peak accident time between 4pm and 5pm.

12% of intersection crashes involved aggressive driving behaviors.

14% of intersection crashes involved a motorcycle.

Angle Crashes

are defined as a collision most often resulting in the vehicles hitting at or near right angles. Angle crashes accounted for just over 14% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

5% of angle crashes resulted in fatalities.

81% of angle crashes occurred in daylight hours.

55% of angle crashes occurred between noon and 6 pm, with the peak hour of accidents occurring between 3pm and 4pm.

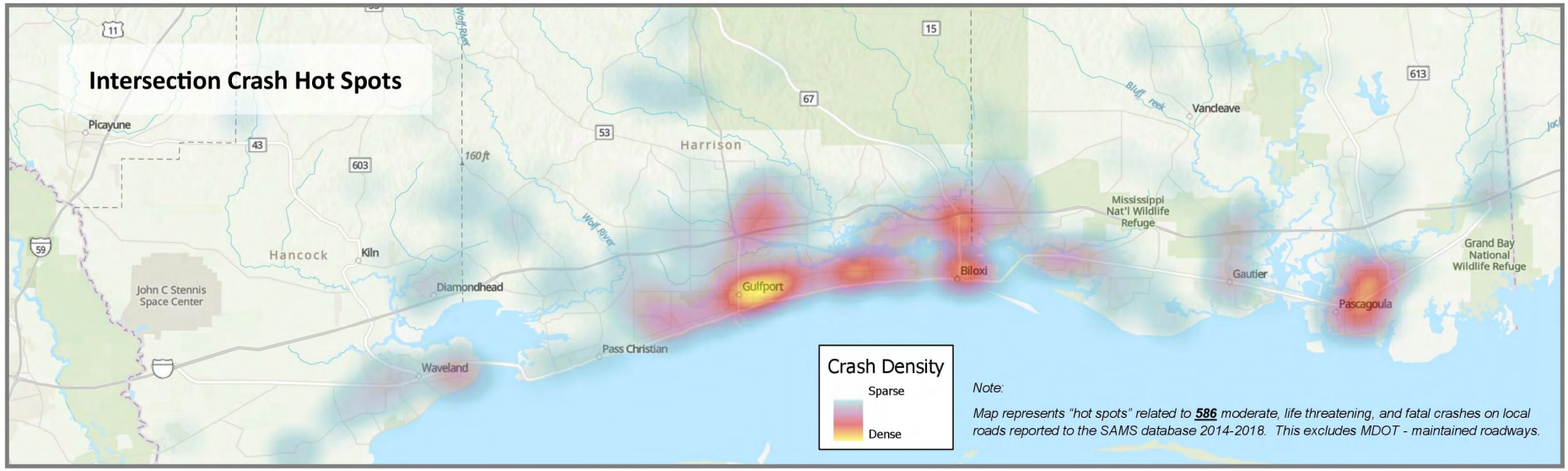
85% of angle crashes occurred at intersections.

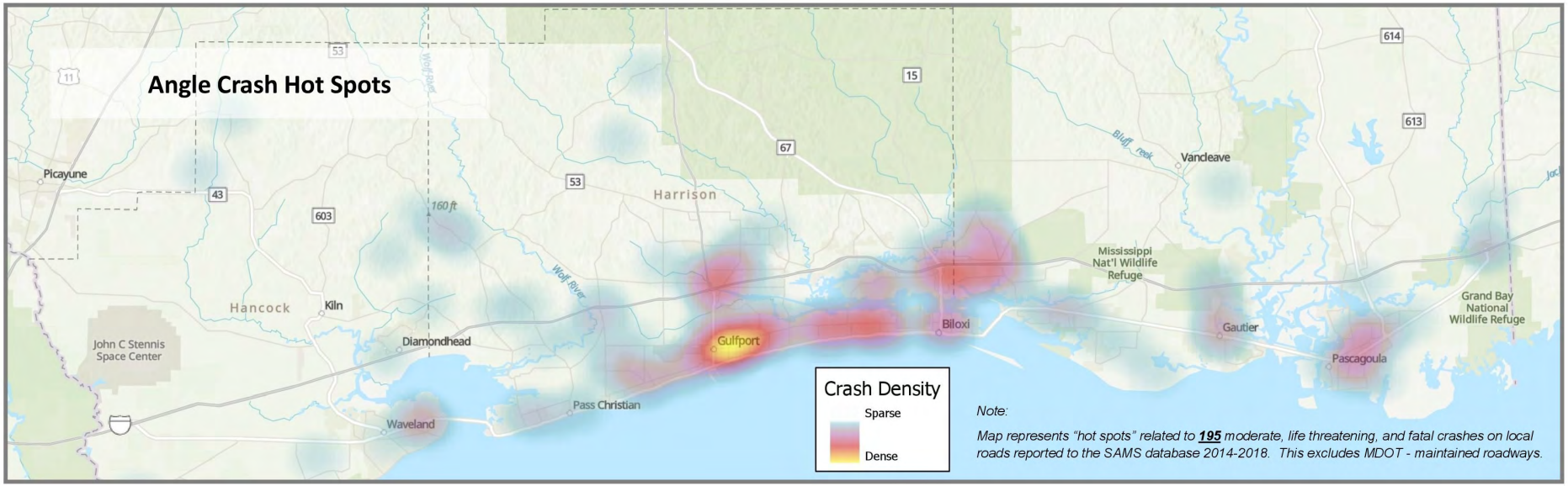
33% of angle crashes involved an individual under 21 (15%) or over 65 (18%).

General Countermeasures

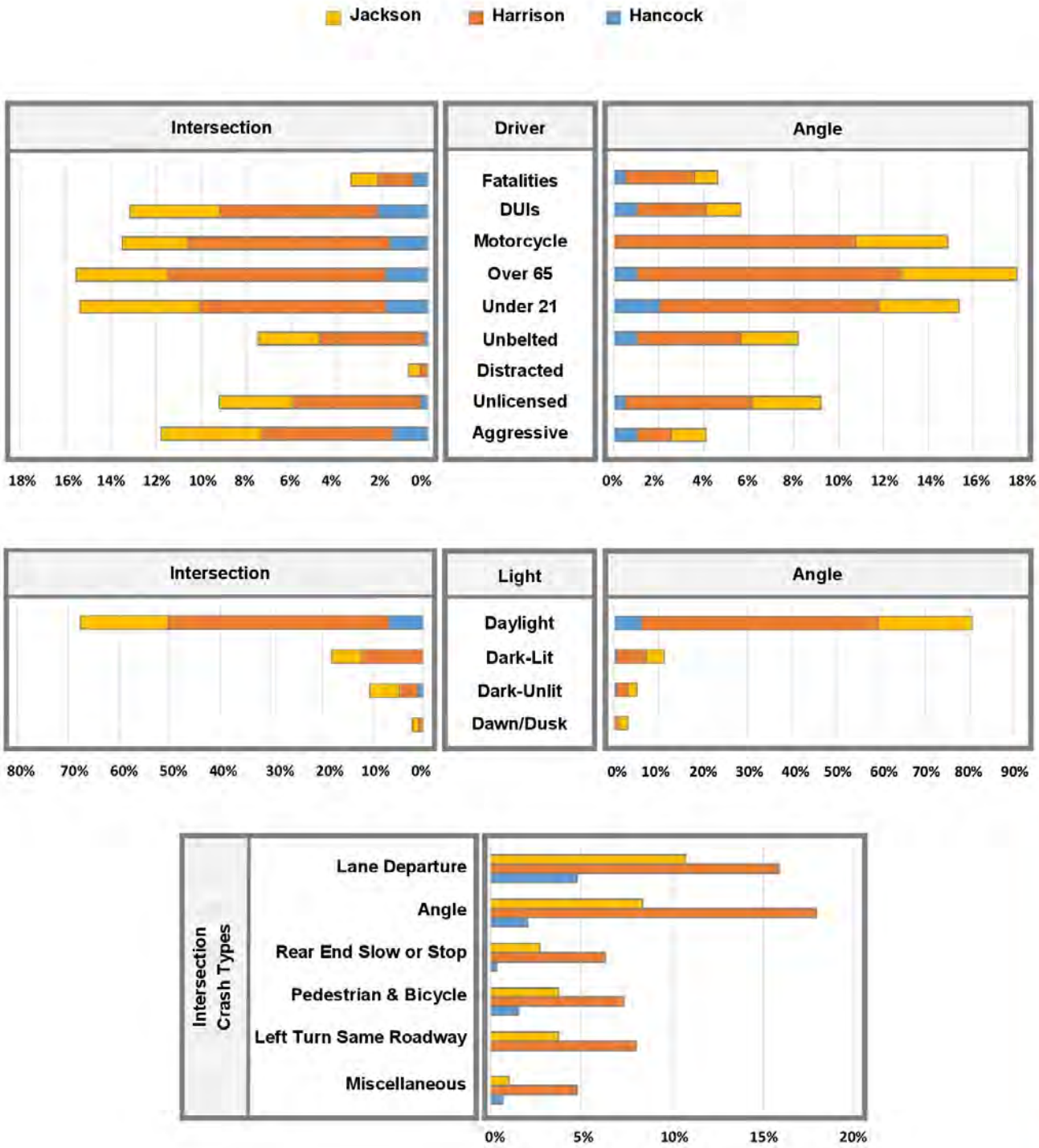
Enforcement - Photo Enforced Red-Light Running

Engineering - Add Turn Lanes/Left Turn Signals
Advanced Warning Signs
Add Stop Bars and Pavement Markings
Remove Sight Obstructions
Roundabout
Enhanced Crosswalks
Raised Intersections
Controlled Access on Major Roadways


Intersection Crash Hot Spots
Picayune
Hancock
Kiln
John C Stennis Space Center
Diamondhead
Waveland
Pass Christian
Gulfport
Biloxi
Harrison
Wolf River
160 ft
Bluff Creek
Vandeave
Mississippi Nat'l Wildlife Refuge
Gautier
Pascagoula
Grand Bay National Wildlife Refuge
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 586 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.


Angle Crash Hot Spots
Picayune
Hancock
Kiln
John C Stennis Space Center
Diamondhead
Waveland
Pass Christian
Gulfport
Biloxi
Harrison
Wolf River
160 ft
Bluff Creek
Vandeave
Mississippi Nat'l Wildlife Refuge
Gautier
Pascagoula
Grand Bay National Wildlife Refuge
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 195 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Intersection vs. Angle



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Aggressive & Speeding

Reducing Fatal and Serious Injury Crashes

AGGRESSIVE & SPEEDING CRASHES

are defined as crashes that occur when driving or attempting to drive at speeds over the posted speed limit, directing verbal or non-verbal expressions of anger toward other drivers, deliberately ignoring traffic controls, or driving in a way that attempts to gain advantage over other drivers. Essentially, the driver is operating a vehicle in a selfish, pushy, or impatient manner that directly affects other drivers. This category accounted for 13% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

According to NHTSA, the largest single contributor to aggressive driving is frustration. Aggressive driving behaviors are not always the result of the physical roadway environment, but may be triggered by traffic delays, restricted traffic flow, uncoordinated traffic signals, etc.

Some general countermeasures for Aggressive Driving and Speeding include:

- Police visibility
- Signage, marking, & traffic control measures
- Speed limits
- Speed trailers
- Penalties for aggressive driving behavior
- Roadway improvements
- Driver training
- Public education initiatives

10% of aggressive driving accidents resulted in fatalities within the three counties from 2014 to 2018.

33% of aggressive driving accidents occurred at intersections between 2014 and 2018.

64% of aggressive driver accidents involved only one vehicle, while an additional 29% involved two vehicles.

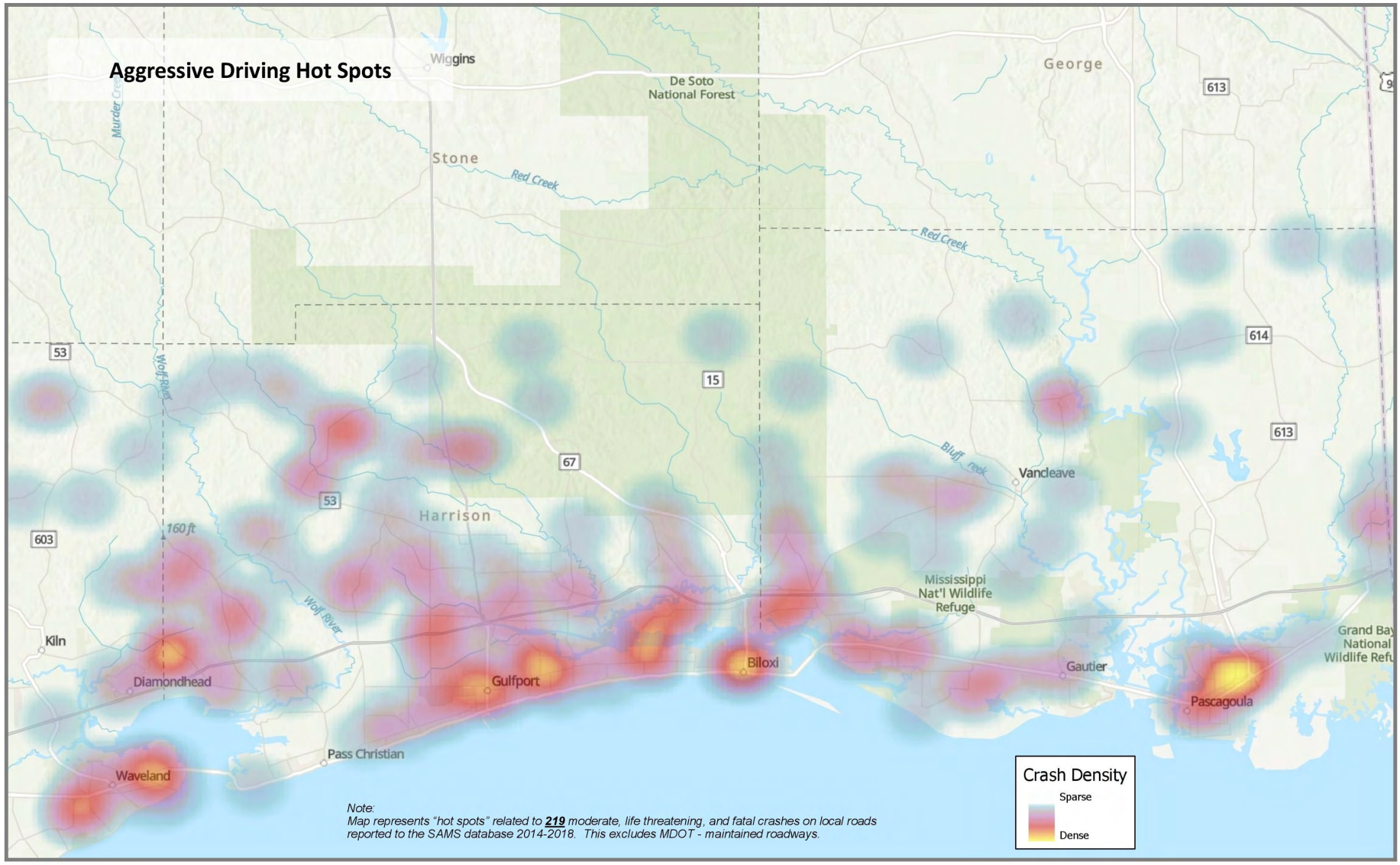
69% of all aggressive driver crashes were the result of a lane departure. An additional 14% resulted in a rear end slow or stop crash.

23% of aggressive drivers were Under 21 and an equal amount were Over 65 years of age.

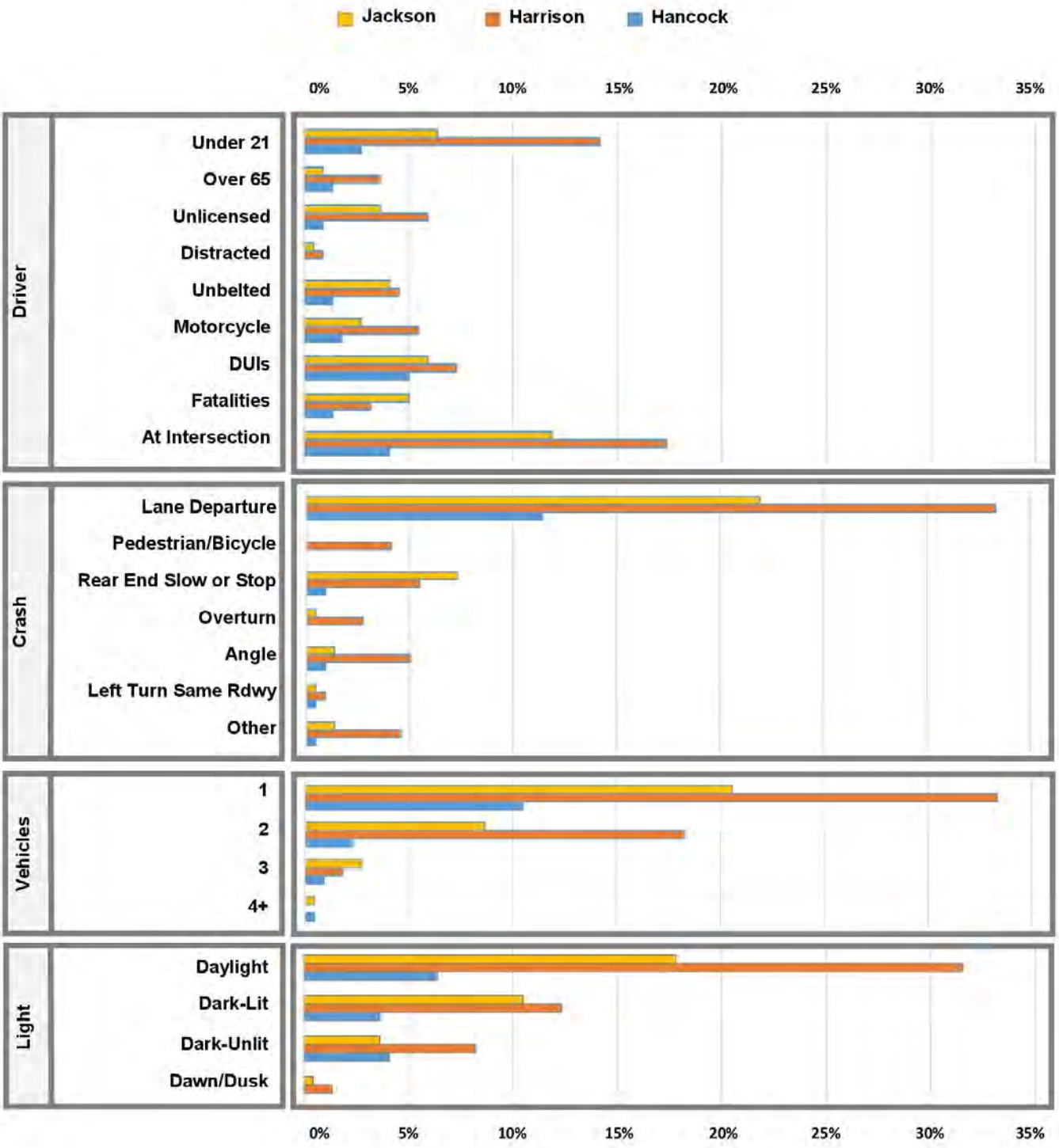
26% of aggressive driver crashes occurred between 4 p.m. and 7 p.m. with the peak crash time between 4 p.m. and 5 p.m. (9.6% of crashes).

18% of aggressive driving crashes also involved DUIs.

A majority of aggressive crashes occurred on the roadway during daylight hours in dry conditions.


Aggressive Driving Hot Spots
Wiggins
De Soto
National Forest
George
613
Stone
Red Creek
Red Creek
614
53
15
613
67
Bluff Creek
Vancleave
53
Harrison
603
160 ft
Wolf River
Mississippi
Nat'l Wildlife
Refuge
Kiln
Wolf River
Biloxi
Gautier
Diamondhead
Gulfport
Pascagoula
Pass Christian
Waveland
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 219 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Aggressive Driving Totals



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Rear End Slow or Stop

Reducing Fatal And Serious Injury Crashes

REAR END SLOW OR STOP CRASHES are defined as a rear end collision with one vehicle going at a slower speed, slowing down, or stopping in traffic. This category accounted for almost 17% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

44% of rear end slow or stop crashes occurred at intersections within the study area.

51% of rear end slow or stop crashes occurred between noon and 6pm with the peak hour for accidents occurring between 4pm and 5pm.

75% of all rear end slow or stop accidents involve 2 vehicles, with almost 20% involving 3 vehicles.

35% of rear end slow or stop crashes involved someone under 21 (22%) or over 65 (13%).

34% of rear end slow or stop crashes were categorized as a result of aggressive driving.

30% of rear end slow or stop crashes with aggressive drivers were reported between 4pm and 5pm.

<1% of fatalities occur as a result of rear end slow or stop crashes.

78% of rear end slow or stop crashes occurred in daylight hours.

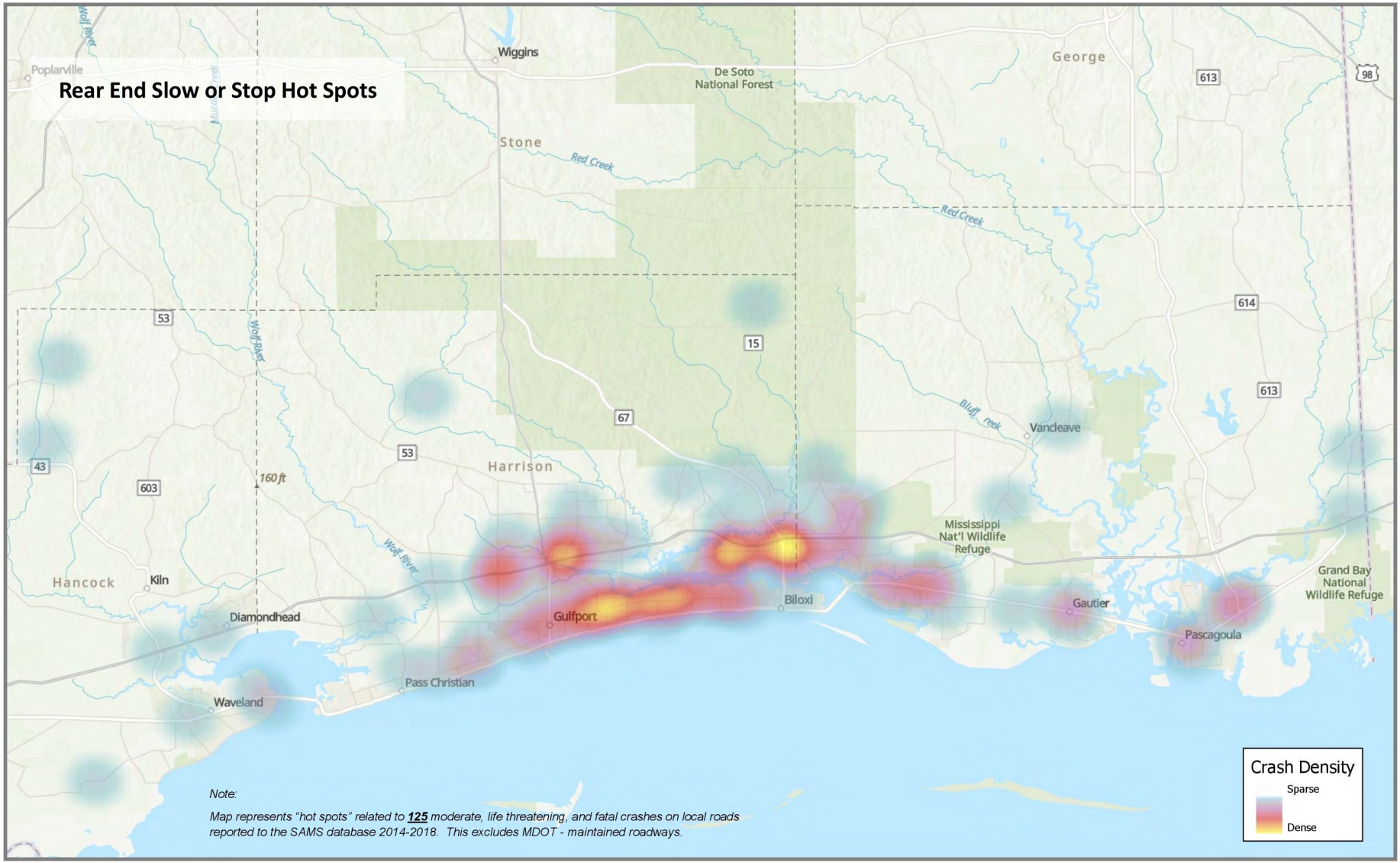
Rear End Slow or Stop Crashes are more difficult to assess than other crash types, because the cause of these crashes vary for each type of roadway and have a large number of contributing factors.

