



SAFE STREETS FOR ALL
AN ECRC 2.0 INITIATIVE

SAFE STREETS AND ROADS FOR ALL SAFETY ACTION PLAN

*EMERALD COAST
REGIONAL COUNCIL*



DECEMBER 2024



TABLE OF CONTENTS

ACKNOWLEDGEMENTS	I
CHAPTER 1 - CREATING SAFER STREETS FOR THE EMERALD COAST	1-1
CHAPTER 1 - CREATING SAFER STREETS FOR THE EMERALD COAST	1-3
CHAPTER 2 - UNDERSTANDING THE CURRENT SYSTEM: SAFETY ANALYSIS	2-1
CHAPTER 3 - HEARING FROM THE COMMUNITY	3-1
CHAPTER 4 - FOLLOWING THE PATH FORWARD: TAKING ACTION	4-1
CHAPTER 5 - MEASURING PROGRESS & NEXT STEPS	5-1
APPENDICES 1-7	APPX-I

LIST OF TABLES

TABLE 1: CRASH TYPE AND KSI CRASH TYPE BY PERCENTAGE	2-6
TABLE 2: CRASH FREQUENCY BY ENVIRONMENTAL CONDITIONS	2-7
TABLE 3: KSI CRASHES BY COUNTY HIN SEGMENT AND INTERSECTIONS	2-15
TABLE 4: FLORIDA-ALABAMA TPO HIGH INJURY NETWORK	2-16
TABLE 5: OKALOOSA-WALTON TPO HIGH INJURY NETWORK	2-20
TABLE 6: BAY COUNTY TPO HIGH INJURY NETWORK	2-22
TABLE 7: RURAL AREAS HIGH INJURY NETWORK	2-23
TABLE 8: AVERAGE CRASH RATES BY COUNTY (PER 100 MILLION VEHICLE MILES TRAVELED) 2-30	
TABLE 9: ROUND 1 PUBLIC WORKSHOPS	3-4
TABLE 10: ROUND 2 PUBLIC WORKSHOP	3-6
TABLE 11: PUBLIC RECOMMENDED HIN ROADWAYS	3-8
TABLE 12: TASK FORCE RECOMMENDED HIN ROADWAYS	3-9

LIST OF TABLES CONTINUED

TABLE 13: STAKEHOLDER RECOMMENDED HIN ROADWAYS	3-9
TABLE 14: PRIORITIZATION CRITERIA	4-2
TABLE 15: FLORIDA-ALABAMA TPO TIER 1 PRIORITY PROJECTS	4-8
TABLE 16: FLORIDA-ALABAMA TPO PRIORITY INTERSECTIONS	4-9
TABLE 17: OKALOOSA-WALTON TPO TIER 1 PRIORITY PROJECTS	4-12
TABLE 18: OKALOOSA-WALTON TPO PRIORITY INTERSECTIONS	4-13
TABLE 19: BAY COUNTY TPO TIER 1 PRIORITY PROJECTS	4-16
TABLE 20: BAY COUNTY TPO PRIORITY INTERSECTIONS	4-17
TABLE 21: RURAL AREAS TIER 1 PRIORITY PROJECTS	4-20
TABLE 22: RURAL AREAS PRIORITY INTERSECTIONS	4-21
TABLE 23: FLORIDA-ALABAMA TPO PROJECT SPECIFIC COUNTERMEASURES	4-22
TABLE 24: OKALOOSA-WALTON TPO PROJECT SPECIFIC COUNTERMEASURES	4-25
TABLE 25: BAY COUNTY TPO PROJECT SPECIFIC COUNTERMEASURES	4-26
TABLE 26: RURAL AREAS PROJECT SPECIFIC COUNTERMEASURES	4-27
TABLE 28: CONTRIBUTING FACTORS FOR KSI CRASHES IN THE EMERALD COAST REGION	4-28
TABLE 27: TOP CRASH TYPES FOR KSI CRASHES IN THE EMERALD COAST REGION	4-28
TABLE 29: SAFER PEOPLE STRATEGIES AND ACTIONS	4-47
TABLE 30: SAFER ROADS STRATEGIES AND ACTIONS	4-48
TABLE 31: SAFER SPEEDS STRATEGIES AND ACTIONS	4-49
TABLE 32: SAFER VEHICLES STRATEGIES AND ACTIONS	4-50
TABLE 33: POST-CRASH CARE STRATEGIES AND ACTIONS	4-51

LIST OF FIGURES

FIGURE 1: FINANCIAL AND INTANGIBLE COSTS OF CRASHES	1-2
FIGURE 2: PROPORTION OF BICYCLE, PEDESTRIAN, AND MOTORCYCLE CRASHES THAT RESULTED IN A FATALITY OR SERIOUS INJURY	1-6
FIGURE 3: SAFETY ACTION PLAN PROCESS	1-9
FIGURE 4: SAFE SYSTEM APPROACH PRINCIPLES AND OBJECTIVES	1-9
FIGURE 5: ECRC 7-LAYER CAKE INITIATIVE	1-10
FIGURE 6: TOTAL FATAL AND SERIOUS INJURY CRASHES IN ECRC REGION	2-1
FIGURE 7: ECRC REGION TOTAL CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY TRANSPORTATION MODE	2-2
FIGURE 8: ECRC REGION TOTAL CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY ROAD TYPE	2-3
FIGURE 9: MONTHLY KSI CRASH BY COUNTY	2-8
FIGURE 10: DAILY KSI CRASH BY COUNTY	2-9
FIGURE 11: TIME OF DAY KSI CRASH BY COUNTY	2-9
FIGURE 12: PERCENT OF KSI CRASHES THAT INVOLVE CONTRIBUTING FACTORS	2-10
FIGURE 13: EQUITY PRIORITY AREA DIAGRAM	2-30
FIGURE 14: PUBLIC ENGAGEMENT TIMELINE	3-1
FIGURE 15: PRIORITIZATION PROCESS	4-2
FIGURE 16: TIER 1 PRIORITY PROJECT CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY TRANSPORTATION MODE	4-4
FIGURE 17: TIER 1 PRIORITY PROJECT CRASH DATA	4-4
FIGURE 18: EXAMPLES OF SYSTEMIC COUNTERMEASURES BY SAFETY FOCUS AREA	4-29
FIGURE 19: ANNUAL REPORT WITH PERFORMANCE MEASURES	5-2



LIST OF MAPS

MAP 1: EMERALD COAST REGIONAL COUNCIL JURISDICTION	1-4
MAP 2: TRANSPORTATION DISADVANTAGED CENSUS TRACTS	1-8
MAP 3: REGION-WIDE CRASHES HEAT MAP	2-5
MAP 4: BICYCLE AND PEDESTRIAN KSI CRASHES	2-13
MAP 5: REGIONAL HIGH INJURY NETWORK	2-27
MAP 6: EQUITY PRIORITY AREAS	2-29
MAP 7: FLORIDA-ALABAMA TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS	4-7
MAP 8: OKALOOSA-WALTON TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS	4-11
MAP 9: BAY COUNTY TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS	4-15
MAP 10: RURAL AREAS TIER 1 PRIORITY PROJECTS AND INTERSECTIONS	4-19

Acknowledgements

Staff

- Kandase Lee, CEO
- Jill Nobles, Project Manager
- Gary Kramer
- Jessica Walton
- Leandra Meredith
- Rae Emary
- Tiffany Bates

Consultants

- Kimley-Horn and Associates, Inc.

Task Force

- Alaina Webb, Florida Department of Transportation
- Allison Patton, City of Pensacola City Council
- Anna Hudson, Walton County
- Anthony Vallee, City of DeFuniak Springs City Council
- Bryant Paulk, Florida Department of Transportation
- Christy Johnson, Florida Department of Transportation
- Cliff Johnson, Bay County
- Deston Taylor, DRMP
- Jason Fulghum, Okaloosa County Sheriff's Office
- Jeff Cozadd, City of Destin
- Jeff Massey, Washington County
- Joe Bodi, City of Destin
- Janice Lucas, City of Panama City
- Joseph Sullivan, Federal Highway Administration Florida Division
- Kristen Shell, City of Niceville
- Kwame Owusu-Daaku, UWF-HAAS Center
- Latilda Hugh-Neel, City of Freeport
- Michael Lewis, Florida Department of Transportation
- Miranda Sargent, Santa Rosa County
- Nicole Gislason, UWF-HAAS
- Patrice Tanner, City of Chipley
- Rebecca Jones, Santa Rosa County
- Scott Bitterman, Okaloosa County
- Tommi Lyter, Escambia County Sheriff's Office
- Wendy Gavin, City of Pensacola
- Zakkiyyah "Zee" Osuigwe, Santa Rosa County

Acknowledgements

Key Terms

Crash – A collision of a motor vehicle with another roadway user or fixed object. It may result in death, injury, or property damage. The collision may involve a single party or multiple parties.

High-Injury Network – A collection of streets and intersections where a disproportionate number of crashes resulting in someone being killed or severely injured (KSI) occurred.

KSI Crash – A crash resulting in death or serious injury.

Safe System Approach – The USDOT adopted approach to prevent death and serious injuries through proactive, safer transportation planning practices.

Serious Injury – A severe injury that is incapacitating or disabling that typically requires hospitalization and transport to a medical facility.

Vulnerable Road Users – A person utilizing the transportation network not traveling in a vehicle, and therefore at greater risk of fatality or serious injury in a crash. This includes, but not limited to, bicyclists, pedestrians, wheelchairs users, and people on scooters.

Abbreviations

FDOT: Florida Department of Transportation

FHWA: Federal Highway Administration

HIN: High Injury Network

KA CRASH: A crash resulting in death or serious injury.

KSI: Killed or Serious Injury

MPO: Metropolitan Planning Organization

TPO: Transportation Planning Organization

SAP: Safety Action Plan

SS4A: Safe Streets for All

VRU: Vulnerable Road Users

ECRC Safety Action Plan Self-Certification Eligibility Checklist

ELIGIBILITY

An Action Plan is considered eligible for an SS4A application for an Implementation Grant or a Planning and Demonstration Grant to conduct Supplemental Planning/Demonstration Activities if the following two conditions are met:

- You can answer "YES" to Questions 3, 7, and 9 in this worksheet; and
- You can answer "YES" to at least four of the six remaining Questions, 1, 2, 4, 5, 6, and 8.

ACTION PLAN DOCUMENTS

In the table below, list the relevant Action Plan and any additional plans or documents that you reference in this form. Please provide a hyperlink to any documents available online or indicate that the Action Plan or other documents will be uploaded in Valid Eval as part of your application. Note that, to be considered an eligible Action Plan for SS4A, the plan(s) coverage must be broader than just a corridor, neighborhood, or specific location.

DOCUMENT TITLE	LINK	DATE OF MOST RECENT UPDATE
ECRC Safe Streets and Roads for All Safety Action Plan		12/18/2024

ACTION PLAN COMPONENTS	YES/NO	PAGE NUMBER
1. Leadership Commitment and Goal Setting Are BOTH of the following true? <ul style="list-style-type: none"> • A high-ranking official and/or governing body in the jurisdiction publicly committed to an eventual goal of zero roadway fatalities and serious injuries; and • The commitment includes either setting a target date to reach zero OR setting one or more targets to achieve significant declines in roadway fatalities and serious injuries by a specific date. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	v
2. Planning Structure <ul style="list-style-type: none"> • To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring? 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	i 3-2 3-3
3. Safety Analysis Does the Action Plan include ALL of the following? <ul style="list-style-type: none"> • Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region; • Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types; • Analysis of systemic and specific safety needs, as needed (e.g., high-risk road features or specific safety needs of relevant road users); and, • A geospatial identification (geographic or locational data using maps) of higher risk locations. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	2-3 2-6 2-14 to 2-27

ECRC Safety Action Plan Self-Certification Eligibility Checklist

4. Engagement and Collaboration Did the Action Plan development include ALL of the following activities? <ul style="list-style-type: none"> Engagement with the public and relevant stakeholders, including the private sector and community groups; Incorporation of information received from the engagement and collaboration into the plan; and Coordination that included inter-and intra-governmental cooperation and collaboration, as appropriate. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	3-1 to 3-9
5. Equity Consideration Did the Action Plan development include ALL of the following? <ul style="list-style-type: none"> Considerations of equity using inclusive and representative processes; The identification of underserved communities through data; and Equity analysis developed in collaboration with appropriate partners, including population characteristics and initial equity impact assessments of proposed projects and strategies. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	1-8 2-29 to 2-31 4-2 to 4-3
6. Policy and Process Changes Are BOTH of the following true? <ul style="list-style-type: none"> The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	4-46 to 4-50
7. Strategy and Project Selections <ul style="list-style-type: none"> Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, with information about time ranges when projects and strategies will be deployed, and an explanation of project prioritization criteria? 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	4-2 to 4-3 4-22 to 4-27 4-28 to 4-45
8. Progress and Transparency Does the plan include BOTH of the following? <ul style="list-style-type: none"> A description of how progress will be measured over time that includes, at a minimum, outcome data. The plan is posted publicly online. 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	5-2
9. Action Plan Date <ul style="list-style-type: none"> Was at least one of your plans finalized and/or last updated between 2019 and April 30, 2024? 	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	1-3

November 25, 2024



Emerald Coast Regional Council Board

Dear Members of the Emerald Coast Regional Council Board of Directors,

I am writing to express the Emerald Coast Regional Council's gratitude and enthusiasm for the ongoing implementation of the Emerald Coast Safety Action Plan, which has been made possible through our successful award of the Safe Streets and Roads for All (SS4A) grant under the Bipartisan Infrastructure Law (BIL). This discretionary program, with \$5 billion in appropriated funds from 2022 to 2026, aims to prevent roadway deaths and serious injuries through targeted initiatives at the regional, local, and Tribal levels.

As a proud recipient of the SS4A grant, the ECRC, in partnership with the Florida-Alabama Transportation Planning Organization (FL-AL TPO), the Okaloosa-Walton Transportation Planning Organization (O-W TPO), and the Bay County Transportation Planning Organization (Bay County TPO), has produced a Safety Action Plan that will guide our collective efforts toward achieving the critical goal of zero fatalities and serious injuries on our roadways.

The plan was developed using a data-driven approach, integrating valuable input from stakeholders, the public, and a dedicated Task Force composed of experts from local organizations and agencies in fields such as transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking. This collaborative effort underscores our region's commitment to addressing the preventable crisis of roadway deaths.

We are excited about the next steps in implementing the ECRC Safety Action Plan throughout the ECRC and our partner TPO regions, as well as in our rural communities. Together, through thoughtful planning, collaboration, and dedicated action, we have the opportunity to make a significant impact on reducing roadway fatalities and injuries.

On behalf of the Emerald Coast Regional Council, I thank you for your continued support of this important program and look forward to working with each of you in ensuring its successful implementation.

Sincerely,

A handwritten signature in black ink that reads "Kasey Cuchens". The signature is fluid and cursive, with the first letters of the first and last names being capitalized.

Kasey Cuchens, Chair
Emerald Coast Regional Council

RESOLUTION ECRC 2024-12
A RESOLUTION OF THE EMERALD COAST
REGIONAL COUNCIL ADOPTING THE EMERALD
COAST SAFETY ACTION PLAN

WHEREAS, the Emerald Coast Regional Council (ECRC) received a Safe Streets and Roads for All (SS4A) grant from the U.S. Department of Transportation to develop a Safety Action Plan; and

WHEREAS, it is critical for ECRC to prioritize the Safety Action Plan to ensure the safety of pedestrians, cyclists, and road users of all ages and abilities; and

WHEREAS, fatal and severe crashes are preventable, and death and serious injury are currently an unacceptable cost on our roadway system; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 45% of all fatal traffic crashes and 28% of all severe injury crashes in the ECRC region between 2019 and 2023; and

WHEREAS, the U.S. Department of Transportation has adopted the Safe System approach and Florida Department of Transportation has adopted a Target Zero Initiative; and

WHEREAS, the Emerald Coast Regional Council (ECRC) and the Florida-Alabama, Okaloosa-Walton, and Bay County Transportation Planning Organizations have adopted a Vision Zero goal; and

WHEREAS, the Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking;

NOW, THEREFORE, BE IT RESOLVED by the Emerald Coast Regional Council that:

ECRC adopts the Emerald Coast Safety Action Plan, which outlines detailed strategies and countermeasures to eliminate fatalities and serious injuries along the High Injury Network.

ECRC adopts the Vision Zero goal of eliminating traffic deaths and severe injuries in the ECRC region by December 31, 2025.

Duly passed and adopted by the Emerald Coast Regional Council on this 12th day of December 2024.

EMERALD COAST REGIONAL COUNCIL
BY: Karen Cuchens
Karen Cuchens, Chair

ATTEST: Kandase Lee
Kandase Lee, ECRC Chief Executive Officer





Steven Barry
Chairman

Charles
Gruber
Vice Chairman

P.O. Box 11399 Pensacola, FL 32524-1399
P: 850.332.7976 • 1.800.226.8914 • F: 850.637.1923 • www.ecrc.org

November 25, 2024

Karen Cuchens, Chair
Emerald Coast Regional Council
P O Box 11399
Pensacola, FL 32502

Dear Chair Cuchens:

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over five (5) years, 2022-2026. The SS4A program funds regional, local, Tribal initiatives through grants to prevent roadway deaths and serious injuries.

As a recipient of an SS4A grant, the Emerald Coast Regional Council (ECRC) working in conjunction with Florida-Alabama Transportation Planning Organization (FL-AL TPO), produced a Safety Action Plan. The Safety Action Plan will guide the ECRC and the TPOs efforts to achieve the target of zero fatalities and serious injuries. The FL-AL TPO, the U.S. Department of Transportation and the Florida Department of Transportation have adopted a Vision Zero goal.

The Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking.

The FL-AL TPO expresses gratitude and excitement for implementation of the ECRC Safety Action Plan throughout the Florida-Alabama TPO region and rural communities. With the Safety Action Plan, communities can address the preventable crisis of deaths on our nation's roads, streets, and highways through safer people, roads, and vehicles; appropriate vehicle speeds; and improved post-crash care.

Sincerely,

Commissioner Steven Barry, Chair
Florida-Alabama Transportation Planning Organization

RESOLUTION FL-AL 24-34

A RESOLUTION OF THE FLORIDA-ALABAMA TRANSPORTATION PLANNING ORGANIZATION ACCEPTING THE EMERALD COAST SAFETY ACTION PLAN

WHEREAS, the Florida-Alabama Transportation Planning Organization (TPO) is the organization designated by the governors of Florida and Alabama as being responsible, together with the State of Florida, and State of Alabama, for carrying out the continuing, cooperative and comprehensive transportation planning process for the FL-AL TPO Planning Area; and

WHEREAS, it is critical for the TPO to prioritize the Safety Action Plan to ensure the safety of pedestrians, cyclists, and road users of all ages and abilities; and

WHEREAS, fatal and severe crashes are preventable, and death and serious injury are currently an unacceptable cost on our roadway system; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 49% of all fatal traffic crashes and 31% of all severe injury crashes in the Florida-Alabama TPO area between 2019 and 2023; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 45% of all fatal traffic crashes and 28% of all severe injury crashes in the ECRC region between 2019 and 2023; and

WHEREAS, the TPO adopts annual safety performance measures as part of the federally required safety performance measures; and

WHEREAS, the U.S. Department of Transportation has adopted the Safe System approach and Florida Department of Transportation has adopted a Target Zero Initiative; and

WHEREAS, the Emerald Coast Regional Council (ECRC) and the Florida-Alabama, Okaloosa-Walton, and Bay County TPOs have adopted a Vision Zero goal; and

WHEREAS, the Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking;

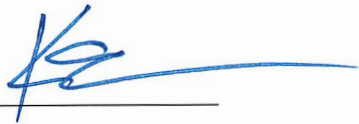
NOW, THEREFORE, BE IT RESOLVED BY THE FLORIDA-ALABAMA TRANSPORTATION PLANNING ORGANIZATION THAT:

- The TPO accepts the Emerald Coast Safety Action Plan, which outlines detailed strategies and countermeasures to eliminate fatalities and serious injuries along the High Injury Network in the Florida-Alabama TPO area.

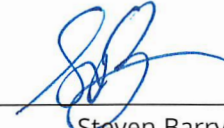
Passed and duly adopted by the Florida-Alabama Transportation Planning Organization on this 11th day of December 2024.

**FLORIDA-ALABAMA TRANSPORTATION
PLANNING ORGANIZATION**

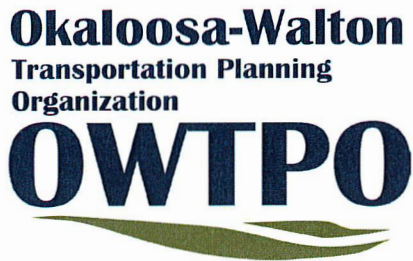
ATTEST: _____



BY: _____



Steven Barry, Chair



Anthony Vallee
Chairman

Bobby Wagner
Vice Chairman

P.O. Box 11399 • Pensacola, FL 32524-1399
P: 850.332.7976 • 1.800.226.8914 • F: 850.637.1923 • www.ecrc.org

November 25, 2024

Karen Cuchens, Chair
Emerald Coast Regional Council
P O Box 11399
Pensacola, FL 32502

Dear Chair Cuchens:

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over five (5) years, 2022-2026. The SS4A program funds regional, local, Tribal initiatives through grants to prevent roadway deaths and serious injuries.

As a recipient of an SS4A grant, the Emerald Coast Regional Council (ECRC) working in conjunction with Okaloosa – Walton Transportation Planning Organization (O-W TPO), produced a Safety Action Plan. The Safety Action Plan will guide the ECRC and the TPOs efforts to achieve the target of zero fatalities and serious injuries. The O-W TPO, the U.S. Department of Transportation and the Florida Department of Transportation have adopted a Vision Zero goal.

The Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking.

The O-W TPO expresses gratitude and excitement for implementation of the ECRC Safety Action Plan throughout the Okaloosa-Walton TPO region and rural communities. With the Safety Action Plan, communities can address the preventable crisis of deaths on our nation's roads, streets, and highways through safer people, roads, and vehicles; appropriate vehicle speeds; and improved post-crash care.

Sincerely,

Councilmember Anthony Vallee, Chair
Okaloosa-Walton Transportation Planning Organization

RESOLUTION O-W 24-17

A RESOLUTION OF THE OKALOOSA-WALTON TRANSPORTATION PLANNING ORGANIZATION ACCEPTING THE EMERALD COAST SAFETY ACTION PLAN

WHEREAS, the Okaloosa-Walton Transportation Planning Organization (TPO) is the organization designated by the governor of Florida as being responsible, together with the State of Florida, for carrying out the continuing, cooperative and comprehensive transportation planning process for the Okaloosa-Walton TPO planning area; and

WHEREAS, it is critical for the TPO to prioritize the Safety Action Plan to ensure the safety of pedestrians, cyclists, and road users of all ages and abilities; and

WHEREAS, fatal and severe crashes are preventable, and death and serious injury are currently an unacceptable cost on our roadway system; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 48% of all fatal traffic crashes and 29% of all severe injury crashes in the Okaloosa-Walton TPO area between 2019 and 2023; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 45% of all traffic fatalities and 28% of all severe injury crashes in the ECRC region between 2019 and 2023; and

WHEREAS, the TPO adopts annual safety performance measures as part of the federally required safety performance measures; and

WHEREAS, the U.S. Department of Transportation has adopted the Safe System approach and Florida Department of Transportation has adopted a Target Zero Initiative; and

WHEREAS, the Emerald Coast Regional Council (ECRC) and the Florida-Alabama, Okaloosa-Walton, and Bay County TPOs have adopted a Vision Zero goal; and

WHEREAS, the Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking;

NOW, THEREFORE, BE IT RESOLVED BY THE OKALOOSA-WALTON TRANSPORTATION PLANNING ORGANIZATION THAT:

- The TPO accepts the Emerald Coast Safety Action Plan, which outlines detailed strategies and countermeasures to eliminate fatalities and serious injuries along the High Injury Network in the Okaloosa-Walton TPO area.

Passed and duly adopted by the Okaloosa-Walton Transportation Planning Organization on this 12th day of December 2024.

**OKALOOSA-WALTON TRANSPORTATION
PLANNING ORGANIZATION**

BY: 
Anthony Vallee, Chair

ATTEST: _____





Pamn Henderson
Chair

Robert Carroll
Vice Chair

P.O. Box 11399 Pensacola, FL 32524-1399
P: 850.332.7976 • 1.800.226.8914 • F: 850.637.1923 • www.ecrc.org

November 25, 2024

Karen Cuchens, Chair
Emerald Coast Regional Council
P O Box 11399
Pensacola, FL 32502

Dear Chair Cuchens:

The Bipartisan Infrastructure Law (BIL) established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over five (5) years, 2022-2026. The SS4A program funds regional, local, Tribal initiatives through grants to prevent roadway deaths and serious injuries.

As a recipient of an SS4A grant, the Emerald Coast Regional Council (ECRC) working in conjunction with Bay County Transportation Planning Organization (Bay County TPO), produced a Safety Action Plan. The Safety Action Plan will guide the ECRC and the TPOs efforts to achieve the target of zero fatalities and serious injuries. The Bay County TPO, the U.S. Department of Transportation and the Florida Department of Transportation have adopted a Vision Zero goal.

The Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking.

The Bay County TPO expresses gratitude and excitement for implementation of the ECRC Safety Action Plan throughout the Bay County TPO region and rural communities. With the Safety Action Plan, communities can address the preventable crisis of deaths on our nation's roads, streets, and highways through safer people, roads, and vehicles; appropriate vehicle speeds; and improved post-crash care.

Sincerely,

A handwritten signature in blue ink that reads "Pamn Henderson".

Mayor Pamn Henderson, Chair
Bay County Transportation Planning Organization

RESOLUTION BAY 24-24

A RESOLUTION OF THE BAY COUNTY TRANSPORTATION PLANNING ORGANIZATION ACCEPTING THE EMERALD COAST SAFETY ACTION PLAN

WHEREAS, the Bay County Transportation Planning Organization (TPO) is the organization designated by the governor of the State of Florida as being responsible, together with the State of Florida, for carrying out the continuing, cooperative and comprehensive transportation planning process for the Bay County TPO Planning Area; and

WHEREAS, it is critical for the TPO to prioritize the Safety Action Plan to ensure the safety of pedestrians, cyclists, and road users of all ages and abilities; and

WHEREAS, fatal and severe crashes are preventable, and death and serious injury are currently an unacceptable cost on our roadway system; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 47% of all fatal traffic crashes and 35% of all severe injury crashes in the Bay County TPO area between 2019 and 2023; and

WHEREAS, pedestrians, bicyclists, and motorcyclists represent the most vulnerable road users and represent approximately 45% of all fatal traffic crashes and 28% of all severe injury crashes in the ECRC region between 2019 and 2023; and

WHEREAS, the TPO adopts annual safety performance measures as part of the federally required safety performance measures; and

WHEREAS, the U.S. Department of Transportation has adopted the Safe System approach and Florida Department of Transportation has adopted a Target Zero Initiative; and

WHEREAS, the Emerald Coast Regional Council (ECRC) and the Florida-Alabama, Okaloosa-Walton, and Bay County TPOs have adopted a Vision Zero goal; and

WHEREAS, the Emerald Coast Safety Action Plan was developed with a data driven approach along with input from stakeholders, members of the public, and a multi-disciplinary Task Force comprised of representatives from local organizations and agencies with expertise in transportation, roadway engineering, law enforcement, emergency response, equity, transit, biking, and walking;

NOW, THEREFORE, BE IT RESOLVED BY THE BAY COUNTY TRANSPORTATION PLANNING ORGANIZATION THAT:

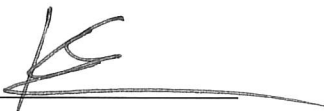
- The TPO accepts the Emerald Coast Safety Action Plan, which outlines detailed strategies and countermeasures to eliminate fatalities and serious injuries along the High Injury Network in the Bay County TPO area.

Passed and duly adopted by the Bay County Transportation Planning Organization on this 9th day of December 2024.

**BAY COUNTY TRANSPORTATION
PLANNING ORGANIZATION**

BY: Pamn Henderson

Pamn Henderson, Chair

ATTEST: 



CHAPTER 1

CREATING SAFER STREETS FOR THE EMERALD COAST



Introduction

Roadway crashes are often understood as an unavoidable part of life in the United States. Crashes are frequently described using terms that reinforce this belief, and are commonly referred to as “accidents,” perpetuating the idea that a crash is a tragic individual mistake. Though traffic crashes are rarely intentional, this language ignores the fact that crashes are a result of a transportation system that is heavily reliant on individual vehicles and prioritizes efficiency and congestion management over safety and multimodal transportation.

This is a national, state, and regional issue. In the US, over 40,000 people die every year in vehicle crashes. Over 3,500 people die in crashes each year in Florida alone.

In the Emerald Coast region, there were **3,973 fatal and serious injury crashes** in the last five years that resulted in:

Nearly
4,000
people seriously
injured

Nearly
1,000
people killed

These numbers represent real people – **family, friends, neighbors, coworkers** – whose lives are lost or permanently impacted by roadway crashes. **Even one death or serious injury is too many.** Within the Emerald Coast, leaders and citizens have decided that a system that fails to prioritize human safety is unacceptable and does not serve the region’s needs. [The Emerald Coast Regional Council \(ECRC\) dares to dream of a transportation system that is safe, connected, and efficient for all roadway users.](#)

NEWS

Walton crash kills 17-year-old 'good soul'

The victim was a senior at Deane Bozeman School

By Nathan Cobb | GateHouse Media Florida

Published 3:31 p.m. ET Aug. 19, 2019



SANTA ROSA BEACH — A Sunday night crash took the life of a 17-year-old high school student driving home from her job at a Destin restaurant.

Caroline Long was “a good soul who was doing her best in life,” said a coworker who was with Long moments before she passed away.

“It started storming shortly before we left the building, and I knew she had a long drive home,” Nicole Noriz, a 16-year-old Fort Walton Beach girl, wrote Monday on Facebook. “I just wanted her to be safe. I don’t remember exactly what we were talking about, but I just remember telling her to be careful.”

Source: Nathan Cobb, GateHouse Media Florida, NWF Daily News

NORTHWEST FLORIDA

UPDATE: Bicyclist identified in fatal crash with car on Fairfield Drive in Pensacola

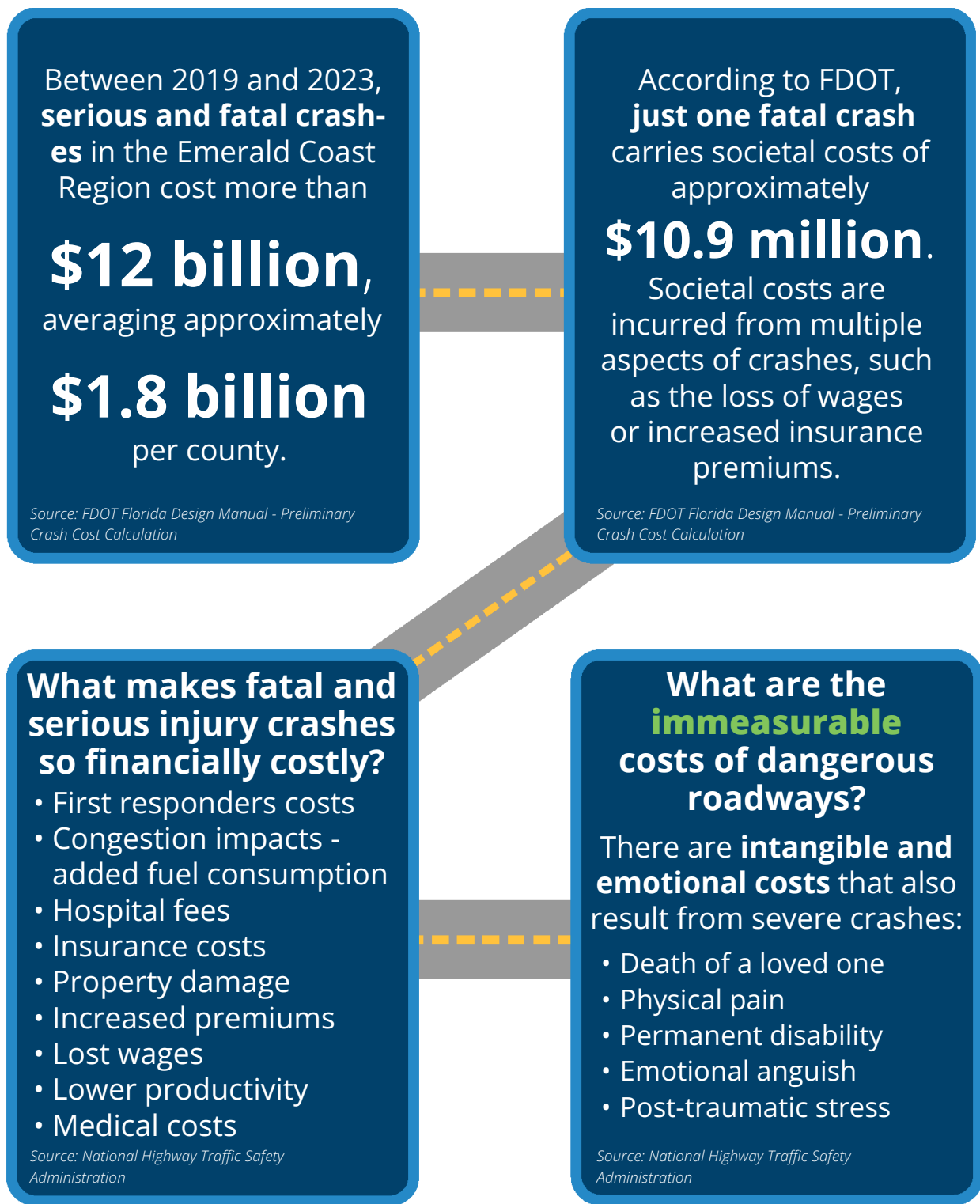
by: WKRG Staff
Posted: Dec 19, 2019 / 10:31 AM CST
Updated: Dec 19, 2019 / 10:14 PM CST



Source: WKRG Staff, WKRG News 5

Roadway crashes result in significant costs both intangible and monetary for communities throughout the country. We all can understand the personal anguish of being involved in a serious crash or knowing someone else who has been. We can empathize with friends and family who have lost someone. Lesser understood are the financial impacts of these crashes, which are often assumed to be taken on solely by individuals in the form of hospital bills, insurance premiums, or legal costs. However, there are significant societal costs that local governments and taxpayers incur. Some of these costs are described in **Figure 1**.

FIGURE 1: FINANCIAL AND INTANGIBLE COSTS OF CRASHES



With all of this in mind, the ECRC has adopted a position of zero roadway deaths and fatalities moving forward, and will continue to push toward achieving this goal as soon as possible. This is reflected in each TPO and Long Range Transportation Plans that have been adopted in the region. To meet requirements of the Safe Streets and Roads for All Program and reflect the region's commitment, the ECRC has formally adopted an ambitious goal of zero roadway fatalities by December 31, 2025.









State Road 30A in Walton County.

The Safety Action Plan outlines current conditions in the region's transportation network and highlights the most dangerous roadway locations. This information is used to forge the path forward and recommend actionable strategies to reduce fatalities and serious injuries.

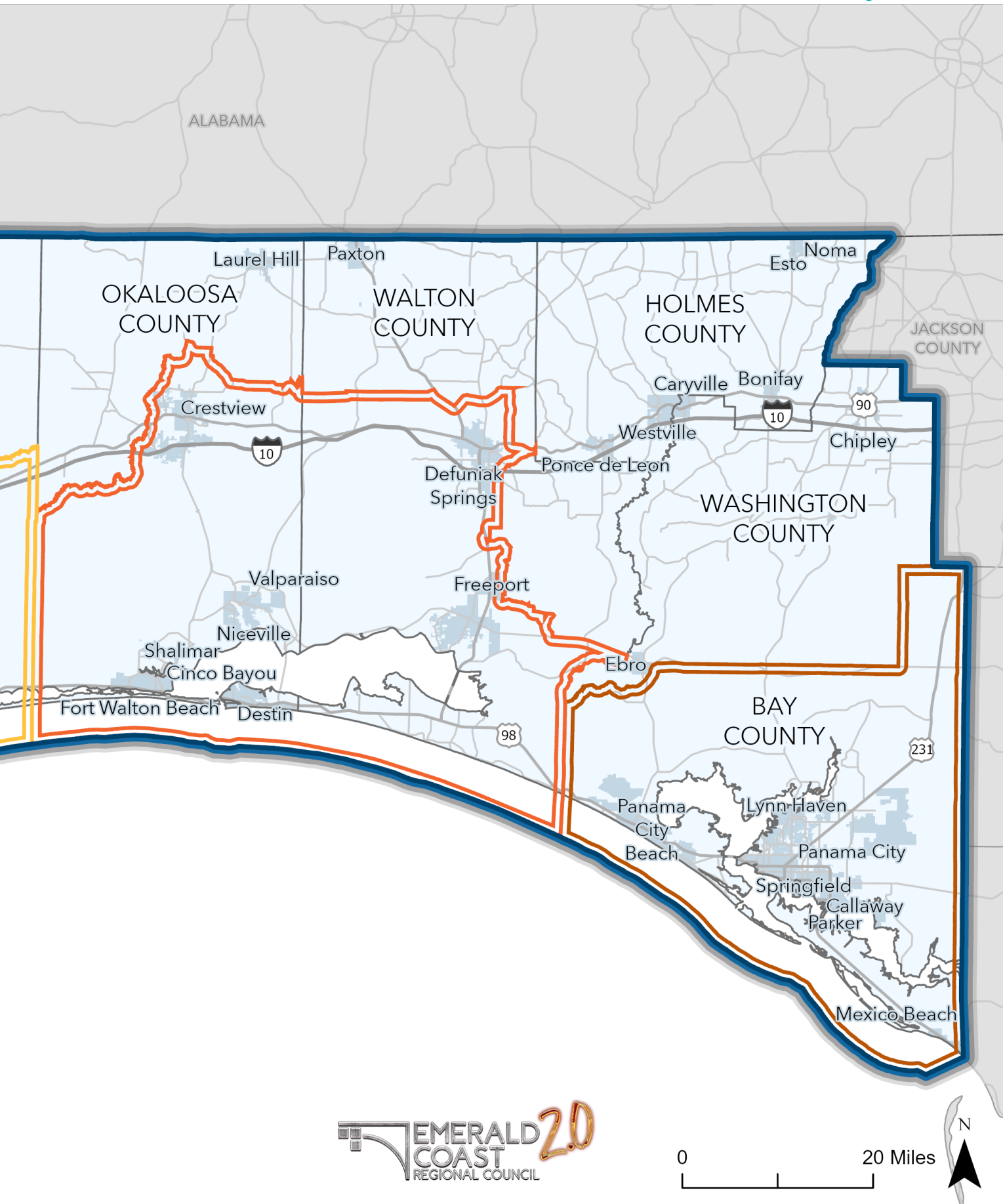
This Safety Action Plan centers around Florida's Emerald Coast region and is representative of one regional council, three transportation planning organizations, seven counties, and over a million residents. **Map 1** is a map of the ECRC Region. The ECRC aims to provide a safer, more connected, and more efficient roadway network for all.



Emerald Coast Regional Council

-  ECRC Boundary
-  ECRC Counties
-  Florida-Alabama TPO
-  Okaloosa-Walton TPO
-  Bay County TPO
-  City Limits

MAP 1: EMERALD COAST REGIONAL COUNCIL JURISDICTION



How to Use this Plan

This plan can be utilized by stakeholders in a variety of ways, allowing all citizens of the Emerald Coast region to contribute to the ECRC's goal of zero traffic fatalities and serious injuries.



RESIDENTS of the ECRC can use this plan to better understand the intersections and corridors that are considered unsafe within their communities.



TPOs should use this plan to inform project priority lists and in the development of Long Range Transportation Plans (LRTPs) to promote a focus on roadway safety.



COMMUNITY GROUPS can use this knowledge to advocate for infrastructure improvements and enhanced planning measures in high crash and injury areas.



LOCAL JURISDICTIONS can utilize this plan to develop projects, identify funding, and allocate resources to address unsafe locations on the transportation network.



POLICYMAKERS AND ELECTED OFFICIALS should use this plan to inform the development of policies and programs that enhance roadway safety in their local communities.



LAW ENFORCEMENT AGENCIES can use this plan to better inform programming, for example when employing High Visibility Enforcement (HVE) tactics in areas with elevated levels of speeding, alcohol use, or distracted driving.

HOW ELSE CAN THIS PLAN BE USED?



To secure grant funds!

This Safety Action Plan is compliant with the USDOT Safe Streets and Roads for All (SS4A) Program, which opens the region up to opportunities for funding for future projects. In addition to SS4A, there are several other federal and state grant programs for which the projects in this plan are eligible.

Safe Streets and Roads for All SS4A

Safe Streets and Roads for All (SS4A) is a USDOT program that supports regional and local initiatives to prevent deaths and serious injuries within the transportation network. Planning, infrastructure, behavioral, and operational initiatives are all eligible for technical assistance and funding through SS4A. The SS4A program's goal of zero roadway deaths is informed by the Safe System Approach, which was developed by USDOT to guide the development of transportation projects and programs that prioritize human safety.



U.S. Department of Transportation

Need for a Safety Action Plan in the Emerald Coast

In recent years, the Emerald Coast region’s transportation system has become increasingly dangerous. Of the Florida Department of Transportation (FDOT) District 3 Top 40 High Crash Corridors, 30 of these corridors are located within the Emerald Coast region. Fatal and serious injury crashes in the region occur frequently. Within the region’s transportation network, there is a fatality rate of 18.7 deaths per 100,000 people, higher than Florida’s state average of 15.9 deaths per 100,000 people.

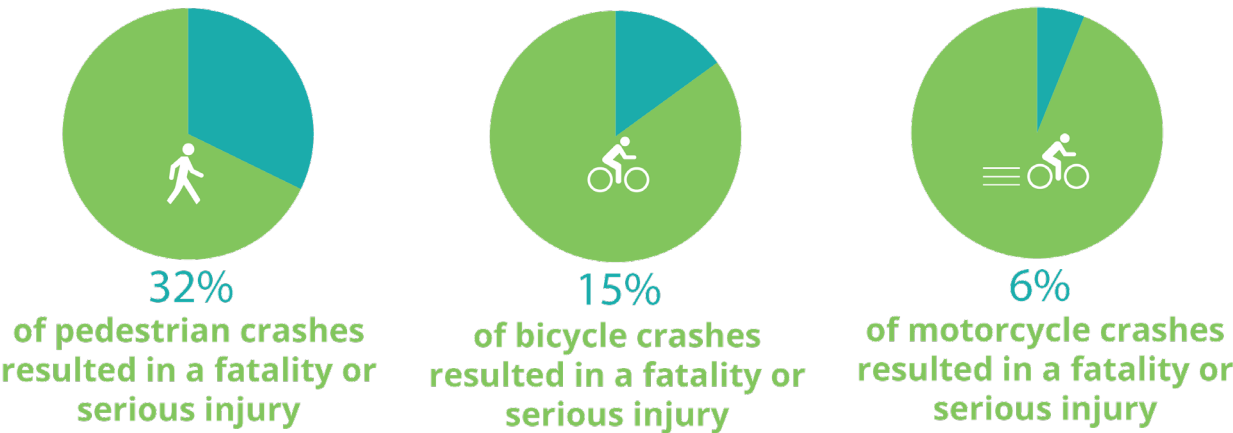


Between 2019 to 2023, there were more than 135,000 crashes in the Emerald Coast region, ranging in severity. Of these crashes, 901 resulted in a fatality and 3,072 resulted in a serious injury, totaling nearly 4,000 crashes that permanently altered lives or cut them short.

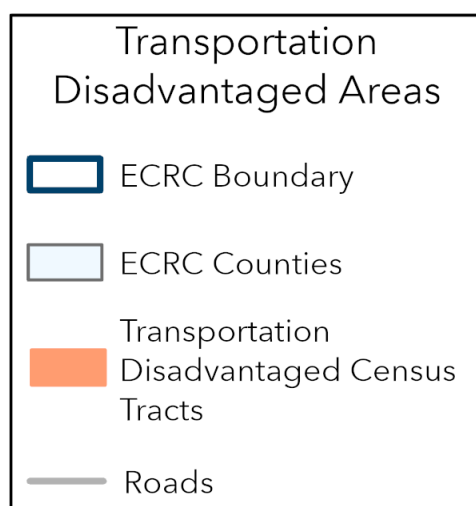
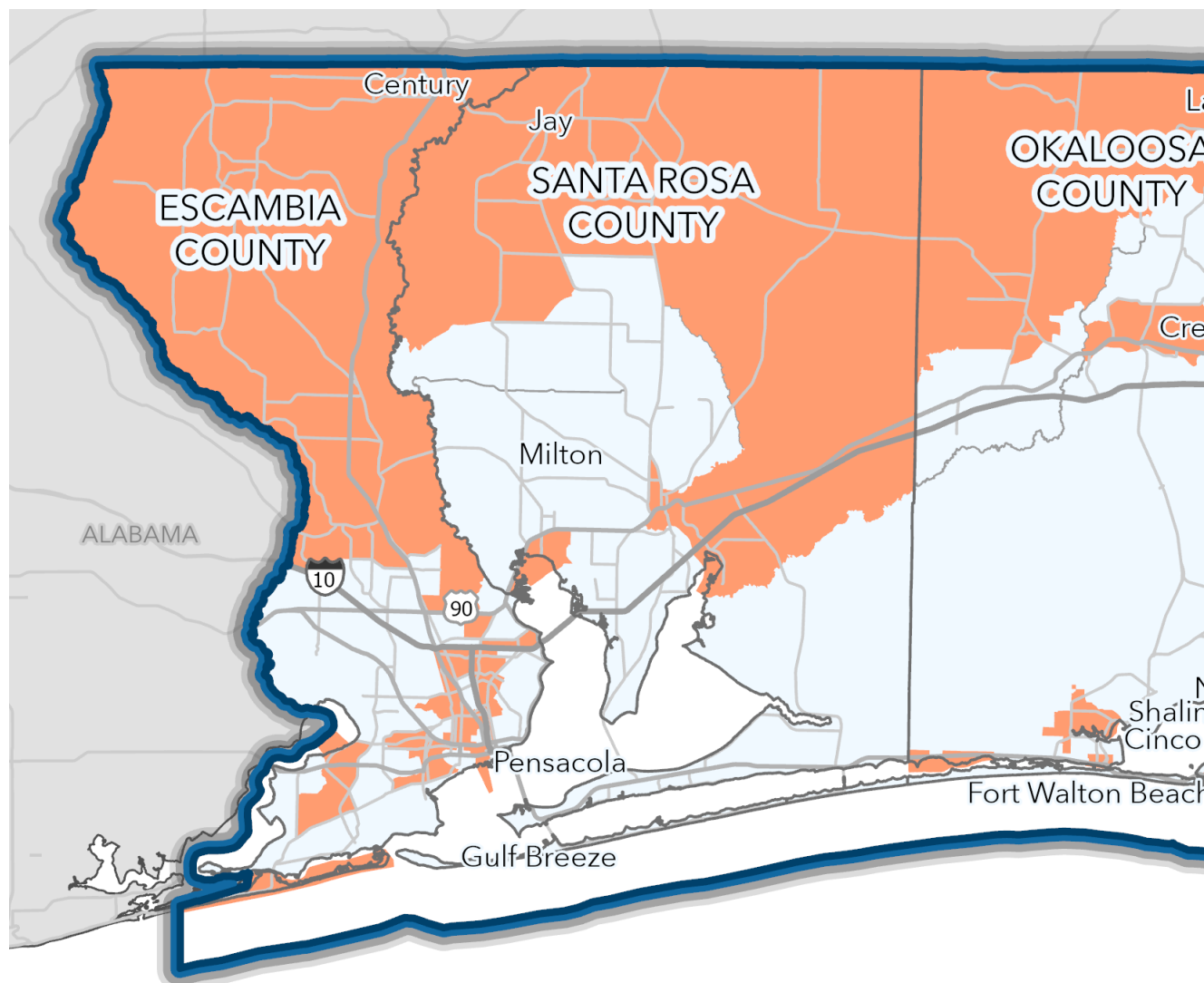


Of the nearly 4,000 fatal and serious injury crashes that occurred between 2019 and 2023, 730 crashes involved vulnerable road users (VRUs) such as pedestrians, bicyclists, and motorcyclists. VRUs involved in a crash are more likely to be killed or seriously injured than people traveling in vehicles because they have little protection, if any, to absorb the impact of a collision. Of all pedestrian, bicyclist, and motorcyclist crashes that occurred in the region during this five-year period, 53% resulted in a fatality or serious injury.

FIGURE 2: PROPORTION OF BICYCLE, PEDESTRIAN, AND MOTORCYCLE CRASHES THAT RESULTED IN A FATALITY OR SERIOUS INJURY

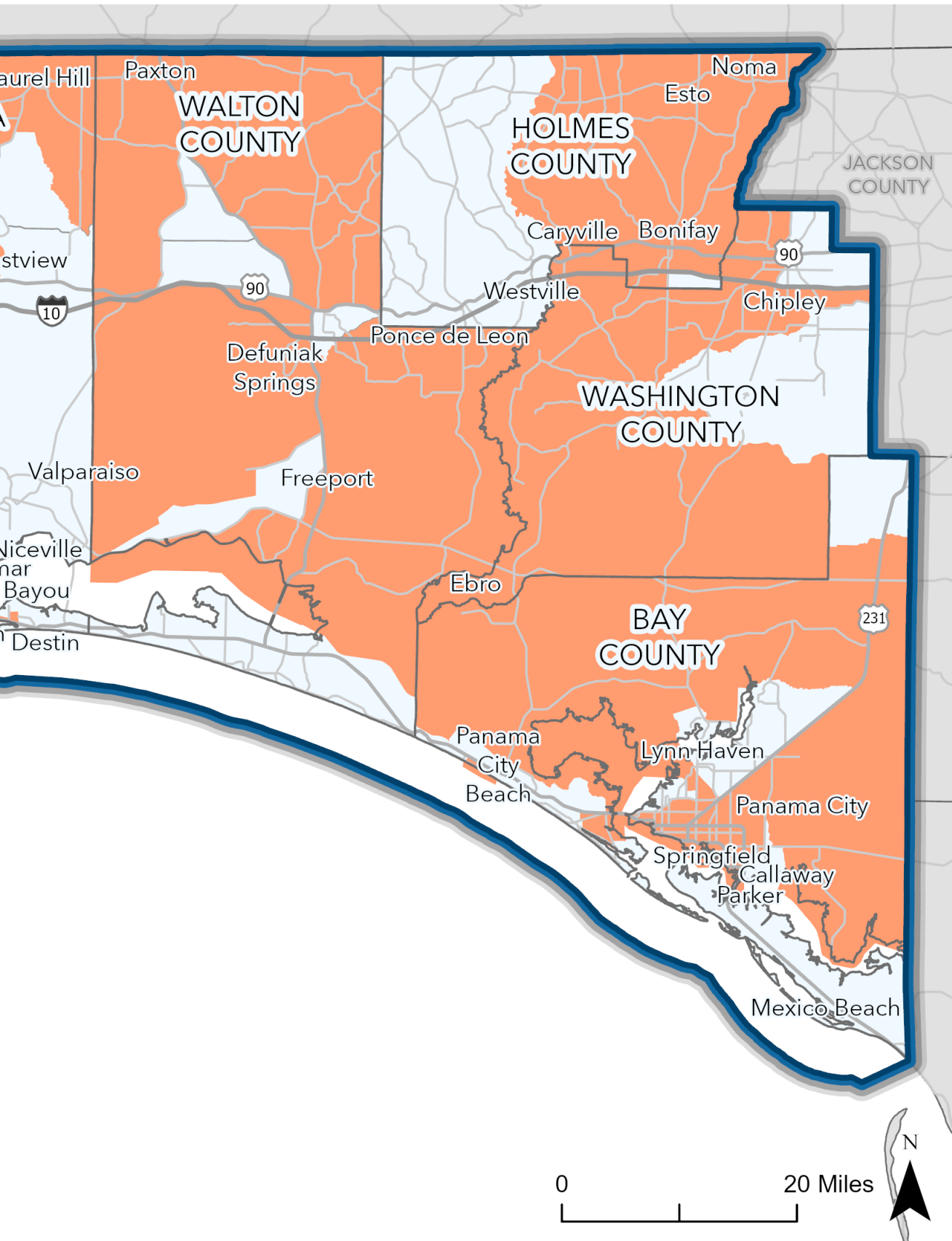


Roadway crashes alone are not the region's only safety concern. The ECRC is also committed to ensuring that neighborhoods that have historically been underserved. According to the United States Department of Transportation's (USDOT) Equity Analysis, the region has several Census Tracts identified as Transportation Disadvantaged. **Map 2** shows the Transportation Disadvantaged Census Tracts.



resources are equitably distributed and that roadway safety issues are adequately addressed in areas that equitable Transportation Community (ETC) Explorer, 37% of the ECRC's population is located within a Census tracts in the ECRC. An Equity Analysis was conducted as part of the development of this plan.

MAP 2: TRANSPORTATION DISADVANTAGED CENSUS TRACTS



Overview of Process

The development of this Safety Action Plan involved a multi-step approach to ensure the process was smooth and accurately met the region's goals and visions for a safe and efficient transportation system. The Safety Action Plan process is outlined in **Figure 3** below.

The Action Plan was first initiated through leadership commitment and goal setting, which ensured a public commitment to a goal of zero roadway fatalities and serious injuries. This was followed by the formation of an appointed Task Force to assist with plan development, implementation, and monitoring. Following the appointment of the Task Force, a safety analysis was completed that informed the development of the High Injury Network (HIN). Following the development of the HIN, public meetings were held to engage members of the public, encourage collaboration, and allow opportunities for feedback. This feedback was utilized to inform policy and process recommendations that will be implemented to improve safety for all modes of transportation. Finally, projects were developed to address safety concerns on the region's most dangerous roadways. These identified projects incorporate stakeholder input, public feedback, data driven evidence, and equity considerations. Identified projects form the basis for future planning activities that will fortify roadway safety in the region.

FIGURE 3: SAFETY ACTION PLAN PROCESS



The Safe System Approach

The Safe System Approach informed the development of this plan by providing a framework for analyzing and addressing roadway safety risks and human vulnerabilities within the Emerald Coast region.

The Safe System Approach aims to simplify the complexities associated with roadway safety into a singular goal of saving lives and protecting roadway users. By prioritizing risk mitigation and accounting for human error and vulnerabilities, the Safe System Approach informs policies and programs by asserting that fatal and serious injury crashes can be prevented through safer transportation planning practices.

The Safe System Approach is comprised of five objectives and six principles that are foundational to the protection of roadway users. These are shown in **Figure 4**.

FIGURE 4: SAFE SYSTEM APPROACH PRINCIPLES AND OBJECTIVES



Safety and the 7-Layer Cake

The ECRC recognizes that the elimination of deaths and serious injuries within the region's transportation system will require a multifaceted approach that includes overlap between a variety of plans and programs. In Spring 2024, the ECRC unveiled the 7-Layer Cake initiative that combines seven plans to modernize the transportation system throughout the region with a heavy emphasis on safety and technology deployment. **Figure 5** shows the components of the ECRC 7-Layer Cake initiative. The ECRC Safety Action Plan is the top layer of the cake, supported by other regionally focused plans, including:

- **The Smart Regions Plan** – Identifies transportation technology infrastructure that will enhance roadway safety, mobility, and efficiency throughout the region.
- **The Data Analytics Plan** – Utilizes the technology infrastructure identified in the Smart Regions Plan to determine software needs for real-time transportation information processing to enhance safety, reduce congestion, and enhance quality of life.
- **The Carbon Reduction Plan** – Identifies regional technology projects that will lower carbon emissions throughout the region, alleviate congestion, and improve mobility for all roadway users.

These plans will then be supported by foundational implementation initiatives related to long-range transportation plan integration, broadband and fiber deployment on the network, and ultimately, the construction and set up of a regional Transportation Management Center.