Reasons for Rear End Slow or Stop crashes could be the result of roadway design. In those instances, potential causes would be:

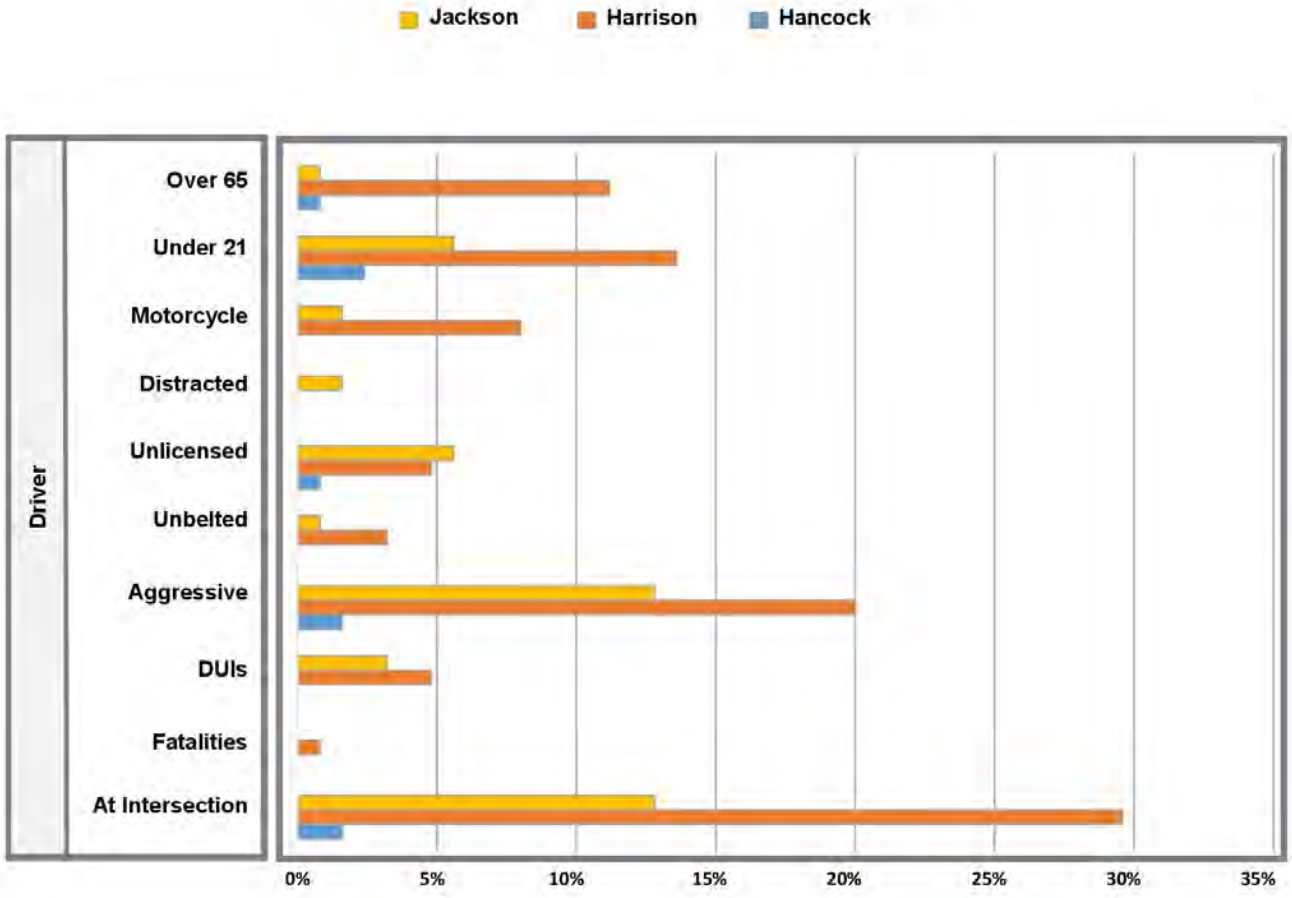
- Absence of Turn Lanes
- Insufficient Advance Warning Signage
- Roadway Capacity/Signal Timing
- Obstructions/Restricted Sight Distance
- Parking Too Close to Intersection
- Inadequately Marked Pedestrian Crossing

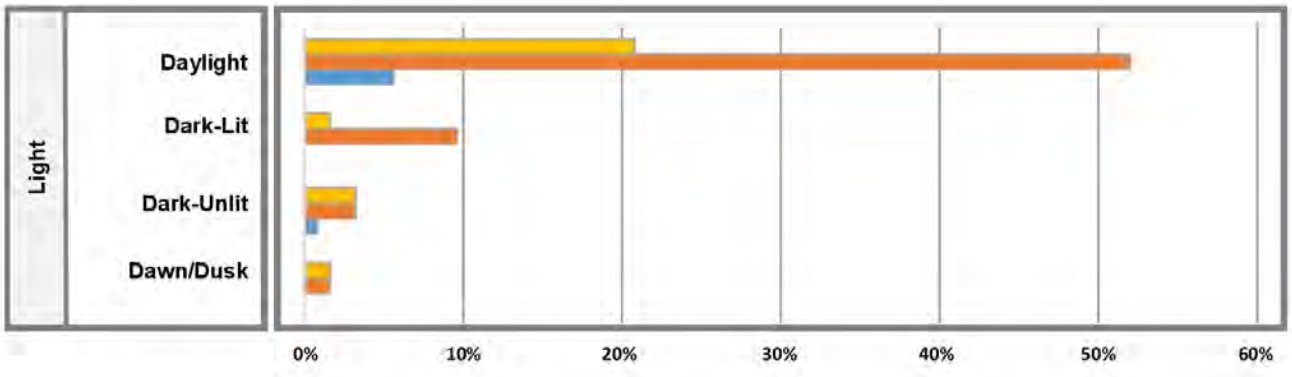
Driver behavior can also be a significant contributor to Rear End Slow or Stop Crashes. In those instances, potential causes would be:

- Following Too Closely
- Improper Passing Maneuver
- Perception of Vehicle Speed
- Distracted Driving
- Confusion on Roadway Markings/Signage

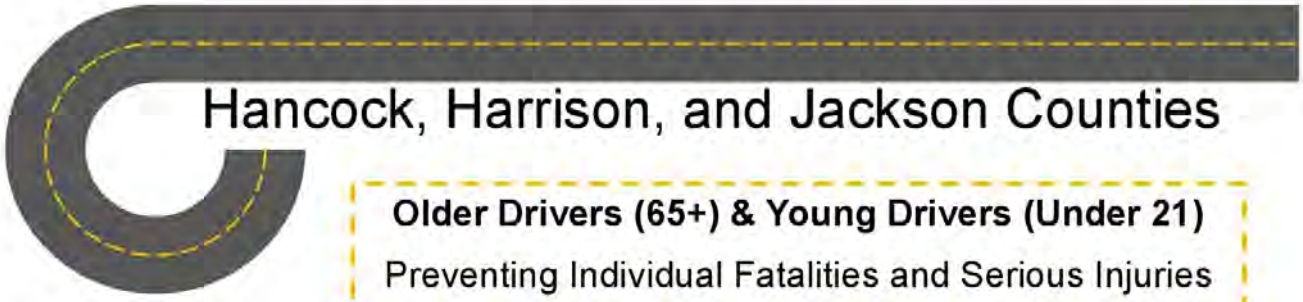

Rear End Slow or Stop Hot Spots
Wiggins
Poplarville
De Soto
National Forest
George
613
98
Stone
Red Creek
Red Creek
53
Wolf River
15
614
613
67
Bluff reek
Vancleave
53
43
603
160 ft
Harrison
Mississippi
Nat'l Wildlife
Refuge
Grand Bay
National
Wildlife Refuge
Hancock
Kiln
Wolf River
Biloxi
Gautier
Diamondhead
Gulfport
Pascagoula
Pass Christian
Waveland
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 125 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Rear End Slow or Stop Totals





Local Road Safety Plan



Hancock, Harrison, and Jackson Counties

Older Drivers (65+) & Young Drivers (Under 21)

Preventing Individual Fatalities and Serious Injuries

Older drivers

are defined as older than 65 years of age. This group accounted for 15% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

11% of older driver crashes resulted in a fatality.

47% of older driver accidents occurred at intersections.

50% of older driver crashes were between noon and 6pm, with the peak hour between 4pm and 5pm.

34% of older driver accidents involved a motorcycle (10%), pedestrian (14%), or bicycle (10%).

33% of older driver crashes were categorized as lane departure, with 61% of those being single vehicle crashes.

74% of older driver crashes occurred during daylight hours and approximately 13% occurred at night in an unlit area.

Young drivers

are defined as age 16 through 20. This demographic accounted for 15% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

8% of young driver crashes resulted in a fatality.

34% of young driver accidents occurred at intersections.

56% of young driver accidents involved 2 vehicles, while 37% were single vehicle accidents.

44% of young driver crashes were between noon and 6pm, with the peak hour between 4pm and 5pm.

28% of young driver accidents involved a motorcycle (8%), pedestrian (14%), or bicycle (6%).

48% of young driver crashes were categorized as lane departure, with 74% of those being single vehicle crashes.

General Countermeasures

Education - Community Programs (i.e., mock crashes)

Reinforce Safe Driving Skills

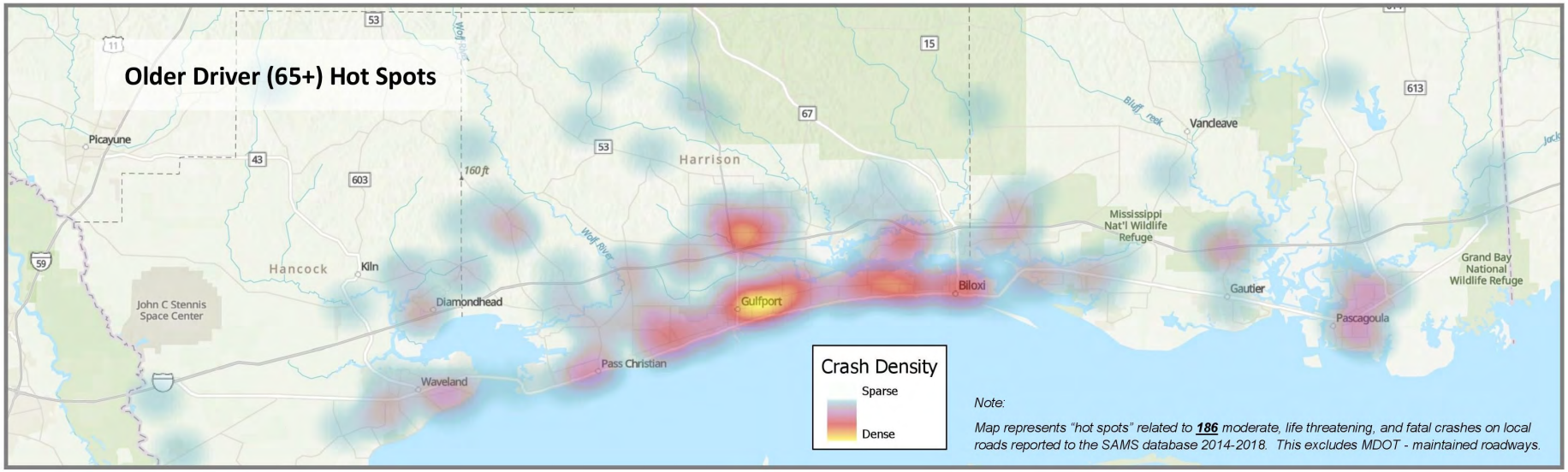
Enforcement - Police Visibility

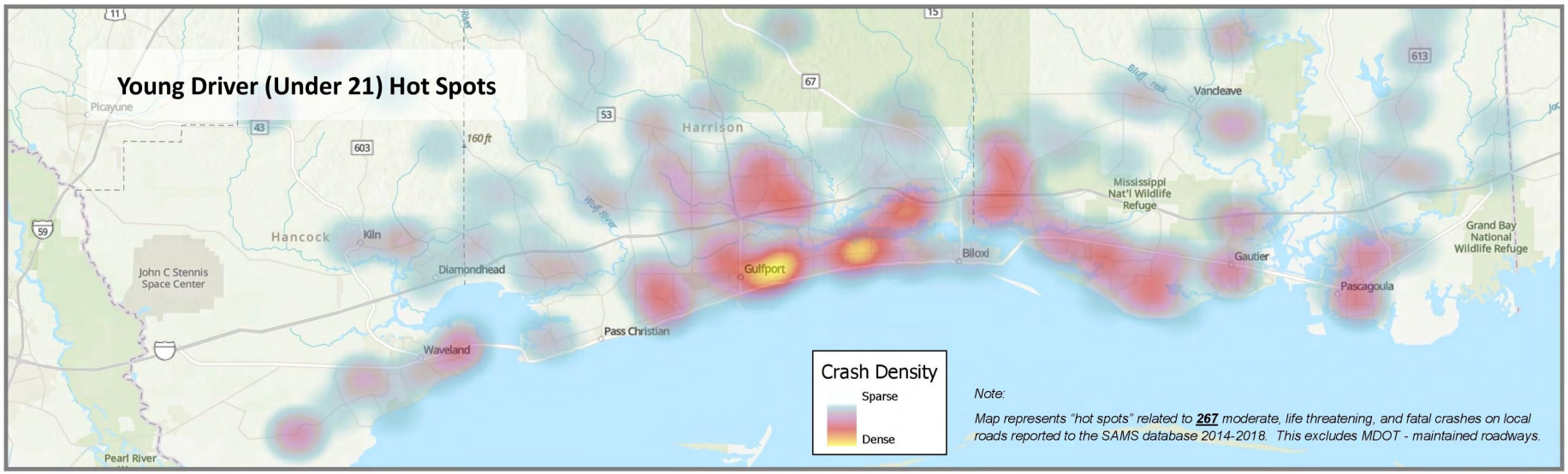
Enhance Penalties for Aggressive Driving & Repeat Offenders

Engineering - Improve Roadway Lighting

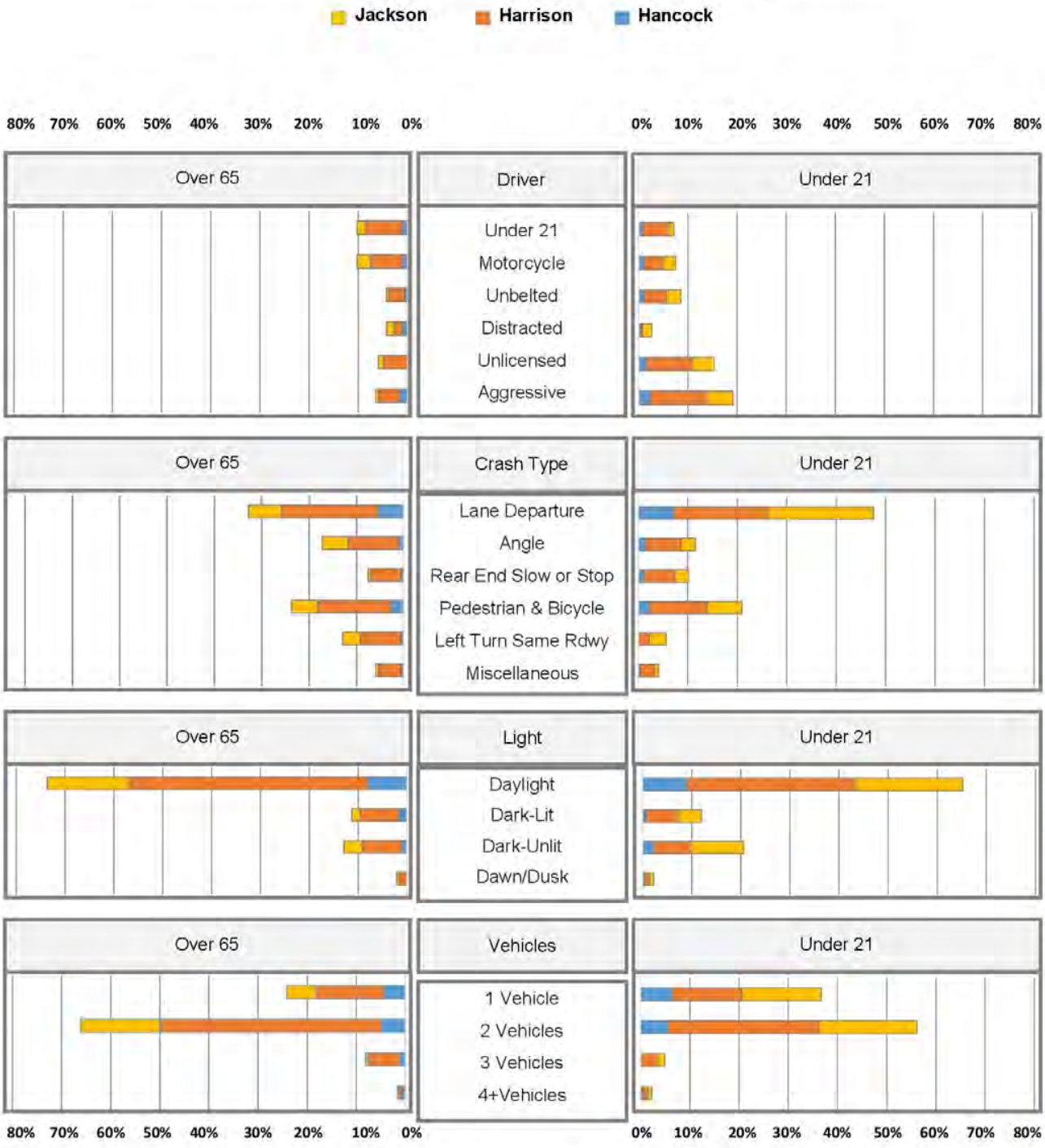
Improve Intersection Signage/Advance Warning Signage

Raised Crosswalks/Intersections


Older Driver (65+) Hot Spots
Picayune
Harrison
Vancleave
Hancock
Kiln
Diamondhead
Gulfport
Biloxi
Gautier
Pascagoula
Waveland
Pass Christian
John C Stennis Space Center
Mississippi Nat'l Wildlife Refuge
Grand Bay National Wildlife Refuge
Wolf River
Bluff Creek
160 ft
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 186 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.


Young Driver (Under 21) Hot Spots
Picayune
Harrison
Vancleave
Hancock
Kiln
Diamondhead
Gulfport
Biloxi
Gautier
Pascagoula
Waveland
Pass Christian
Pearl River
John C Stennis Space Center
Mississippi Nat'l Wildlife Refuge
Grand Bay National Wildlife Refuge
Wolf River
Bluff Creek
160 ft
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 267 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Older Driver vs. Young Driver Comparison



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Pedestrian & Bicycle

Preventing Individual Fatalities and Serious Injuries

Pedestrian Crashes

made up almost 10% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014 - 2018.

21%	of pedestrian crashes resulted in a fatality, with 63% of these occurring in dark-unlit roadway light conditions and 67% of these occurring after 6pm.
32%	of pedestrian crashes occurred at intersections.
25%	of pedestrian crashes involved an individual under 21, whether driver or pedestrian.
19%	of pedestrian crashes involved an individual over 65, whether driver or pedestrian.
63%	of pedestrian crashes occurred at night. Unlit areas accounted for 41% of these crashes and Lit areas accounted for 22%.
30%	of pedestrian crashes occurred between 7pm and 10pm, with the peak crash time between 8pm and 9pm.
18%	of pedestrian crash involved an individual under the influence
56%	of pedestrian crash DUIs occurred between 6pm and midnight.

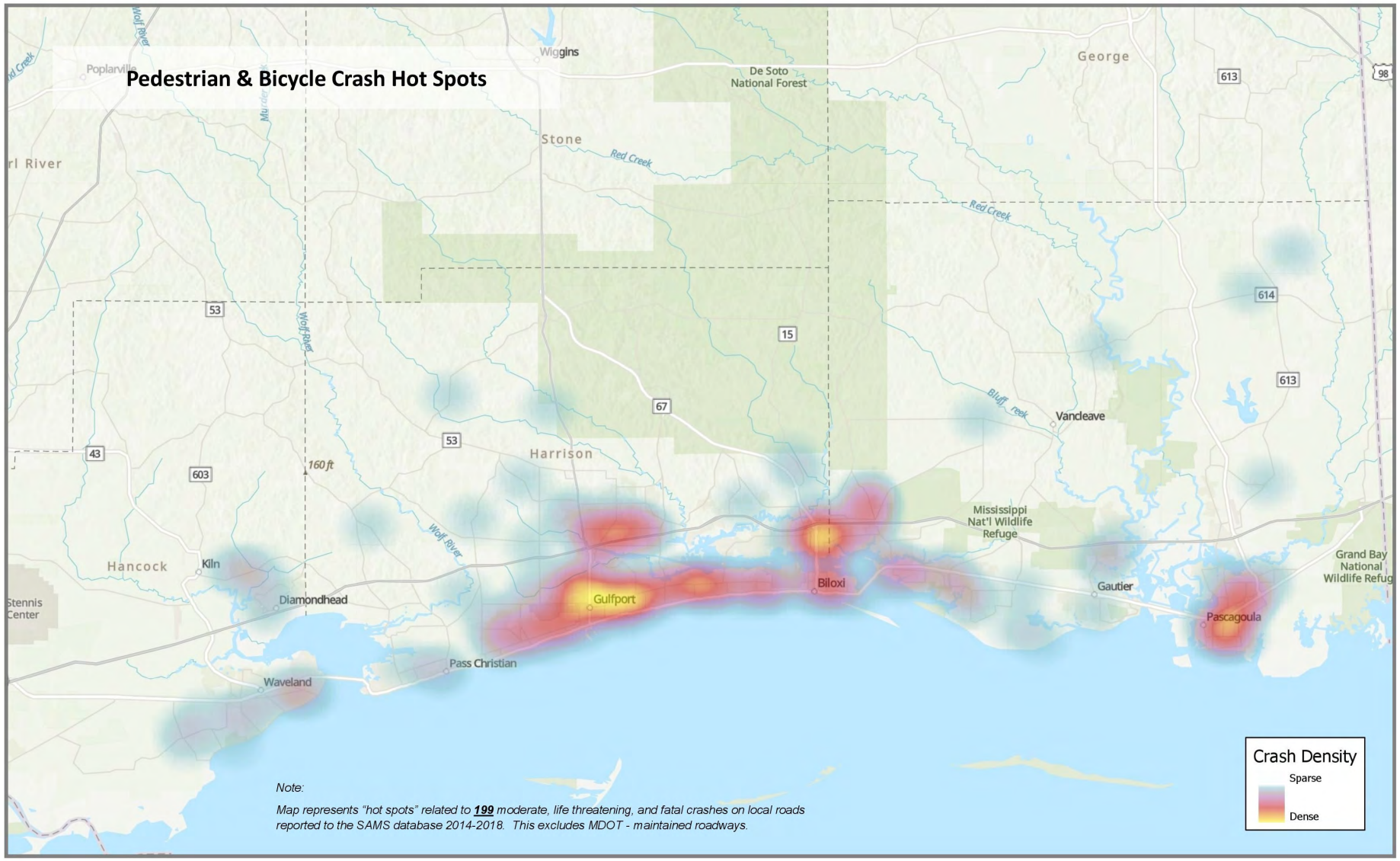
Bicycle Crashes

made up les than 4% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014-2018.