FIGURE 5: ECRC 7-LAYER CAKE INITIATIVE





CHAPTER 2



UNDERSTANDING THE CURRENT SYSTEM: SAFETY ANALYSIS

Understanding Crash Trends

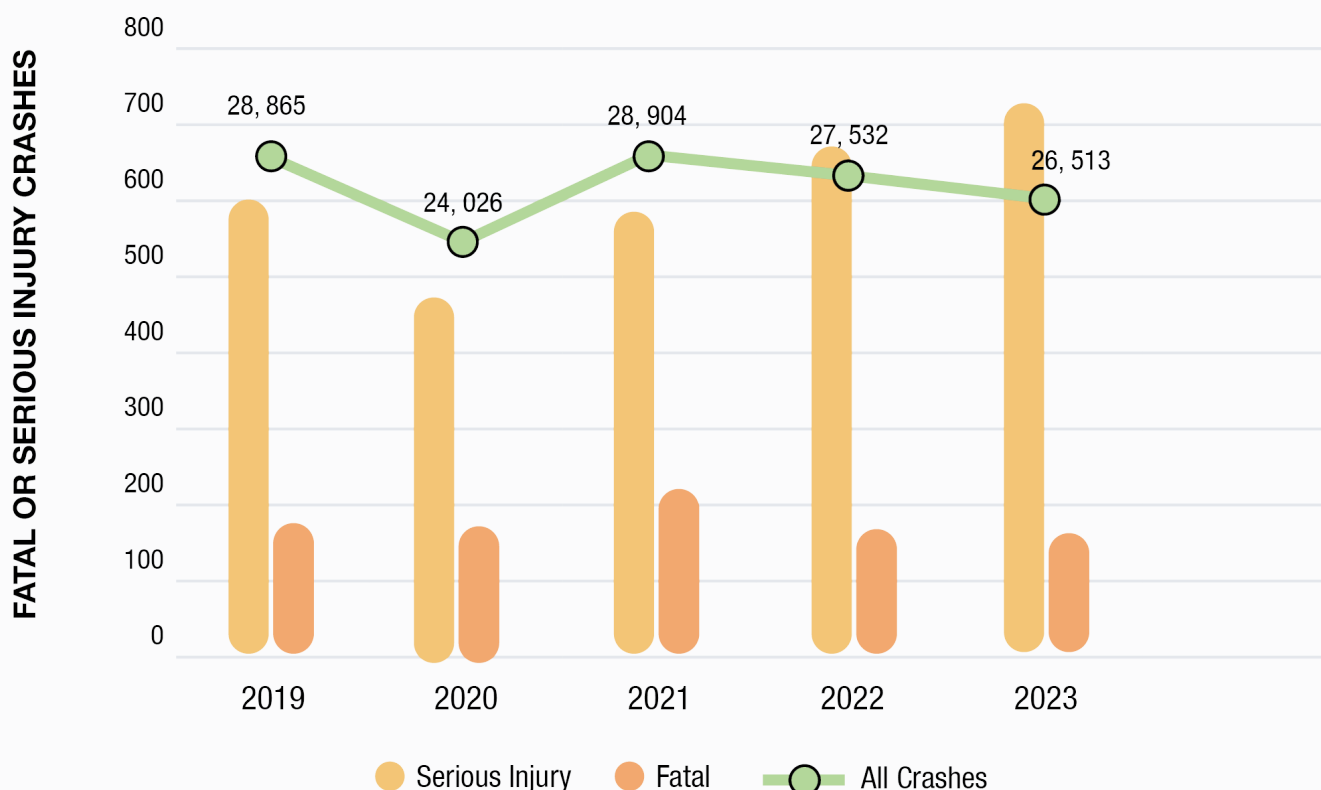
As part of the development of this Safety Action Plan, crash data was obtained to paint a picture of the current state of roadway safety in the region. This analysis included a review of historical crash data from 2019 to 2023, looking at different factors including location, time of day, time of year, behavior, environmental circumstances, and the involvement of vulnerable road users. Key findings are detailed in this chapter, with the complete crash analysis by county and HIN methodology available in [Appendix 1](#).

Historical Crash Data

From 2019 to 2023, 135,840 crashes occurred on roads throughout the seven counties in the ECRC Region. Approximately 3,973 of those crashes resulted in at least one fatality or serious injury, resulting in an average of approximately 795 fatal or serious injury crashes occurring in the Emerald Coast Region each year. These crashes have far-reaching effects on the lives of countless people.

Many communities saw a reduction in fatal and serious injury crashes during the height of the COVID-19 pandemic in 2020; fatal crashes increased slightly year-over-year in the Emerald Coast region despite a reduction in serious injury crashes and overall crashes. Since then, the number of serious injury crashes has increased each year. This pattern in crash data is depicted in [Figure 6](#) below. On the next page, [Figure 7](#) shows the region's total crashes and fatal and serious injury crashes by transportation mode.

FIGURE 6: TOTAL FATAL AND SERIOUS INJURY CRASHES IN ECRC REGION



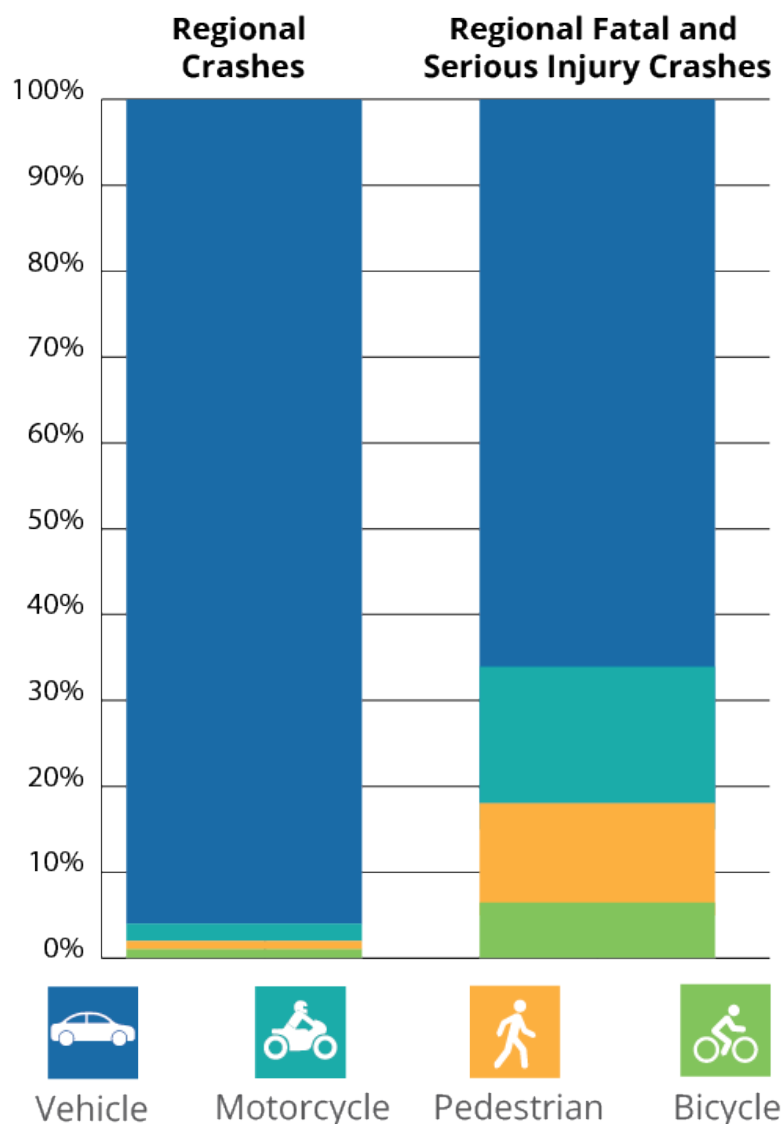
What is a serious injury crash?

A serious or severe injury crash results in an incapacitating injury, such as burns, lacerations, spinal cord injuries, or broken bones that require hospitalization. These are frequently life-altering injuries that affect a person's quality of life and reduce their ability to complete tasks they were able to do before the crash.

Why focus on fatal and serious injury crashes?

It is essential to focus on fatal and serious injury crashes because even one death on our transportation network is too many. Emphasizing these types of crashes can help our community reduce the adverse effects of crashes on our roadways and prioritize and protect the lives and well-being of all users, regardless of the mode they choose to use.

FIGURE 7: ECRC REGION TOTAL CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY TRANSPORTATION MODE



What is a KSI crash?

A crash resulting in a person being **killed (K)** or **seriously injured (SI)**.

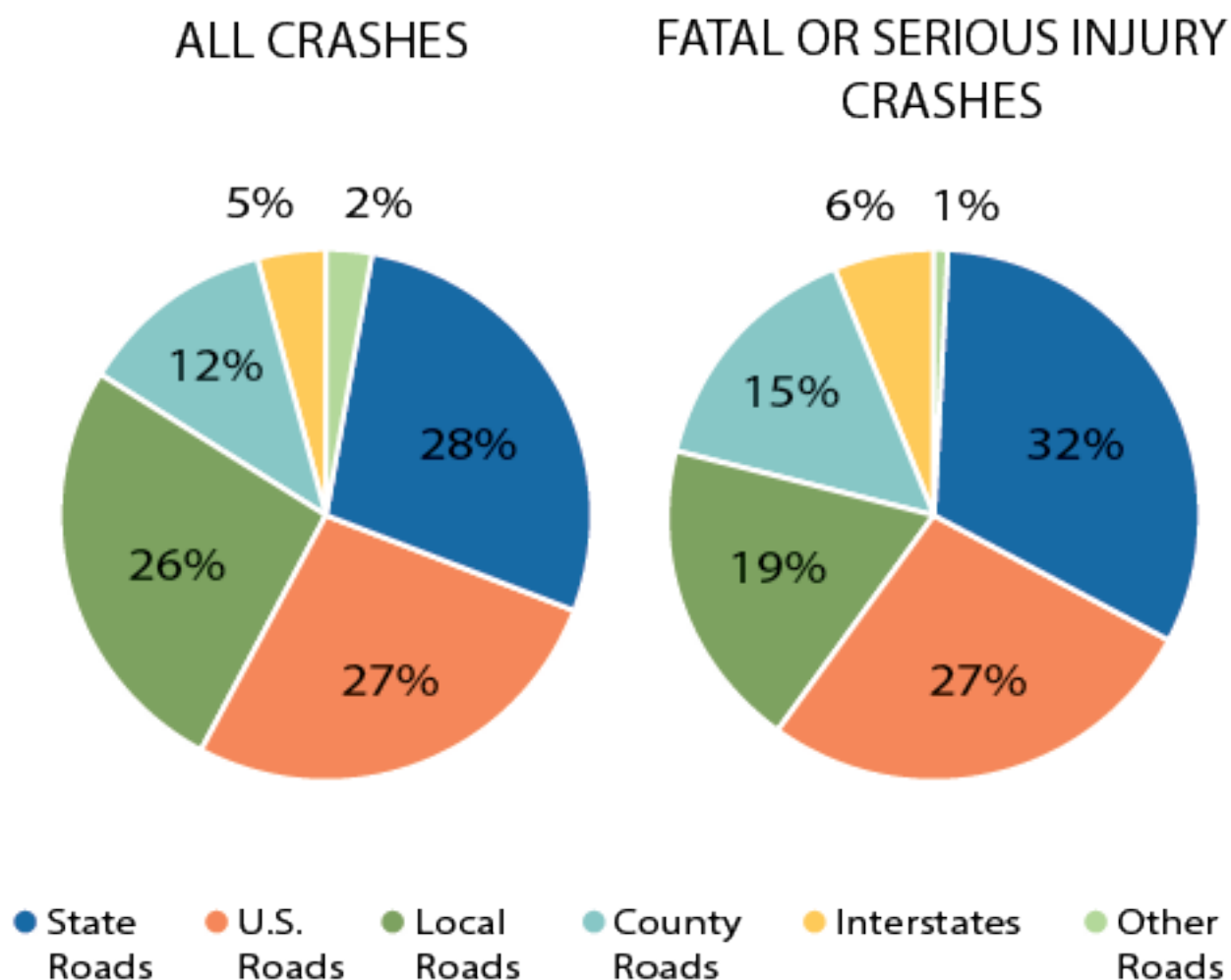
The acronym **"KSI"** is prevalent in crash reporting and data. **"KSI Crashes"** and **"Fatal and Serious Injury Crashes"** are used interchangeably in roadway safety planning and engineering. Both appear throughout this document.

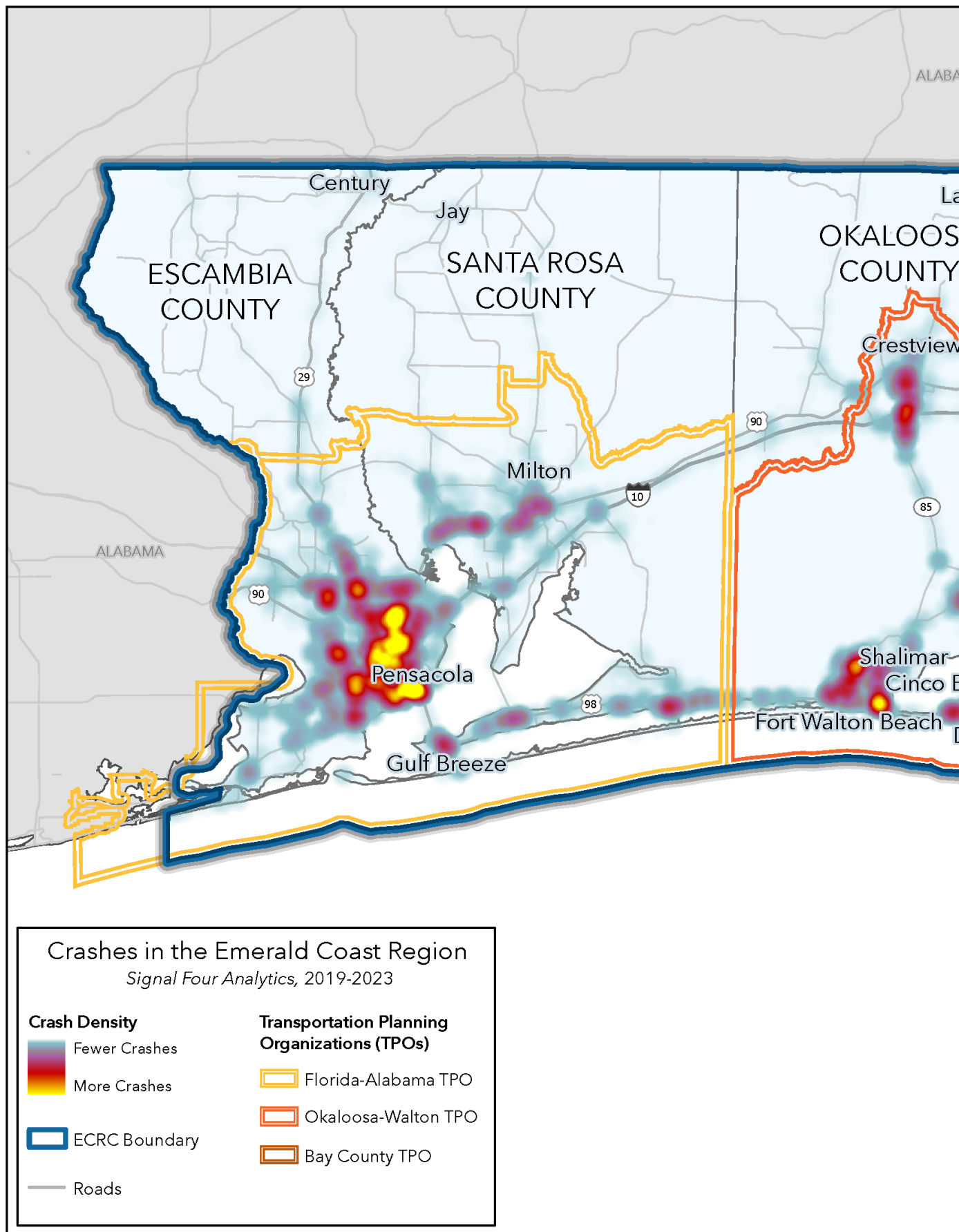
Crash Location

The distribution of crashes by road type from 2019 to 2023 indicates that five percent (5%) of crashes (6,220) occurred on interstate freeways, 55 percent (55%) of crashes (73,940) occurred on state roads (including U.S. routes), and 38 percent (38%) of crashes (51,622) occurred on local and county roads. Of the KSI crashes reported from 2019 to 2023, six percent (6%) (249) occurred on interstate freeways, 59 percent (59%) (2,357) occurred on state roads (including U.S. routes), and 34 percent (34%) (1,313) occurred on local and county roads. All other crashes are grouped into the “Other” category, which includes privately owned roadways. A detailed breakdown of this crash data by road type can be found in [Figure 8](#) below.

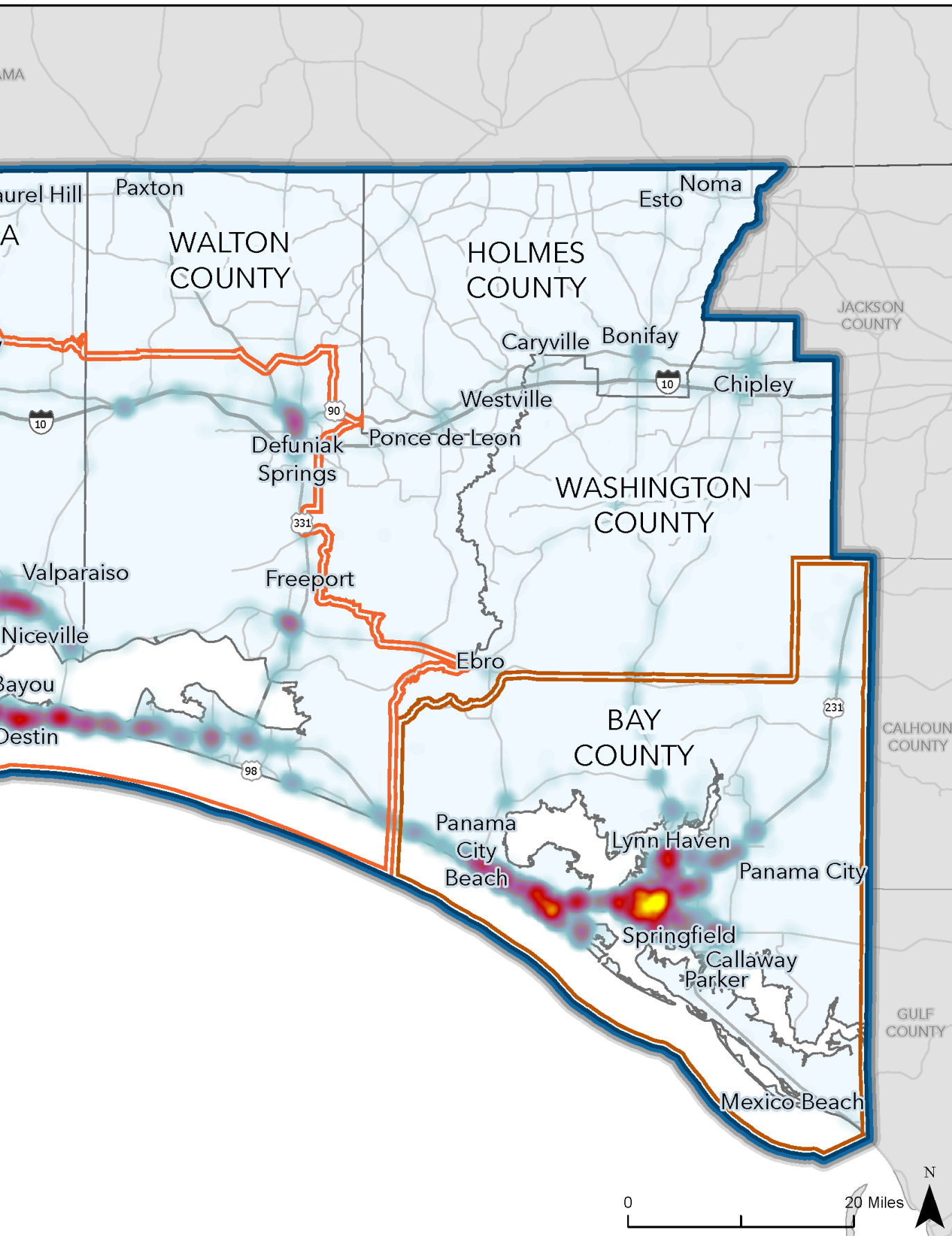
Approximately 31% of overall crashes (42,441) and 32% of KSI crashes (1,280) were classified as intersection related. On the following page, [Map 3](#) is a heat map of all crashes in the ECRC region.

FIGURE 8: ECRC REGION TOTAL CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY ROAD TYPE





MAP 3: REGION-WIDE CRASHES HEAT MAP



Crash Types and Contributing Factors

The most common crash types among the fatal and serious injury crashes reported in the five-year analysis period were off-road crashes and left-turn crashes. Each of these crash types accounted for approximately 16 percent (16%) of the fatal and serious injury crashes reported in the ECRC Region. Rear end crashes (14%), pedestrian crashes (11%), and angle crashes (9%) were the next most common crash types reported among fatal and serious injury crashes. **Table 1** compares the fatal and serious injury crash types to all crashes reported during the five-year analysis period.

TABLE 1: CRASH TYPE AND KSI CRASH TYPE BY PERCENTAGE

Crash Type	KSI Crashes	KSI %	All Crashes	All Crashes %
Left Turn	646	16%	16,665	12%
Off Road	619	16%	14,634	11%
Rear End	552	14%	49,633	37%
Other	453	11%	15,563	11%
Pedestrian	449	11%	1,409	1%
Angle	354	9%	11,229	8%
Rollover	263	7%	2,124	2%
Head On	237	6%	1,883	1%
Bicycle	178	4%	1,200	1%
Sideswipe	105	3%	13,669	10%
Unknown	63	2%	3,385	2%
Right Turn	32	1%	2,376	2%
Animal	22	1%	2,070	2%
Total	3,973	100%	135,840	100%

Contributing factors are not mutually exclusive; two or more contributing factors may be involved in any crash.

24%
of KSI crashes
involved distracted
driving

54%
of KSI crashes
involved illegal
risk-taking behavior

9%
of KSI crashes
involved aggressive
driving

6%
of KSI crashes
involved
speeding

16%
of KSI crashes
involved drugs
or alcohol

Environmental Circumstances

The environmental conditions during a crash can be informative of potential areas for improvement within the roadway network to better accommodate the traveling public. Environmental circumstances such as lighting, weather, and surface conditions were evaluated for the 3,973 fatal and serious injury crashes reported in the ECRC Region. **Table 2** summarizes the contributing circumstances as reported during the five-year analysis period.

TABLE 2: CRASH FREQUENCY BY ENVIRONMENTAL CONDITIONS

Light Conditions	2019	2020	2021	2022	2023	Total
Daylight	434	339	438	458	479	2,148
Dawn	14	14	12	8	13	61
Dusk	25	34	35	31	34	159
Dark - Lighted	107	96	124	128	130	585
Dark - Not Lighted	191	181	194	204	222	992
Other	6	5	5	0	12	20
Total	777	669	808	829	890	3,973

Surface Conditions	2019	2020	2021	2022	2023	Total
Dry	683	576	692	717	776	3,444
Wet	87	89	106	106	110	488
Other	7	4	10	6	4	31
Total	777	669	808	829	890	3,973

Weather Conditions	2019	2020	2021	2022	2023	Total
Clear	580	495	599	628	681	2,983
Cloudy	139	107	133	129	123	631
Rain	46	60	64	60	68	298
Other	12	7	12	12	18	61
Total	777	669	808	829	890	3,973

Approximately 45 percent (45%) of fatal and serious injury crashes reported in the ECRC Region during the five-year analysis period occurred under dark conditions (including dawn and dusk). Approximately 25 percent (25%) were coded as 'dark (not lighted)' indicating that there was no street or intersection lighting present at the location of the crash.

Approximately 13 percent (13%) of fatal and serious injury crashes reported in the ECRC region during the five-year analysis period occurred with wet surface conditions. Approximately 8 percent (8%) occurred during rainy weather conditions.

Temporal Patterns

The 3,973 fatal and serious injury crashes reported in the ECRC Region from 2019 to 2023 were evaluated for temporal patterns as well.

Figure 9 shows the monthly crash trends in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Washington, and Holmes Counties. The most common times for crashes were late spring and early fall, with October being the peak month for crashes in Escambia, Santa Rosa, Okaloosa, and Bay Counties. Walton County had the highest number of crashes in May, while Holmes County peaked in September. The fewest crashes were reported during December, January, and February.

FIGURE 10: DAILY KSI CRASH BY COUNTY

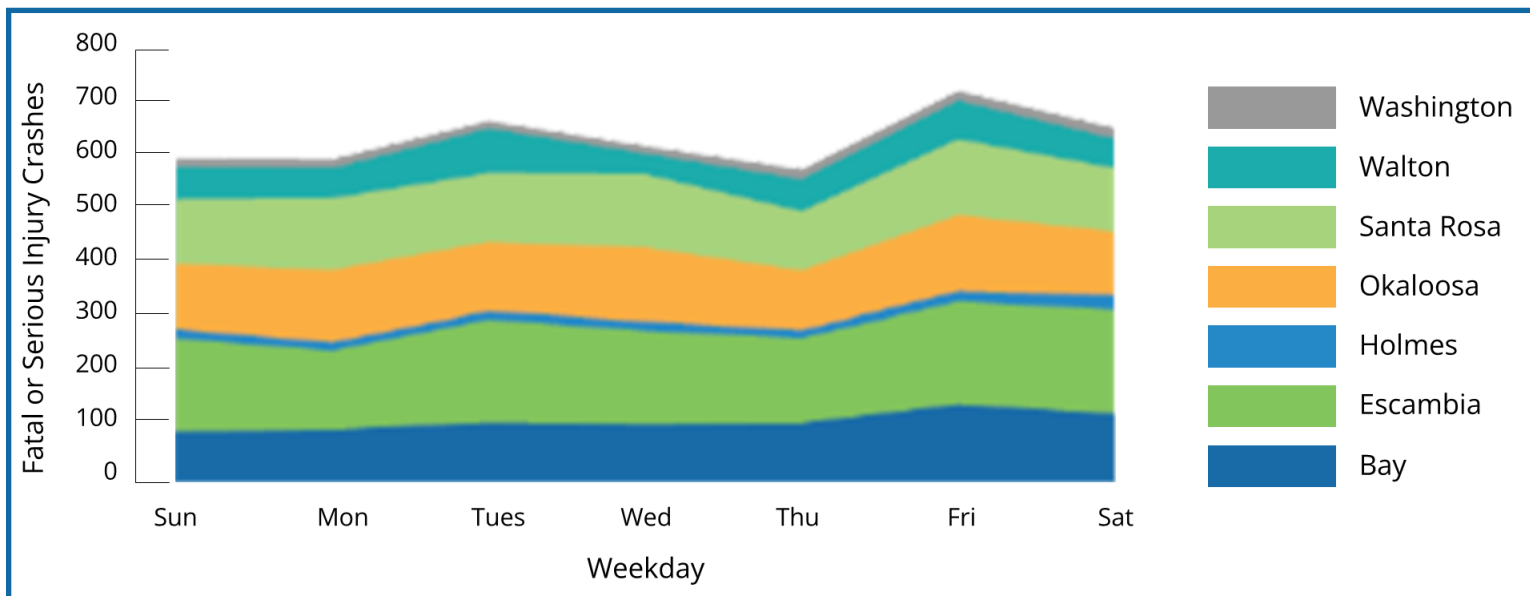


Figure 11 illustrates the time-of-day trends in crashes reported in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Washington, and Holmes Counties. Fatal and serious injury crashes are more frequent during afternoon and evening hours. The morning peak hour (7:00 AM to 9:00 AM) presents a modest increase in KSI crashes. Approximately 40 percent (40%) of fatal and serious injury crashes occurred between 2:00 PM and 8:00 PM.

FIGURE 9: MONTHLY KSI CRASH BY COUNTY

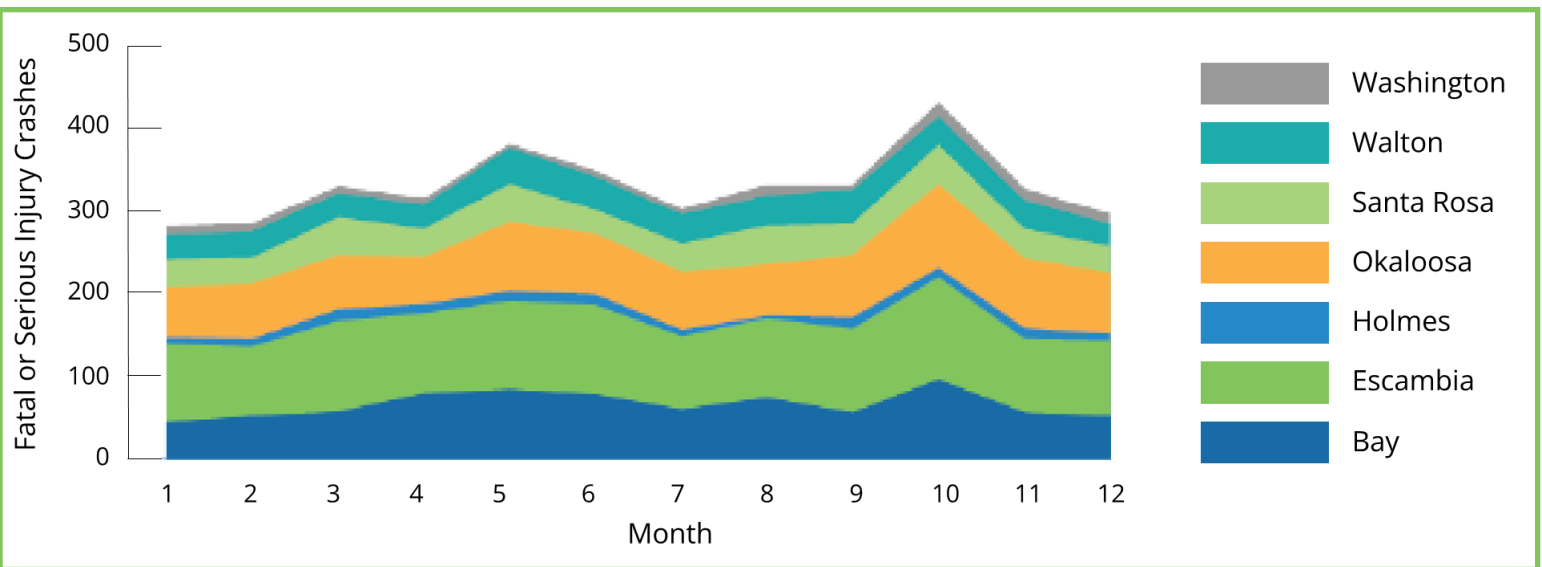
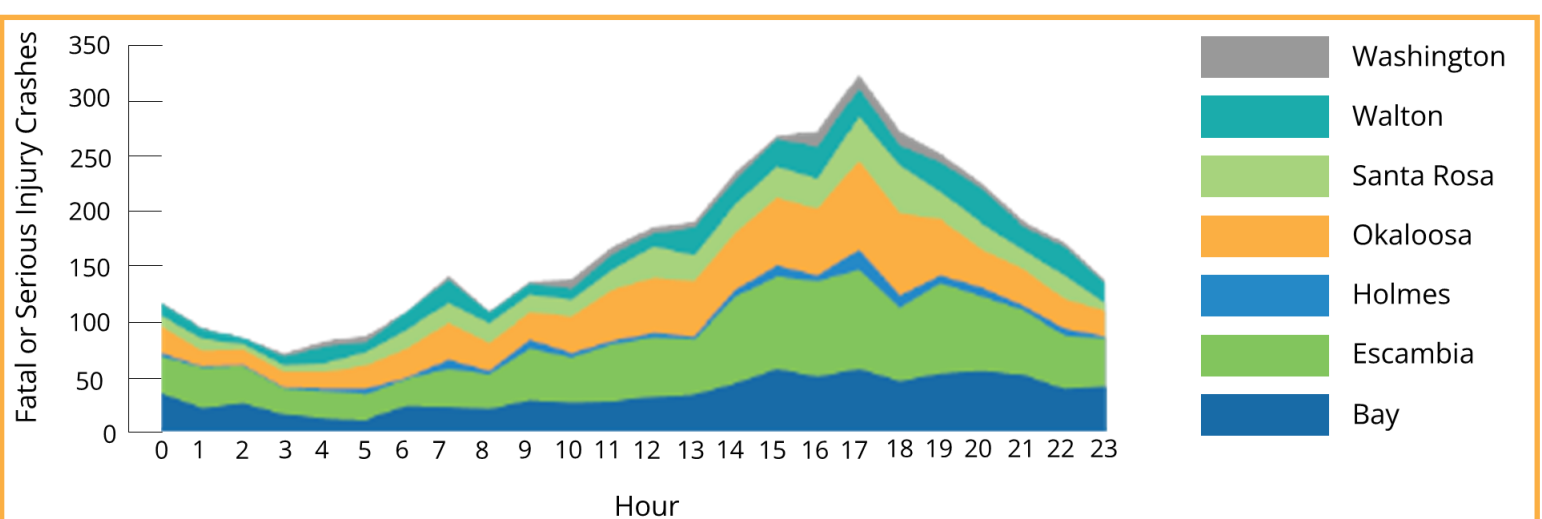


Figure 10 illustrates the day-of-the-week trends in crashes reported in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Washington, and Holmes Counties. Fatal and serious injury crashes reported within the five-year analysis period occurred more frequently on Fridays and Saturdays than on weekdays, except for Tuesdays. Approximately 45 percent (45%) of KSI crashes reported in the five-year analysis period occurred on a Friday, Saturday, or Sunday. That pattern was especially true in Holmes County, where approximately 51 percent (51%) of crashes occurred on a Friday, Saturday, or Sunday.

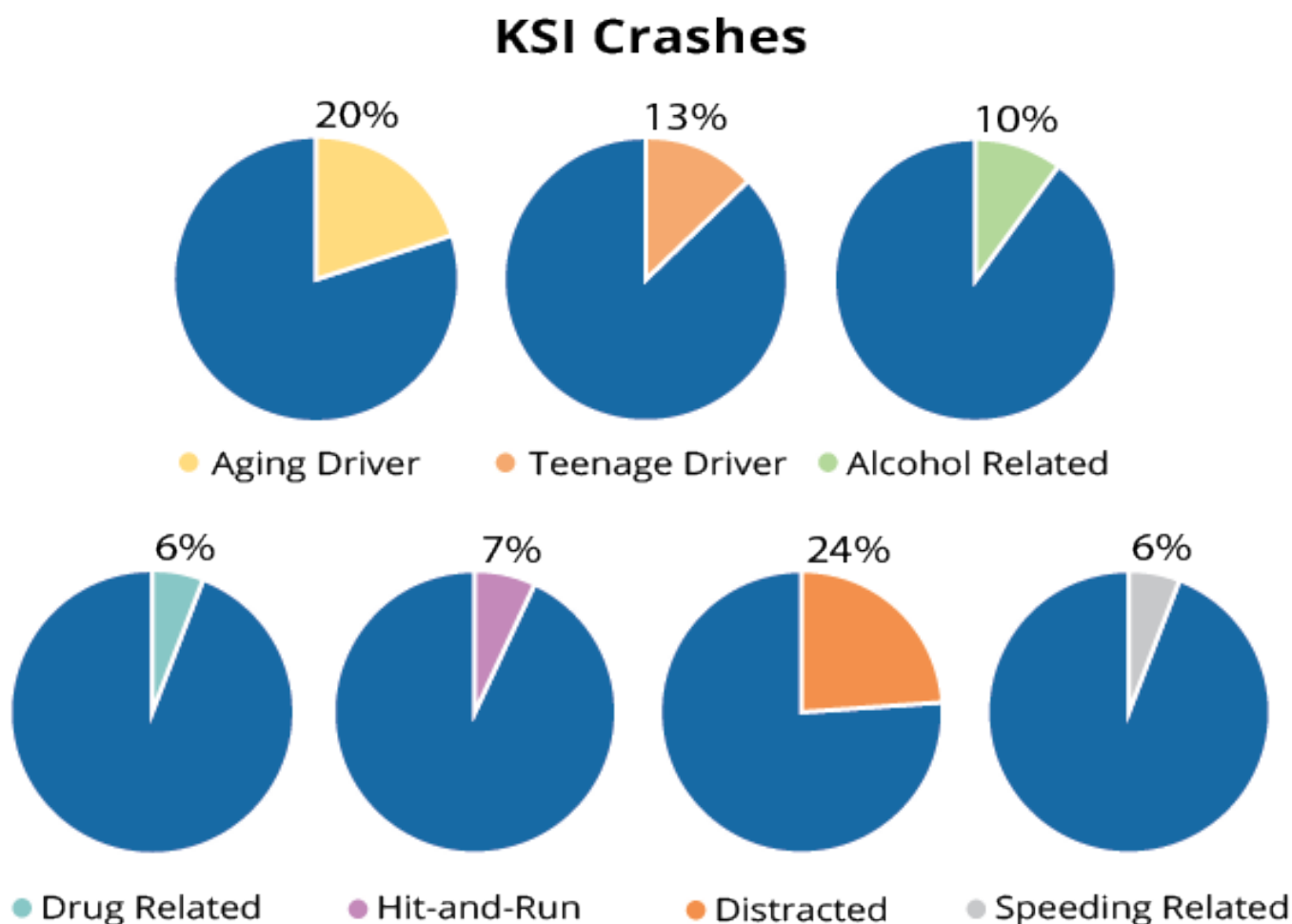
FIGURE 11: TIME OF DAY KSI CRASH BY COUNTY



Human Characteristics and Behavior

The 3,973 fatal and serious injury crashes reported in the ECRC Region from 2019 to 2023 were evaluated for patterns related to driver characteristics and risky behaviors as well. Crashes involving aging drivers (motorists aged 65 or older), teenage drivers, drivers under the influence of alcohol or drugs, hit-and-run collisions, distracted driving, and speeding behavior were evaluated. **Figure 12** summarize the involvement of these demographic characteristics in the crash sample. Note that the crashes quantified in **Figure 12** are not mutually exclusive; two or more human characteristics or behaviors could be involved in any crash.

FIGURE 12: PERCENT OF KSI CRASHES THAT INVOLVE CONTRIBUTING FACTORS



Aging drivers were involved in approximately 20 percent (20%) of the fatal and serious injury crashes reported during the five-year analysis period, and teenage drivers were involved in approximately 13 percent (13%).

Risky behaviors such as distracted driving, speeding, and alcohol or drug usage of drivers involved in crashes from 2019 to 2023 were assessed. Approximately 24 percent (24%) of fatal and serious injury crashes reported in the ECRC region during the five-year analysis period involved one or more distracted drivers. Driving under the influence of alcohol and drugs was observed in ten percent (10%) and six percent (6%) of all fatal and serious injury crashes, respectively. Speeding-related crashes accounted for six percent (6%) of all fatal and serious injury crashes. Last, hit-and-runs were reported in seven percent (7%) of all fatal and serious injury crashes.



THIS PAGE WAS INTENTIONALLY LEFT BLANK.

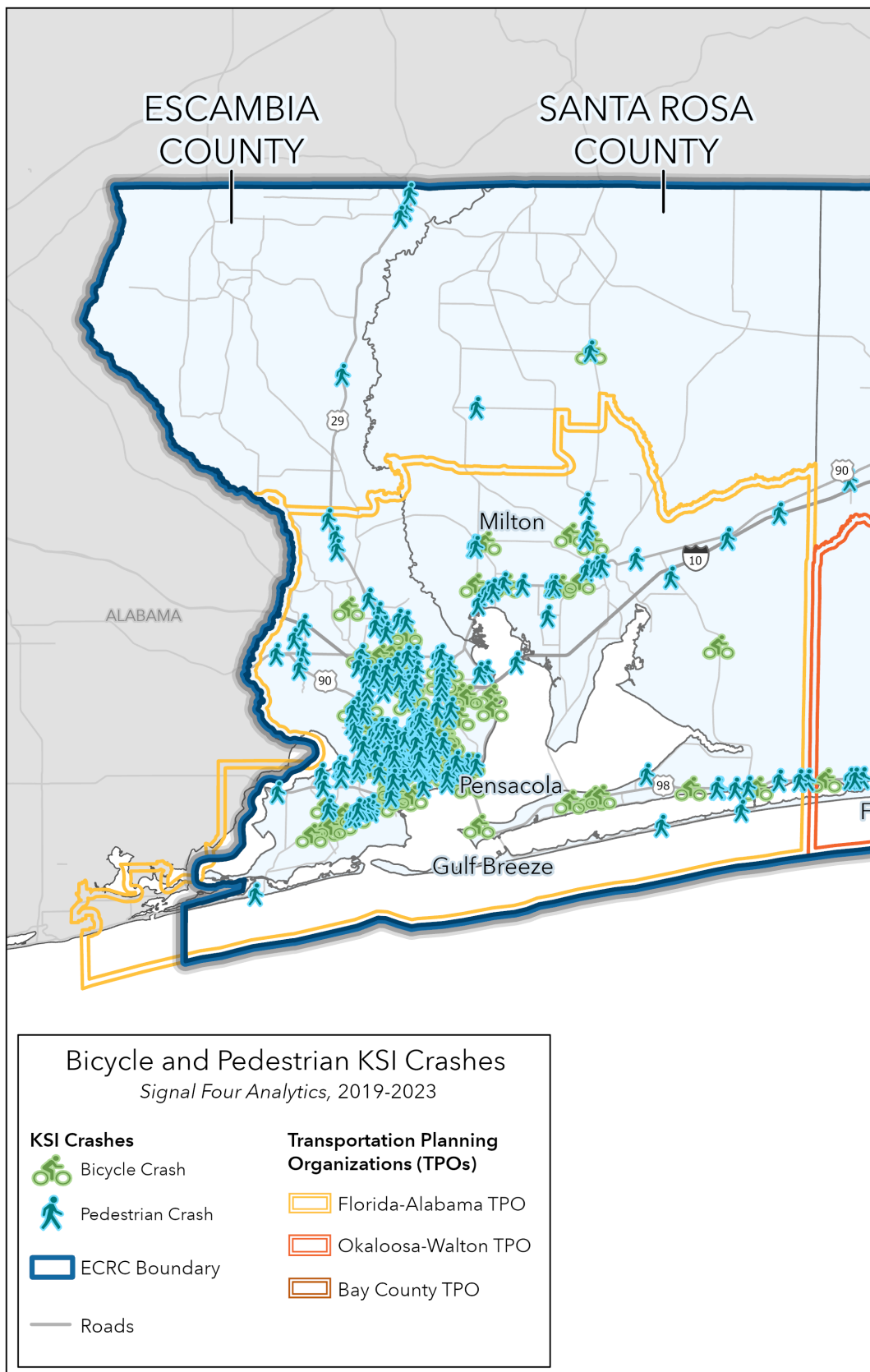
Safety of Vulnerable Road Users

Crashes that result in a severe injury or fatality disproportionately impact vulnerable road users (VRUs) – transit riders, bicyclists, and pedestrians. VRUs also include people using wheelchairs, other mobility assistance devices, electric bikes, or scooters.

Among the 3,973 fatal and serious injury crashes, there were 449 pedestrian crashes, 178 bicycle crashes, and 644 motorcycle crashes reported within the ECRC region during the five-year analysis period. Among these incidents, 193 of the pedestrian crashes resulted in a fatality and 256 resulted in serious injury; 48 of the bicycle crashes resulted in a fatality and 130 resulted in serious injury; 161 motorcycle crashes resulted in a fatality and 483 resulted in a serious injury.

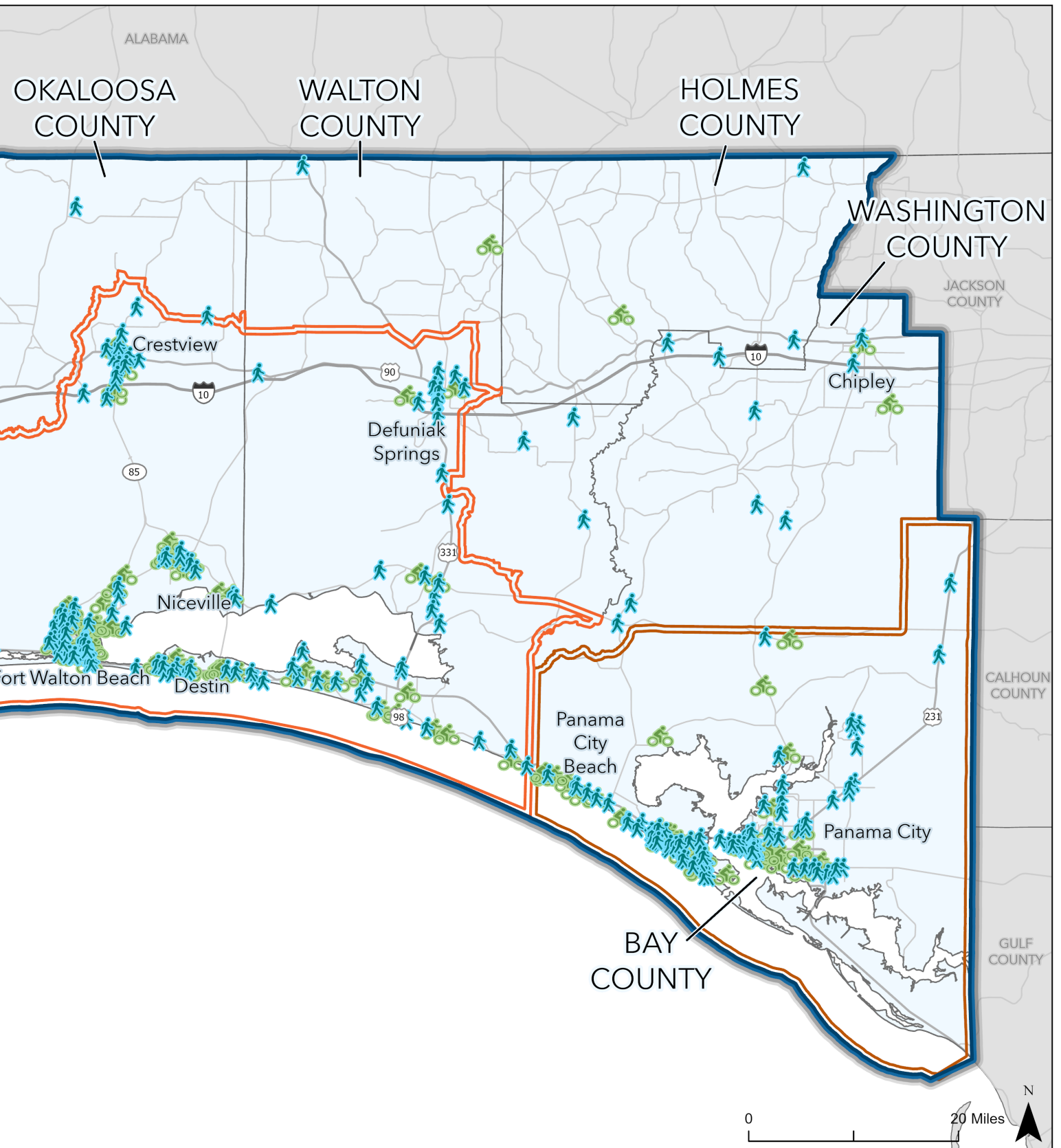
A majority of the fatal and serious injury pedestrian crashes, approximately 79 percent (79%), occurred under dark conditions, including dawn and dusk, whereas 29 percent (29%) of the bicycle crashes occurred under dark lighting conditions. Just twelve percent (12%) of pedestrian crashes occurred with wet surface conditions and just seven percent (7%) of bicycle crashes occurred with wet surface conditions. Very few of the pedestrian crashes and bicycle crashes within the region were attributed to the involvement of alcohol: 21 pedestrian crashes and one bicycle crash.

Escambia County had more bicycle and pedestrian crashes than any other county. [Map 4](#) illustrates the locations of these crashes throughout the region.



transportation network users who lack the protection of a vehicle – including people walking, bicycling or riding scooters.

MAP 4: BICYCLE AND PEDESTRIAN KSI CRASHES



The High Injury Network

The historical crash data was utilized to develop a High Injury Network to identify the most dangerous roads and intersections throughout the Emerald Coast region. The High Injury Network, or “HIN,” is a subset of the region’s streets and intersections where a disproportionate number of crashes that result in someone being killed or seriously injured have historically occurred.

The segments identified in the HIN represent some of our most dangerous corridors for motorists and vulnerable road users. Identifying the HIN is the first step toward developing a comprehensive list of locations to prioritize when implementing safety projects in our community that will have the most impact.

HIN Development

As part of the HIN development, a set of Segment Priority Lists (SPLs) and Intersection Priority Lists (IPLs) were developed for each of the seven counties within the Emerald Coast region. Separate SPLs and IPLs were created for overall crash trends and crashes involving vulnerable road users (i.e., pedestrians, bicyclists, and motorcyclists). These separate lists can be found in the [Appendix 1](#).

The HIN focused on road segments with the highest fatal and serious injury crash rates. To adjust crash data for traffic exposure (volumes and road length) on ECRC’s roads, crash rates per 100 million vehicle miles traveled (MVMT) were calculated for roads with available traffic data. Exclusions were made for crashes on interstates, ramps, parking lots, and private roads. The crash rate per 100 MVMT for each segment was calculated using the following formula.

$$\text{Crash Rate per 100 MVMT} = \frac{\text{Number of Crashes} \times 100,000,000}{365 \text{ days} \times (\text{AADT} \times 5 \text{ years}) \times \text{Segment Length}}$$

The crash rate per 100 MVMT was calculated for fatal and serious injury (KA) crashes, as well as for the overall dataset of all crashes (KABCO).

For intersection evaluation, crash counts were standardized using their Equivalent Property Damage Only (EPDO) scores. The EPDO method adds weighting factors based on the societal cost of each crash severity relative to the societal cost of one property damage only (PDO) crash. The EPDO score for individual intersections was determined by summing the EPDO value of all the crashes associated with each respective intersection. EPDO weighting factors were sourced from the American Society of State Highway and Transportation Officials (AASHTO) Highway Safety Manual. The complete HIN approach description is presented in [Appendix 1](#).

Region-wide High Injury Network

The total number of crashes that occurred on the HIN between 2019 and 2023 was 65,774, which accounts for 44% of all crashes in the ECRC region during that time. There were 1,954 fatal and serious injury crashes linked to the HIN, accounting for 48% of all KSI crashes. **Table 3** below shows the number of segments, intersections, and KSI crashes by road facility type for each county in the ECRC region. Note that segment-related crashes and intersection-related crashes may overlap, and one crash could be associated with both an intersection and adjacent approach road segment. **Tables 4-7** on the subsequent pages list the HIN by TPOs and rural areas followed by **Map 5** of the regional High Injury Network.

TABLE 3: KSI CRASHES BY COUNTY HIN SEGMENT AND INTERSECTIONS

County	HIN Segments	HIN Length (Miles)	Segment KSI Crashes	HIN Intersections	Intersection KSI Crashes
Escambia	56	182	576	30	93
Santa Rosa	24	114	153	23	59
Okaloosa	43	125	435	28	97
Walton	22	117	164	23	61
Bay	29	124	424	26	76
Washington	11	60	39	20	26
Holmes	16	57	34	20	28
Total	201	779	1,825	170	440



US 98 in City of Destin

TABLE 4: FLORIDA-ALABAMA TPO HIGH INJURY NETWORK

Florida-Alabama TPO High Injury Network			
County	Roadway	Begin	End
Escambia	S PACE BLVD	US/90W CERVANTES ST	US-29/SR-95
Escambia	N W ST	US-98/SR-30	SR-295/W FAIRFIELD DR
Escambia	US 90/N DAVIS HWY	SR-295/E FAIRFIELD D	US 90/9 MILE RD
Escambia	BRENT LN/SR-296	US-29/SR-95/N PALAFOX	N 12TH AVE
Escambia	US 29/N PALAFOX ST	BRENT LN	GARDEN ST
Escambia	W MICHIGAN AVE/ SAUFLEY FIELD RD	MILLVIEW RD	FAIRVIEW DR
Escambia	US-90/W CERVANTES ST	HYDE PARK RD	MASSACHUSETTS AVE
Escambia	N HWY 95A	US-29/SR-95	US-29/SR-95
Escambia	W KINGSFIELD RD	HWY 297A	CHEMSTRAND RD
Escambia	W JACKSON ST	SR-727	CR-453/W ST
Escambia	SR 297/DOG TRACK RD	SR-292	US-98/SR-30
Escambia	US 29/PENSACOLA BLVD	DIAMOND DAIRY RD	BRENT LN
Escambia	SR-292/GULF BEACH HWY/ BARRANCAS AVE	SR-297/DOG TRACK RD	LEMHURST RD
Escambia	SR 289/N 9TH AVE	BAYFRONT PKWY	FAIRFIELD DR
Escambia	N DAVIS HWY	US-90/SR-10A/MOBILE	ESCAM/SNTA CNTY LINE
Escambia	AIRPORT BLVD	N W ST	N 12TH AVE/TIPPIN AVE
Escambia	S NAVY BLVD/SR-295	N END BAYOU GRANDE	48080016 NB ON
Escambia	N T ST	US-90/SR-10A	W FAIRFIELD DR
Escambia	CERNY RD	SR-173	MARLANE DR
Escambia	MASSACHUSETTS AVE	US 90	US-29/SR-95
Escambia	W DETROIT BLVD	SR-297	US29/SR95/ PENSACOLA

TABLE 4: FLORIDA-ALABAMA TPO HIGH INJURY NETWORK CONTINUED

Florida-Alabama TPO High Injury Network Continued			
County	Roadway	Begin	End
Escambia	US 90/W CERVANTES ST	KLONDIKE RD	FAIRGROUNDS
Escambia	N ALCANIZ ST	E WRIGHT ST	E FAIRFIELD DR
Escambia	UNIVERSITY PKWY	SR-291	US-90A/SR-10/E NINE
Escambia	N TARRAGONA ST	E BLOUNT ST	SR-196/E MAIN ST
Escambia	W FAIRFIELD DR/CR-727	LILLIAN HWY	TEXAR DR
Escambia	LILLIAN HWY	SR-727/FAIRFIELD DR	N NEW WARRINGTON RD
Escambia	N DAVIS HWY	E WRIGHT ST	SR 295/E FAIRFIELD D
Escambia	PATTON DR	SR-292	SR-295/N NAVY BLVD
Escambia	COPTER RD	US-90A/SR-10	GROW DR
Escambia	N 14TH AVE	US-98/SR-30	US-90/SR-10A
Escambia	SR 290/E OLIVE RD	SR 291/N Davis Hwy	US 90
Escambia	TIPPIN AVE	SR-296/BAYOU BLVD	CREIGHTON RD
Escambia	E TEXAR DR	SR-289/N 9TH AVE	E MAXWELL ST
Escambia	HWY 297A	KINGSFIELD RD	CR-184/MUSCOGEE RD
Escambia	W CERVANTES ST	US-90/SR-10	CR-99/BEULAH RD
Escambia	W FAIRFIELD DR	SR-292	US-98/SR-30
Escambia	E GREGORY ST	N A ST	US98/SR289/N9TH AVE
Escambia	E GOVERNMENT ST	S A ST	END OF PAVEMENT
Escambia	W MORENO ST	CT-453/N W ST	N A ST
Escambia	N E ST	US-90/US-98/SR-10A	W TEXAR DR
Escambia	S HWY 97	LAKE SUZANNE DR	CR-184/MUSCOGEE RD
Escambia	N HWY 95A	CR-184/E QUINTETTE R	MOLINO RD

TABLE 4: FLORIDA-ALABAMA TPO HIGH INJURY NETWORK CONTINUED

Florida-Alabama TPO High Injury Network Continued			
County	Roadway	Begin	End
Escambia	PALAFOX PL	US-98B/SR-30/ GARDEN	S JEFFERSON ST
Escambia	PERDIDO KEY RD	LAFITTE REEF	CR-292A/GULF BCH HWY
Escambia	GULF BEACH HWY	SR-292/PERDIDO KEY D	S LOOP RD
Escambia	CHEMSTRAND RD	US-90A/SR-10	CHILDERS ST
Escambia	J EARL BOWDEN WAY E	GULF ISLAND NATL SEA	ESCAMBIA CO LINE
Escambia	LONGLEAF DR	ROLLING HILLS RD	PINE FOREST RD
Escambia	VIA DE LUNA DR	N END OF BRIDGE 480139	SANTA ROSA CO LINE
Santa Rosa	HWY 90	PACE LN	SR-87/STEWART ST
Santa Rosa	US 98/NAVARRE PKWY	SR-87	OKALOOSA COUNTY LINE
Santa Rosa	WOODBINE RD	US 90/SR 10	CHUMUKLA HWY
Santa Rosa	HWY 87 S	FARRINGTON RD	US-90/SR-10
Santa Rosa	GULF BREEZE PKWY	AVALON BLVD	CR-399/EAST BAY BLVD