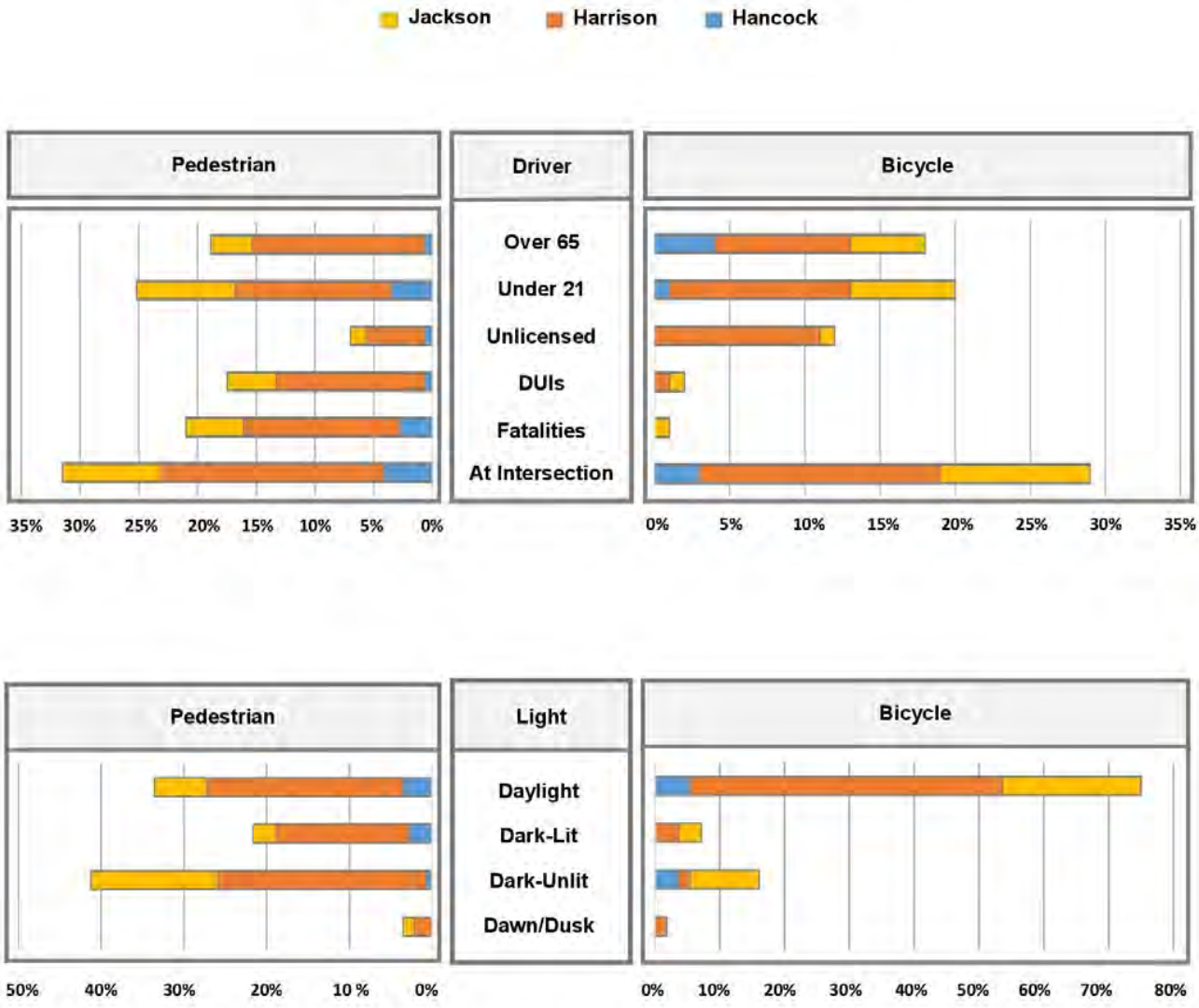
2%	of bicycle crashes resulted in fatalities.
52%	of bicycle crashes occurred at intersections.
36%	of bicycle accidents involved an individual under 21, whether the driver or cyclist.
32%	of bicycle crashes involved an individual over 65, whether the driver or cyclist.
75%	of bicycle accidents occurred during daylight hours.
57%	of bicycle accidents occurred between noon and 6 pm, with most occurring from 12pm - 1pm and 5pm - 6pm.

General Countermeasures

Education -	Road Rules Education/Refresher Safety Education (i.e., reflective clothing) Discourage Distracted Walking Community Events (i.e., bicycle rodeos)
Enforcement -	Reduce Walking/Biking Under the Influence Deter Distracted Driving
Engineering -	Raised Crosswalks/Intersections Pavement Marking/Warning Sign Upgrades Pedestrian Median Fencing Intersection Lighting


Pedestrian & Bicycle Crash Hot Spots
Wiggins
De Soto National Forest
George
Stone
Red Creek
Poplarville
Wolf River
53
15
67
43
603
160 ft
Harrison
Vancleave
Bluff creek
614
613
98
Mississippi Nat'l Wildlife Refuge
Grand Bay National Wildlife Refug
Hancock
Kiln
Diamondhead
Gulfport
Biloxi
Gautier
Pascagoula
Pass Christian
Waveland
Stennis Center
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 199 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Pedestrian & Bicycle Totals



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Motorcycle

Preventing Individual Fatalities and Serious Injuries

Motorcycle Crashes

made up approximately 12% of all reported crashes in Hancock, Harrison, and Jackson Counties from 2014-2018.

7% of motorcycle crashes resulted in a fatality.

43% of motorcycle accidents occurred at intersections.

11% of motorcycle crashes involved an individual under 21.

11% of motorcycle crashes involved an individual over 65.

74% of motorcycle accidents occurred during daylight hours.

74% of motorcycle accidents occurred between 12pm and 6pm, with peak hour of 4pm to 5pm.

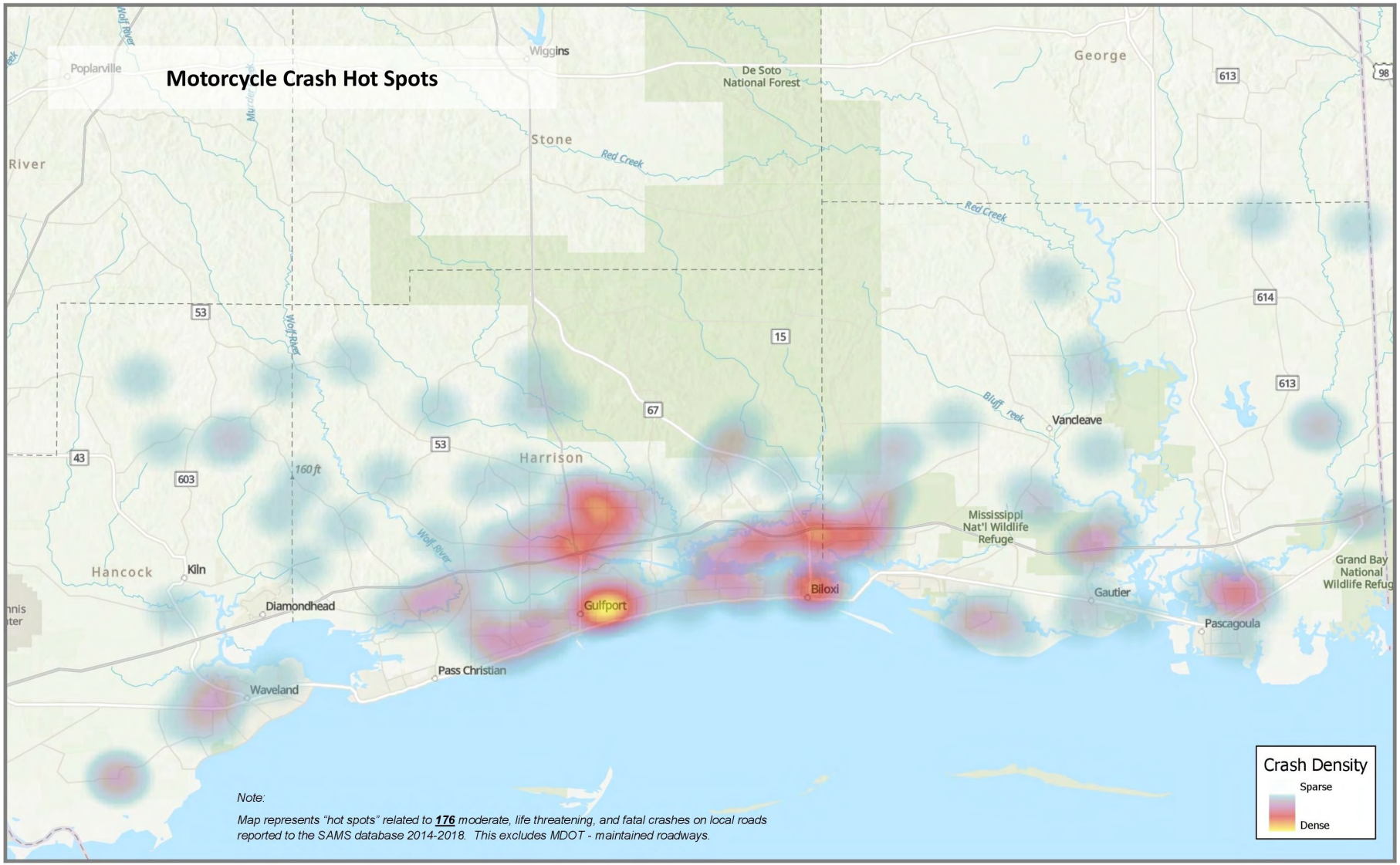
Motorcycle crashes are broken into the following crash types:

General Countermeasures

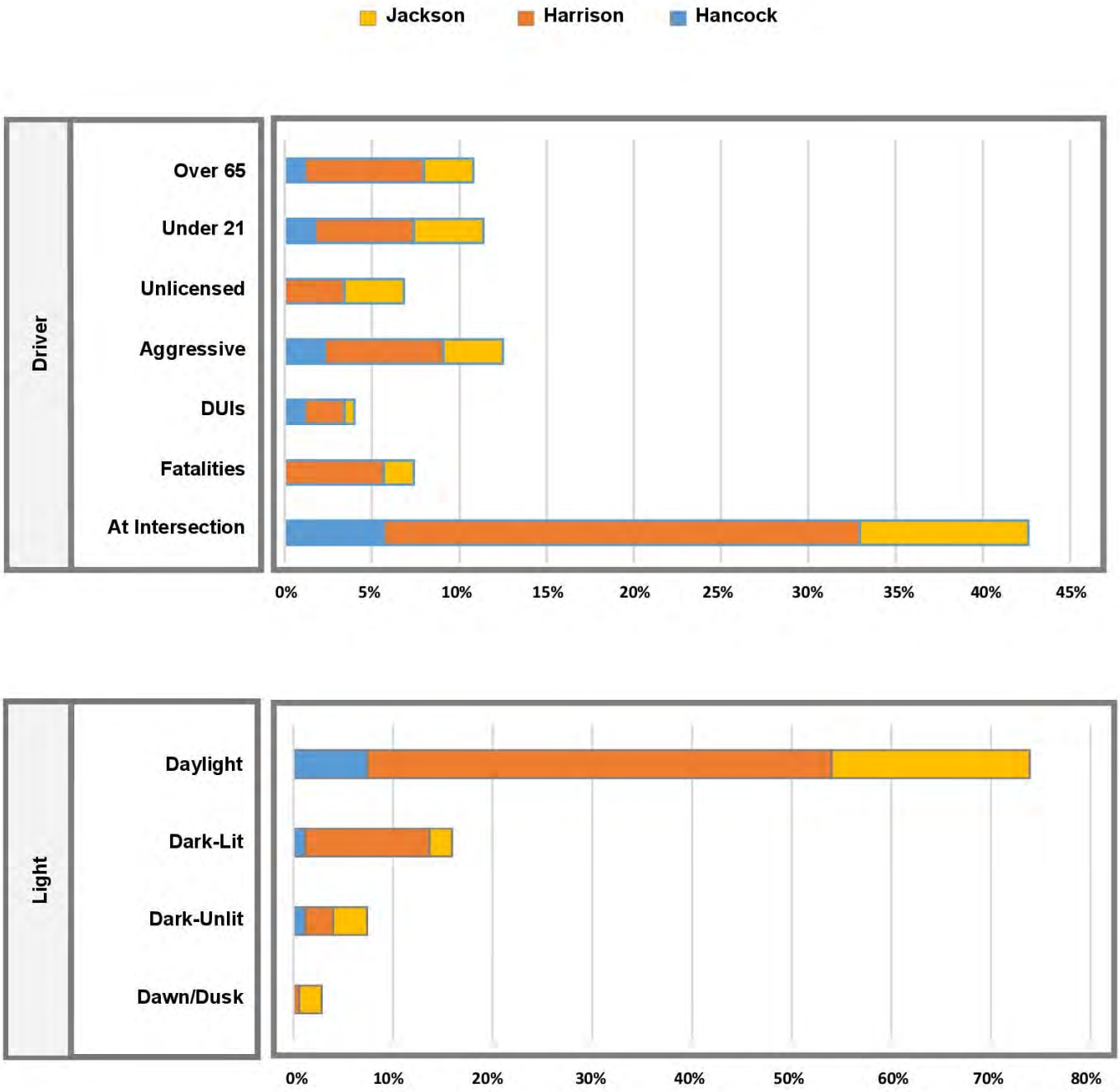
Education - Reinforce Safe Motorcycle Operating Skills
Increase Community Education (i.e., Look Twice, Save a Life)
Deter Distracted Driving
Increase Roadway Maintenance

Enforcement - Increase Police Visibility
Aggressive Motorcycle Driving Enforcement

Engineering - Intersection Lighting
Warning Signs/Advanced Warning in Curves
Roadway Improvements


Motorcycle Crash Hot Spots
Poplarville
Wiggins
De Soto
National Forest
George
613
98
Stone
Red Creek
River
Red Creek
614
53
15
Wolf River
613
67
Bluff Creek
Vancleave
53
Harrison
43
603
160 ft
Mississippi
Nat'l Wildlife
Refuge
Grand Bay
National
Wildlife Refug
Hancock
Kiln
Wolf River
Biloxi
Gautier
Diamondhead
Gulfport
Pascagoula
Pass Christian
Waveland
Crash Density
Sparse
Dense
Note:
Map represents "hot spots" related to 176 moderate, life threatening, and fatal crashes on local roads reported to the SAMS database 2014-2018. This excludes MDOT - maintained roadways.

Motorcycle Crash Totals



Local Road Safety Plan

Hancock, Harrison, and Jackson Counties

Stakeholder Meeting Feedback

Over three days from June 22nd to June 24th, four meetings were hosted to discuss the six emphasis areas:

- Lane Departure Crashes
- Young & Old Drivers
- Aggressive Driving & Speeding
- Rear End Slow and Stop Crashes
- Motorcycle Users
- Pedestrian & Bicycle Users

We heard from law enforcement officers, city and county officials, and concerned citizen groups. Because most of the meetings covered a wide variety of transportation topics, including those covered in other meetings, all of the stakeholder feedback is provided in one document which represents everything heard at all four meetings. The feedback is broken down into enforcement, engineering, and education countermeasures.

Enforcement:

- Law enforcement officers (both state and local) are frustrated by crash reporting.
  - ⇒ Uniformity across jurisdictions for how reports are completed.
  - ⇒ Communication from state down on the importance of information collected.
  - ⇒ Reporting is time consuming. Reduces police visibility and officer response time for other emergencies.
- Officers are limited by the law.
  - ⇒ MS Highway Patrol (MHP) limited to 650 officers by legislation. With only 180 dedicated to patrol, MHP averages 1-2 officers per county each shift.
  - ⇒ MS law requires all accidents with $500.00 or more in damage be reported. Increasing this limit would eliminate minor crash reporting.
  - ⇒ Harder to enforce speeding where no speed limit signs are posted.
  - ⇒ No technology to identify distracted driving. Rely on honesty of driver.
- Mississippi does not have an aggressive driving law.
- Mississippi does not have a distracted driving law for standard driver's licenses.
- Increase police visibility in high speed areas with an empty patrol car.
- Slow down motorcycles.
- Mississippi needs a jaywalking statue in order to ticket mid-block crossings and enforce the use of crosswalks.

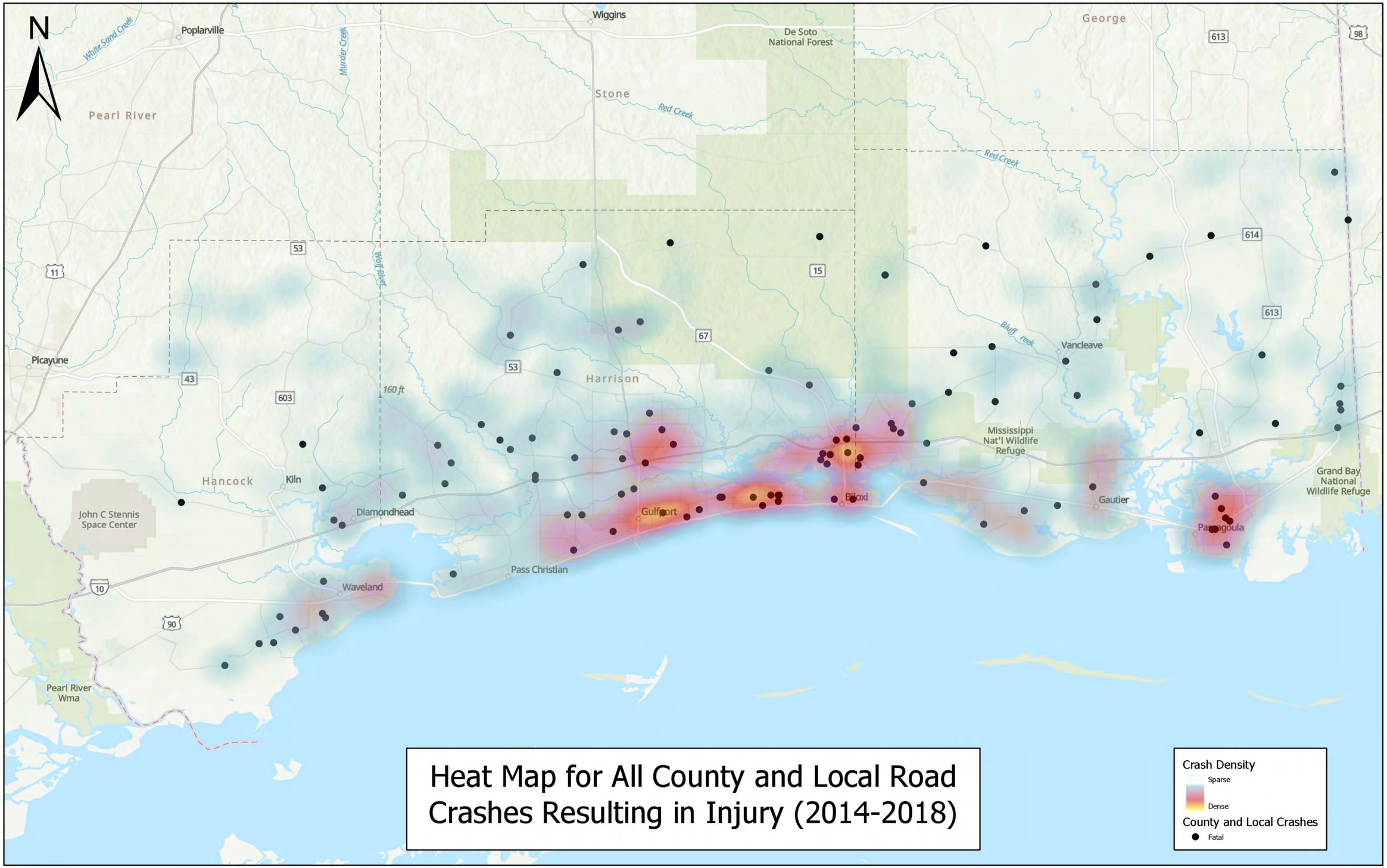
Engineering:

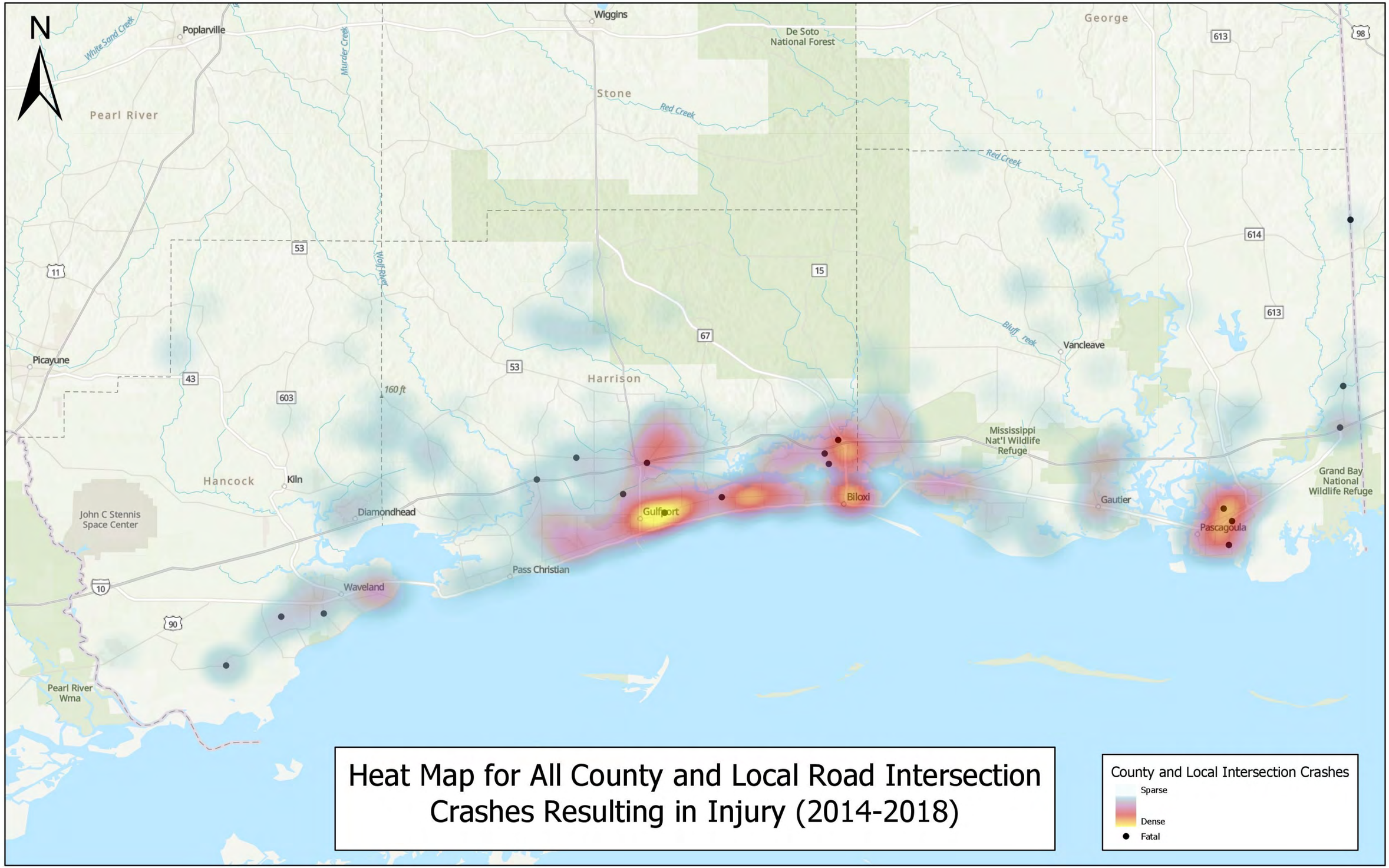
- Improve roadway maintenance on local roads. Aging roads, poor drainage, and limited signage can lead to accidents.
- Consider roadway materials in design (e.g., cold mix asphalt is slick when wet).
- Provide clear zones. Most county roads have limited clear zones and many city roads have obstructions in the clear zones that can make crashes more severe.
- Speed limit signs should be placed at each highway exit and after each major intersection on local roads.
- Add advance warning signs and pavement markings for curves and/or signs attenuated to speed.
- Utilize audible stripe to notify driver of lane departure.
- Continue to utilize edge rumble strips on roadways. Be careful with double center rumble strips which tend to pull vehicle.
- Many local streets lack pedestrian refuges (e.g., parking lots that are adjacent to roadways with no medians).
- Use traffic calming methods on older roadways, like Pass Road, which have high pedestrian/bicycle accident counts, and limited right-of-way.
  - ⇒ Roundabouts to reduce conflicts at intersections.
  - ⇒ Road "diets".
- Full lane separation or physical barrier between pedestrian/cyclist and vehicles where right-of-way is available and obtainable.
- Roadway design should center around keeping traffic flowing. Traffic backups lead to accidents.
- Design for all users, including bicyclist and pedestrians.
- Direct pedestrians to crosswalks
  - ⇒ Utilize median barriers or pedestrian fences to deter mid-block crossings.
  - ⇒ Provide more overhead crosswalks on Hwy 90 where pedestrians are crossing between the beach and businesses.
  - ⇒ Utilize art at intersections to draw pedestrians to crosswalks.
  - ⇒ Remove art/obstructions from highway medians to deter mid-block crossings for photo opportunities (e.g., Hurricane Katrina tree carvings).
  - ⇒ Look at reasons pedestrians cross when planning crosswalks in design.
  - ⇒ Be intentional in providing pedestrian crossings. Provide direct and frequent access to beaches, shopping, and local attractions.