TABLE 4: FLORIDA-ALABAMA TPO HIGH INJURY NETWORK CONTINUED

Florida-Alabama TPO High Injury Network Continued			
County	Roadway	Begin	End
Santa Rosa	E BAY BLVD	US 98/SR-30	SR-87/HWY 87 S
Santa Rosa	WILLARD NORRIS RD	ANDERSON LN	SR-87/STEWART ST
Santa Rosa	GULF BREEZE PKWY	EAST END OF PCOLA BR	PENSACOLA BEACH RD
Santa Rosa	MUNSON HWY	SR-87	INDIAN FORD RD
Santa Rosa	HAMILTON BRIDGE RD	E SPENCER FIELD RD	CR-184A/BERRYHILL RD
Santa Rosa	AVALON BLVD	US-98/SR-30	58002006 EB ON
Santa Rosa	HICKORY HAMMOCK RD	CR-89/WARD BASIN RD	SR-87/HWY 87 S
Santa Rosa	US-90	POND RD	TIMBER CENTER RD
Santa Rosa	HWY 182	CR-197/CHUMUCKLA HWY	ARD FIELD RD
Santa Rosa	MUNSON HWY	RED ROCK RD	FRANK HARDY ROAD
Santa Rosa	SPRINGHILL RD	SR-87/HWY 98N	TOMAHAWK LANDING RD
Santa Rosa	ALABAMA ST	BERRYHILL ST	SR-87
Santa Rosa	HWY 87 N	CR-182/ALLENTOWN RD	CR-178

TABLE 5: OKALOOSA-WALTON TPO HIGH INJURY NETWORK

Okaloosa-Walton TPO High Injury Network			
County	Roadway	Begin	End
Okaloosa	US 98/MIRACLE STRIP PKWY E	KERWOOD RD	SR 145/BROOKS ST SE
Okaloosa	US 98/EMERALD COAST PKWY	COASTGUARD STATION	WALTON CO LINE
Okaloosa	SR 20/JOHN SIMS PKWY	SR 397	SR 85
Okaloosa	SR 189/BEAL PKWY	HOLLYWOOD BLVD	SR 393/MARY ESTHER CUTOFF
Okaloosa	SR 85/N FERDON BLVD	OLD BETHEL RD	US 90
Okaloosa	RACETRACK RD	MLK BLVD	SR-85/EGLIN PKWY
Okaloosa	CR-30F/AIRPORT RD	US-98/SR-30	AIRPORT
Okaloosa	AIRPORT RD	SR-85	POVERTY CREEK RD
Okaloosa	HOLLYWOOD BLVD NW	ANDERSON DR/HILL AVE	BAY DR SE
Okaloosa	SR-285/PARTIN DR	BAYSHORE DR	COLLEGE BLVD
Okaloosa	EGLIN PKWY	4TH AVE	12TH AVE
Okaloosa	PALM BLVD	VALPARISO BLVD	E COLLEGE BLVD
Okaloosa	REDWOOD AVE	7TH ST	SR-20
Okaloosa	HOLMES BLVD NW	JONQUIL AVE NW	SR-189/BEAL PKWY NW
Okaloosa	4TH AVE	MEIGS DR	SR-85/EGLIN PKWY
Okaloosa	CALHOUN AVE	CROSS ST	MAIN ST
Okaloosa	OLD BETHEL RD	US-90/SR-10	POVERTY CREEK RD
Okaloosa	SANTA ROSA BLVD	MILITARY BDRY ENT	US-98/SR-30
Okaloosa	SR-85	SR-20	57160131 NB OFF
Okaloosa	E CHESTNUT AVE	S MAIN ST	US-90/SR-10/HWY 90
Okaloosa	MARY ESTHER CUT OFF	ANCHORS ST NW	SR-189/BEAL PKWY
Okaloosa	DENTON BLVD	MAYFLOWER AVE	SR-188/RACETRACK RD
Okaloosa	FERRY RD NE	CHESTNUT AVE SE	YACHT CLUB DR NE
Okaloosa	BENNING DR	US-98/SR-30	CALHOUN AVE

TABLE 5: OKALOOSA-WALTON TPO HIGH INJURY NETWORK CONTINUED

Okaloosa-Walton TPO High Injury Network Continued			
County	Roadway	Begin	End
Okaloosa	ROCKY BAYOU DR	SR-20/JOHN SIMS PKWY	STEPHEN DR
Okaloosa	MLK BLVD	FREEDOM WAY	HURLBURT RD
Okaloosa	HWY 393	US-90/SR-10/HWY 90	POVERTY CREEK RD
Okaloosa	LEWIS TURNER BLVD	GEN BOND BLVD	EGLIN PKWY
Okaloosa	SR293/SPENCE PKWY	E HWY 20	N LAKESHORE DR
Okaloosa	GOVERNMENT ST	SR-190	SR-397
Okaloosa	COLLEGE BLVD	SR-85	PALM BLVD
Okaloosa	MID-BAY CONNECTOR	57160128 SB ON	GORE 57160129/130
Okaloosa	SCENIC HWY 98	COUNTY LINE	END ROAD
Okaloosa	HWY 285	57160127 NB OFF	WALTON CO LINE
Okaloosa	CEDAR AVE	VALPARAISO BLVD	E COLLEGE BLVD
Walton	US-331	SR-20/MAIN ST	OWLS HEAD RD
Walton	US-90/SR-10	BOY SCOUT RD	HOLMES CO LINE
Walton	US-98/SR-30	OKALOOSA CO LINE	CO HWY 395
Walton	SR-20	SR-81	US-331/MADISON ST
Walton	US-331/SR-83	I-10 WB RAMP	E NELSON AVE
Walton	US-331	US-90/SR-10	DR. NELSON RD
Walton	CR-3280	US-331	MAGNOLIA LODGE RD
Walton	ROCK HILL RD	US-331	MCKINNON BRIDGE RD
Walton	US-98/SR-30	WATERSOUND PKWY	BAY CO LINE
Walton	CO HWY 1883	SR-83	COY ELLIS RD
Walton	CR-280	WALTON BRIDGE RD	CR-280A
Walton	CO HWY 183 S	CO HWY 280	US-90
Walton	CO HWY 183 N	US-90/SR-10	CR-183B
Walton	CHAT HOLLEY RD	CO HWY 393	US-331

TABLE 6: BAY COUNTY TPO HIGH INJURY NETWORK

Bay County TPO High Injury Network			
County	Roadway	Begin	End
Bay	US-98/SR-30	THOMAS DR	N EAST AVE
Bay	US 98/FL-30/9TH ST/ BECK AVE/SAINT ANDREWS BLVD	CR-385/FRANKFORD AVE	SR-327/LISENBY AVE
Bay	SR-22/E 3RD ST/ SHERMAN AVE	US 98/N TYNDALL PKWY	US 98/E 15TH ST
Bay	SR-30/FRONT BEACH RD	SR-79/ARNOLD RD	THOMAS DR
Bay	SR-368/W 23RD ST	SR 390/BECK AVE/ST ANDREWS BLVD	US-231
Bay	US-98/SR-30	OKALOOSA CO LINE	HILLS RD
Bay	SR-392/THOMAS DR	CR-3030/N LAGOON DR	CR-3031/BRISTOL ST
Bay	SR-20	SR-77	LITTLE BLUE LN
Bay	SR-389/N EAST AVE	US-98/SR-30A	E HWY 390
Bay	US-231	TRANSMITTER RD	CR-2301
Bay	SR-30/FRONT BEACH RD	US-98/PANAMA CITY BEACH PKWY	SR-79/ARNOLD RD
Bay	EVERITT AVE/CHERRY ST	US-98B/SR-30	N STAR AVE
Bay	US-98/SR-30A/PANAMA CITY BEACH PKWY	RICHARD JACKSON BLVD	SR-30
Bay	TITUS RD/JOHN PITTS RD	SR-77A	OLD MAJETTE TOWER RD
Bay	S THOMAS DR	SR-30	THOMAS DR
Bay	ALF COLEMAN RD	US-98/SR-30A	PANAMA CITY BEACH PKWY
Bay	CR-3031/THOMAS DR	SR-30/PANAMA CITY BEACH PKWY	CR-392/THOMAS DR
Bay	WISTERIA LN	SR-30	US-98/SR-30A
Bay	CR-2301	US-231	E HWY 388
Bay	SR-30A/TYNDALL PKWY	US-98/PITTS BAYOU	E 11TH ST

TABLE 6: BAY COUNTY TPO HIGH INJURY NETWORK CONTINUED

Bay County TPO High Injury Network Continued			
County	Roadway	Begin	End
Bay	SR-392A/HUTCHISON BLVD	RICHARD JACKSON BLVD	SR-30/FRONT BEACH RD
Bay	US-231	SR-20	SR-167/RESTFUL RD
Bay	SR-20	G W HOBBS RD	US-231
Bay	SR-79/ARNOLD RD	US-98A	CR-388
Bay	CR-2297	ALLANTON RD	OLD BICYCLE RD
Bay	E 11TH ST	TRANSMITTER RD	US-98/SR-30A
Bay	US-98B/SR-30/E 5TH ST	N COVE BLVD	CHERRY ST
Bay	CR-2300	ROMAN RD	SR-77
Bay	CR-388	SR-79	PRESERVATION DR

TABLE 7: RURAL AREAS HIGH INJURY NETWORK

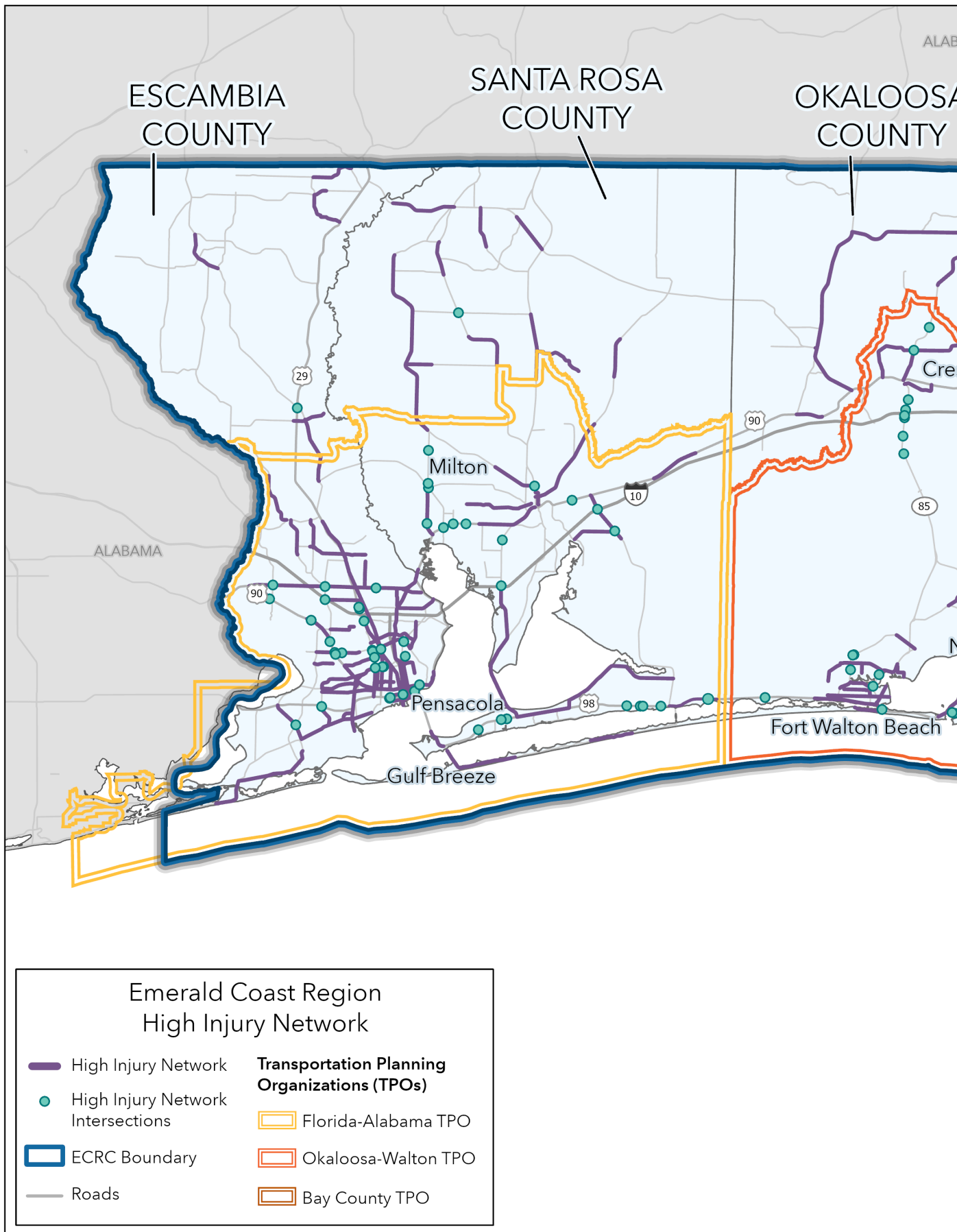
Rural Ares High Injury Network			
County	Roadway	Begin	End
Escambia	MOLINO RD	US-29/SR-95/N HWY 29	BRICKYARD RD
Escambia	BYRNEVILLE RD	CR-4/HWY 4	US-29/SR-65
Escambia	W HWY 4	HWY 4A	TEDDER RD
Escambia	CR-97/HWY 97	CR-99/N HWY 99	CR-164/HWY 164
Holmes	CR-10A	HWY 183A	US-90/SR-10
Holmes	CR-160	CR-79	CR-177
Holmes	US 90	HWY 10A	E MAIN ST
Holmes	CR-183A	WALTON CO LINE	HWY 10A

TABLE 7: RURAL AREAS HIGH INJURY NETWORK CONTINUED

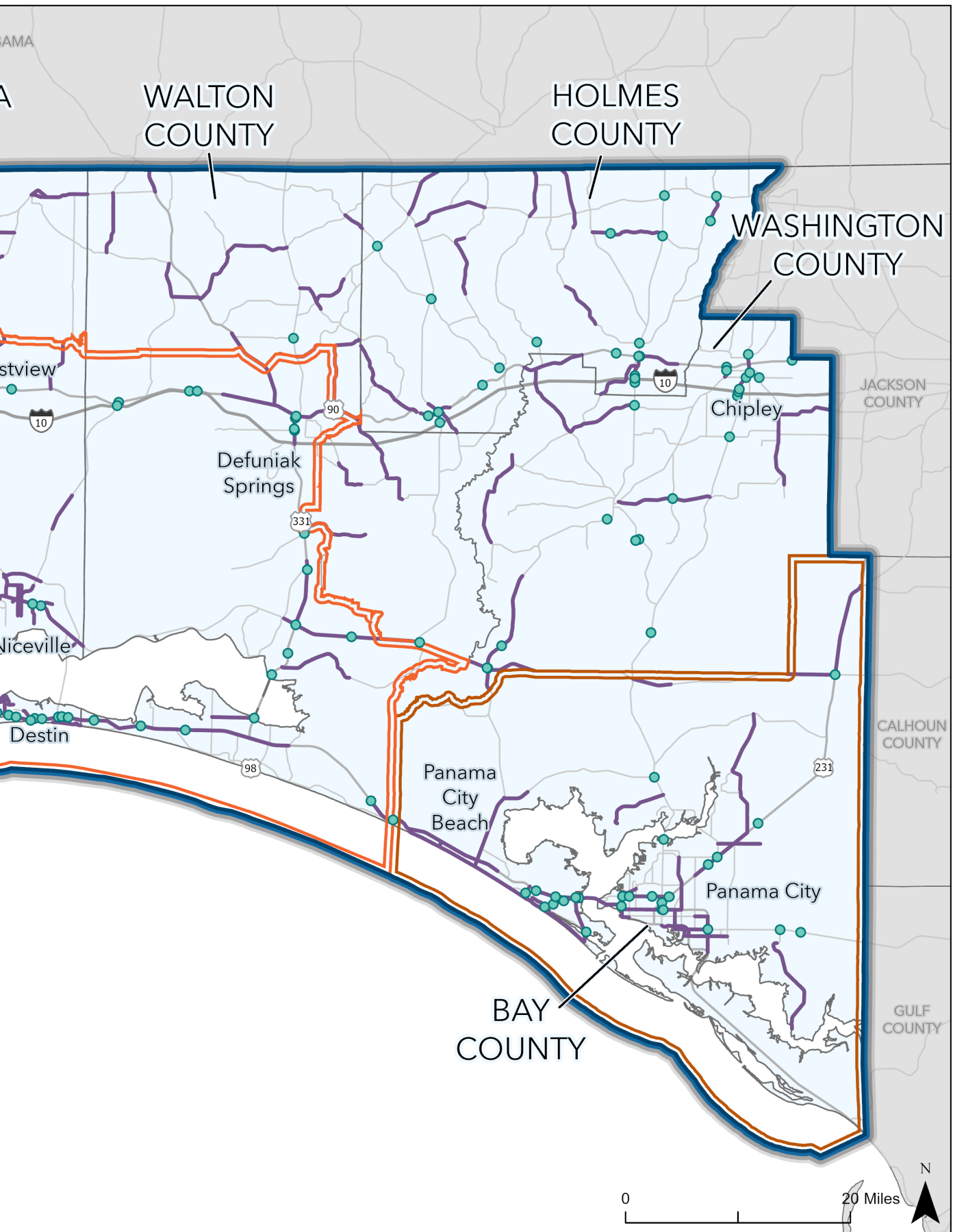
Rural Ares High Injury Network			
County	Roadway	Begin	End
Holmes	COUNTY RD 173	CR-79	WASHINGTON CO LINE
Holmes	PONCE DE LEON SPRING RD	WALTON CO LINE	US-90
Holmes	WAUKESHA ST	I-10	US-90
Holmes	SR-81	US-90/SR-10	JOHN DEERE LN
Holmes	CR-179	AL STATE LINE	SR-2
Holmes	CR-177A	MOTLEY RD	AL STATE LINE
Holmes	US-90	WAUKESHA ST	HOLMESTEAD RD
Holmes	PETTY CROSSROADS	AL STATE LINE	SR-2
Holmes	SR-2	CR-179A	SR-81
Holmes	CR-179A	PALADIN LN	DUCK POND BRANCH
Holmes	CR-173	JOHN LANE DR	SR-2
Holmes	CR-177A	JAMES G RD	TOBE RETHERFORD RD
Okaloosa	SECOND AVE	SR 85	SR 85
Okaloosa	HWY 2	SR-189/HWY 189	SR-85/HWY 85
Okaloosa	HWY 189	GEORGIA AVE	CR-2
Okaloosa	SR-4	GEORGIA RD	US-90/SR-10
Okaloosa	HWY 85	CR 85A	COUNTY LINE RD
Okaloosa	HWY 90	MIDDLEBROOKS RD	WILKERSON BLUFF RD
Okaloosa	HWY 85	HERITAGE PLANTATION BLVD	HART ROAD
Santa Rosa	CHUMUCKLA HWY	CR191/WILLARD NORRIS	EBENEZER CHURCH RD
Santa Rosa	SR-4	CR-87A/MARKET RD	SR-87

TABLE 7: RURAL AREAS HIGH INJURY NETWORK CONTINUED

Rural Areas High Injury Network Continued			
County	Roadway	Begin	End
Santa Rosa	COUNTRY MILL RD	POLK RD	SR-4/HWY 4
Santa Rosa	HWY 4	BLACK LAKE	MAGNOLIA ST
Santa Rosa	HWY 89	HARVEST RD	CR-197/CHUMUCKLA HWY
Santa Rosa	HWY 89	DALLAS ELLIOT RD	CR-182/CENTRAL SCH RD
Walton	CR-2A	US-331	SR-2
Walton	CO HWY 183 S	W C CURRINGTON RD	CO HWY 280 E
Walton	US-331	CO HWY 147 W	ALABAMA ST LINE
Walton	CO HWY 181 E	CO HWY 181 E/ ANDREWS ST	HOLMES CO LINE
Walton	CR-147W	SR-2	SR-85
Walton	SR-2	SR-83	US-331
Walton	CR-183B/MAIN ST	PADGETT RD	SR-83
Walton	CR-185/LEONIA HWY	CR-183B	MEMORY LN
Washington	SR-79/DOG TRACK RD	BAY CO LINE	SUGARDOLL RD
Washington	CR-279/PATE POND RD	US-90/SR-10/HWY 90	DOUGLAS FERRY RD
Washington	SR-277	CR-280/BRICKYARD RD	US-90/SR-10
Washington	FL-77/MAIN ST	GLENWOOD AVE	I-10
Washington	FL-20/CAPT FRITZ RD	WALTON CO LINE	BAY CO LINE
Washington	CR-278/PIONEER RD	CR-77	CR-277
Washington	HWY 90	HOLMES CO LINE	HOLMES CO LINE
Washington	RIVER RD	BURNS LAKE RD	CHOCTAW RD
Washington	ORANGE HILL RD	RATTLEBOX RD	PIONEER RD
Washington	DOUGLAS FERRY RD	PATE POND RD	SR-79
Washington	CORBIN RD	JACKSON CO LINE	ORANGE HILL RD



MAP 5: REGIONAL HIGH INJURY NETWORK

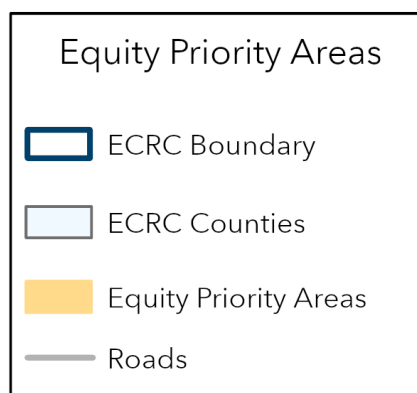
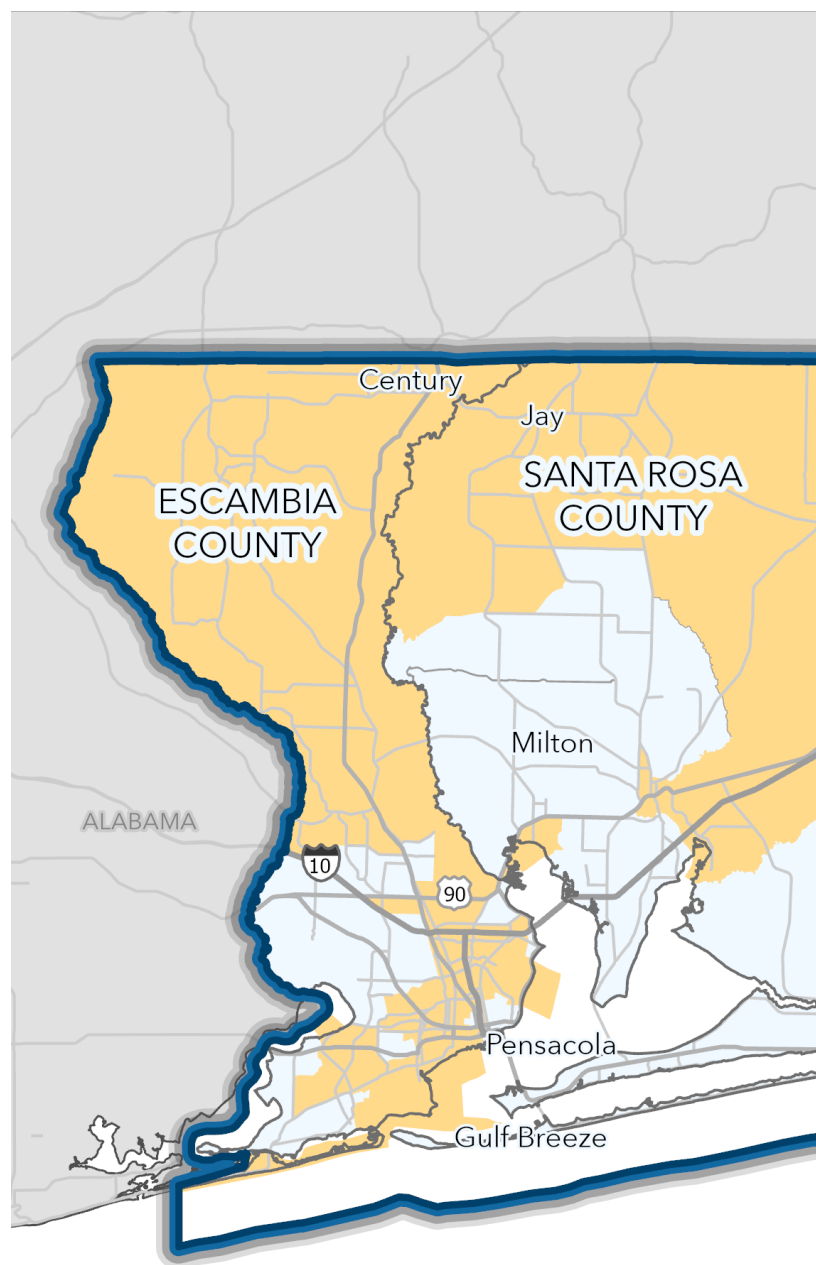


Equity Assessment

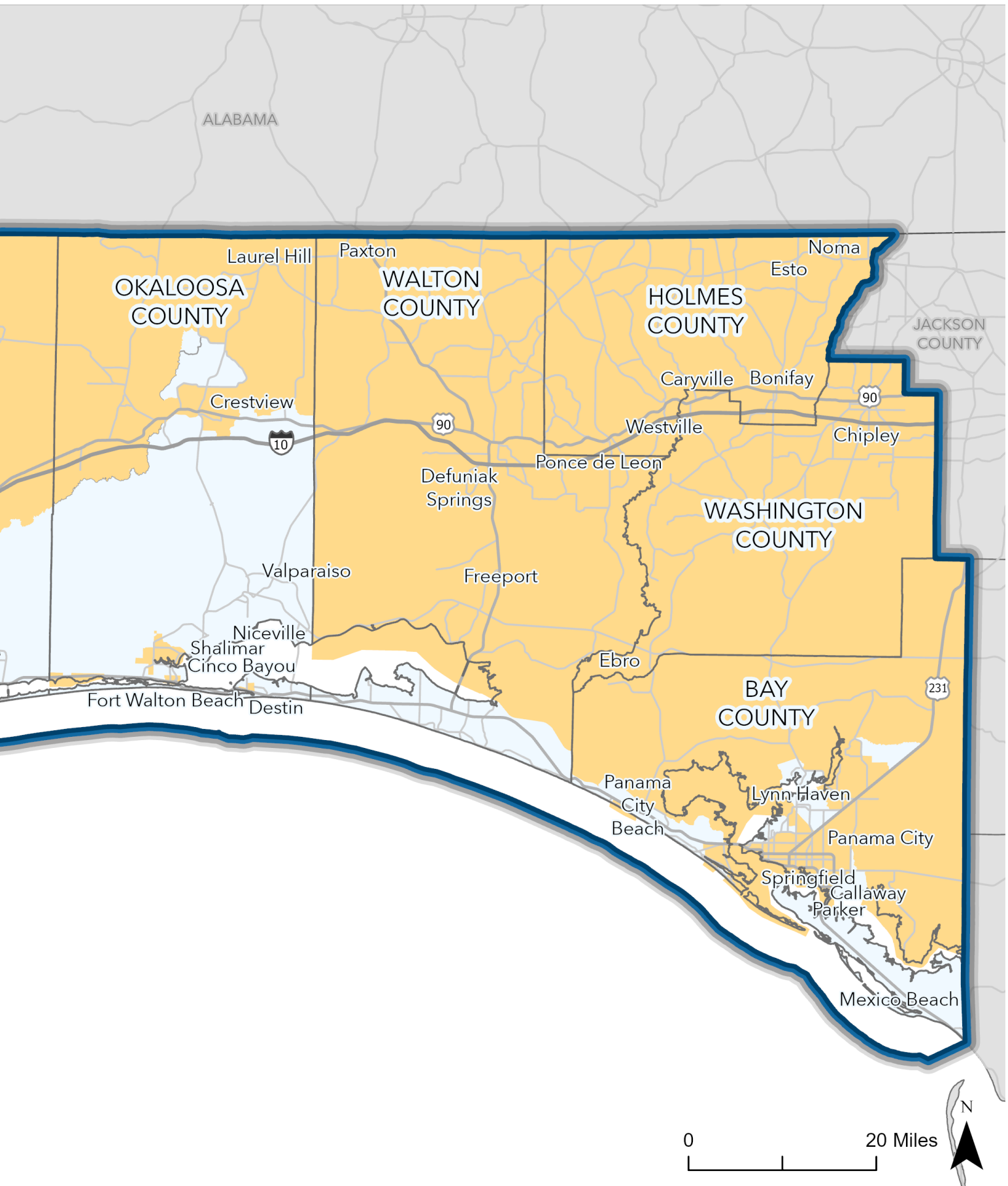
To ensure that equity was highly considered throughout the plan development process, an equity assessment was conducted that identified areas within the Emerald Coast that are likely to be disproportionately impacted by transportation-related injuries and fatalities. This equity framework was used to guide the recommendation of HIN segments for future transportation safety projects. The integration of equity data into the safety analysis ensures that all communities have access to a safe and reliable roadway network that can accommodate all transportation users regardless of race or socioeconomic status. The detailed equity assessment description is provided in [Appendix 2](#).

To identify the areas within the Emerald Coast that are disproportionately impacted by transportation-related deaths and injuries, data from the USDOT's Equitable Transportation Community (ETC) Explorer was used to identify Transportation Disadvantaged Areas. Transportation Disadvantaged Areas are identified based on factors including transportation insecurity, environmental burden, social vulnerability, and climate and disaster risk. Census Tracts that are considered overburdened by any of these factors are considered Transportation Disadvantaged. In conjunction with Transportation Disadvantaged Areas, Areas of Persistent Poverty and Historically Disadvantaged Communities were also considered. These three equity indicators were combined as Equity Priority Areas as shown in [Figure 13](#) on the next page. Out of 247 Census Tracts in the region, 128 are considered Equity Priority Areas. These Equity Priority Areas are shown in [Map 6](#).

People living in **Equity Priority Areas** are more likely to be **disproportionately impacted** by transportation-related fatalities and serious injuries.



MAP 6: EQUITY PRIORITY AREAS



To determine which Equity Priority Areas are most at-risk for crashes, average crash rates and average KSI crash rates were calculated for each Equity Priority Area. This number was then compared to the average crash rates and average KSI crash rates for the county the Census Tract is within. Equity Priority Areas that exhibit higher-than-average crash rates and KSI crash rates were identified. Crash rates and KSI crash rates by county can be seen below in [Table 3](#). It was determined from this analysis that, with the exception of Pensacola, Panama City, and Panama City Beach, rural areas experience more crashes that result in fatalities and serious injuries than urban areas in the Emerald Coast. At a county level, Escambia and Bay County had the highest crash rate for all counties, though Holmes County had the highest crash rate for fatal and serious injury crashes. Within the Emerald Coast region from 2019 to 2023, 59% of all crashes and 59% of all fatal and serious injury crashes occurred in an Equity Priority Area. This is consistent with the nationwide trend of fatal and serious injury crashes occurring more frequently in disadvantaged areas. This disproportionate impact endangers anyone living or traveling in an Equity Priority Area.

As equity is a priority for transportation safety enhancements throughout the region, Equity Priority Areas were weighted in the prioritization process that identified roadways most urgently in need of additional safety infrastructure. This ensures that roadway segments in disadvantaged areas are awarded additional consideration for safety planning and programming. The prioritization process is described in additional detail in [Chapter 4](#).

FIGURE 13: EQUITY PRIORITY AREA DIAGRAM

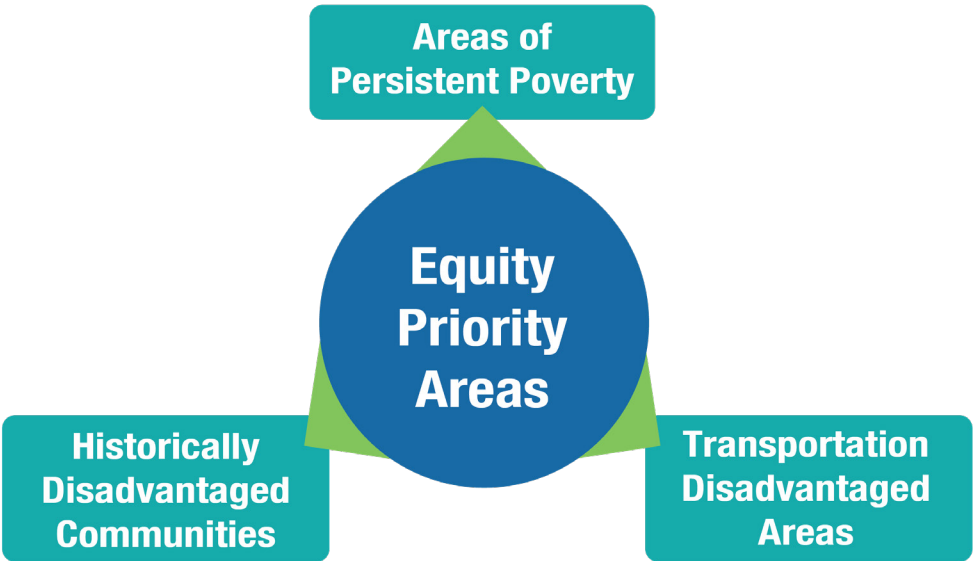


TABLE 8: AVERAGE CRASH RATES BY COUNTY (PER 100 MILLION VEHICLE MILES TRAVELED)

Average Crash Rates by County (per 100 million vehicle miles traveled)							
Average Crash Rate	Escambia	Bay	Santa Rosa	Holmes	Okaloosa	Walton	Washington
All Crashes	440	424	203	192	317	204	152
KSI Crashes	13	11	9	18	14	13	5

As equity is a priority for transportation safety enhancements throughout the region, Equity Priority Areas were highly weighted in the prioritization process that identified the roadways most urgently in need of additional safety infrastructure. The prioritization process is described in additional detail in [Chapter 4](#).

What is an AREA OF PERSISTENT POVERTY?

A Census Tract is an Area of Persistent Poverty if:

- 1) The county in which the Census Tract is located has greater than or equal to 20% of the population living in poverty
- 2) The Census Tract has a poverty rate of at least 20%

What is a HISTORICALLY DISADVANTAGED COMMUNITY?

A Census Tract is a Historically Disadvantaged Community if:

- 1) The Census Tract has been identified in the Climate and Economic Justice Screening Tool (CEJST), which identified communities that have been marginalized by disinvestment and overburdened by pollution

What is a TRANSPORTATION DISADVANTAGED AREA?

A Census Tract is a Transportation Disadvantaged Area if:

- 1) The Census Tract is identified as overburdened by underinvestment in transportation by the USDOT Equitable Community Transportation (ETC) Tool. The following factors are assessed for the Census Tract:

TRANSPORTATION INSECURITY	HEALTH VULNERABILITY
ENVIRONMENTAL BURDEN	CLIMATE AND DISASTER RISK
SOCIAL VULNERABILITY	



CHAPTER 3

HEARING FROM THE COMMUNITY



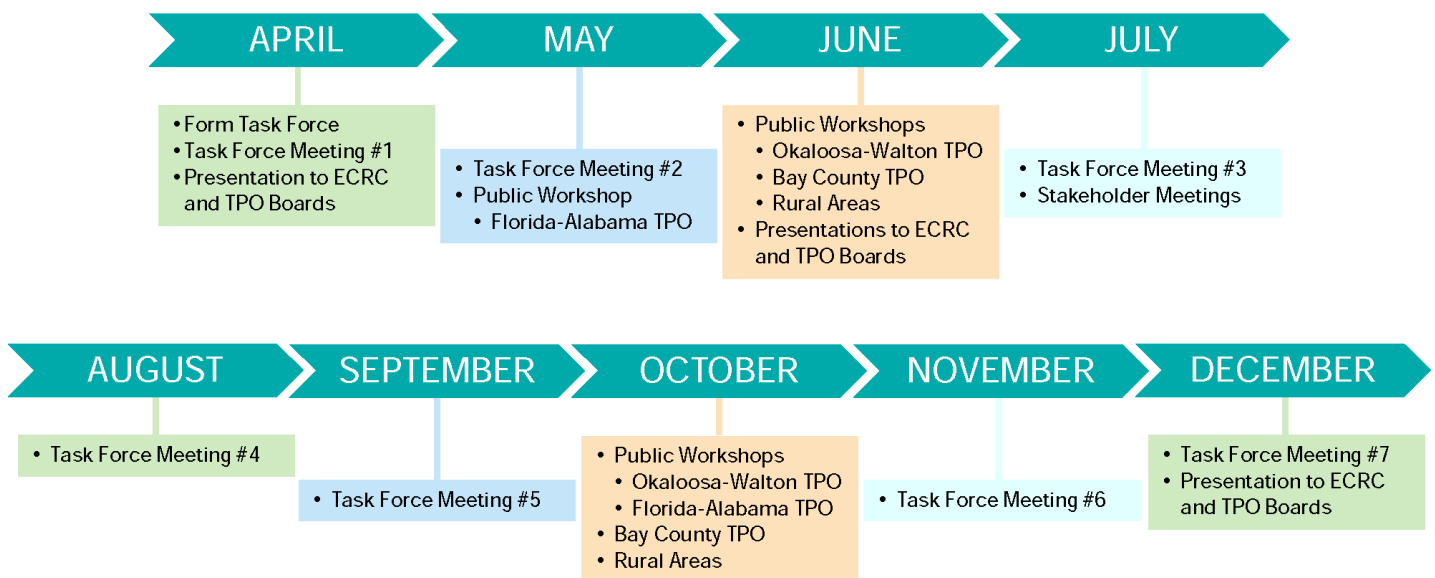
Hearing from the Community

Engagement with the stakeholders and community is a critical component in developing a Safety Action Plan. This process was heavily focused on the development and regular engagement of a Task Force, technical stakeholders, and members of the public. Feedback from these different groups provided much needed perspective to the data-driven safety analysis by providing information on the intangible “perceived” safety concerns that are not always illustrated in singularly data-driven processes influenced by crash data. Engagement was ongoing throughout plan development with:

- Seven virtual task force meetings
- Two rounds of engagement with between four and five public workshops each
- One-on-one stakeholder meetings as requested

In addition to meetings, a Story Map and project page were developed to provide access to information and deliverables as they were completed. Project updates were regularly presented to the ECRC board and the three TPO boards in the Emerald Coast region, Bay County TPO, Florida-Alabama TPO, and Okaloosa-Walton TPO. Engagement with the boards occurred in April, June, and December of 2024. The public engagement timeline is detailed below in [Figure 14](#). The multifaceted approach to engagement allowed for varied feedback from technical experts, stakeholders, and members of the public. Materials from the engagement process are presented in [Appendix 3](#).

FIGURE 14: PUBLIC ENGAGEMENT TIMELINE



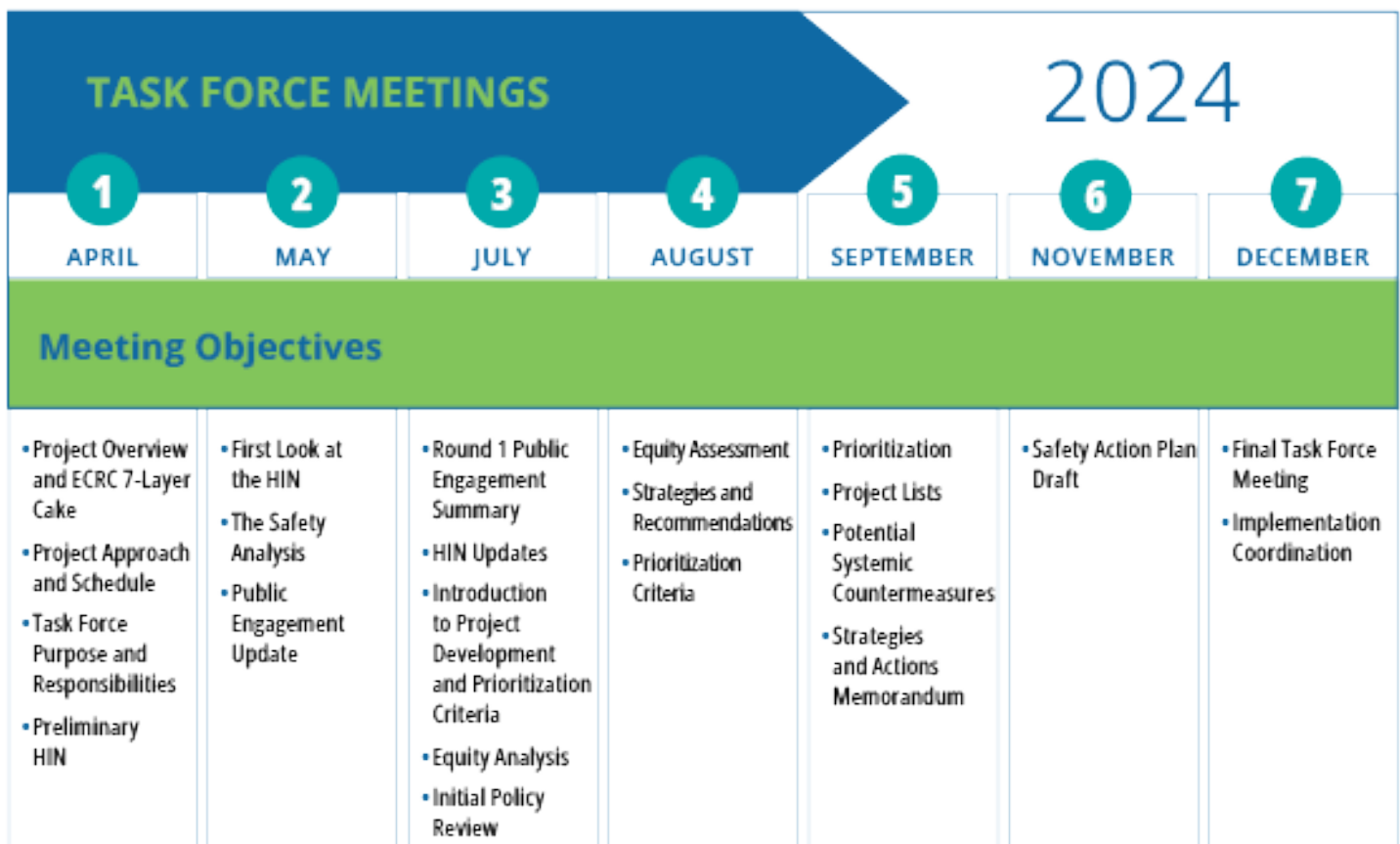
The Task Force

A Task Force was created to include elected officials and technical experts throughout the region in the Safety Action Plan development process. This group consisted of representatives from city and county government, law enforcement agencies, University of West Florida (UWF) Haas Center, TPOs, FDOT District 3, and the Federal Highway Administration (FHWA) Florida Division. The Task Force meetings were held virtually and included project updates and reviewing essential plan components. Task Force members were encouraged to provide feedback on draft deliverables ranging from the high injury network (HIN) lists, strategies and recommendations, prioritization criteria and methodology, project lists, and recommended regional countermeasures. Task Force meetings were held virtually, with an in-person option for the final meeting in Okaloosa County. Recordings of each meeting are available on the [ECRC website](#). The Task Force was instrumental in the development of this regional plan, and their role in future implementation cannot be understated.



Images from Task Force Virtual Meeting Recordings

The Task Force met seven times during plan development.



Stakeholders

Stakeholders from local agencies and the three TPOs within the Emerald Coast region were involved in the plan development process to provide unique insight on transportation safety in their communities and ensure support and participation from local agencies. Ongoing coordination with stakeholders built an understanding of the Safety Action Plan and the SS4A program overall. This will help prepare local agencies for applying for SS4A funding in the future.

Individual meetings were held with stakeholders for focused discussions on potential project priorities, policy review, and questions on project components. Individual stakeholder meetings included:

- City of DeFuniak
- Santa Rosa Island Authority
- Walton County
- FDOT District 3
- City of Niceville

During the HIN review process, some stakeholders provided recommendations for the HIN in their jurisdictions. The project team coordinated with the City of Pensacola, City of Niceville, and the FDOT District 3 Safety Office on their local HINs and hot spot locations. While these locations were not formally added to the ECRC regional HIN, they are recognized as significant to local communities and included with regional lists in [Appendix 1](#).

Public Workshops

Public workshops were held at key points during the development of the Safety Action Plan to provide an opportunity for the public to review project materials and provide feedback. The workshops were designed to inform the community about the ECRC 7-Layer Cake, the Safety Action Plan process, and the transportation safety concerns being identified through the process. These workshops were held in an open house style format to allow community members to move freely throughout the room and ask questions when needed.



Public Workshop in Walton County in October 2024

Public workshops were completed in two rounds throughout the development of the plan. In each round, four to five meetings were held within the three TPO regions as well as the rural areas in the Emerald Coast region. Workshops were held throughout the region to provide an opportunity for residents in all seven counties to attend a workshop.



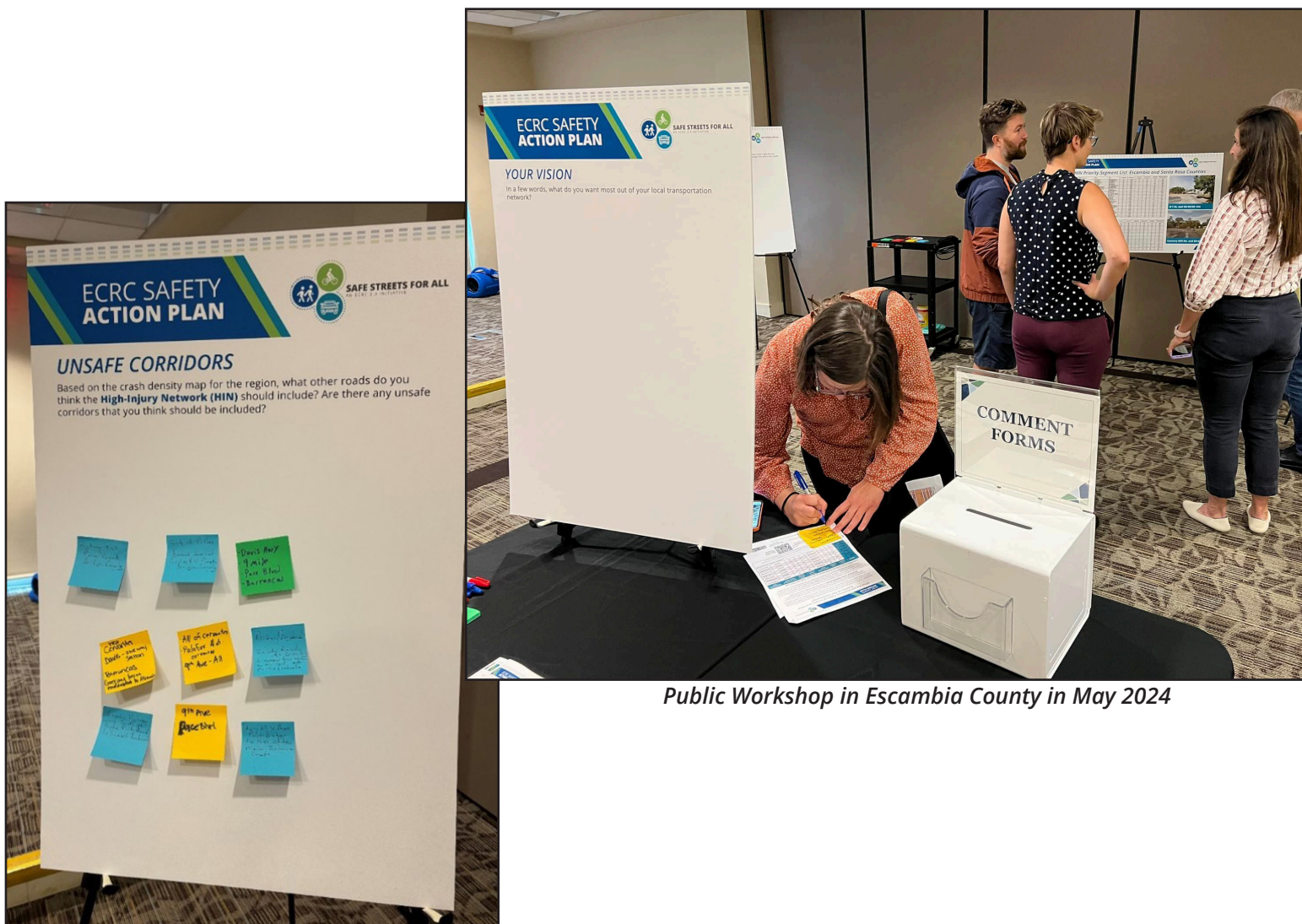
Florida-Alabama TPO ATMS/ITS Meeting in October 2024

Round 1

The intent for the first round of public workshops was to introduce the project, share information from preliminary data analysis, present the preliminary HIN, and hear from the public. Informational boards presented the Safety Action Plan components, the ECRC 7-Layer Cake, overall crash statistics for the region, and the preliminary HIN for each county. Prompts were provided to encourage attendees to share what they wanted out of the local transportation network, what other roads should be included in the HIN, and if there are additional unsafe corridors that should be included. Dates and locations of the first round of public workshops is included in [Table 9](#) below.

TABLE 9: ROUND 1 PUBLIC WORKSHOPS

Meetings	Date	Location
Florida-Alabama TPO	May 13, 2024	Pensacola Library
Rural Areas	June 17, 2024	Crestview University of Florida Extension Office
Okaloosa-Walton TPO	June 18, 2024	Okaloosa County Admin Building
Bay County TPO	June 26, 2024	BayWay Administration and Meeting Facility



Public Workshop in Escambia County in May 2024

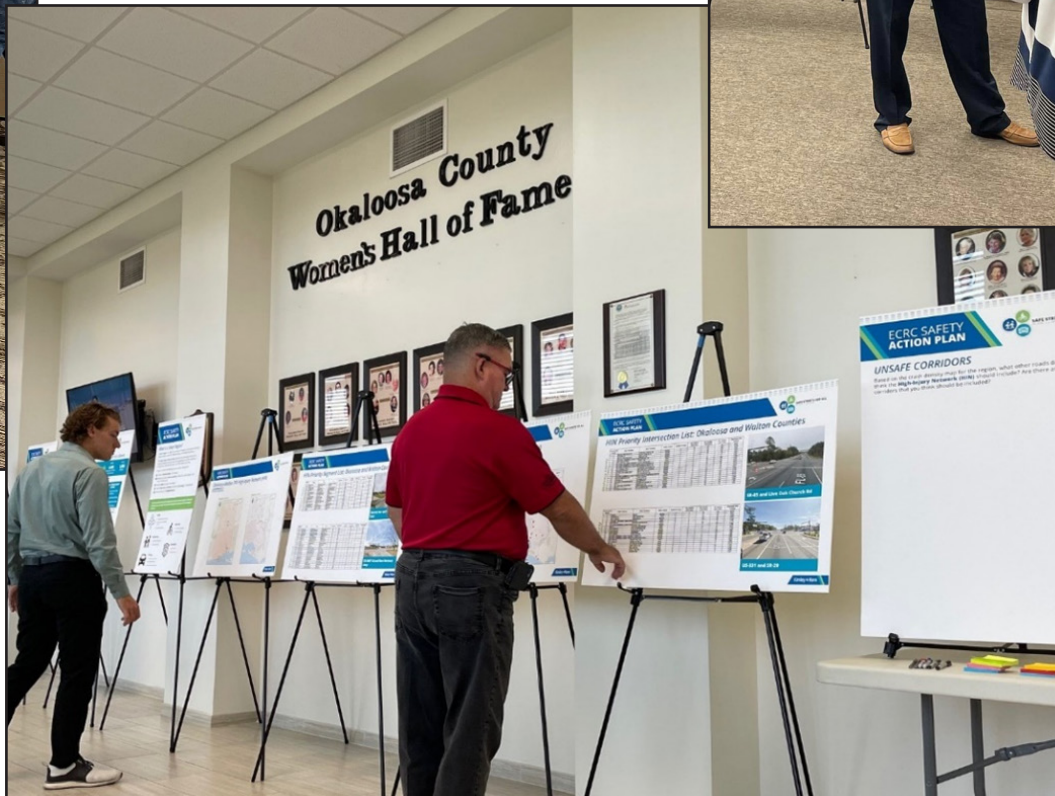
Comment Boards at Public Workshop in Escambia County in May 2024



Public Workshop in Escambia County in May 2024



Rural Areas Public Workshop in June 2024



Public Workshop in Okaloosa County in June 2024

Round 2

In the second round of public workshops, prioritized project lists were shared with the public to hear their feedback. Similar to round 1 engagement, these meetings were open house style format and featured several informational boards to illustrate the layout of the draft plan. Information boards included the final HIN maps for the region and the three TPOs, a summary of Task Force and public engagement, prioritization criteria and process, Tier 1 project maps for the region and the three TPOs, systemic countermeasures, Smart Regions, and strategies and recommendations. Participants were invited to participate in a personal resolution activity to write down a personal resolution to make the roads safer. Dates and locations of the second round of public workshops is included in [Table 10](#) below.

TABLE 10: ROUND 2 PUBLIC WORKSHOP

Meetings	Date	Location
Okaloosa-Walton TPO	October 28, 2024	Chautauqua Building
Florida-Alabama TPO	October 29, 2024	Gulf Breeze Community Center
Florida-Alabama TPO	October 29, 2024	Tryon Branch Library
Rural Areas	October 30, 2024	Chipley City Hall
Bay County TPO	October 30, 2024	Panama City Port Authority



Public Workshop in Walton County in October 2024





Personal Resolution Activity at Public Workshops in October 2024



Public Workshop in Bay County in October 2024

Feedback

Public feedback was essential in developing the Safety Action Plan. Feedback during the process was heavily focused on providing locations on the HIN and other programmatic recommendations.

Location and the High Injury Network

Feedback was provided on the preliminary HIN in the first round of engagement including additional roadways to incorporate, frequent issues along these roadways, and how the HIN compares to what they are seeing in their communities. Through public engagement and feedback from the Task Force, 25 additional roadway segments and intersections were recommended for the HIN. Recommended roadways are listed in **Tables 11-13**. Additional input from the public and stakeholders provided guidance to the project team on the HIN methodology and aided them in making important updates.