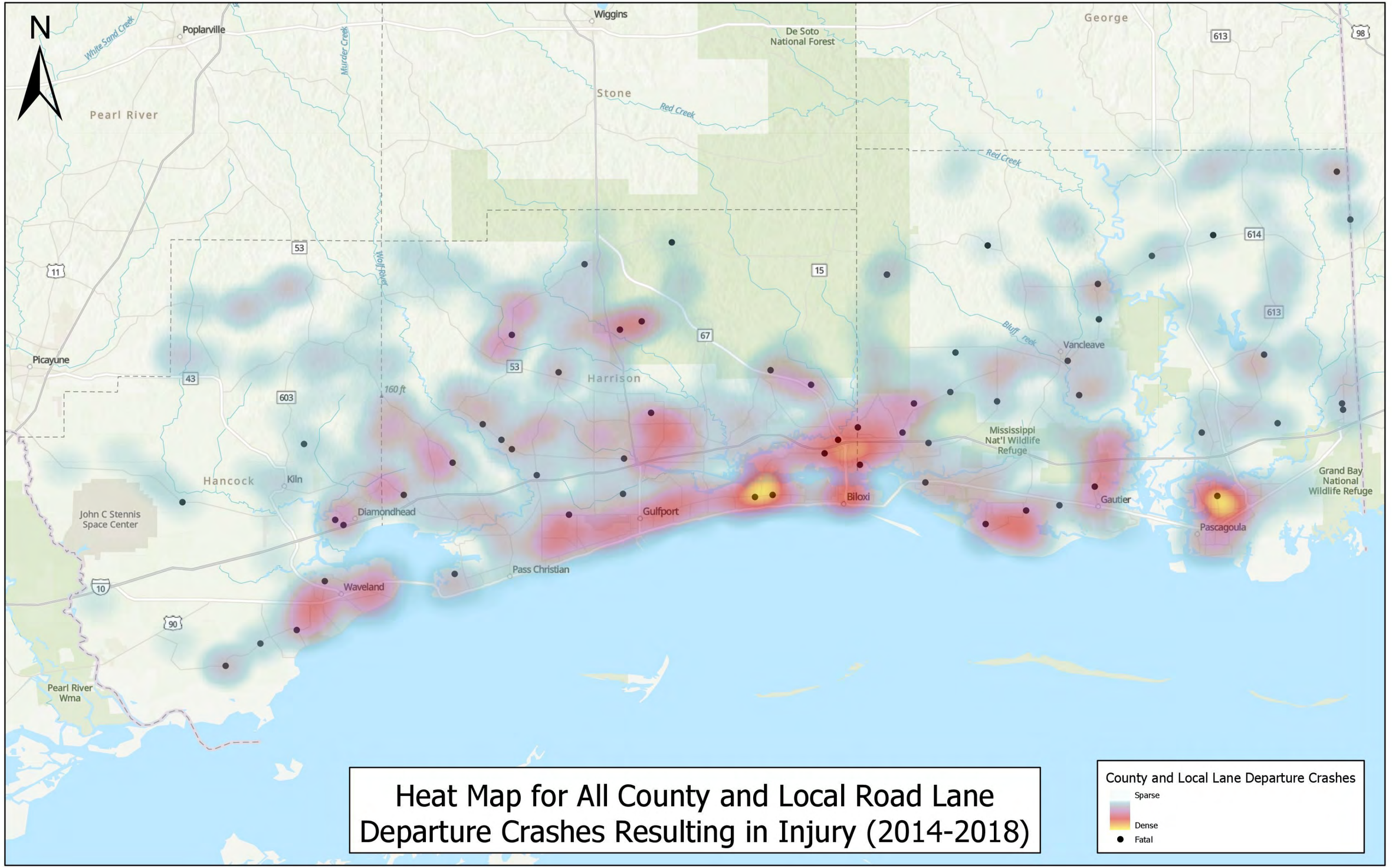
Education:

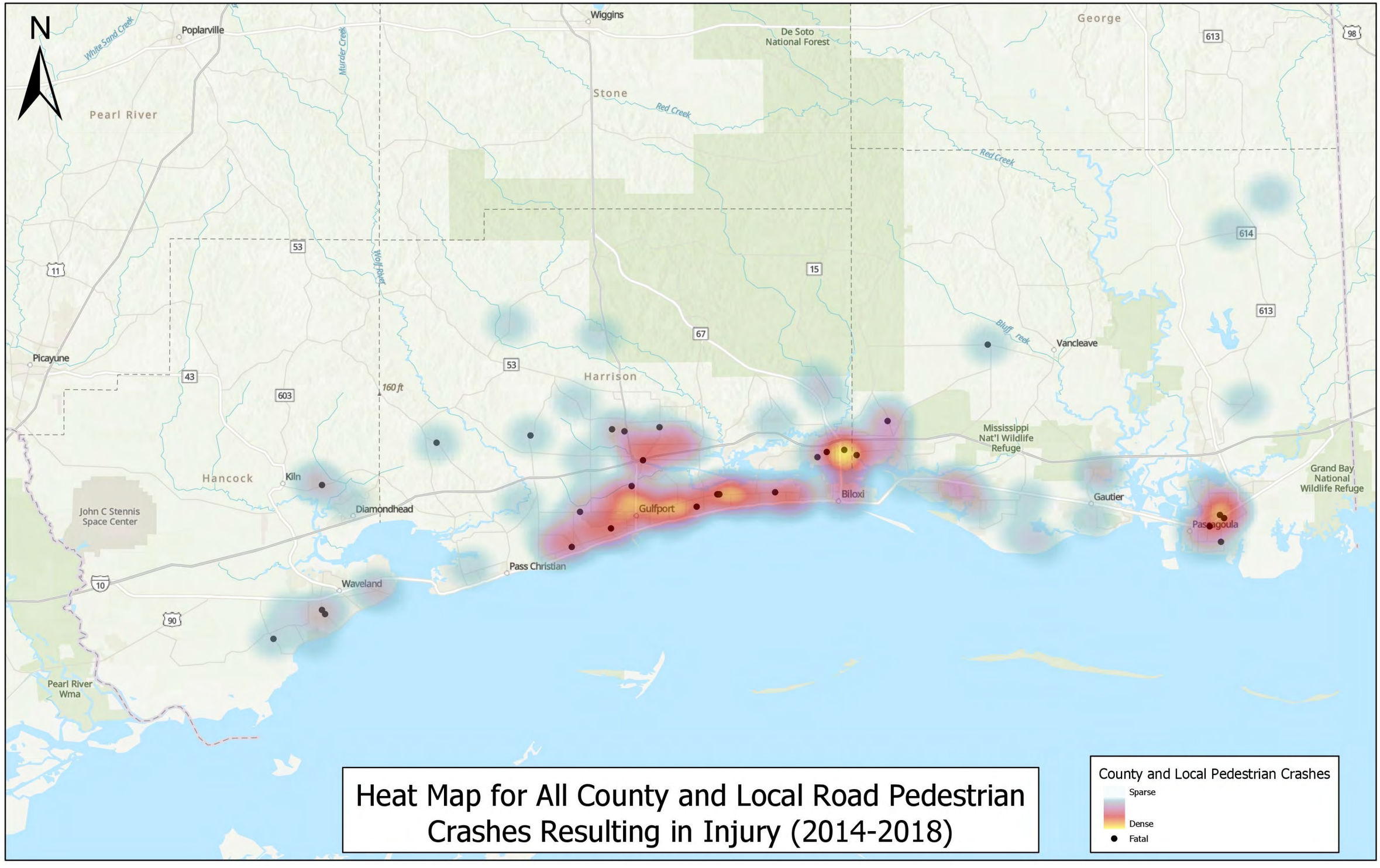
- Older drivers tend to sit closer to their steering wheel which may lead to more severe injuries or even death during minor crashes.
- Driver's Education program has effectively been phased out of public schools.
  - ⇒ MHP is now certified to teach these classes in schools.
  - ⇒ Young drivers would benefit with more road knowledge, especially defensive driving skills needed to prevent crashes.
  - ⇒ Utilize traffic school as a means to educate drivers in lieu of ticket fines. Ensure traffic school has a dedicated program, not just movies, to educate drivers.
- Utilize MDOT dynamic message signs for education.
- More student demonstrations on the consequences of poor driving behaviors.
- Educate road managers and municipalities on how to identify roadway issues and how to employ effective countermeasures.
- Utilize radio, TV, and social media for public service announcements (PSAs).
  - ⇒ Provide general roadway knowledge (e.g. speed limit on unmarked MS highways).
  - ⇒ Notify public of high pedestrian and bicycle volumes anticipated at special events and during tourism season.
  - ⇒ Educate bicyclist and pedestrians on proper shared-use pathway etiquette.
  - ⇒ Educate pedestrians and bicyclists on local road rules.
- Educate older drivers and caregivers on when to relinquish driver's license.
  - ⇒ MHP can send an officer to evaluate older drivers upon request.
  - ⇒ Enlist medical professionals to participate in helping caregivers and loved ones make these determinations.
- Smart car technologies.
  - ⇒ Technology helps the driver detect and correct poor judgement.
  - ⇒ Officers concerned that drivers will become too reliant on technology and not know how to respond when it fails.
- Educate parents on young driver crash data in order to give them the tools and resources to educate their young driver.
- Utilize parent programs, like Mothr's Against Drunk Driving (MADD), to speak to students and parents on personal experiences of vehicle crashes.
- Educate pedestrians on crosswalks and overhead crossings through maps. Provide these in hotels and tourism groups.
- Increase bicycle and pedestrian education on road rules and safety measures. Partner with local bike shops.

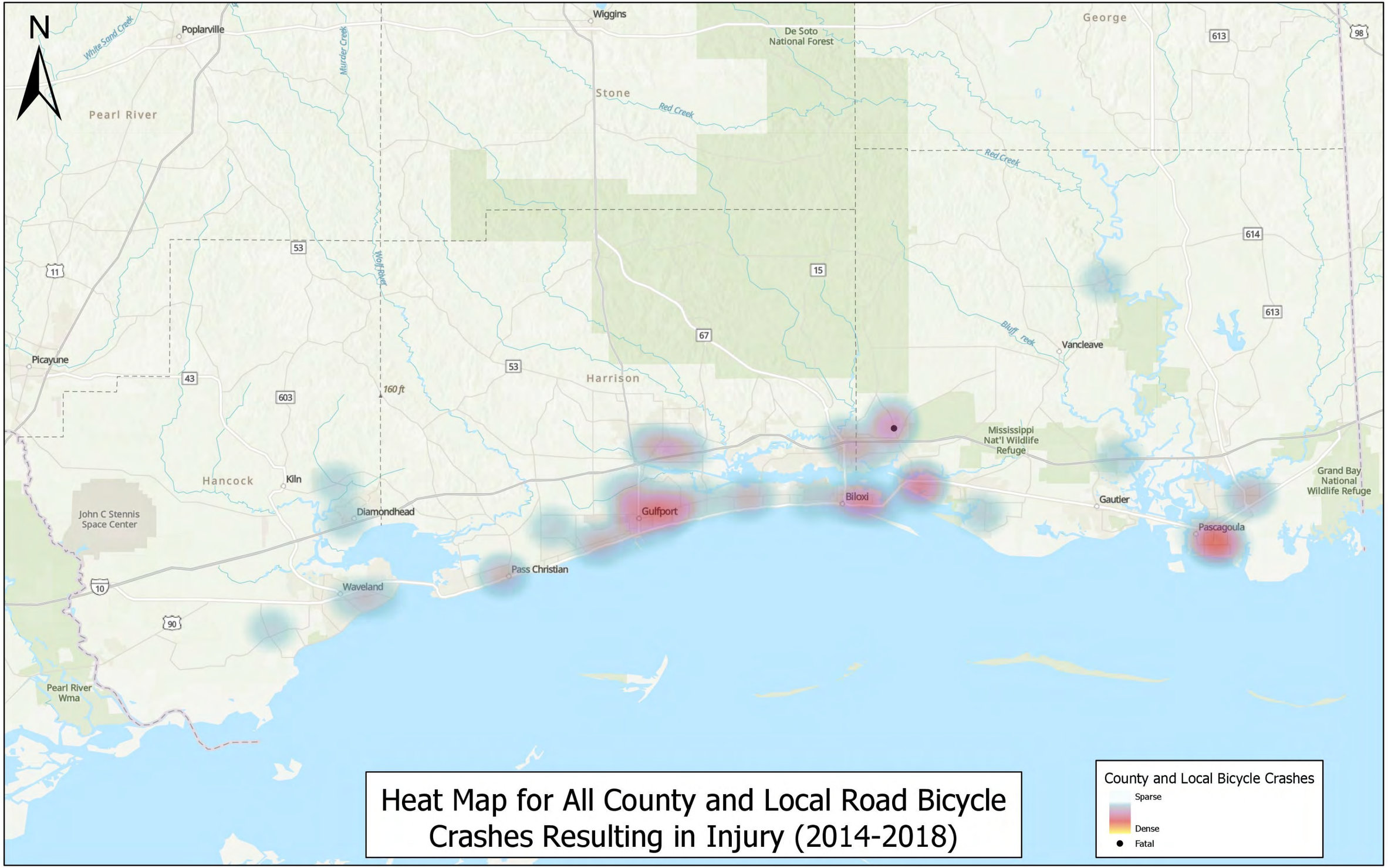
Appendix C-1: Heat Maps


N
Wiggins
Poplarville
White Sand Creek
Murder Creek
De Soto
National Forest
George
613
98
Stone
Red Creek
Pearl River
Red Creek
53
614
11
Wolf River
15
67
Bluff reek
Vancleave
613
Picayune
53
Harrison
43
603
160 ft
Mississippi
Nat'l Wildlife
Refuge
Grand Bay
National
Wildlife Refuge
Hancock
Kiln
Gautier
John C Stennis
Space Center
Diamondhead
Gulfport
Biloxi
Pascagoula
Pass Christian
10
Waveland
90
Pearl River
Wma
Heat Map for All County and Local Road
Crashes Resulting in Injury (2014-2018)
Crash Density
Sparse
Dense
County and Local Crashes
Fatal


N
White Sand Creek
Poplarville
Murder Creek
Wiggins
De Soto
National Forest
George
613
98
Stone
Red Creek
Pearl River
Red Creek
53
Wolf River
614
11
15
613
67
Bluff Creek
Vancleave
Picayune
53
Harrison
43
603
160 ft
Mississippi
Nat'l Wildlife
Refuge
Grand Bay
National
Wildlife Refuge
Hancock
Kiln
Biloxi
Gautier
John C Stennis
Space Center
Diamondhead
Gulfport
Pascagoula
Pass Christian
10
Waveland
90
Pearl River
Wma
Heat Map for All County and Local Road Intersection Crashes Resulting in Injury (2014-2018)
County and Local Intersection Crashes
Sparse
Dense
Fatal


N
Poplarville
White Sand Creek
Murder Creek
Wiggins
De Soto
National Forest
George
613
98
Stone
Red Creek
Pearl River
Red Creek
53
614
11
Wolf River
15
613
67
Bluff Creek
Vancleave
Picayune
43
53
Harrison
160 ft
603
Mississippi
Nat'l Wildlife
Refuge
Hancock
Kiln
Grand Bay
National
Wildlife Refuge
John C Stennis
Space Center
Diamondhead
Gulfport
Biloxi
Gautier
Pascagoula
Pass Christian
10
Waveland
90
Pearl River
Wma
Heat Map for All County and Local Road Lane Departure Crashes Resulting in Injury (2014-2018)
County and Local Lane Departure Crashes
Sparse
Dense
Fatal


N
Poplarville
White Sand Creek
Murder Creek
Wiggins
De Soto
National Forest
George
613
98
Stone
Red Creek
Pearl River
Red Creek
53
Wolf River
15
614
11
67
613
Bluff Creek
Vancleave
Picayune
53
Harrison
43
603
160 ft
Mississippi
Nat'l Wildlife
Refuge
Grand Bay
National
Wildlife Refuge
Hancock
Kiln
Biloxi
Gautier
John C Stennis
Space Center
Diamondhead
Gulfport
Pascagoula
Pass Christian
Waveland
10
90
Pearl River
Wma
Heat Map for All County and Local Road Pedestrian Crashes Resulting in Injury (2014-2018)
County and Local Pedestrian Crashes
Sparse
Dense
Fatal

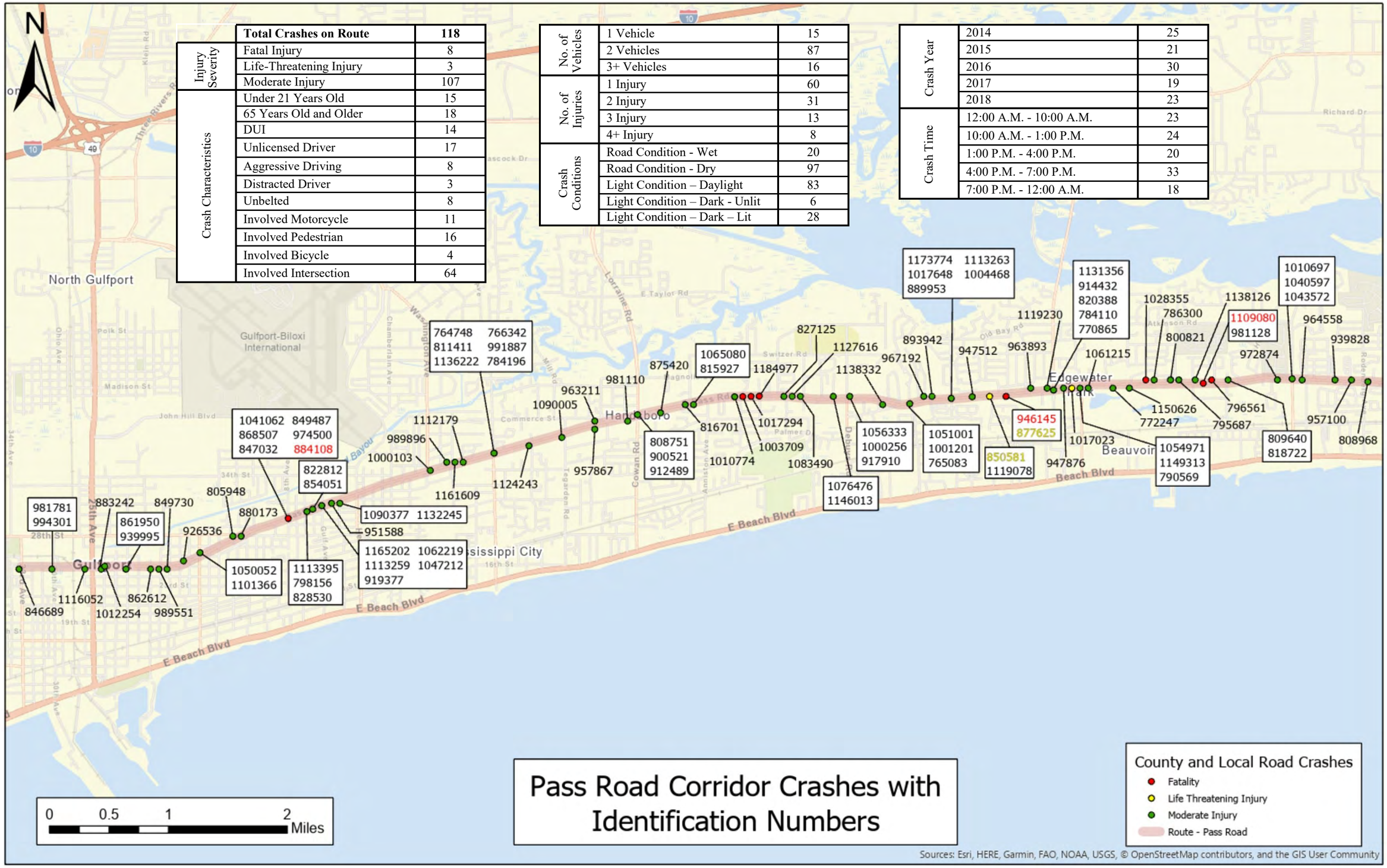

N
Poplarville
White Sand Creek
Murder Creek
Wiggins
De Soto
National Forest
George
613
98
Stone
Red Creek
Pearl River
Red Creek
53
614
11
Wolf River
15
613
67
Bluff Creek
Vancleave
Picayune
43
53
Harrison
603
160 ft
Mississippi
Nat'l Wildlife
Refuge
Hancock
Kiln
Grand Bay
National
Wildlife Refuge
Biloxi
Gautier
John C Stennis
Space Center
Diamondhead
Gulfport
Pascagoula
Pass Christian
Waveland
10
90
Pearl River
Wma
Heat Map for All County and Local Road Bicycle Crashes Resulting in Injury (2014-2018)
County and Local Bicycle Crashes
Sparse
Dense
Fatal

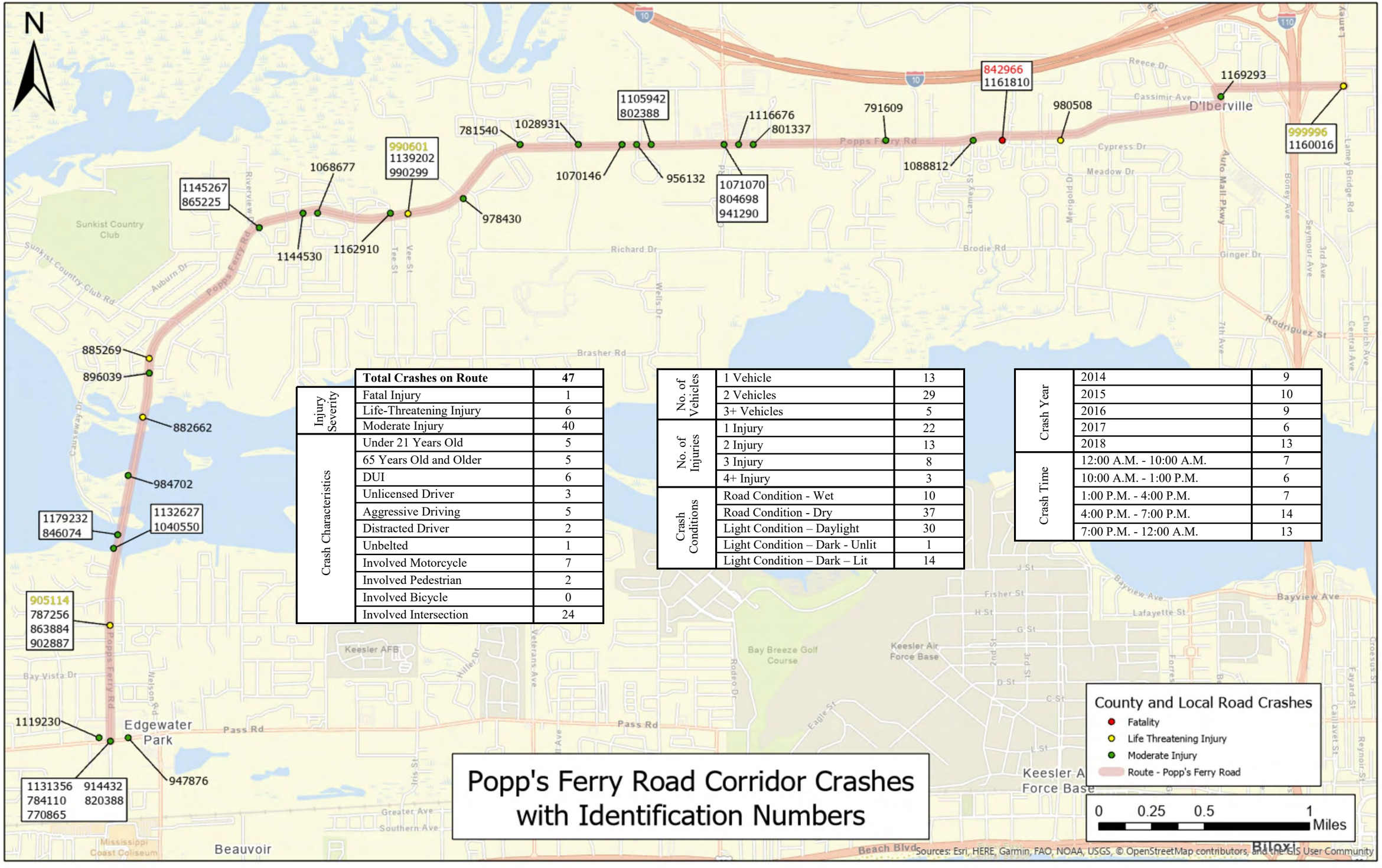
Appendix C-2: Route Analysis

	Total Crashes on Route	**118**
Injury Severity	Fatal Injury	8
	Life-Threatening Injury	3
	Moderate Injury	107
Crash Characteristics	Under 21 Years Old	15
	65 Years Old and Older	18
	DUI	14
	Unlicensed Driver	17
	Aggressive Driving	8
	Distracted Driver	3
	Unbelted	8
	Involved Motorcycle	11
	Involved Pedestrian	16
	Involved Bicycle	4
	Involved Intersection	64