TABLE 11: PUBLIC RECOMMENDED HIN ROADWAYS

Public Recommended Roadways				
Primary Road	Start/Intersection	End	County	Recommended
Davis Highway			Escambia	FL-AL Workshop
Davis Highway	I-110 Interchange	Wright St	Escambia	FL-AL Workshop
9 Mile Road			Escambia	FL-AL Workshop
Pace Boulevard			Escambia	FL-AL Workshop
Barrancas Avenue			Escambia	FL-AL Workshop
Cervantes Street			Escambia	FL-AL Workshop
E Gregory Street	N Alcaniz St	Pensacola Bay Bridge	Escambia	FL-AL Workshop
9th Avenue			Escambia	FL-AL Workshop
Palafox Street	North of Cervantes St		Escambia	FL-AL Workshop
Pensacola Scenic Bluffs Highway/ US-90	Summit Boulevard	South of Hyde Park Road	Escambia	FL-AL Workshop
US 90/FL-10	Pond Creek Bridge Crossing		Santa Rosa	FL-AL Workshop
Broad Street	Collins Mill Creek Bridge Crossing (near Monroe Street)		Santa Rosa	FL-AL Workshop
CR 191	City of Milton	Bagdad Area	Santa Rosa	FL-AL Workshop
Highway 87 N	Point Baker Community	87A/Langley Street	Santa Rosa	FL-AL Workshop
87A New Connector			Santa Rosa	FL-AL Workshop
Hospital Drive	Lewis Turner Boulevard		Okaloosa	OW Workshop
US 98	Gulf Shore Dr		Okaloosa	OW Workshop
SR 85	Live Oak Church Rd		Okaloosa	OW Workshop
Palmetto Street			Okaloosa	OW Workshop
US 90			Walton	OW Workshop
US 90	12th Street	1st Street	Walton	OW Workshop
US 331	Live Oak Ave		Walton	OW Workshop
Highway 4			Okaloosa	Rural Areas Workshop
Highway 189			Okaloosa	Rural Areas Workshop
Highway 2			Okaloosa	Rural Areas Workshop

TABLE 12: TASK FORCE RECOMMENDED HIN ROADWAYS

Task Force Recommended Roadways				
Primary Road	Start/Intersection	End	County	Recommended
US 98/15th St	Beck Avenue	Hathaway Bridge	Bay	Task Force #1
9th Avenue	Bayou Boulevard	Fairfield Drive	Escambia	Task Force #1
Barrancas Ave	E Street	Business 98	Escambia	Task Force #1
US 98	Marler Street	William T. Marler Bridge	Okaloosa	Task Force #1
Pensacola Bay Bridge	Intersection of E Gregory Street and N 14th Avenue		Escambia	Task Force #2
US 98 in Mary Esther			Okaloosa	Task Force #2
Hamilton Bridge Road			Santa Rosa	Task Force #2
Woodbine Road			Santa Rosa	Task Force #2
Five-Points			Santa Rosa	Task Force #2
Magnolia Street	SR 89	SR 87	Santa Rosa	Task Force #2
Willard Norris Road	Anderson Lane	SR 89	Santa Rosa	Task Force #2
US 331	S of US 90		Walton	Task Force #2
US 331			Walton	Task Force #2

TABLE 13: STAKEHOLDER RECOMMENDED HIN ROADWAYS

Stakeholder Recommended Roadways				
Primary Road	Start/Intersection	End	County	Recommended
Chat Holley Road			Santa Rosa	Okaloosa-Walton County Citizen Advisory Committee Meeting
MLK Boulevard (Highway 77)	US 98		Bay	Bay County TPO Board Meeting
US 98	Hathaway Bridge	Sherman Avenue	Bay	Bay County TPO Board Meeting

Programmatic Feedback

In addition to roadway segments and intersections, the public and task force feedback was provided on systemic safety issues within the region. Many safety concerns were shared throughout this engagement process that can be addressed with systemic and programmatic countermeasures. Systemic countermeasures are safety measures that can be applied to numerous areas with similar safety issues. More details on systemic countermeasures are provided in [Chapter 4](#). Safety needs reported during engagement included:

- Speeding Enforcement
- Bicyclist and Pedestrian Infrastructure
- Restricting Right Turn on Red
- Red Light Enforcement
- Red Signal Ahead Warning Signs
- Medians

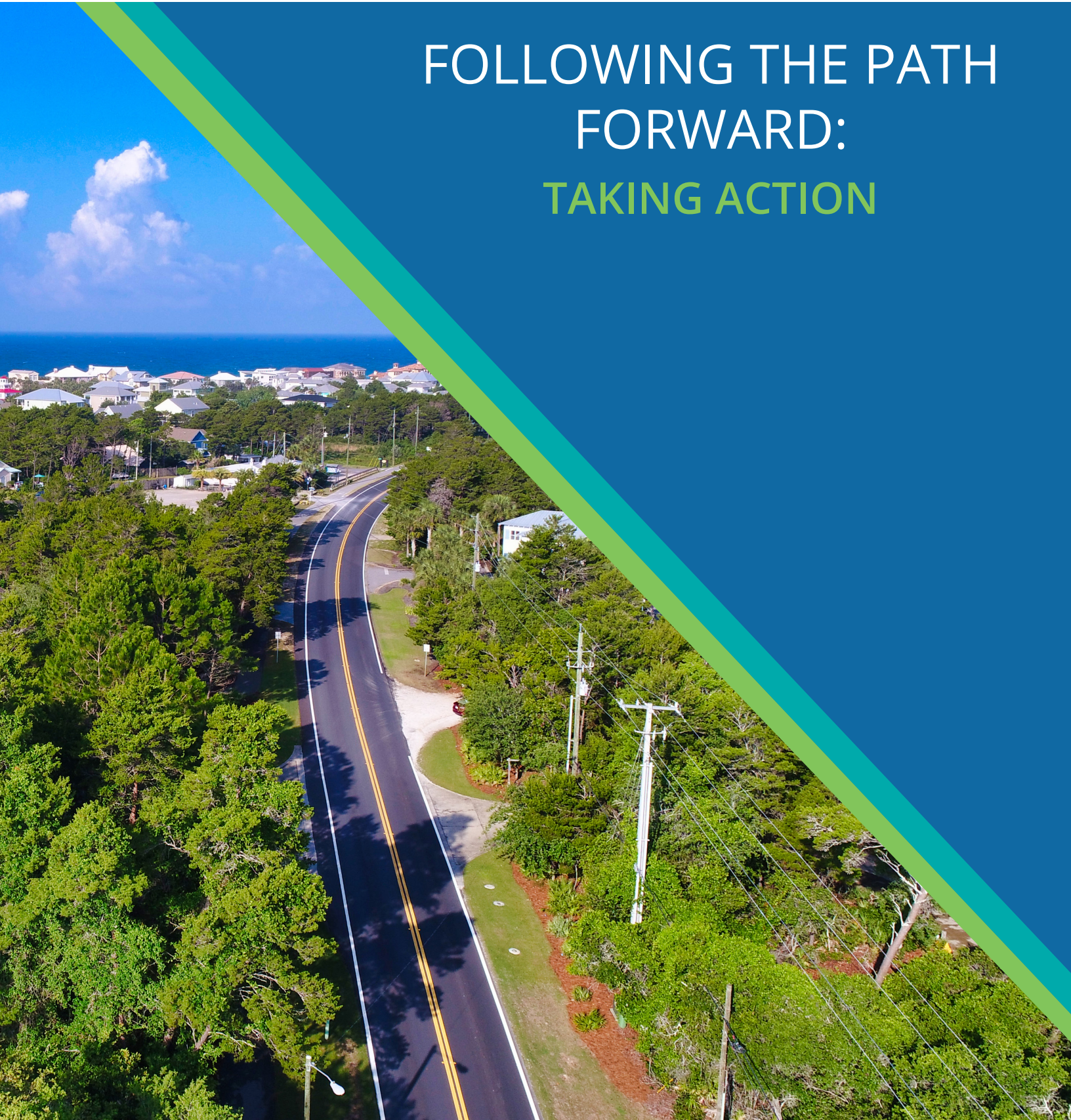


US 90 in City of DeFuniak Springs



CHAPTER 4

FOLLOWING THE PATH FORWARD: TAKING ACTION



Taking Action

This Safety Action Plan identifies locations within the Emerald Coast's transportation network that are most in need of safety improvements and provides high-level countermeasures to bolster safety in these areas.

A High Injury Network (HIN) was developed for the region based on a historical crash analysis for the five-year period of 2019 to 2023. The HIN identified unsafe roadway locations that exhibit frequent crashes. A prioritization was completed that elevated segments of the HIN to Priority Project status. The prioritization focused on several criteria aligned with the ECRC's goals, but safety was weighted most heavily. The Priority Projects represent the most dangerous segments of the HIN that are in need of urgent safety improvements.

In this chapter, countermeasures are recommended to remediate safety issues associated with Priority Projects. The countermeasures provide trusted and proven improvements that should be used to enhance safety for all roadway users. From these countermeasures, recommendations for Priority Project improvements are described, which focus largely on design, education, and planning efforts. These recommendations are high-level and are intended to be flexible for implementation at the local level.



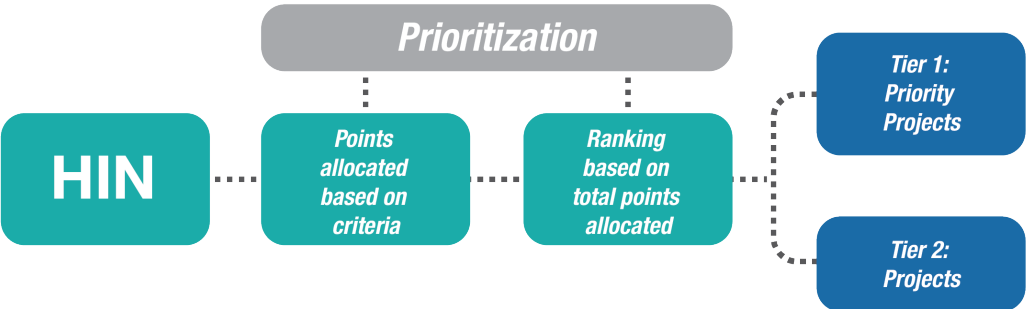
US 90 in City of DeFuniak Springs

Prioritization Methodology

The Emerald Coast’s High Injury Network (HIN) is comprised of 200 segments of roadway that have high rates and frequencies of traffic fatalities and serious injuries, making them essentially the most dangerous corridors in the region. Across the region’s seven counties, these segments represent corridors that will benefit from additional planning and design to improve safety conditions for a variety of users.

FIGURE 15: PRIORITIZATION PROCESS

As part of the SS4A program requirements for a compliant Safety Action Plan, a prioritization methodology was developed to help the ECRC identify regional project priorities. The prioritization process is



shown in Figure 15. This prioritization allocated points to each segment of the HIN based on defined criteria and then ranked the HIN segments by the total number of points allocated. A complete list of prioritization points allocated to each HIN segments is provided in Appendix 4. The HIN segments were then sorted into two tiers based on ranking: Tier 1 Priority Projects and Tier 2 Projects. Priority roadway projects identified through other regional or local safety action plans may be incorporated into this plan by utilizing the systemic countermeasures, strategies, and recommendations discussed later in this chapter. Such countermeasures, strategies, and recommendations were developed to be high-level and broadly applicable to roadways in need of safety improvements, not just the Tier 1 Priority Projects identified in this plan.

Criteria

The prioritization methodology relied on a set of criteria that emphasized safety, equity, multimodal transportation, and existing planning efforts in the region. The criteria groups and correlating evaluation metrics are included in Table 14 below. Each criterion was assigned a pre-weighted point value to heavily prioritize safety criteria and the individual HIN segments

TABLE 14: PRIORITIZATION CRITERIA

Criteria Groups	Criteria	Evaluation Metric
Safety	S1	Overall Crash Rate and Crash Frequency is in the 80th or 90th percentile for the county
	S2	Fatal and Serious Injury (KSI) Crash Rate and Crash Frequency is in the 80th or 90th percentile for the county
Equity	E1	Segment is in an Equity Priority Area
	E2	Segment is located in a Census Tract designated as Transportation Disadvantaged by the USDOT Justice40 Climate and Economic Justice Screening Tool (CEJST)
Multimodal	MM1	A crash involving a Vulnerable Road User (VRU) occurred along or within 100 feet of the segment
	MM2	A fatal Crash involving a VRU occurred along or within 100 feet of the segment
Planning Consistency & Feasibility	PCF1	Segment has had preliminary planning or other studies completed, or is identified in an existing plan
	PCF2	Segment overlaps with FDOT District 3 Top 40 High Crash Corridors

The four criteria groups highlighted in the prioritization were **Safety, Equity, Multimodal, and Planning Consistency and Feasibility**. Each of these groups had two criteria, with each criterion assigned a point value based on its alignment with program and ECRC goals. A maximum of 20 points across all four criteria groups was possible for each segment of the HIN. The prioritization criteria looked at these four groups in an effort to identify priority projects that are holistically aligned with the ECRC's transportation goals, as well as those outlined by the SS4A program.

SAFETY

The safety metrics utilized in the prioritization were crash rate and crash frequency. For each HIN segment, the overall crash rate and crash frequency were calculated. The crash rate and crash frequency for fatal and serious injury crashes were also separately calculated for each HIN segment. Points were awarded to the HIN segment if the crash rate and crash frequency, for either the overall crashes or fatal and serious injury crashes, were in the 80th percentile or higher for the county that segment is located in. Additional points were awarded to segments that had crash rates and crash frequencies in the 90th percentile or higher.

MULTIMODAL

To ensure that the prioritization was representative of all roadway users, metrics to evaluate multimodal transportation were considered. Vulnerable Road Users (VRUs) include transportation network users who do not travel in a vehicle, largely bicyclists and pedestrians. Points were allocated to segments where a crash involving a VRU occurred on or within 100 feet of the roadway. Additional points were allocated to HIN segments where a crash occurred that resulted in a VRU fatality.

EQUITY

Equity was also considered in the prioritization. The metrics evaluated under this criteria group included Equity Priority Areas and Transportation Disadvantaged Census Tracts.

Equity Priority Areas include Census Tracts that have been designated by the USDOT Equitable Transportation Community (ETC) Tool as Areas of Persistent Poverty, Historically Disadvantaged, or Transportation Disadvantaged. Points were allocated to HIN segments that intersected an Equity Priority Area, even if this intersection was partial.

Similarly, points were awarded to segments that intersected or partially intersected Census Tracts identified as Transportation Disadvantaged through the USDOT Justice40 Climate and Economic Justice Screening Tool (CEJST).

PLANNING CONSISTENCY & FEASIBILITY

Planning Consistency and Feasibility was considered in the prioritization to ensure that HIN segments ranked as priority segments could reasonably be considered for supplemental planning activities or projects. This criteria group evaluated how achievable additional planning activities are for the individual segments of the HIN and if these planning activities are consistent with the goals of local jurisdictions within the Emerald Coast. To assess this feasibility, 34 plans from multiple agencies across the region were reviewed to deduce which roadway sections have been considered for additional planning measures. Points were awarded to HIN segments that overlapped or intersected any roadway included in these plans. Additional points were awarded if any segment of the HIN overlapped or intersected an FDOT District 3 Top 40 High Crash Corridor.

Project Recommendations

Tier 1 Priority Projects

Out of the 200 HIN segments, 65 segments were categorized into Tier 1 Priority Projects. Tier 1 Priority Projects include segments that scored in the top 50% of points possible, between 11 and 20 total points, and represent the roadway corridors most urgently in need of additional safety infrastructure and improvements. Countermeasures and project recommendations for each of these segments can be found later in this chapter. Tier 1 Priority Projects represent the most unsafe roadway locations within the Emerald Coast Region and are recommended for additional planning measures and infrastructure improvements. **Figure 16** shows the total crashes and fatal and serious injury crashes of the Tier 1 Priority Projects by transportation mode. **Maps 7-10** below display Tier 1 Priority Projects by TPO or rural areas with corresponding lists of the Tier 1 Priority Projects in **Tables 15, 17, 19, 21**.

Tier 2 Projects

The remaining 135 segments scored in the lower 50% of points possible, between 0 and 10 points, and were categorized into Tier 2 Projects. Tier 2 Projects are included on the HIN and represent further opportunities for safety projects and SS4A implementation grants. The full list of Tier 2 Projects can be found in the **Appendix 5**.

FIGURE 16: TIER 1 PRIORITY PROJECT CRASHES AND FATAL AND SERIOUS INJURY CRASHES BY TRANSPORTATION MODE

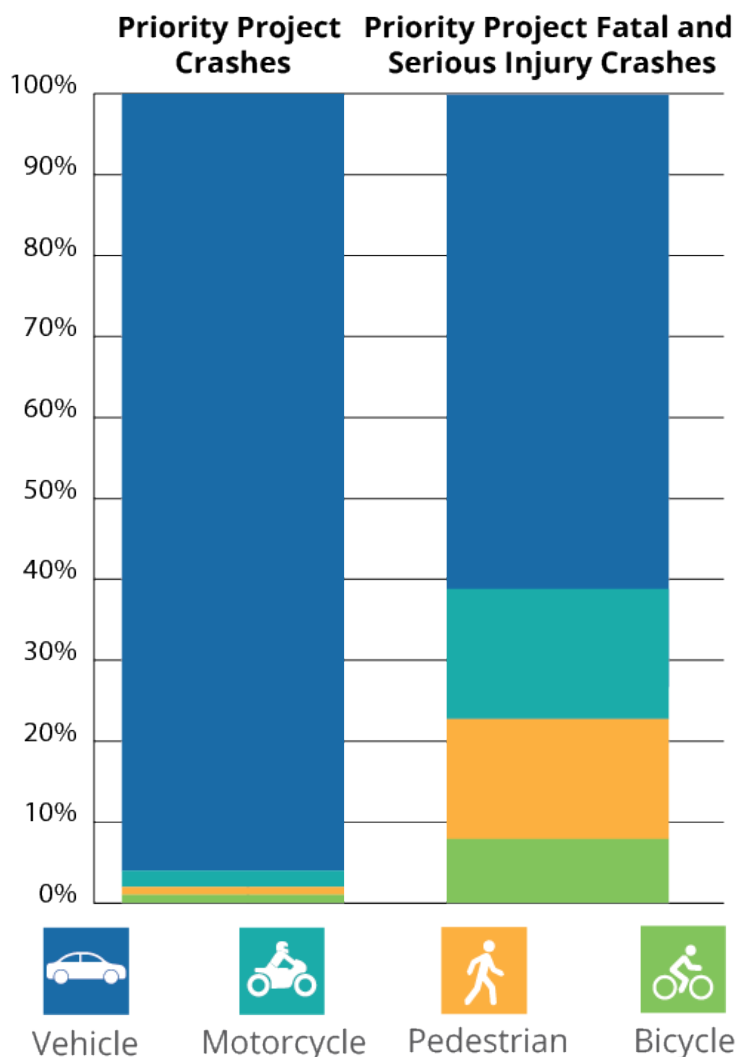
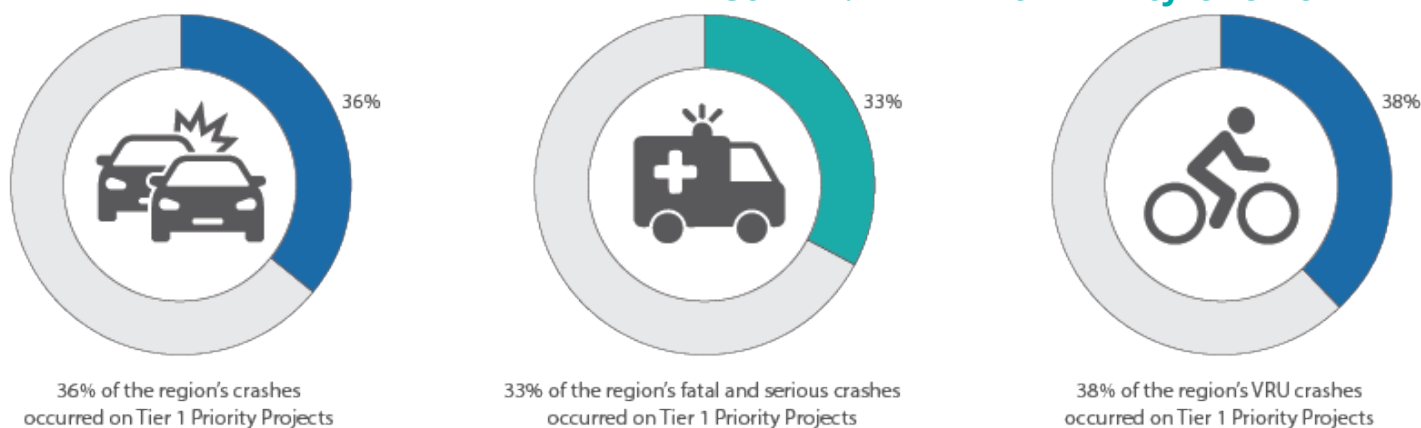


FIGURE 17: TIER 1 PRIORITY PROJECT CRASH DATA



Intersection Projects

As part of the Safety Action Plan, intersections were evaluated based on total number of crashes, crash rate, and equivalent property damage only (EPDO). These different factors allowed the intersections to be evaluated from a variety of perspectives to determine what intersections are most in need of safety improvements. Ultimately, the intersections were prioritized using EPDO rank, which is an industry-accepted standard for ranking the safety of locations by combining the frequency and severity of crashes per FHWA. The top 10 intersections from each county were then identified as priority projects. Those intersections are listed in TPO-specific project lists in [Table 16](#), [18](#), [20](#), and [22](#).