No. of Vehicles	1 Vehicle	15
	2 Vehicles	87
	3+ Vehicles	16
No. of Injuries	1 Injury	60
	2 Injury	31
	3 Injury	13
	4+ Injury	8
Crash Conditions	Road Condition - Wet	20
	Road Condition - Dry	97
	Light Condition – Daylight	83
	Light Condition – Dark - Unlit	6
	Light Condition – Dark – Lit	28

Crash Year	2014	25
	2015	21
	2016	30
	2017	19
	2018	23
Crash Time	12:00 A.M. - 10:00 A.M.	23
	10:00 A.M. - 1:00 P.M.	24
	1:00 P.M. - 4:00 P.M.	20
	4:00 P.M. - 7:00 P.M.	33
	7:00 P.M. - 12:00 A.M.	18

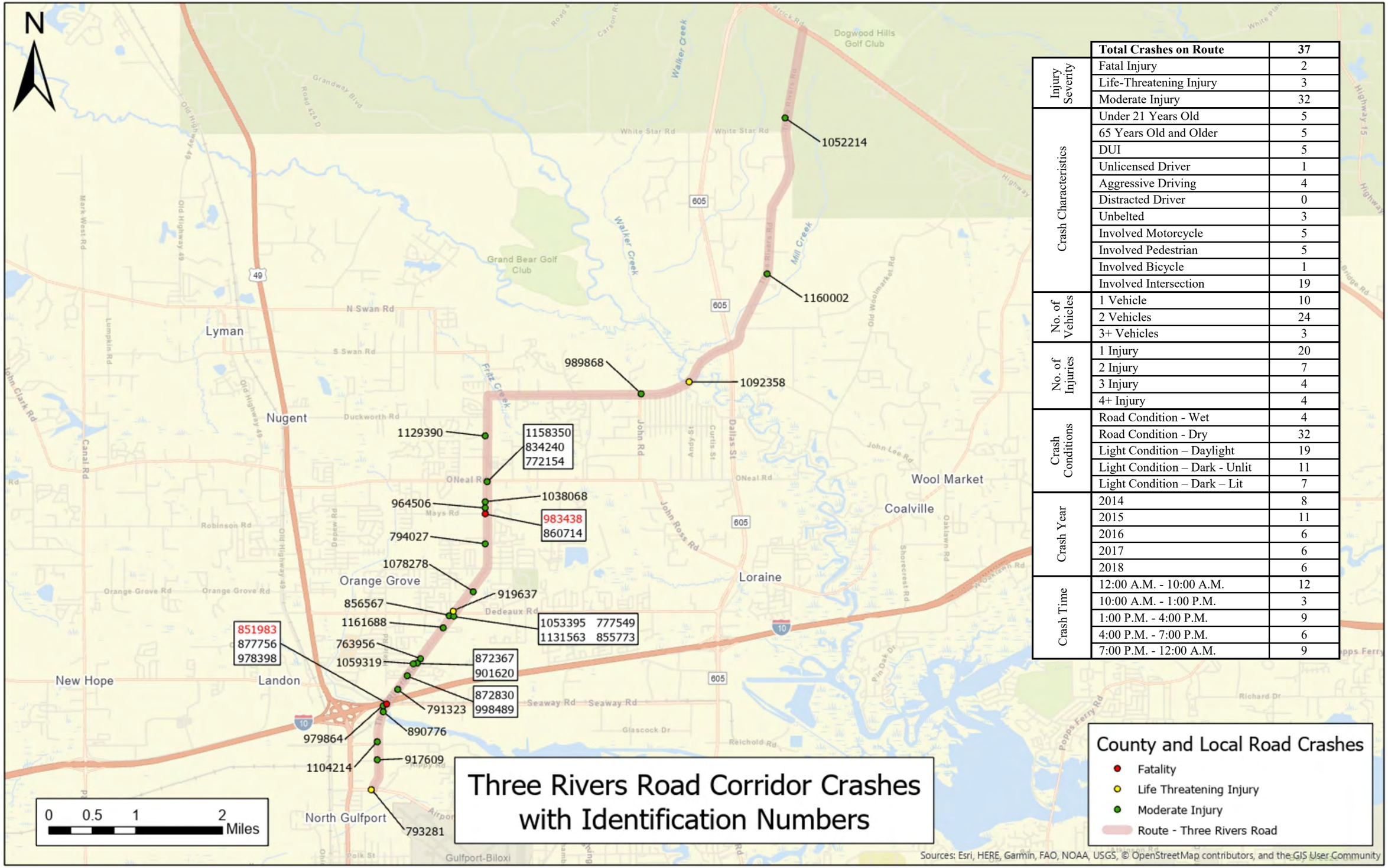




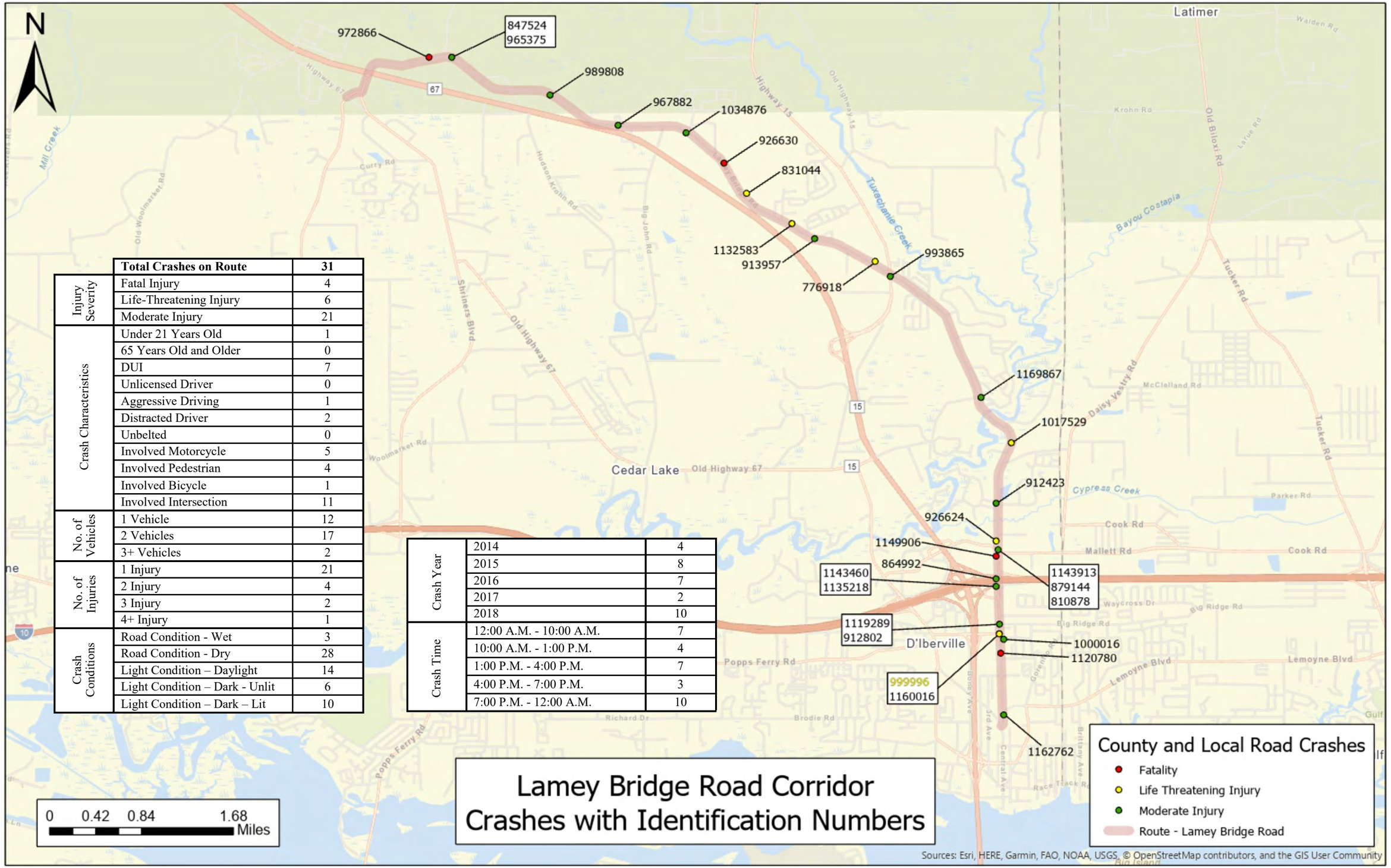
	Total Crashes on Route	**47**
Injury Severity	Fatal Injury	1
	Life-Threatening Injury	6
	Moderate Injury	40
Crash Characteristics	Under 21 Years Old	5
	65 Years Old and Older	5
	DUI	6
	Unlicensed Driver	3
	Aggressive Driving	5
	Distracted Driver	2
	Unbelted	1
	Involved Motorcycle	7
	Involved Pedestrian	2
	Involved Bicycle	0
	Involved Intersection	24

No. of Vehicles	1 Vehicle	13
	2 Vehicles	29
	3+ Vehicles	5
No. of Injuries	1 Injury	22
	2 Injury	13
	3 Injury	8
	4+ Injury	3
Crash Conditions	Road Condition - Wet	10
	Road Condition - Dry	37
	Light Condition – Daylight	30
	Light Condition – Dark - Unlit	1
	Light Condition – Dark – Lit	14

Crash Year	2014	9
	2015	10
	2016	9
	2017	6
	2018	13
Crash Time	12:00 A.M. - 10:00 A.M.	7
	10:00 A.M. - 1:00 P.M.	6
	1:00 P.M. - 4:00 P.M.	7
	4:00 P.M. - 7:00 P.M.	14
	7:00 P.M. - 12:00 A.M.	13

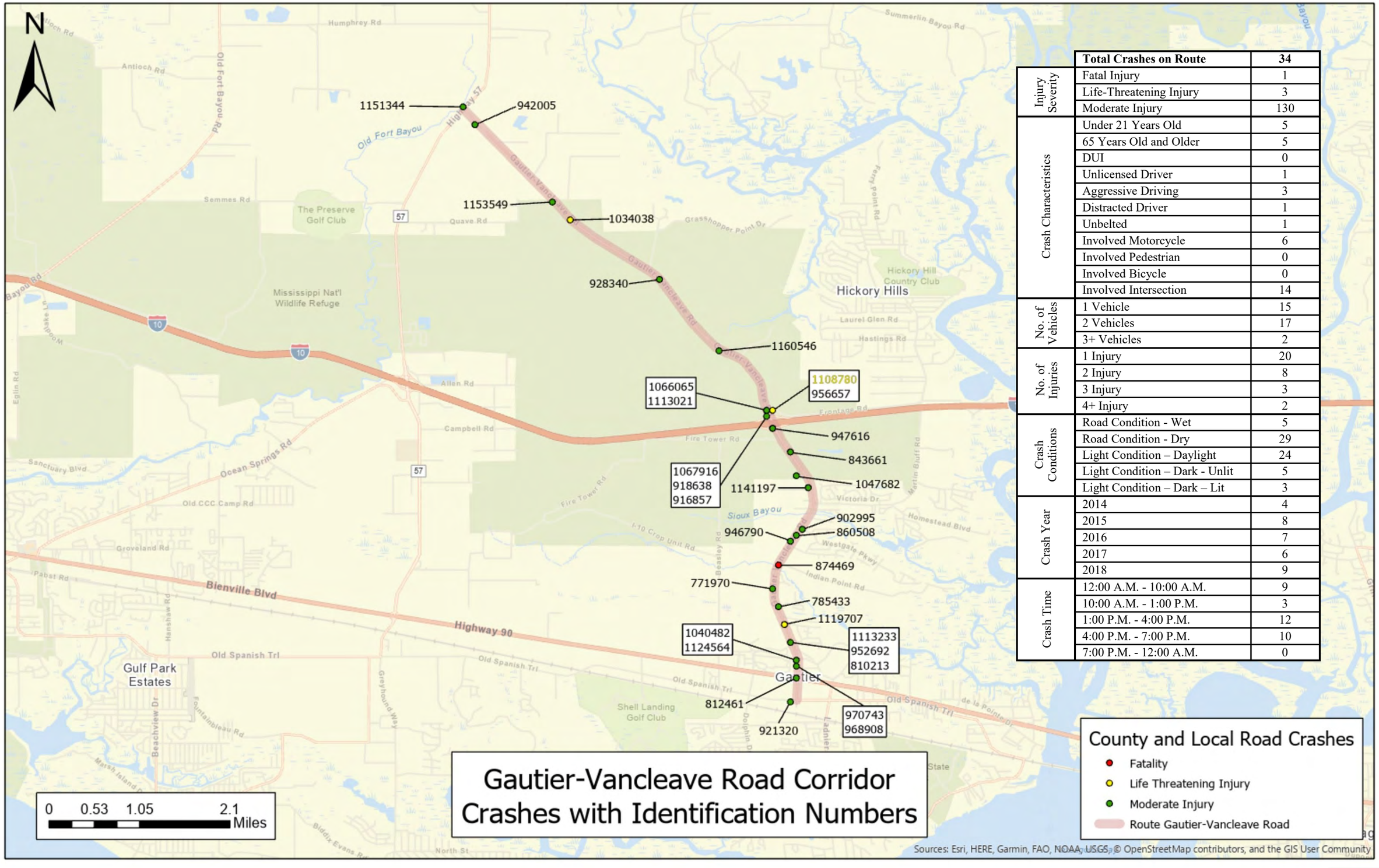


	Total Crashes on Route	**37**
Injury Severity	Fatal Injury	2
	Life-Threatening Injury	3
	Moderate Injury	32
Crash Characteristics	Under 21 Years Old	5
	65 Years Old and Older	5
	DUI	5
	Unlicensed Driver	1
	Aggressive Driving	4
	Distracted Driver	0
	Unbelted	3
	Involved Motorcycle	5
	Involved Pedestrian	5
	Involved Bicycle	1
	Involved Intersection	19
No. of Vehicles	1 Vehicle	10
	2 Vehicles	24
	3+ Vehicles	3
No. of Injuries	1 Injury	20
	2 Injury	7
	3 Injury	4
	4+ Injury	4
Crash Conditions	Road Condition - Wet	4
	Road Condition - Dry	32
	Light Condition – Daylight	19
	Light Condition – Dark - Unlit	11
	Light Condition – Dark – Lit	7
Crash Year	2014	8
	2015	11
	2016	6
	2017	6
	2018	6
Crash Time	12:00 A.M. - 10:00 A.M.	12
	10:00 A.M. - 1:00 P.M.	3
	1:00 P.M. - 4:00 P.M.	9
	4:00 P.M. - 7:00 P.M.	6
	7:00 P.M. - 12:00 A.M.	9



	Total Crashes on Route	**31**
Injury Severity	Fatal Injury	4
	Life-Threatening Injury	6
	Moderate Injury	21
Crash Characteristics	Under 21 Years Old	1
	65 Years Old and Older	0
	DUI	7
	Unlicensed Driver	0
	Aggressive Driving	1
	Distracted Driver	2
	Unbelted	0
	Involved Motorcycle	5
	Involved Pedestrian	4
	Involved Bicycle	1
	Involved Intersection	11
No. of Vehicles	1 Vehicle	12
	2 Vehicles	17
	3+ Vehicles	2
No. of Injuries	1 Injury	21
	2 Injury	4
	3 Injury	2
	4+ Injury	1
Crash Conditions	Road Condition - Wet	3
	Road Condition - Dry	28
	Light Condition – Daylight	14
	Light Condition – Dark - Unlit	6
	Light Condition – Dark – Lit	10

Crash Year	2014	4
	2015	8
	2016	7
	2017	2
	2018	10
Crash Time	12:00 A.M. - 10:00 A.M.	7
	10:00 A.M. - 1:00 P.M.	4
	1:00 P.M. - 4:00 P.M.	7
	4:00 P.M. - 7:00 P.M.	3
	7:00 P.M. - 12:00 A.M.	10

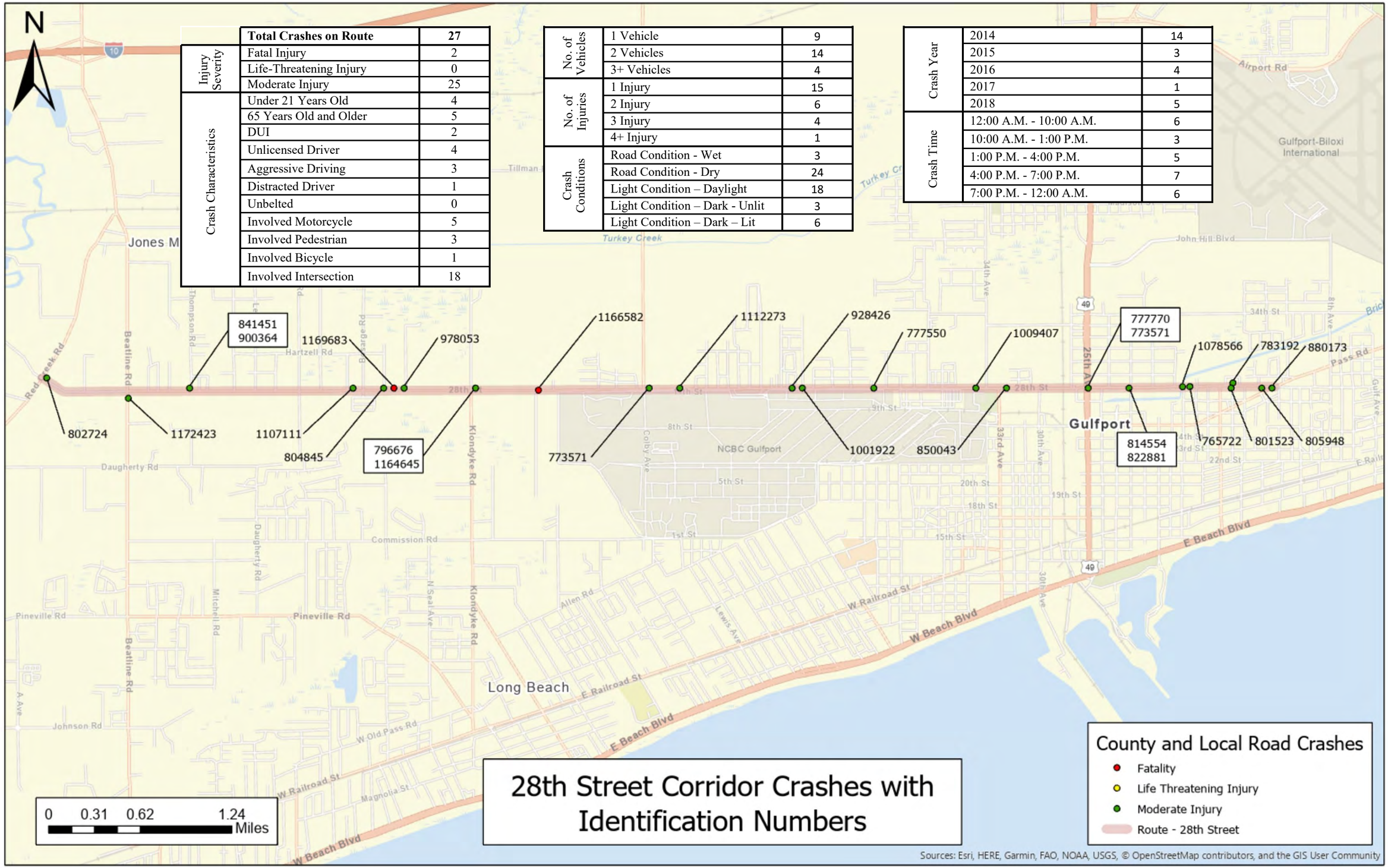


	Total Crashes on Route	**34**
Injury Severity	Fatal Injury	1
	Life-Threatening Injury	3
	Moderate Injury	130
Crash Characteristics	Under 21 Years Old	5
	65 Years Old and Older	5
	DUI	0
	Unlicensed Driver	1
	Aggressive Driving	3
	Distracted Driver	1
	Unbelted	1
	Involved Motorcycle	6
	Involved Pedestrian	0
	Involved Bicycle	0
	Involved Intersection	14
No. of Vehicles	1 Vehicle	15
	2 Vehicles	17
	3+ Vehicles	2
No. of Injuries	1 Injury	20
	2 Injury	8
	3 Injury	3
	4+ Injury	2
Crash Conditions	Road Condition - Wet	5
	Road Condition - Dry	29
	Light Condition – Daylight	24
	Light Condition – Dark - Unlit	5
	Light Condition – Dark – Lit	3
Crash Year	2014	4
	2015	8
	2016	7
	2017	6
	2018	9
Crash Time	12:00 A.M. - 10:00 A.M.	9
	10:00 A.M. - 1:00 P.M.	3
	1:00 P.M. - 4:00 P.M.	12
	4:00 P.M. - 7:00 P.M.	10
	7:00 P.M. - 12:00 A.M.	0

	Total Crashes on Route	27
Injury Severity	Fatal Injury	2
	Life-Threatening Injury	0
	Moderate Injury	25
Crash Characteristics	Under 21 Years Old	4
	65 Years Old and Older	5
	DUI	2
	Unlicensed Driver	4
	Aggressive Driving	3
	Distracted Driver	1
	Unbelted	0
	Involved Motorcycle	5
	Involved Pedestrian	3
	Involved Bicycle	1
	Involved Intersection	18

No. of Vehicles	1 Vehicle	9
	2 Vehicles	14
	3+ Vehicles	4
No. of Injuries	1 Injury	15
	2 Injury	6
	3 Injury	4
	4+ Injury	1
Crash Conditions	Road Condition - Wet	3
	Road Condition - Dry	24
	Light Condition – Daylight	18
	Light Condition – Dark - Unlit	3
	Light Condition – Dark – Lit	6

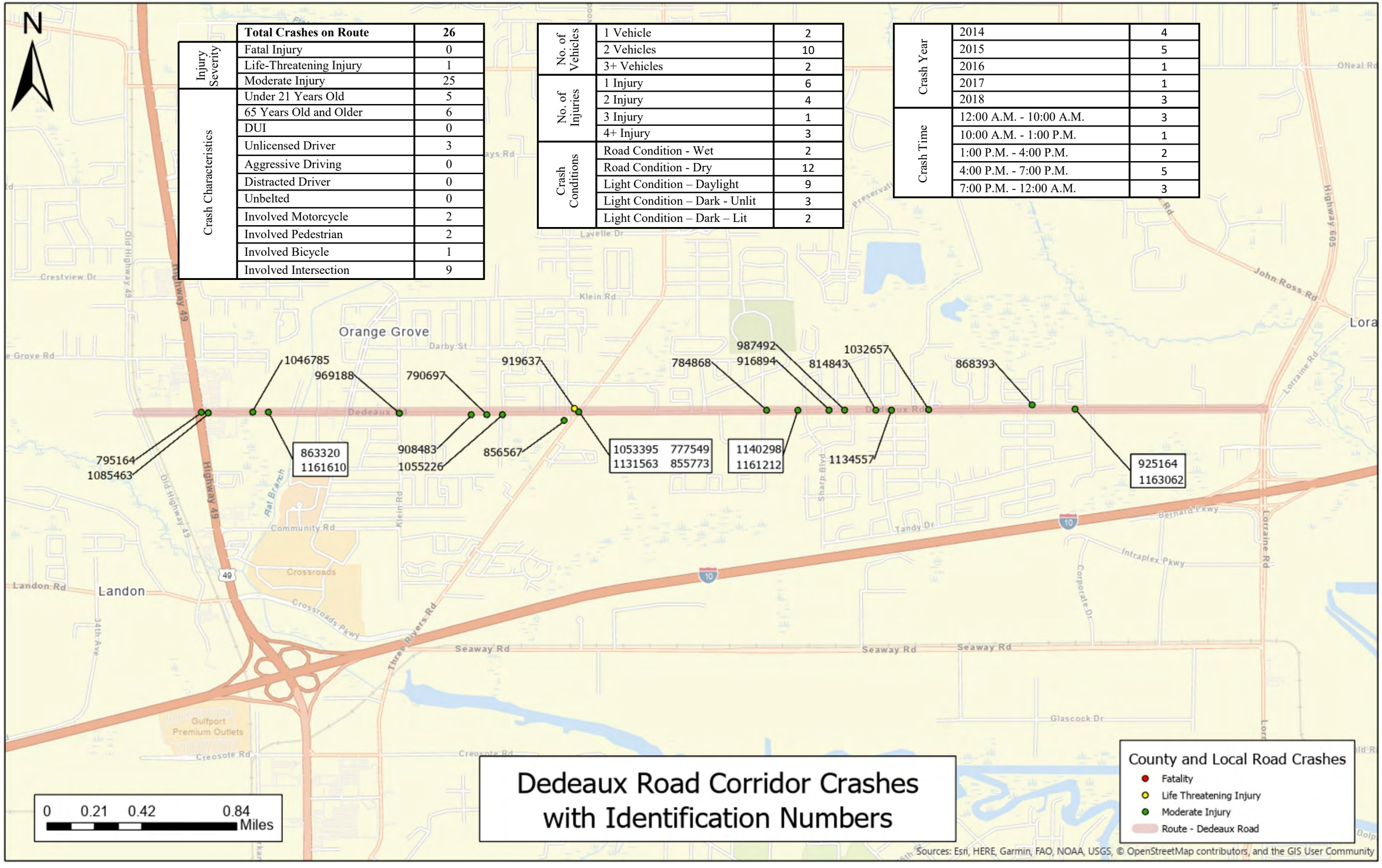
Crash Year	2014	14
	2015	3
	2016	4
	2017	1
	2018	5
Crash Time	12:00 A.M. - 10:00 A.M.	6
	10:00 A.M. - 1:00 P.M.	3
	1:00 P.M. - 4:00 P.M.	5
	4:00 P.M. - 7:00 P.M.	7
	7:00 P.M. - 12:00 A.M.	6



	Total Crashes on Route	**26**
Injury Severity	Fatal Injury	0
	Life-Threatening Injury	1
	Moderate Injury	25
Crash Characteristics	Under 21 Years Old	5
	65 Years Old and Older	6
	DUI	0
	Unlicensed Driver	3
	Aggressive Driving	0
	Distracted Driver	0
	Unbelted	0
	Involved Motorcycle	2
	Involved Pedestrian	2
	Involved Bicycle	1
	Involved Intersection	9

No. of Vehicles	1 Vehicle	2
	2 Vehicles	10
	3+ Vehicles	2
No. of Injuries	1 Injury	6
	2 Injury	4
	3 Injury	1
	4+ Injury	3
Crash Conditions	Road Condition - Wet	2
	Road Condition - Dry	12
	Light Condition – Daylight	9
	Light Condition – Dark - Unlit	3
	Light Condition – Dark – Lit	2

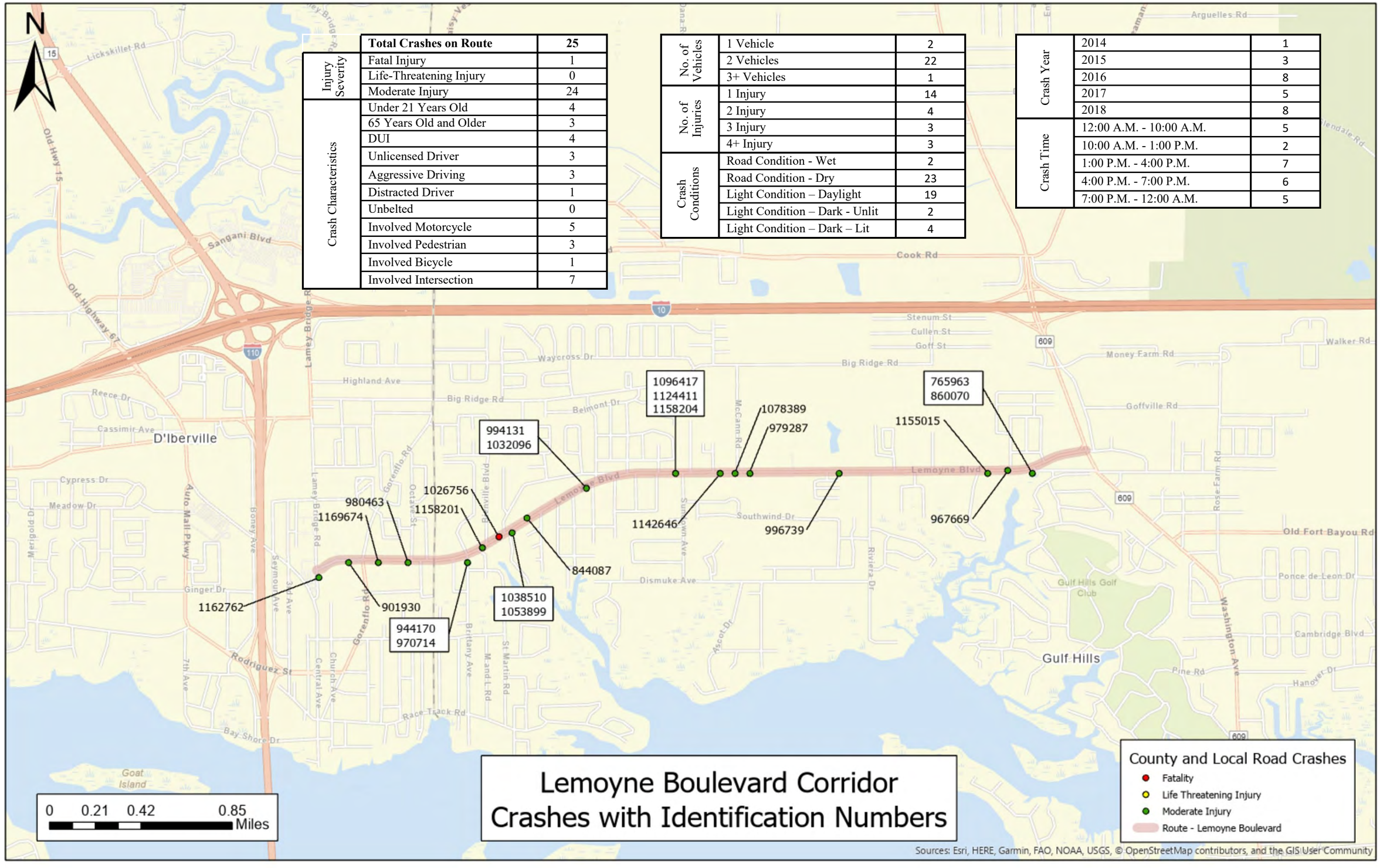
Crash Year	2014	4
	2015	5
	2016	1
	2017	1
	2018	3
Crash Time	12:00 A.M. - 10:00 A.M.	3
	10:00 A.M. - 1:00 P.M.	1
	1:00 P.M. - 4:00 P.M.	2
	4:00 P.M. - 7:00 P.M.	5
	7:00 P.M. - 12:00 A.M.	3

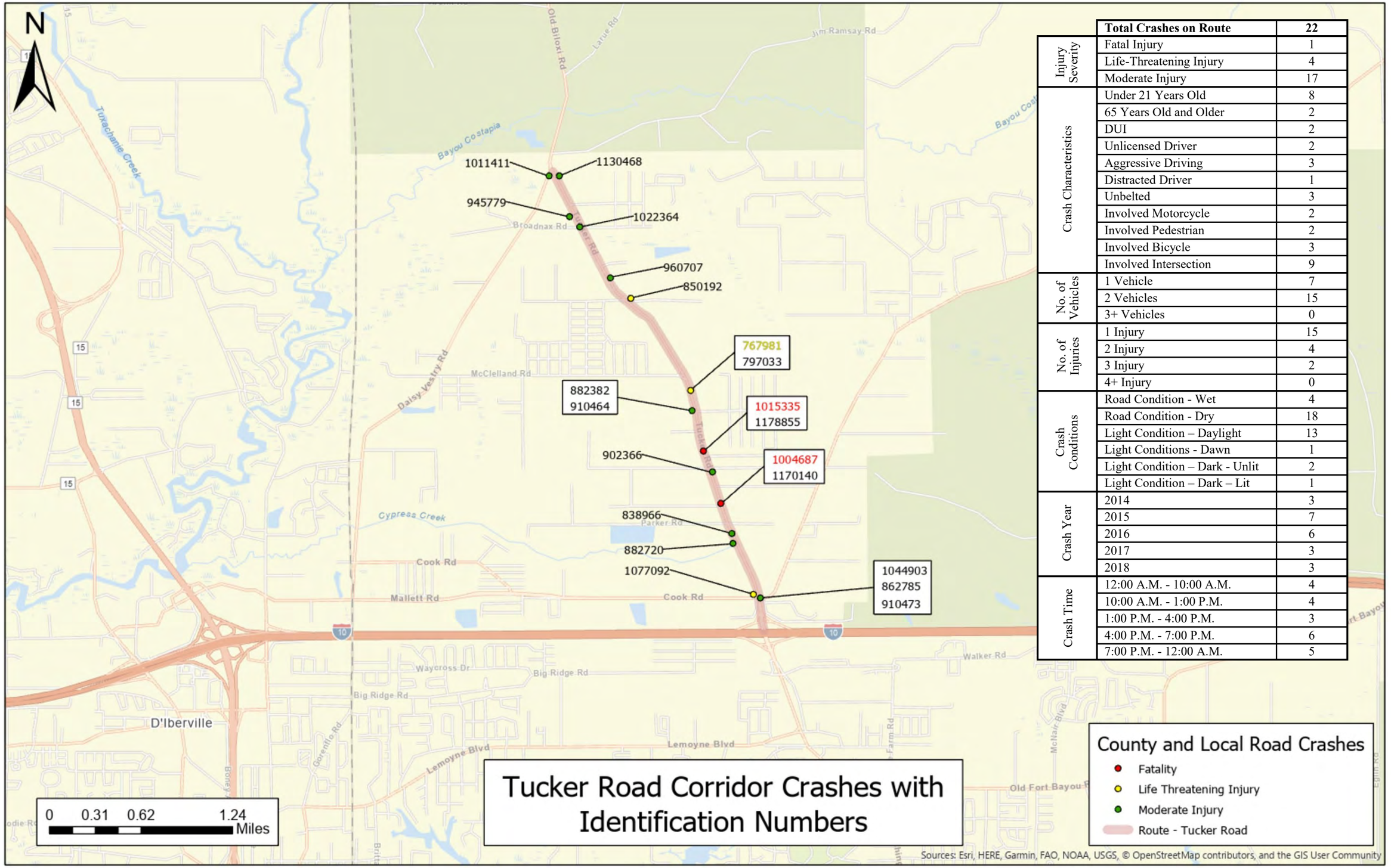


	Total Crashes on Route	**25**
Injury Severity	Fatal Injury	1
	Life-Threatening Injury	0
	Moderate Injury	24
Crash Characteristics	Under 21 Years Old	4
	65 Years Old and Older	3
	DUI	4
	Unlicensed Driver	3
	Aggressive Driving	3
	Distracted Driver	1
	Unbelted	0
	Involved Motorcycle	5
	Involved Pedestrian	3
	Involved Bicycle	1
	Involved Intersection	7

No. of Vehicles	1 Vehicle	2
	2 Vehicles	22
	3+ Vehicles	1
No. of Injuries	1 Injury	14
	2 Injury	4
	3 Injury	3
	4+ Injury	3
Crash Conditions	Road Condition - Wet	2
	Road Condition - Dry	23
	Light Condition – Daylight	19
	Light Condition – Dark - Unlit	2
	Light Condition – Dark – Lit	4

Crash Year	2014	1
	2015	3
	2016	8
	2017	5
	2018	8
Crash Time	12:00 A.M. - 10:00 A.M.	5
	10:00 A.M. - 1:00 P.M.	2
	1:00 P.M. - 4:00 P.M.	7
	4:00 P.M. - 7:00 P.M.	6
	7:00 P.M. - 12:00 A.M.	5





	Total Crashes on Route	**22**
Injury Severity	Fatal Injury	1
	Life-Threatening Injury	4
	Moderate Injury	17
Crash Characteristics	Under 21 Years Old	8
	65 Years Old and Older	2
	DUI	2
	Unlicensed Driver	2
	Aggressive Driving	3
	Distracted Driver	1
	Unbelted	3
	Involved Motorcycle	2
	Involved Pedestrian	2
	Involved Bicycle	3
	Involved Intersection	9
No. of Vehicles	1 Vehicle	7
	2 Vehicles	15
	3+ Vehicles	0
No. of Injuries	1 Injury	15
	2 Injury	4
	3 Injury	2
	4+ Injury	0
Crash Conditions	Road Condition - Wet	4
	Road Condition - Dry	18
	Light Condition – Daylight	13
	Light Conditions - Dawn	1
	Light Condition – Dark - Unlit	2
	Light Condition – Dark – Lit	1
Crash Year	2014	3
	2015	7
	2016	6
	2017	3
	2018	3
Crash Time	12:00 A.M. - 10:00 A.M.	4
	10:00 A.M. - 1:00 P.M.	4
	1:00 P.M. - 4:00 P.M.	3
	4:00 P.M. - 7:00 P.M.	6
	7:00 P.M. - 12:00 A.M.	5

Intersections - Supplemental

Strategies to Reduce Intersection Crashes

1. Modify existing signals to include a flashing yellow arrow and regulatory signage.
2. Modify existing intersection to include dedicated left turn lane.
3. Refresh intersection pavement markings.
4. Upgrade signals to include mast arms, backplate, and retroreflective border.
5. Provide advanced warning for stop-controlled intersections.
6. Increase police presence at intersections which routinely have aggressive drivers or drivers that fail to obey traffic signs/signals.
7. Reduce speeds through major intersections where routine aggressive driving is reported.
8. Evaluate priority intersection for implementation of a roundabout.
9. Grade separation.
10. Raised intersection.
11. Improve sightlines.
12. Install street lighting.

US 90 & Lakeshore Road

Hancock County

Intersection Notes There is no traffic signal at this intersection.		***Crash Rate:*** *Very High*
Crash Analysis There were 6 crashes with injury and no fatalities during the 3-year analysis period. There were four angle crashes and two rear-end crashes.		
Possible Countermeasures • Add traffic signal or flashing yellow signal. • Reduce speeds through intersection. • Evaluate intersection for implementation of a roundabout. • Provide advanced warning for intersection		

US 90 & Kiln Waveland Cutoff

Waveland, Hancock County

Intersection Notes	***Crash Rate:***
There is a traffic signal at this intersection. It is the first traffic signal entering the City from the West. Some of the turn lanes appear to be narrow.	*High*

Crash Analysis

There were 10 crashes with injury and no fatalities during the 3-year analysis period. Half of the crashes were rear-end crashes. All but one of the crashes were in the daylight.

Possible Countermeasures

- Provide advanced warning for intersection.
- Improve length and width of turn lanes

US 90 & Dunbar Avenue

Bay Saint Louis, Hancock County

Intersection Notes	***Crash Rate:***
There is a traffic signal at this intersection. The intersection is slightly skewed.	*Very High*

Crash Analysis

There were eight crashes with injury and no fatalities during the 3-year analysis period. Five of the crashes were angle crashes. All of the crashes were in the daylight.

Possible Countermeasures

- Reconfigure skewed intersection to 90 degrees

Kiln Delisle Road & Kapalama Road

Hancock County

Intersection Notes A new grocery store/convenience store opened here and is causing traffic problems.	***Crash Rate:*** *High*
Crash Analysis There were two crashes with injury and no fatalities during the 3-year analysis period. Both crashes occurred in 2022 after the opening of a store. The two crashes were angle and left turn crashes.	
Possible Countermeasures • Add signal or flashing yellow signal. • Reduce speeds through intersection. • Evaluate intersection for implementation of a roundabout. • Provide advanced warning for intersection. • Improve access management.	

Pineville Road & Old Pass Road

Long Beach, Harrison County

Intersection Notes This is an unsignalized intersection.	***Crash Rate:*** *Very High*
Crash Analysis There were three crashes with injury and no fatalities during the 3-year analysis period. The three crashes were all angle crashes. All crashes occurred in daylight.	
Possible Countermeasures • Add traffic signal or flashing yellow signal. • Reduce speeds through intersection. • Evaluate intersection for implementation of a roundabout. • Improve access management. • Add left turn lanes	

42nd Avenue & West Railroad Street

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is an unsignalized intersection. The intersection is slightly skewed.	*Very High*

Crash Analysis

There were seven crashes with injury and no fatalities during the 3-year analysis period. The seven crashes were all angle crashes. All crashes occurred in daylight

Possible Countermeasures

- Add signal or flashing yellow signal.
- Reduce speeds through intersection.
- Improve intersection skew to 90 degrees.
- Add left turn lanes.

30th Avenue and 17th Street

Gulfport, Harrison County

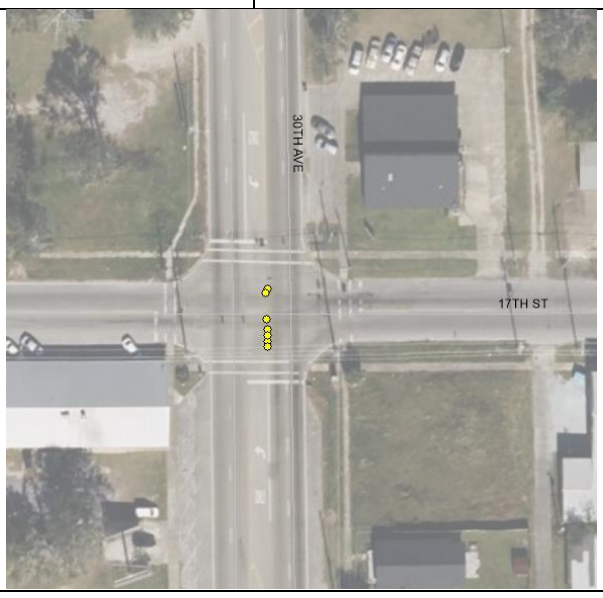
Intersection Notes	***Crash Rate:***
This is a signalized intersection.	*High*

Crash Analysis

There were seven crashes with injury and no fatalities during the 3-year analysis period. The seven crashes were all angle crashes. All crashes except one occurred in daylight.

Possible Countermeasures

- Reduce speeds through intersection.
- Upgrade traffic signals with backing plate.



US 49 & 28th Street

Gulfport, Harrison County

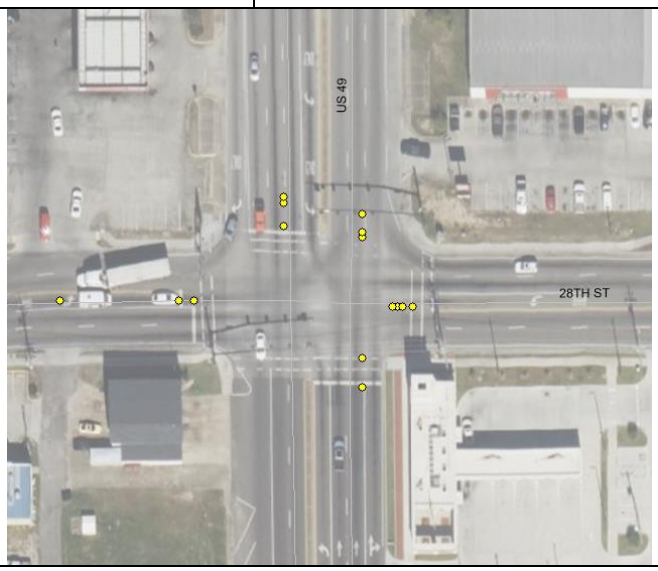
Intersection Notes	***Crash Rate:***
This is a signalized intersection.	*High*

Crash Analysis

There were 16 crashes with injury and no fatalities during the 3-year analysis period. There were a significant number of left turn crashes westbound turning south.

Possible Countermeasures

- Reduce speeds through intersection.
- Upgrade traffic signals with backing plate.
- Investigate issues with turning lanes.



US 49 & 34th Street

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is a signalized intersection with left and right turn lanes on all approaches.	*High*

Crash Analysis

There were 14 crashes with injury and no fatalities during the 3-year analysis period. The majority of the crashes were left turn crashes.

Possible Countermeasures

- Reduce speeds through intersection.
- Upgrade traffic signals with backing plate.
- Investigate issues with turning lanes.

Pass Road & 18th Avenue

Gulfport, Harrison County

Intersection Notes This is a non-signalized intersection with the minor approaches being a local road.	***Crash Rate:*** *High*
Crash Analysis There were four crashes with injury and no fatalities during the 3-year analysis period. The crashes were a mix of types. There being very little traffic coming from the minor approach produced a high crash rate.	
Possible Countermeasures • Reduce speeds through intersection. • Add left and right turning lanes.	

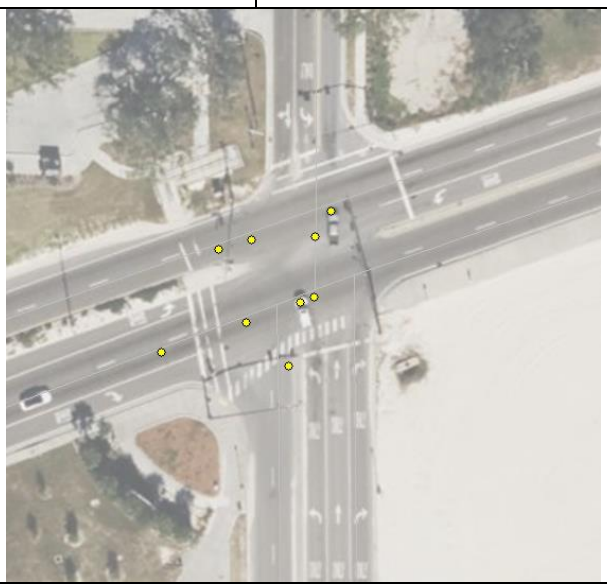
Pass Road & 8th Avenue

Gulfport, Harrison County

Intersection Notes This is a signalized intersection with no turn lanes.	***Crash Rate:*** *High*
Crash Analysis There were six crashes with injury and no fatalities during the 3-year analysis period. The crashes were left turn and rear-end crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Upgrade traffic signals with backing plate. • Add left and right turning lanes.	

US 90 & 20th Avenue

Gulfport, Harrison County

Intersection Notes This is a signalized intersection with left turn lanes on all approaches.	***Crash Rate:*** *High*
Crash Analysis There were eight crashes with injury and one fatality during the 3-year analysis period. The majority of the crashes are left turn crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Investigate issues with turning lanes. • Upgrade traffic signals with backing plate.	

East Railroad Street & Pratt Avenue

Gulfport, Harrison County

Intersection Notes This is a non-signalized intersection with no turn lanes.	***Crash Rate:*** *Very High*
Crash Analysis There were four crashes with injury and no fatalities during the 3-year analysis period. The crashes were all angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Add left and right turning lanes. • Install stop signs on East Railroad Street	

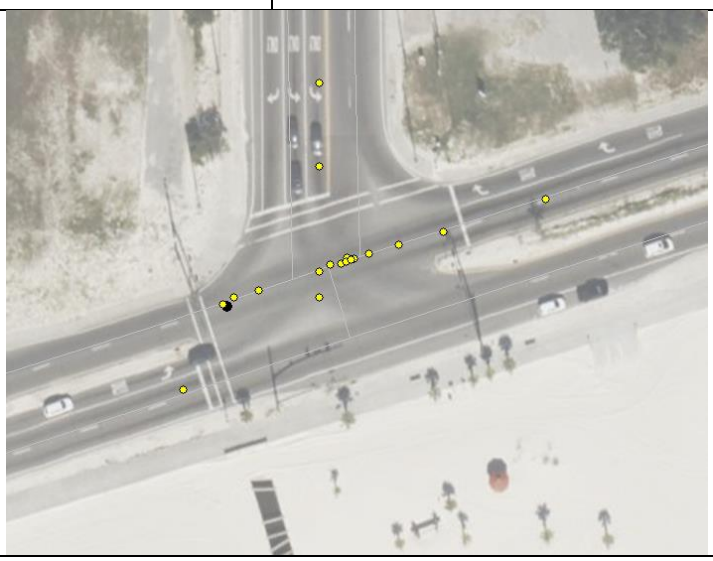
Pass Road & Washington Avenue

Gulfport, Harrison County

Intersection Notes This is a signalized intersection with no left-turn lanes.	***Crash Rate:*** *High*
Crash Analysis There were nine crashes with injury and no fatalities during the 3-year analysis period. The crashes were a mix of rear-end and angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Upgrade traffic signals with backing plate. • Improve intersection pavement markings and geometry. • Add left-turn lanes.	

US 90 & Cowan Road

Gulfport, Harrison County

Intersection Notes This is a signalized intersection with left-turn lanes and a double left turn lane southbound.	***Crash Rate:*** *Very High*
Crash Analysis There were 19 crashes with injury and no fatalities during the 3-year analysis period. 6 crashes were angle crashes, 6 were left-turn, and 4 were rear-end, and 2 were other types.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines.	

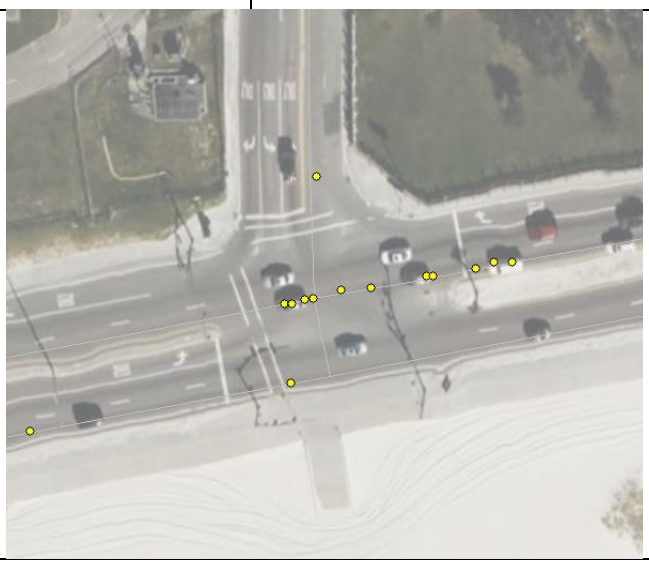
US 49 & Creosote Road

Gulfport, Harrison County

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *High*
Crash Analysis There were 24 crashes with injury and no fatalities during the 3-year analysis period. 8 of the crashes were angle crashes and 16 were rear-end.	
Possible Countermeasures • Reduce speeds through intersection. • Upgrade traffic signals with backing plate.	

US 90 & Beauvior Road

Biloxi, Harrison County

Intersection Notes This is a signalized intersection with left-turn lanes and a double left turn lane southbound.	***Crash Rate:*** *High*
Crash Analysis There were 14 crashes with injury and no fatalities during the 3-year analysis period. Half of the crashes were rear-end type.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines.	

I-110 & US 90

Biloxi, Harrison County

Intersection Notes This is a non-signalized intersection.	***Crash Rate:*** *Very High*
Crash Analysis There were 24 crashes with injury and no fatalities during the 3-year analysis period. The crashes shown on the map on the ramp are all run-off-the-road and the one merging on to US 90 are angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve merging.	

Community Road & David Street

Gulfport, Harrison County

Intersection Notes This is an un-signalized intersection with left-turn lanes	***Crash Rate:*** *Very High*
Crash Analysis There were 9 crashes with injury and no fatalities during the 3-year analysis period. All the crashes were angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Add signal or flashing yellow signal.	

MS 605 & John Ross Road

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is a signalized intersection with left turn lanes.	*Very High*

Crash Analysis

There were 14 crashes with injury and no fatalities during the 3-year analysis period. 12 of the crashes were left-turn crashes.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Improve intersection pavement markings and geometry.

Three Rivers Road & Duckworth Road

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is a flashing yellow signal at this intersection with no left-turn lanes	*Very High*

Crash Analysis

There were 5 crashes with injury and no fatalities during the 3-year analysis period. 4 of the crashes were angle crashes.

Possible Countermeasures

- Reduce speeds through intersection.
- Improve sight lines.
- Add signal or 4-way stop.

MS 605 & Three Rivers Road

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is a un signalized intersection.	*Very High*

Crash Analysis

There were 13 crashes with injury and no fatalities during the 3-year analysis period. 12 of the crashes were angle crashes.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Improve intersection pavement markings and geometry.
- Add signal.

US 49 & MS 53

Gulfport, Harrison County

Intersection Notes	***Crash Rate:***
This is a signalized intersection	*High*

Crash Analysis

There were 11 crashes with injury and no fatalities during the 3-year analysis period. There were 9 rear-end crashes and 2 angle crashes.

Possible Countermeasures

- Reduce speeds through intersection.
- Improve sight lines.

Old Hwy 49 & West Wortham Road

Harrison County

Intersection Notes This is a un signalized intersection four-way stop.	***Crash Rate:*** *Very High*
Crash Analysis There were 3 crashes with injury and no fatalities during the 3-year analysis period. 2 of the crashes were angle crashes and the other was rear-end.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry. • Add signal. • Add turn lanes.	

US 49 & West Wortham Road

Harrison County

Intersection Notes This is a signalized intersection with left turn lanes on the major approaches.	***Crash Rate:*** *Very High*
Crash Analysis There were 8 crashes with injury and 1 fatality during the 3-year analysis period. There were 4 angle crashes and the other 4 were a mix of crash types.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines.	

US 49 & East Wortham Road

Harrison County

Intersection Notes This is a un signalized intersection.	***Crash Rate:*** *Very High*
Crash Analysis There were 7 crashes with injury and 1 fatality during the 3-year analysis period. 6 of the crashes were angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry. • Add signal.	

Saucier Lizana Road & West Wortham Road

Harrison County

Intersection Notes This is a unsignalized two-way stop intersection flashing light.	***Crash Rate:*** *Very High*
Crash Analysis There were 3 crashes with injury and no fatalities during the 3-year analysis period. There were 2 angle crashes and 1 left turn crash.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Improve intersection pavement markings and geometry. • Add turn lanes.	

Orchard Road & Bayou Cassotte Parkway

Pascagoula

Intersection Notes This is a un signalized intersection with a two-way stop.	***Crash Rate:*** *Very High*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period. The crashes were mix of crash types.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Add signal.

MS 63 & Grierson Street

Moss Point

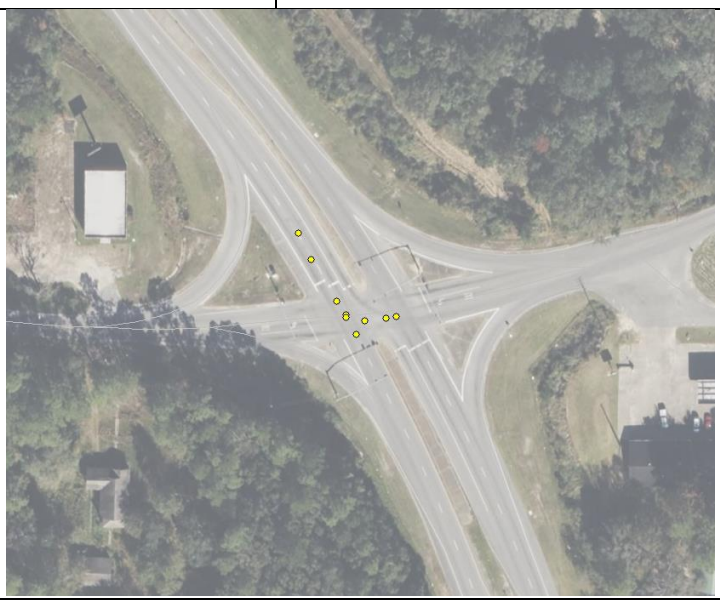
Intersection Notes This is a signalized intersection.	***Crash Rate:*** *High*

Crash Analysis

There were 9 crashes with injury and no fatalities during the 3-year analysis period. The crashes were a mix of crash types.

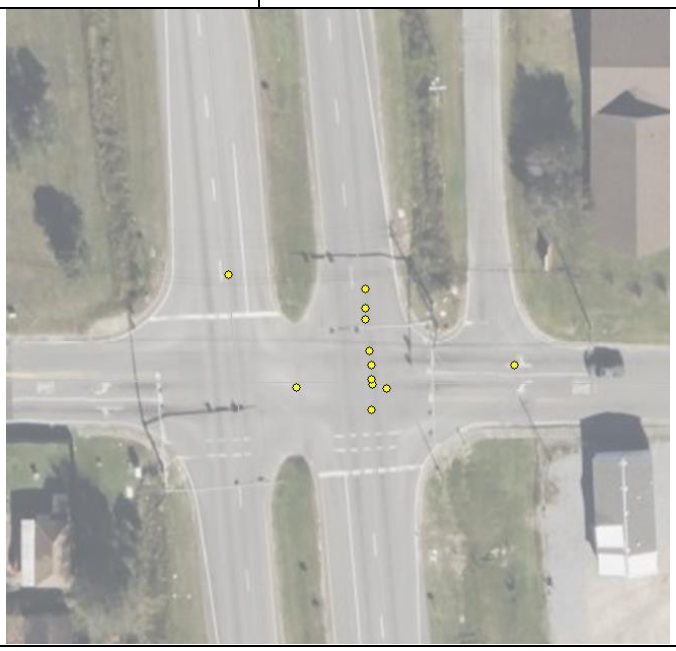
Possible Countermeasures

- Reduce speeds through intersection.
- Improve sight lines.



MS 63 & Dr. MLK Jr. Drive

Moss Point

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Very High*
Crash Analysis There were 12 crashes with injury and no fatalities during the 3-year analysis period. 10 of the crashes angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

MS 63 & Dutch Bayou Road

Moss Point

Intersection Notes This is a unsignalized intersection.	***Crash Rate:*** *Very High*
Crash Analysis There were 12 crashes with injury and no fatalities during the 3-year analysis period. 9 of the crashes were angle and the rest were a mix of crash types.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Add signal.	

MS 63 & Old Saracennia Road

Moss Point

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *High*
Crash Analysis There were 7 crashes with injury and no fatalities during the 3-year analysis period. 3 angle and 3 rear-end crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

US 90 & Franklin Creek Road

Jackson County

Intersection Notes This is a unsignalized intersection.	***Crash Rate:*** *High*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period. 4 of the crashes were angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Add signal.	

US 90 & Lower Bay Road

Waveland

Intersection Notes This is a unsignalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 4 crashes with injury and no fatalities during the 3-year analysis period. 2 angle and 2 rear-end crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

Old Mobile Highway & Eden Street

Pascagoula

Intersection Notes This is a signalized intersection with left turn lanes on three approaches.	***Crash Rate:*** *Moderate*
Crash Analysis There were 3 crashes with injury and no fatalities during the 3-year analysis period. They were all angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Upgrade traffic signals with backing plate.	

US 90 & 14th Street

Pascagoula

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 10 crashes with injury and 1 fatality during the 3-year analysis period. The crashes were a mix of crash types.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

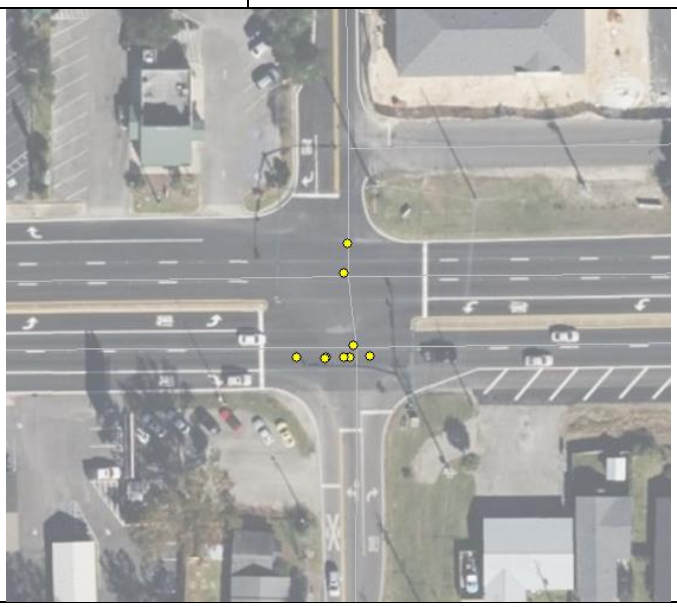
US 90 & Washington Avenue

Ocean Springs

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 13 crashes with injury and no fatalities during the 3-year analysis period. They were all angle and rear-end crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines.	

US 90 & MLK Jr Avenue

Ocean Springs

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 9 crashes with injury and 1 fatality during the 3-year analysis period. The crashes were mostly left-turn and angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

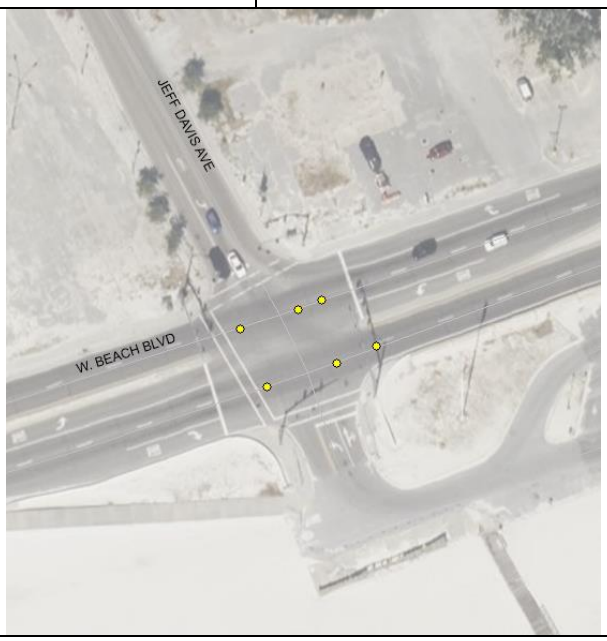
US 90 & MS 57

Ocean Springs

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 11 crashes with injury and no fatalities during the 3-year analysis period. They were all left turn, angle and rear-end crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines.	

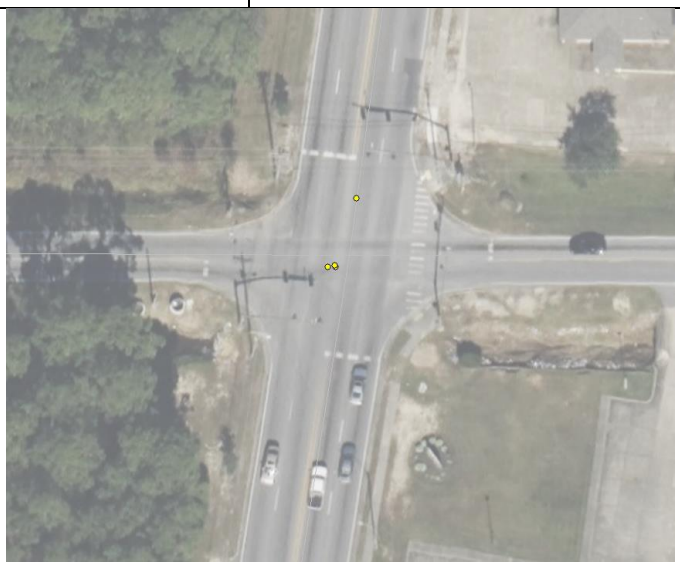
US 90 & Jeff Davis Avenue

Long Beach

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 6 crashes with injury and no fatalities during the 3-year analysis period. There were 4 left-turn crashes and 2 angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

Old Spanish Trail & Ladnier Road

Gautier

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 4 crashes with injury and no fatalities during the 3-year analysis period. They were two left turn and two angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Add dedicated left turn lanes.	

Gautier-Vancleave Road & Valleywood Drive

Gautier

Intersection Notes This is an unsignalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 3 crashes with injury and no fatalities during the 3-year analysis period. There were angle crashes and 2 rear-end crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry. • Add signal or flashing yellow.	

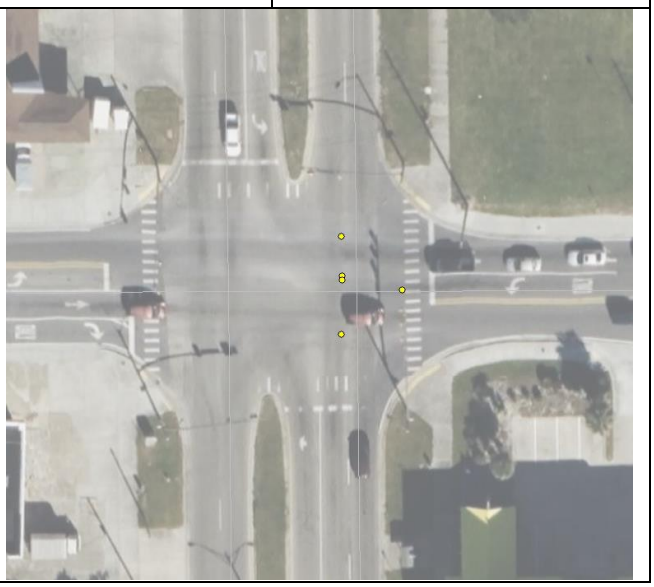
Popps Ferry Road & Lamey Street

DIberville

Intersection Notes This is an unsignalized intersection. The road goes from 3-lane to 5-lane at this intersection.	***Crash Rate:*** *High*
Crash Analysis There were 4 crashes with injury and no fatalities during the 3-year analysis period. They were left turn, angle, and rear-end crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Improve intersection pavement markings and geometry. • Add signal or flashing yellow.	

Cailavet Street & Division Street

Biloxi

Intersection Notes This is a unsignalized intersection.	***Crash Rate:*** *High*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period. There were 3 angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

US 90 & Rodenberg Avenue

Biloxi

Intersection Notes This is an signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 11 crashes with injury and no fatalities during the 3-year analysis period. They were 8 left turn, angle and 3 angle crashes.	
Possible Countermeasures • Reduce speeds through intersection. • Improve sight lines. • Improve intersection pavement markings and geometry.	

MS 603 & Central Avenue

Bay Saint Louis

Intersection Notes This is a unsignalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period. There were 3 angle crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

US 90 & Drinkwater Road

Bay Saint Louis

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period. There were angle, left-turn, and rear-end crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

US 90 & Menge Avenue

Pass Christian

Intersection Notes	***Crash Rate:***
This is a signalized intersection.	*Moderate*

Crash Analysis

There were 4 crashes with injury and no fatalities during the 3-year analysis period. All crashes were angle crashes.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Improve intersection pavement markings and geometry.

Pass Road & Hewes Avenue

Gulfport

Intersection Notes	***Crash Rate:***
This is a signalized intersection.	*Moderate*

Crash Analysis

There were 4 crashes with injury and no fatalities during the 3-year analysis period. There were 2 left-turn crashes and 2 angle crashes.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Improve intersection pavement markings and geometry.

MS 63 & MS 613

Jackson County

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *Moderate*
Crash Analysis There were 3 crashes with injury and 2 fatalities during the 3-year analysis period. The crashes were a mix of types.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

MS 63 & MS 614

Jackson County

Intersection Notes This is a signalized intersection.	***Crash Rate:*** *High*
Crash Analysis There were 5 crashes with injury and 1 fatality during the 3-year analysis period. There were 3 left-turn crashes and 2 run off the road crashes.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.	

Rodriguez St & I-110 Exit 2

D'Iberville

Intersection Notes This is a signalized intersection.		***Crash Rate:*** *Very High*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period. There were 4 left-turn crashes.		
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Improve intersection pavement markings and geometry.		

1. Upgrade intersections with sidewalk extensions, pedestrian refuge, crosswalk striping, and pedestrian signals.
2. Improve roadway lighting.
3. Construct new or extend existing sidewalks.
4. Refresh crosswalk pavement striping.
5. Break up continuous turn lanes with raised medians for pedestrian refuge or provide mid-block crossing islands.
6. Evaluate the feasibility of a road diet.
7. Install pedestrian warning signs in high pedestrian trafficked areas.
8. Reduce speeds along roadways where routine aggressive driving is reported.
9. Construct multiuse pathways where pedestrian and bicycle crashes overlap to separate pedestrian and bicycle traffic from motorized vehicles.
10. Pedestrian and bicycle bridge.
11. Curb extensions
12. Raised "speed table" pedestrian crossing.

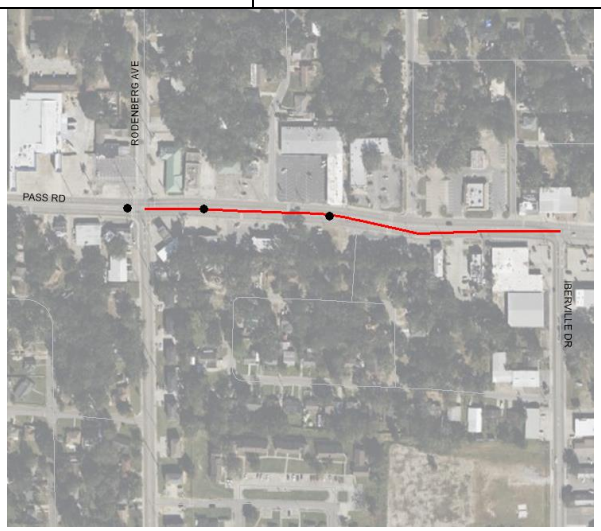
Main Street – Elder Street to Jackson Street

Moss Point

Roadway Notes This is a state road with a daily traffic count of 17,000 AADT.	***Ped/Bike Crashes Per Mile:*** *Very High*
Crash Analysis There were 4 crashes with injury and no fatalities during the 3-year analysis period.	
Possible Countermeasures • Reduce speeds. • Improve sight lines. • Break up continuous turn lanes with raised medians for pedestrian refuge or provide mid- block crossing islands. • Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals. • Construct Multiuse path or protected bike lanes.	

Pass Road – Rodenberg Avenue to Iberville Drive

Biloxi

Roadway Notes This is a local road with a daily traffic count of 10,000 AADT.	***Ped/Bike Crashes Per Mile:*** *Very High*
Crash Analysis There were 2 crashes with injury and 1 fatality during the 3-year analysis period.	
Possible Countermeasures • Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals. • Improve roadway lighting. • Construct new or extend existing sidewalks. • Refresh crosswalk pavement striping. • Break up continuous turn lanes with raised medians for pedestrian refuge or provide mid- block crossing islands.	

Ingalls Avenue – Chicot Street to Geerkin Street

Pascagoula

Roadway Notes This is a local road with a daily traffic count of 7,700 AADT.	***Ped/Bike Crashes Per Mile:*** *Very High*
Crash Analysis There were 2 crashes with injury and no fatalities during the 3-year analysis period.	
Possible Countermeasures • Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals. • Improve roadway lighting. • Construct new or extend existing sidewalks. • Construct multiuse pathways or protected bikes lanes	

Beach Boulevard – Main Street to Union Street

Bay Saint Louis

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 3,200 AADT.	*Very High*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Refresh crosswalk pavement striping.

US 90 – Treasure Bay Casino to Rodenberg Avenue

Biloxi

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 28,000 AADT.	*Very High*

Crash Analysis

There were 6 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals.
- Construct multiuse pathways or protected bikes lanes.

Caillavet Street – Division Street to Esters Boulevard

Biloxi

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 8,200 AADT.	*Very High*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period. All 3 crashes were bicycle crashes.

Possible Countermeasures

- Reduce speeds.
- Improve sight lines.
- Refresh crosswalk pavement striping.
- Construct multiuse pathways or protected bikes lanes.

Pass Road – A Avenue to Washington Avenue

Gulfport

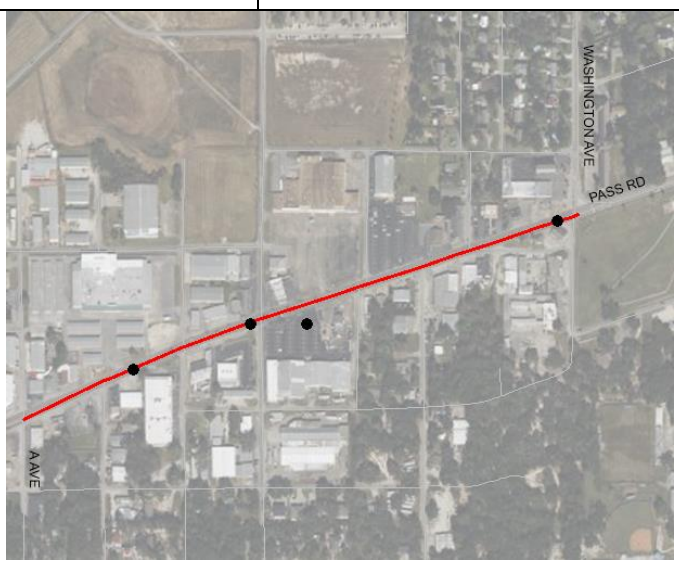
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 18,000 AADT.	*Very High*

Crash Analysis

There were 4 crashes with injury and no fatalities during the 3-year analysis period. Two crashes were bicycle crashes and two were pedestrian.

Possible Countermeasures

- Construct multiuse pathways or protected bikes lanes.
- Upgrade intersections with sidewalk extensions, crosswalk striping, and pedestrian signals.
- Improve roadway lighting.
- Construct new or extend existing sidewalks.



US 90 – Caillavet Street to Main Street

Biloxi

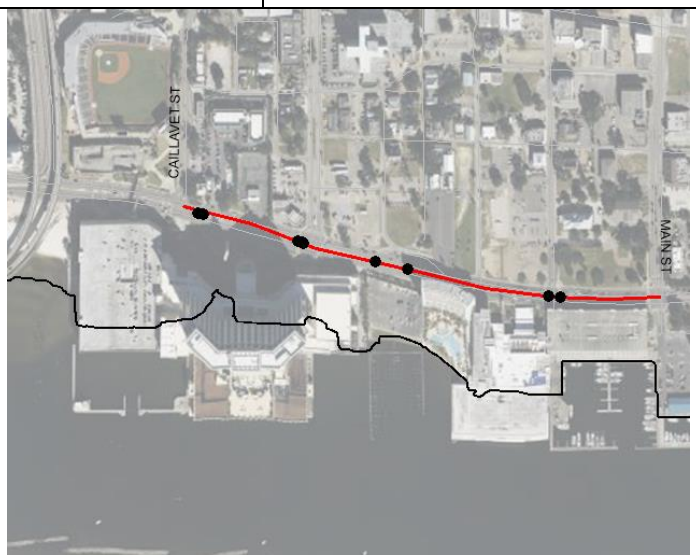
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 28,000 AADT.	*Very High*

Crash Analysis

There were 9 crashes with injury and 3 fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct multiuse pathways or protected bikes lanes.



US 90 – Johnston Road to trailer park

Gautier

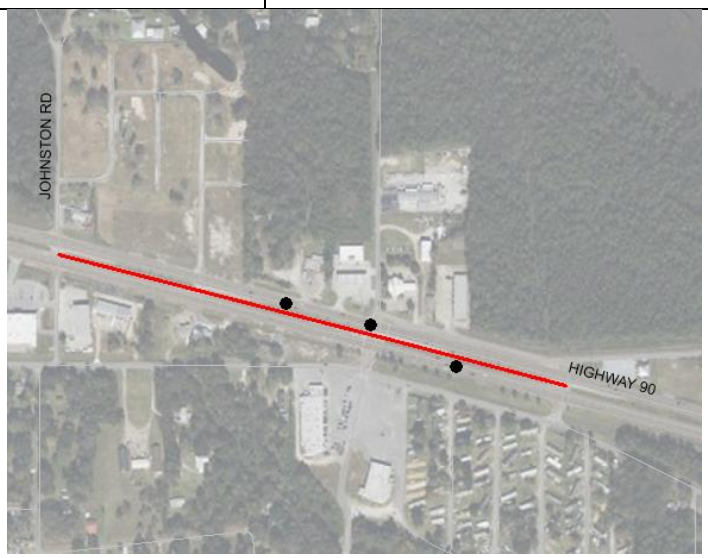
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 33,000 AADT.	*High*

Crash Analysis

There was 1 crash with injury and 2 fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Construct multiuse pathways or protected bikes lanes.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.



Pass Road – US 49 to 20th Avenue

Gulfport

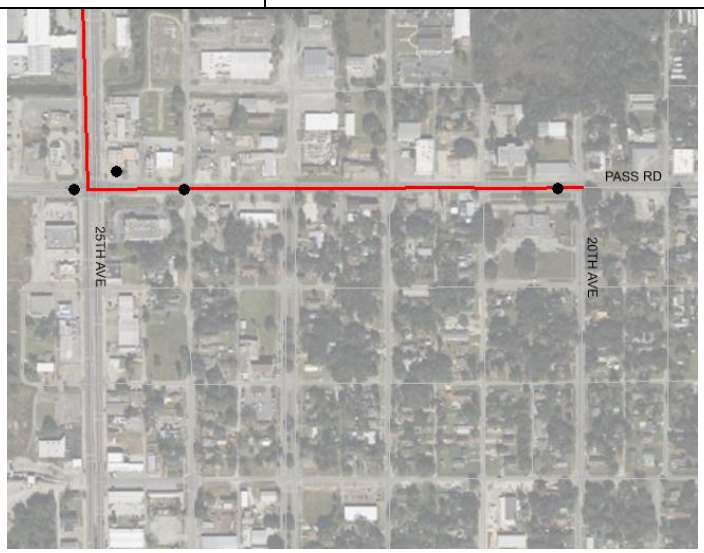
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 10,000 AADT.	*Very High*

Crash Analysis

There were 3 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Construct multiuse pathways or protected bikes lanes.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.



US 90 – Telephone Road to Hospital Road

Pascagoula

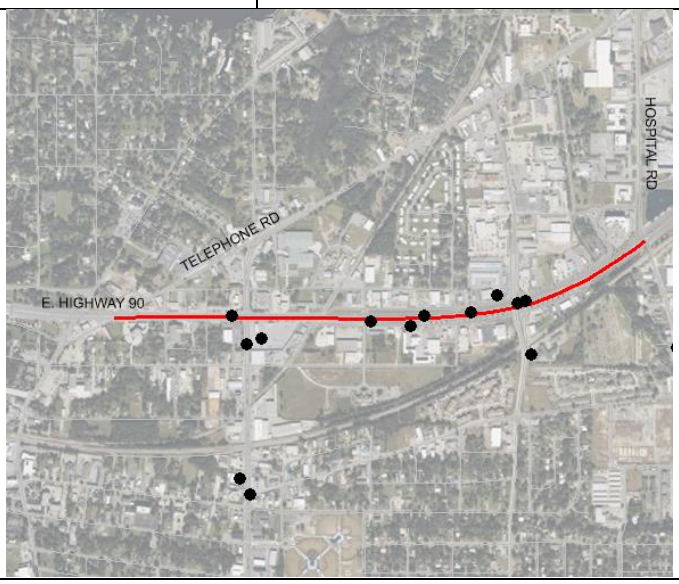
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 31,000 AADT.	*High*

Crash Analysis

There were 6 crashes with injury and 2 fatalities during the 3-year analysis period.

Possible Countermeasures

- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Improve roadway lighting.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.



MS 63 – Grierson Street to Frederick Street

Moss Point

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 22,000 AADT.	*High*

Crash Analysis

There were 3 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Improve roadway lighting.
- Construct new or extend existing sidewalks.
  Construct multiuse pathways or protected bikes lanes.

US 49 – 34th Street to Pass Road

Gulfport

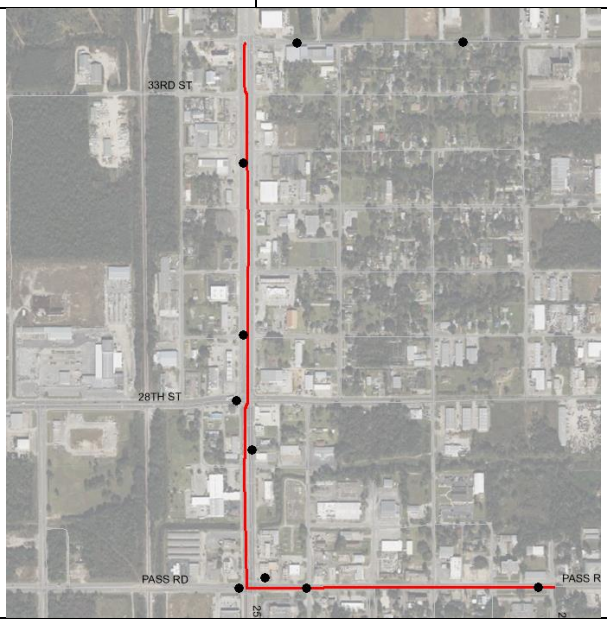
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 32,000 AADT.	*High*

Crash Analysis

There were 4 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Improve roadway lighting.
- Construct new or extend existing sidewalks.
  Construct multiuse pathways or protected bikes lanes.



Pass Road – 28th Street to Chicago Avenue

Gulfport

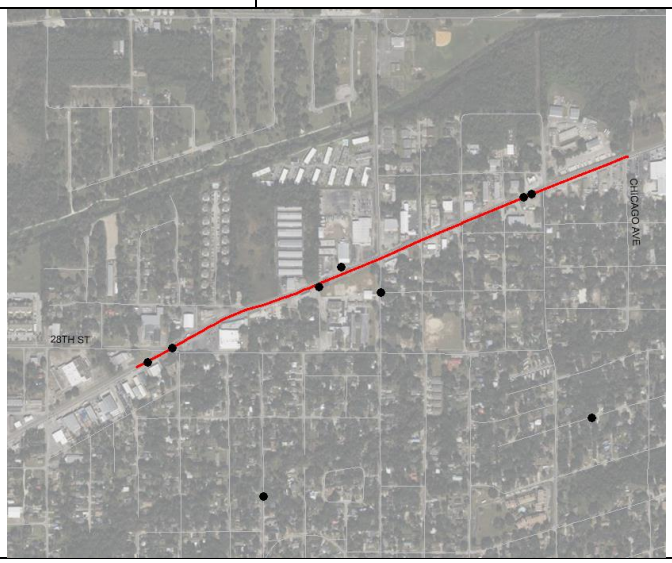
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 17,000 AADT.	*High*

Crash Analysis

There were 6 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.



Pass Road – Big Lake Road to Beauvoir Road

Biloxi

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 30,000 AADT.	*High*

Crash Analysis

There were 5 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct multiuse pathways or protected bikes lanes.
- Break up continuous turn lanes with raised medians for pedestrian refuge or provide mid- block crossing islands.

US 49 – MLK Jr Avenue to Airport Road

Gulfport

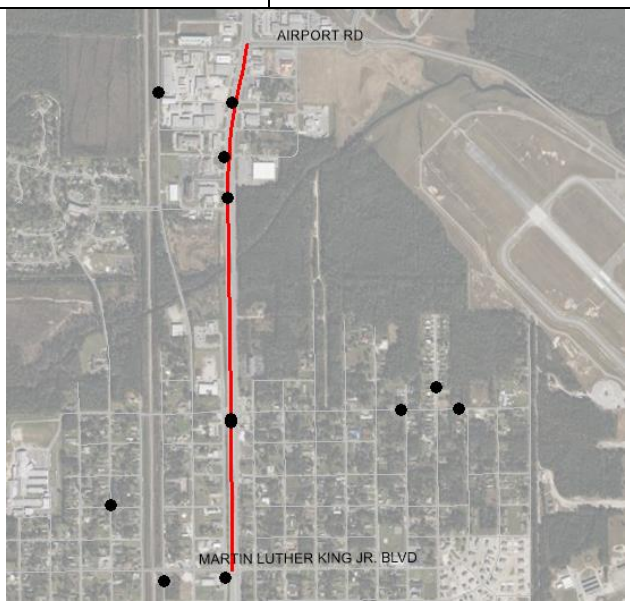
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 41,000 AADT.	*Moderate*

Crash Analysis

There were 4 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.



Dedeaux Road – Jessica Drive to MS 605

Gulfport

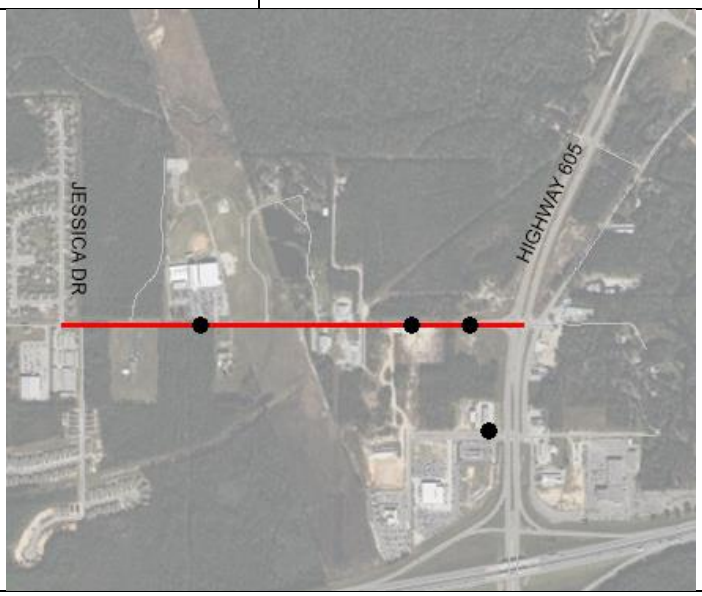
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 11,000 AADT.	*Moderate*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
  Construct multiuse pathways or protected bikes lanes.



US 90 – 33rd Avenue to 20th Avenue

Gulfport

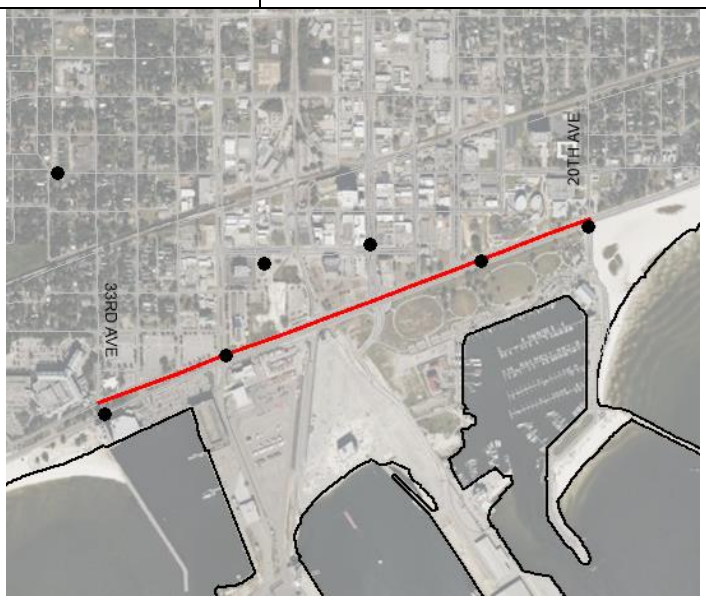
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 28,000 AADT.	*Moderate*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct multiuse pathways or protected bikes lanes.



Three Rivers Road – Oneal Road to Duckworth Road

Gulfport

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a local road with a daily traffic count of 7,900 AADT.	*Moderate*

Crash Analysis

There were 2 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.

US 90 – Old Spanish Trail to McLaurin Street

Waveland

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 22,000 AADT.	*Moderate*

Crash Analysis

There were 2 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.

US 49 – Oneal Road to Community Road

Gulfport

Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 45,000 AADT.	*Moderate*

Crash Analysis

There were 5 crashes with injury and 1 fatality during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.

US 90 – MS 609 to Holcomb Boulevard

Ocean Springs

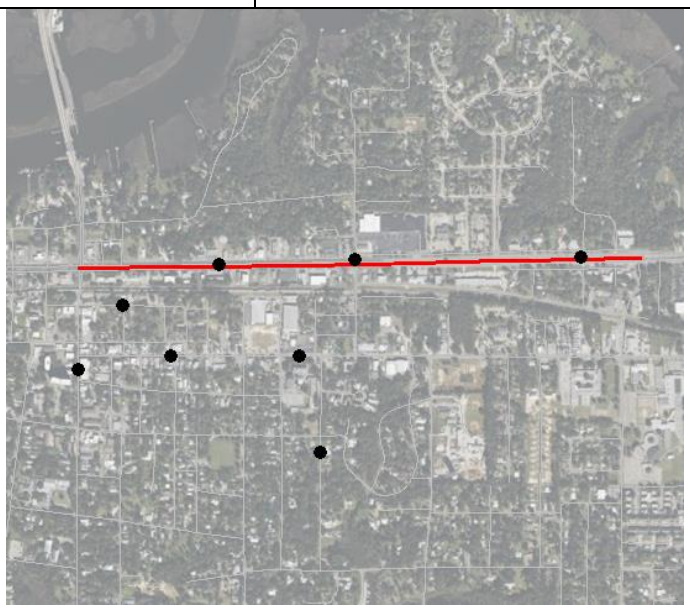
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 41,000 AADT.	*Moderate*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period.

Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.



US 90 – Halstead Road to Ocean Springs Road

Ocean Springs

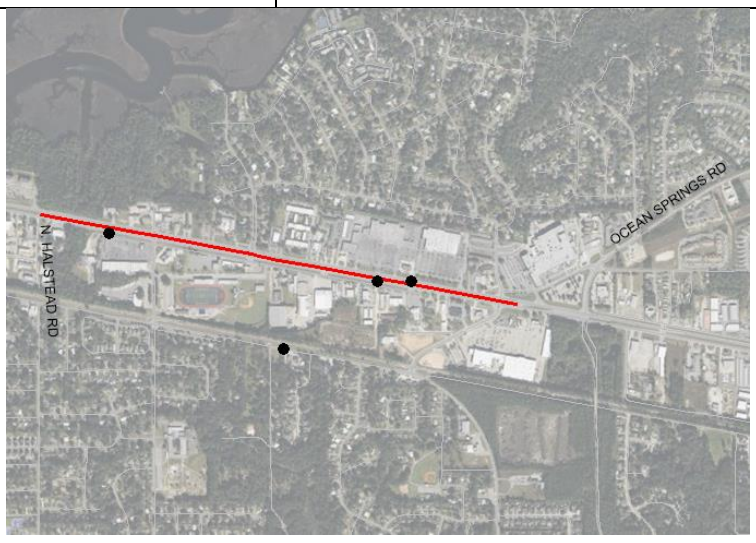
Roadway Notes	***Ped/Bike Crashes Per Mile:***
This is a State road with a daily traffic count of 40,000 AADT.	*Moderate*

Crash Analysis

There were 3 crashes with injury and no fatalities during the 3-year analysis period.

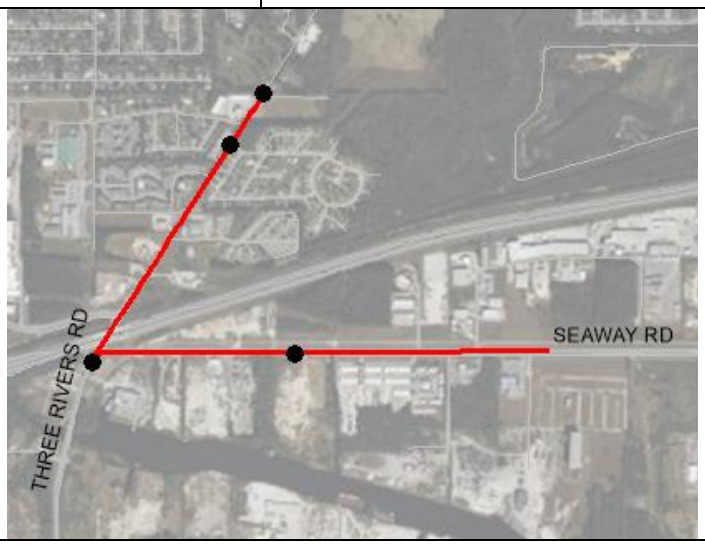
Possible Countermeasures

- Reduce speeds.
- Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals.
- Construct new or extend existing sidewalks.
- Construct multiuse pathways or protected bikes lanes.



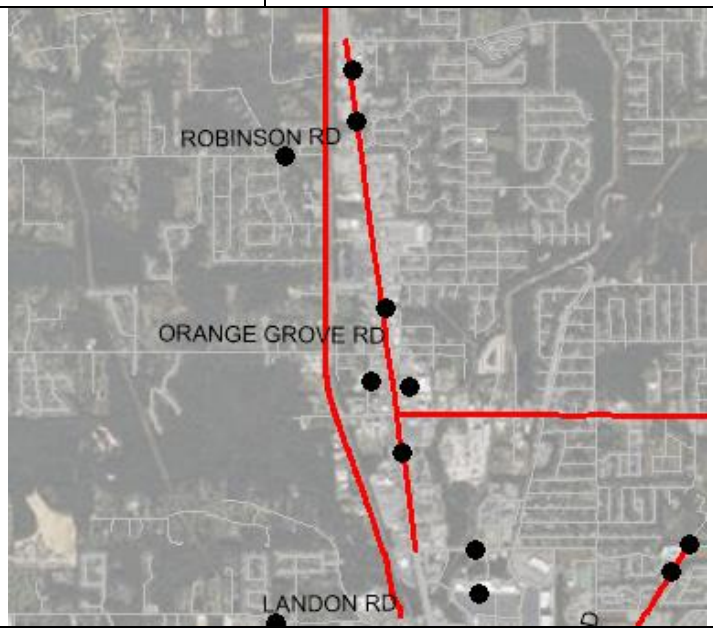
Seaway Road – Three Rivers Road to 1 mile east

Gulfport

Roadway Notes This is a State road with a daily traffic count of 13,000 AADT.	***Ped/Bike Crashes Per Mile:*** *Moderate*
Crash Analysis There was 1 crash with injury and no fatalities during the 3-year analysis period.	
Possible Countermeasures • Upgrade intersections with sidewalk extensions, crosswalk striping, pedestrian refuge, and pedestrian signals. • Construct multiuse pathways or protected bikes lanes.	

Old Hwy 49 – Landon Road to Lyman

Gulfport

Roadway Notes This is a State road with a daily traffic count of 6,300 AADT.	***Ped/Bike Crashes Per Mile:*** *Moderate*
Crash Analysis There were 5 crashes with injury and no fatalities during the 3-year analysis period on US 49 paralleling this route. This would serve as an alternative to traveling on the busy US 49.	
Possible Countermeasures • Construct new or extend existing sidewalks. • Construct multiuse pathways or protected bikes lanes..	