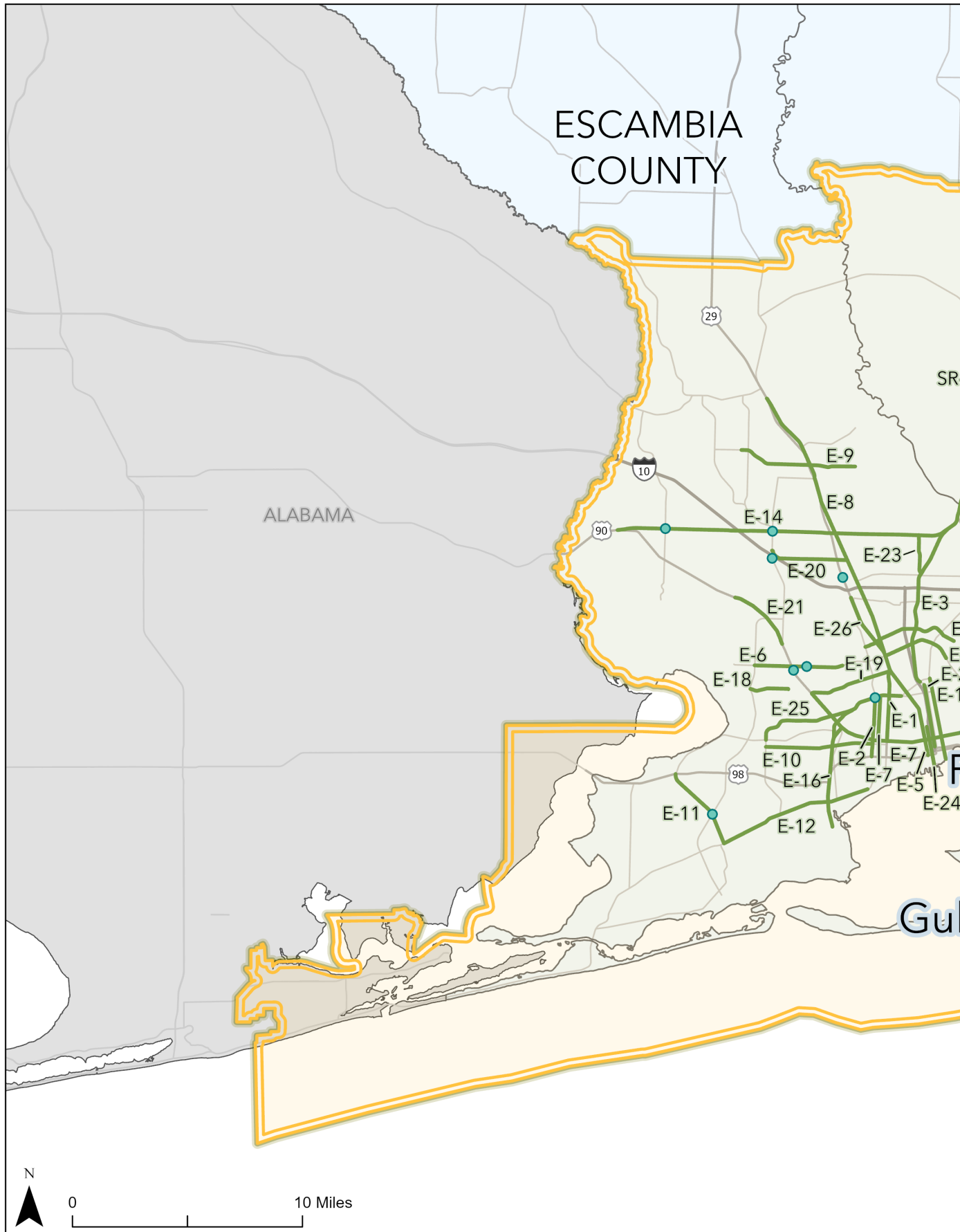


Intersection of US 98 and Watersound Parkway in Walton County

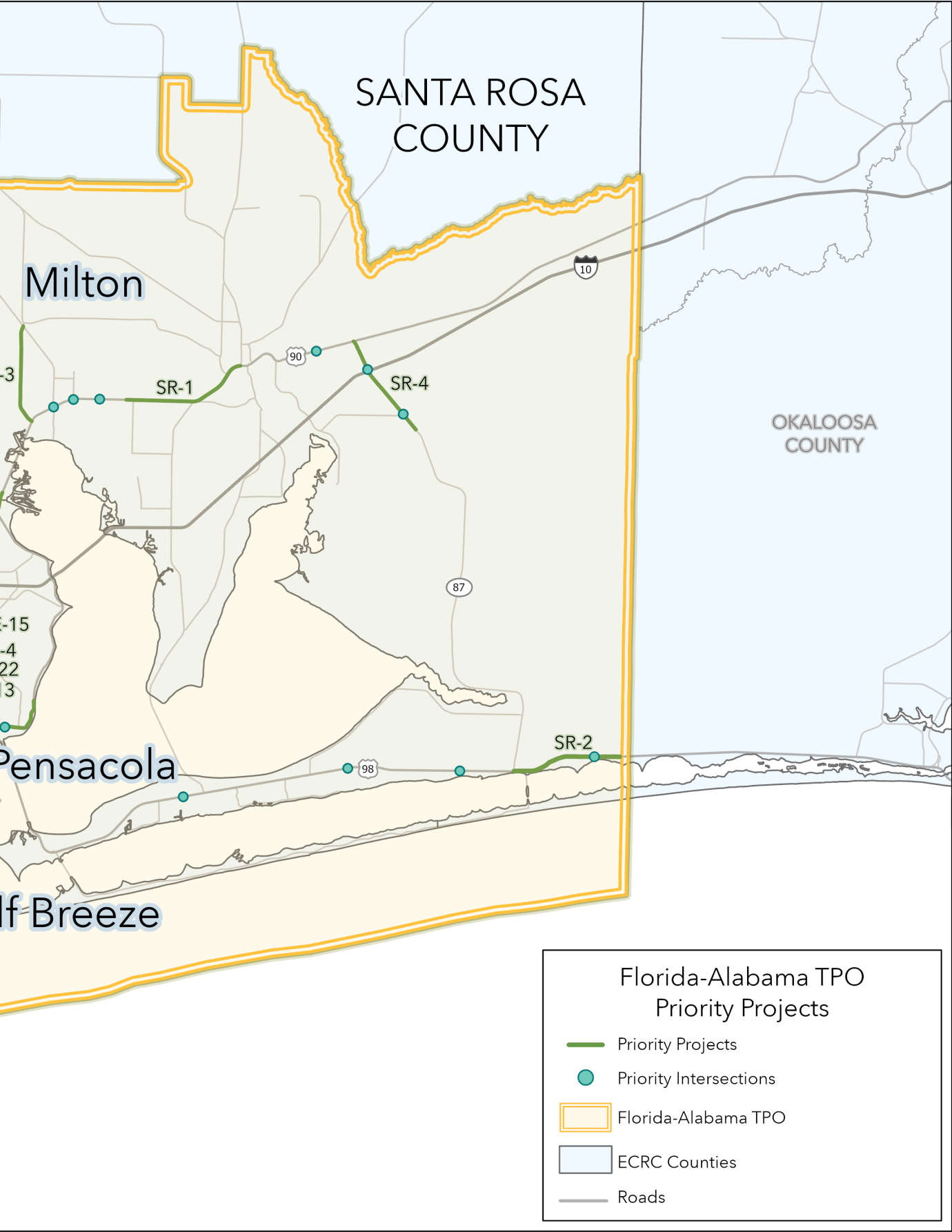


Intersection of South Palafox Street and Main Street in City of Pensacola

Florida-Alabama TPO



MAP 7: FLORIDA-ALABAMA TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS



Florida-Alabama TPO

TABLE 15: FLORIDA-ALABAMA TPO TIER 1 PRIORITY PROJECTS

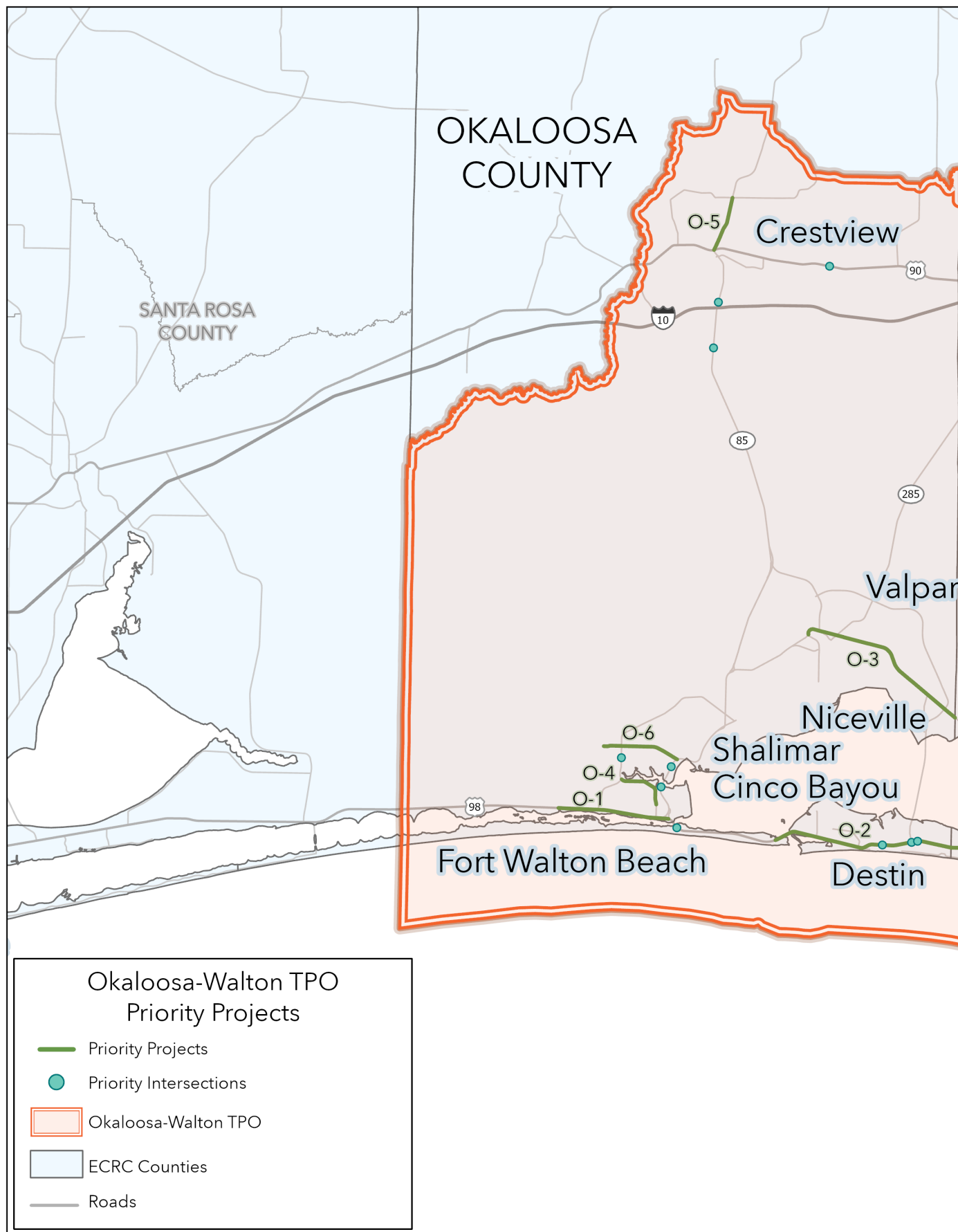
Florida-Alabama TPO Priority Projects					
Segment Number	Roadway	Begin	End	County	Jurisdiction
Escambia-1	S PACE BLVD	US 90/W CERVANTES ST	US-29/SR-95	Escambia	State
Escambia-2	N W ST	US-98/SR-30	SR-295/W FAIRFIELD D	Escambia	State
Escambia-3	US 90/N DAVIS HWY	SR-295/E FAIRFIELD D	US 90/9 MILE RD	Escambia	State
Escambia-4	BRENT LN/SR-296	US-29/SR-95/N PALAFOX	N 12TH AVE	Escambia	State
Escambia-5	US 29/N PALAFOX ST	DIAMOND DIARY RD	GARDEN ST	Escambia	State
Escambia-6	W MICHIGAN AVE/ SAUFLEY FIELD RD	MILLVIEW RD	FAIRVIEW DR	Escambia	State
Escambia-7	US-90/W CERVANTES ST	HYDE PARK RD	MASSACHUSETTS AVE	Escambia	State
Escambia-8	N HWY 95A	US-29/SR-95	US-29/SR-95	Escambia	County
Escambia-9	W KINGSFIELD RD	HWY 297A	CHEMSTRAND RD	Escambia	County
Escambia-10	W JACKSON ST	SR-727	CR-453/W ST	Escambia	State
Escambia-11	SR 297/DOG TRACK RD	SR-292	US-98/SR-30	Escambia	State
Escambia-12	SR-292/GULF BEACH HWY/BARRANCAS AVE	CR-297/DOG TRACK RD	LEMHURST RD	Escambia	State
Escambia-13	SR 289/N 9TH AVE	BAYFRONT PKWY	FAIRFIELD DR	Escambia	State
Escambia-14	N DAVIS HWY	US-90/SR-10A/MOBILE	ESCAM/SNTA CNTY LINE	Escambia	State
Escambia-15	AIRPORT BLVD	N W ST	N 12TH AVE/TIPPIN AVE	Escambia	State
Escambia-16	S NAVY BLVD/SR-295	N END BAYOU GRANDE	48080016 NB ON	Escambia	State
Escambia-17	N T ST	US-90/SR-10A	W FAIRFIELD DR	Escambia	State
Escambia-18	CERNY RD	SR-173	MARLANE DR	Escambia	State
Escambia-19	MASSACHUSETTS AVE	US 90	US-29/SR-95	Escambia	State
Escambia-20	W DETROIT BLVD	SR-297	US29/SR95/PENSACOLA	Escambia	State
Escambia-21	US 90/W CERVANTES ST	KLONDIKE RD	FAIRGROUNDS	Escambia	State
Escambia-22	N ALCANIZ ST	E WRIGHT ST	E FAIRFIELD DR	Escambia	State
Escambia-23	UNIVERSITY PKWY	SR-291	US-90A/SR-10/E NINE	Escambia	State
Escambia-24	N TARRAGONA ST	E BLOUNT ST	SR-196/E MAIN ST	Escambia	State
Escambia-25	W FAIRFIELD DR/CR-727	LILLIAN HWY	US-90/SR-10A/MOBILE	Escambia	State
Escambia-26	US-29/PENSACOLA BLVD	DIAMOND DAIRY RD	BRENT LN	Escambia	State
Santa Rosa-1	HWY 90	PACE LN	SR-87/STEWART ST	Santa Rosa	State
Santa Rosa-2	US 98/NAVARRE PKWY	SR-87	OKALOOSA COUNTY LINE	Santa Rosa	State
Santa Rosa-3	WOODBINE RD	US 90/SR 10	CHUMUKLA HWY	Santa Rosa	County
Santa Rosa-4	HWY 87 S	FARRINGTON RD	US-90/SR-10	Santa Rosa	State

Florida-Alabama TPO

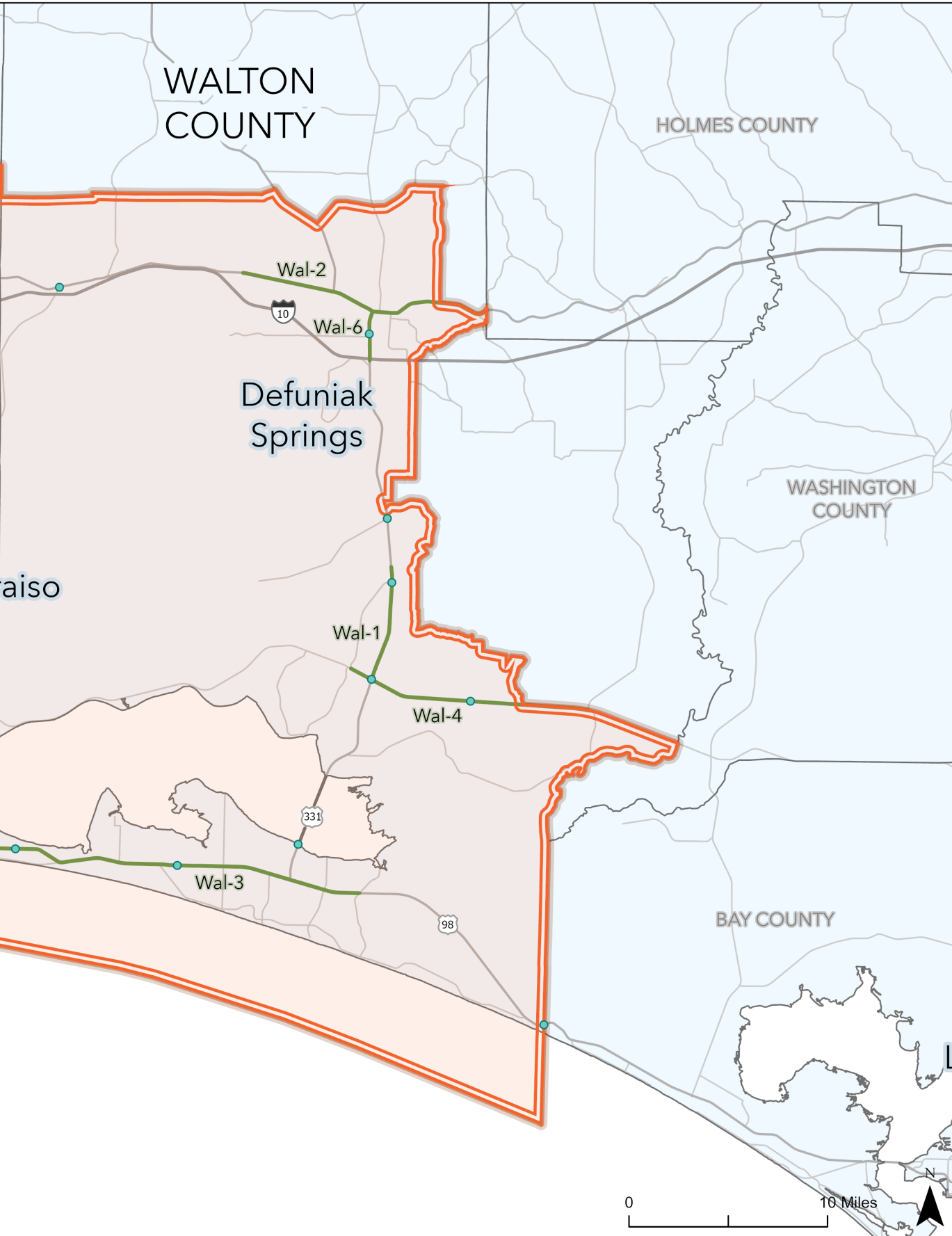
TABLE 16: FLORIDA-ALABAMA TPO PRIORITY INTERSECTIONS

Florida-Alabama TPO Top Intersections			
EPDO Rank	Roadway	Intersection	County
1	BEULAH RD	US-90A/SR-10/W 9 MILE RD	Escambia
2	WILDE LAKE BLVD	SR-297/PINE FOREST RD	Escambia
3	BOULDER AVE	US-90/SR-10A/MOBILE HWY	Escambia
4	CR-297/DOG TRACK RD	SR-173/S BLUE ANGEL PKWY	Escambia
5	SR-97	US-29/SR-95	Escambia
6	CR-453/N W ST	SR-295/W FAIRFIELD DR	Escambia
7	PINE FOREST RD	US-90A/SR-10/W 9 MILE RD	Escambia
8	CR-495/W HOPE DR	US-29/SR-95/PENSACOLA BLVD	Escambia
9	CHICAGO AVE	SR-296/W MICHIGAN AVE	Escambia
10	N 19TH AVE	US-90/SR-10A/E CERVANTES ST	Escambia
1	CR-184/NICHOLS LAKE RD	SR-87	Santa Rosa
2	AIR PRODUCTS PLNT RD	US-90/SR-10/CAROLINE ST	Santa Rosa
3	CR-197/FLORIDATOWN	US-90/SR-10/CAROLINE ST	Santa Rosa
4	AIRPORT RD	US-90/SR-10/SR-87	Santa Rosa
5	CR-197B/W SPENCER FI	US-90/SR-10/CAROLINE ST	Santa Rosa
6	WHISPERING PNES BLVD	US-98/SR-30/NAVARRE PKWY	Santa Rosa
7	CORAL ST	US-98/SR-30/NAVARRE PKWY	Santa Rosa
8	GREEN BRIAR PKWY	US-98/SR-30/GULF BREEZE PKWY	Santa Rosa
9	TO I-10 WB	SR-87	Santa Rosa
10	AMBASSADOR DR	US-98/SR-30/GULF BREEZE PKWY	Santa Rosa

Okaloosa-Walton TPO



MAP 8: OKALOOSA-WALTON TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS



Okaloosa-Walton TPO

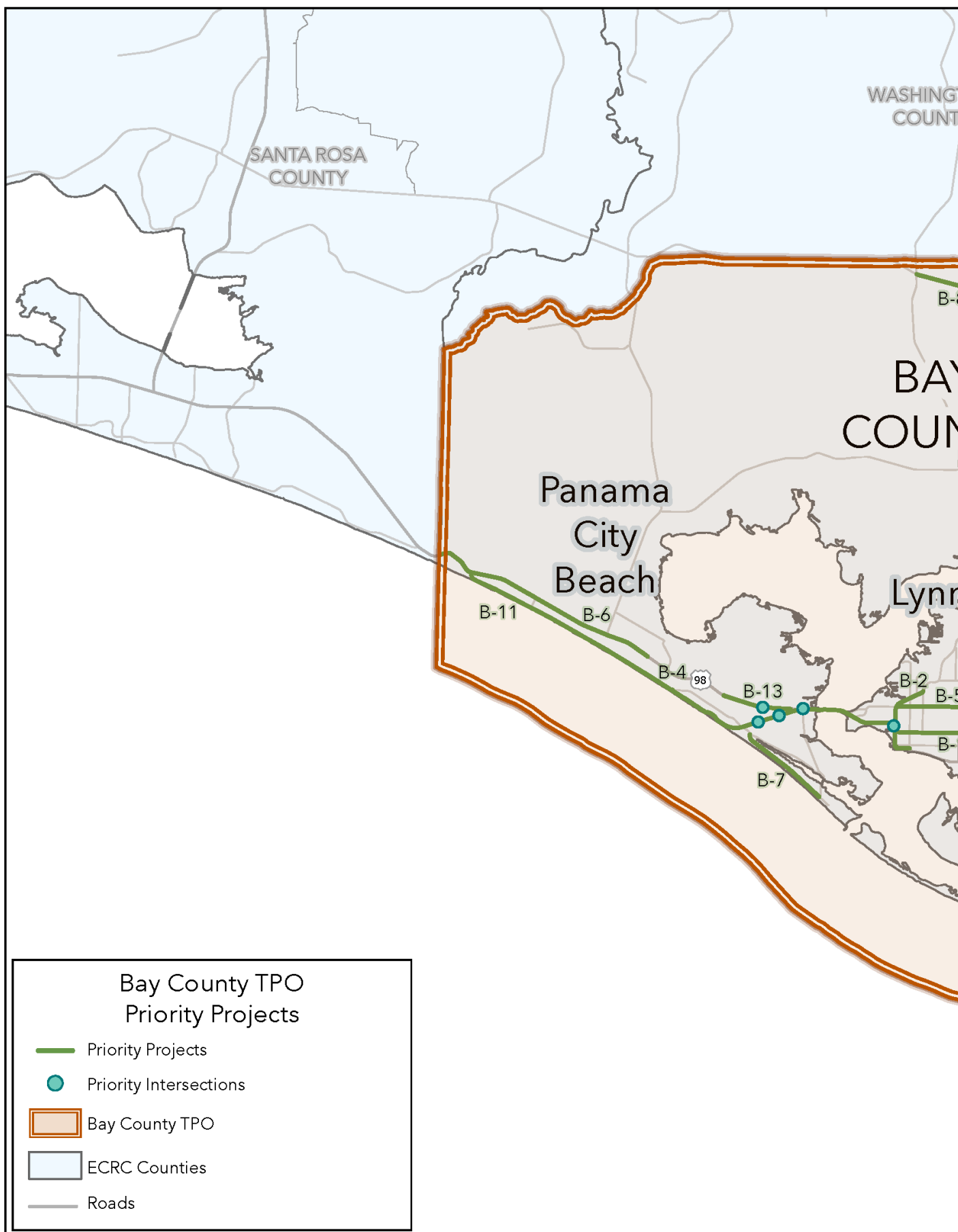
TABLE 17: OKALOOSA-WALTON TPO TIER 1 PRIORITY PROJECTS

Okaloosa-Walton TPO Priority Projects					
Segment Number	Roadway	Begin	End	County	Jurisdiction
Okaloosa-1	US 98/MIRACLE STRIP PKWY E	KERWOOD RD	SR 145/BROOKS ST SE	Okaloosa	State
Okaloosa-2	US 98/EMERALD COAST PKWY	COASTGUARD STATION	WALTON CO LINE	Okaloosa	State
Okaloosa-3	SR 20/JOHN SIMS PKWY	SR 397	SR 85	Okaloosa	State
Okaloosa-4	SR 189/BEAL PKWY	HOLLYWOOD BLVD	SR 393/MARY ESTHER CUTOFF	Okaloosa	State
Okaloosa-5	SR 85/N FERDON BLVD	OLD BETHEL RD	US 90	Okaloosa	State
Okaloosa-6	RACETRACK RD	MLK BLVD	SR-85/EGLIN PKWY	Okaloosa	State
Walton-1	US-331	SR-20/MAIN ST	OWLS HEAD RD	Walton	State
Walton-2	US-90/SR-10	BOY SCOUT RD	HOLMES CO LINE	Walton	State
Walton-3	US-98/SR-30	OKALOOSA CO LINE	CO HWY 395	Walton	State
Walton-4	SR-20	SR-81	US-331/MADISON ST	Walton	State
Walton-6	US-331/SR-83	I-10 WB RAMP	E NELSON AVE	Walton	State

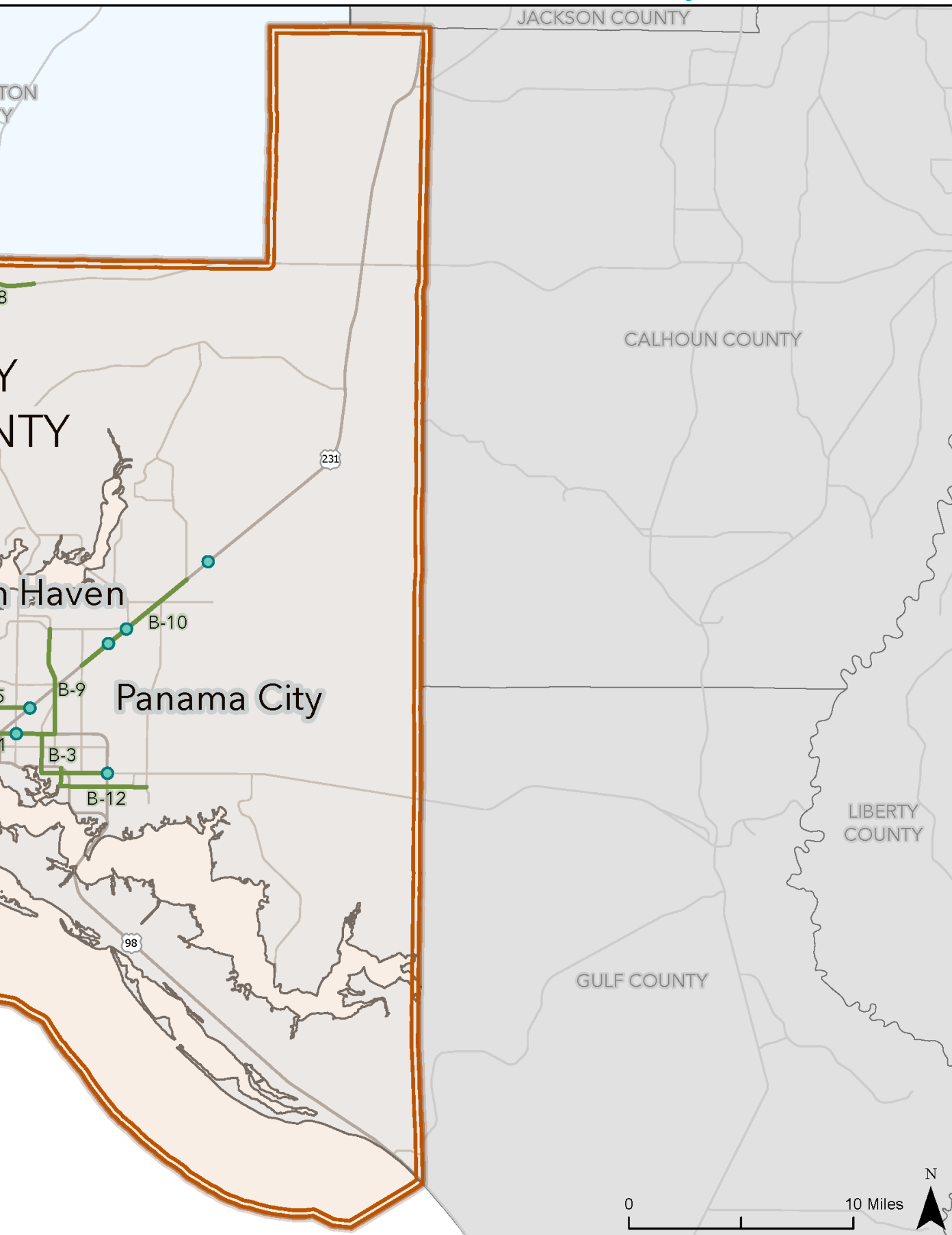
TABLE 18: OKALOOSA-WALTON TPO PRIORITY INTERSECTIONS

Okaloosa-Walton TPO Top Intersections			
EPDO Rank	Roadway	Intersection	County
1	LIVE OAK CHURCH RD	SR-85/S FERDON BLVD	Okaloosa
2	SANTA ROSA BLVD	US-98/SR-30	Okaloosa
3	MIRAGE AVE	SR-85/S FERDON BLVD	Okaloosa
4	LEGENDARY DR	US-98/SR-30/EMERALD COAST PKWY	Okaloosa
5	FIRST AVE	SR-85/EGLIN PKWY	Okaloosa
6	CLINT MASON RD	US-90/SR-10/E JAMES LEE BLVD	Okaloosa
7	SR-293/HUTCHINSON ST	US-98/SR-30/EMERALD COAST PKWY	Okaloosa
8	HENDERSON BEACH RD	US-98/SR-30/EMERALD COAST PKWY	Okaloosa
9	CLIFFORD ST/CARMEL DR	CR-189/BEAL PKWY	Okaloosa
10	SR-189A/YACHT CLUB DR	SR-85/EGLIN PKWY	Okaloosa
1	SR-20	US-331	Walton
2	DON BISHOP RD	US-98/SR-30	Walton
3	MADISON ST	US-331/SR-83	Walton
4	SR-285	US-90/SR-10/E MOSSY HEAD MAIN ST	Walton
5	GRANDE POINTE BLVD	US-98/SR-30	Walton
6	HOLIDAY RD	US-98/SR-30/EMERALD COAST PKWY	Walton
7	J W HOLLINGTON RD	SR-20	Walton
8	CR-282/SEGREST RD	US-331/SR-83	Walton
9	CHAT HOLLEY RD	US-331/SR-83	Walton
10	SHOPPING	US-331/SR-83	Walton

Bay County TPO



MAP 9: BAY COUNTY TPO TIER 1 PRIORITY PROJECTS AND INTERSECTIONS



Bay County TPO

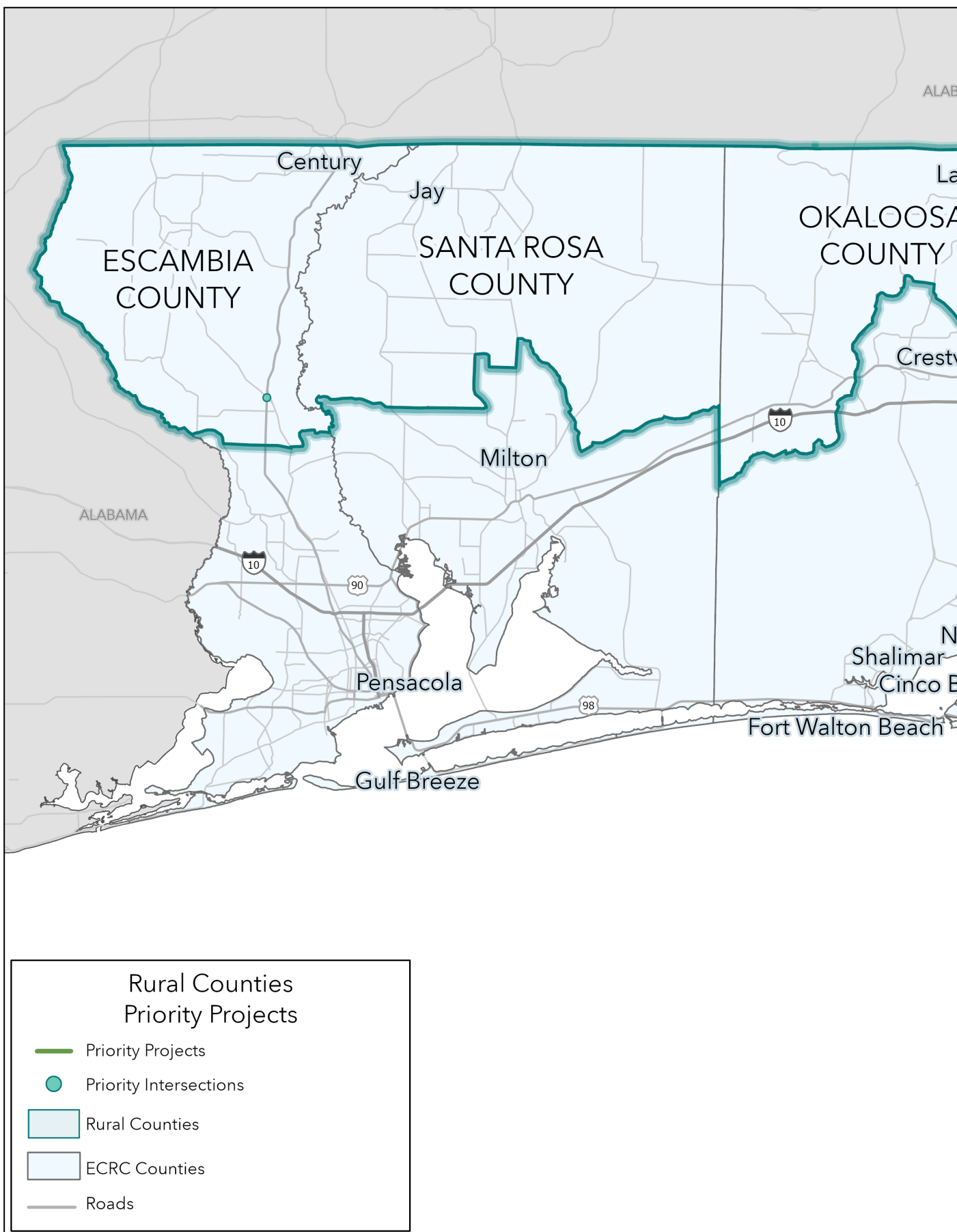
TABLE 19: BAY COUNTY TPO TIER 1 PRIORITY PROJECTS

Bay County TPO Priority Projects					
Segment Number	Roadway	Begin	End	County	Jurisdiction
Bay-1	US-98/SR-30	THOMAS DR	N EAST AVE	Bay	State
Bay-2	US 98B/FL-30/9TH ST/BECK AVE/SAINT ANDREWS BLVD	CR-385/FRANKFORD AVE	SR-327/LISENBY AVE	Bay	State
Bay-3	SR-22/E 3RD ST/SHERMAN AVE	US 98/N TYNDALL PKWY	US 98/E 15TH ST	Bay	State
Bay-4	SR-30/FRONT BEACH RD	SR-79/ARNOLD RD	THOMAS DR	Bay	County
Bay-5	SR-368/W 23RD ST	SR 390/BECK AVE/ST ANDREWS BLVD	US-231	Bay	State
Bay-6	US-98/SR-30	OKALOOSA CO LINE	HILLS RD	Bay	State
Bay-7	SR-392/THOMAS DR	CR-3030/N LAGOON DR	CR-3031/BRISTOL ST	Bay	County
Bay-8	SR-20	SR-77	LITTLE BLUE LN	Bay	State
Bay-9	SR-389/N EAST AVE	US-98/SR-30A	E HWY 390	Bay	State
Bay-10	US-231	TRANSMITTER RD	CR-2301	Bay	State
Bay-11	SR-30/FRONT BEACH RD	US-98/PANAMA CITY BEACH PKWY	SR-79/ARNOLD RD	Bay	County
Bay-12	EVERITT AVE/CHERRY ST	US-98B/SR-30	N STAR AVE	Bay	County
Bay-13	US-98/SR-30A/PANAMA CITY BEACH PKWY	RICHARD JACKSON BLVD	SR-30	Bay	State

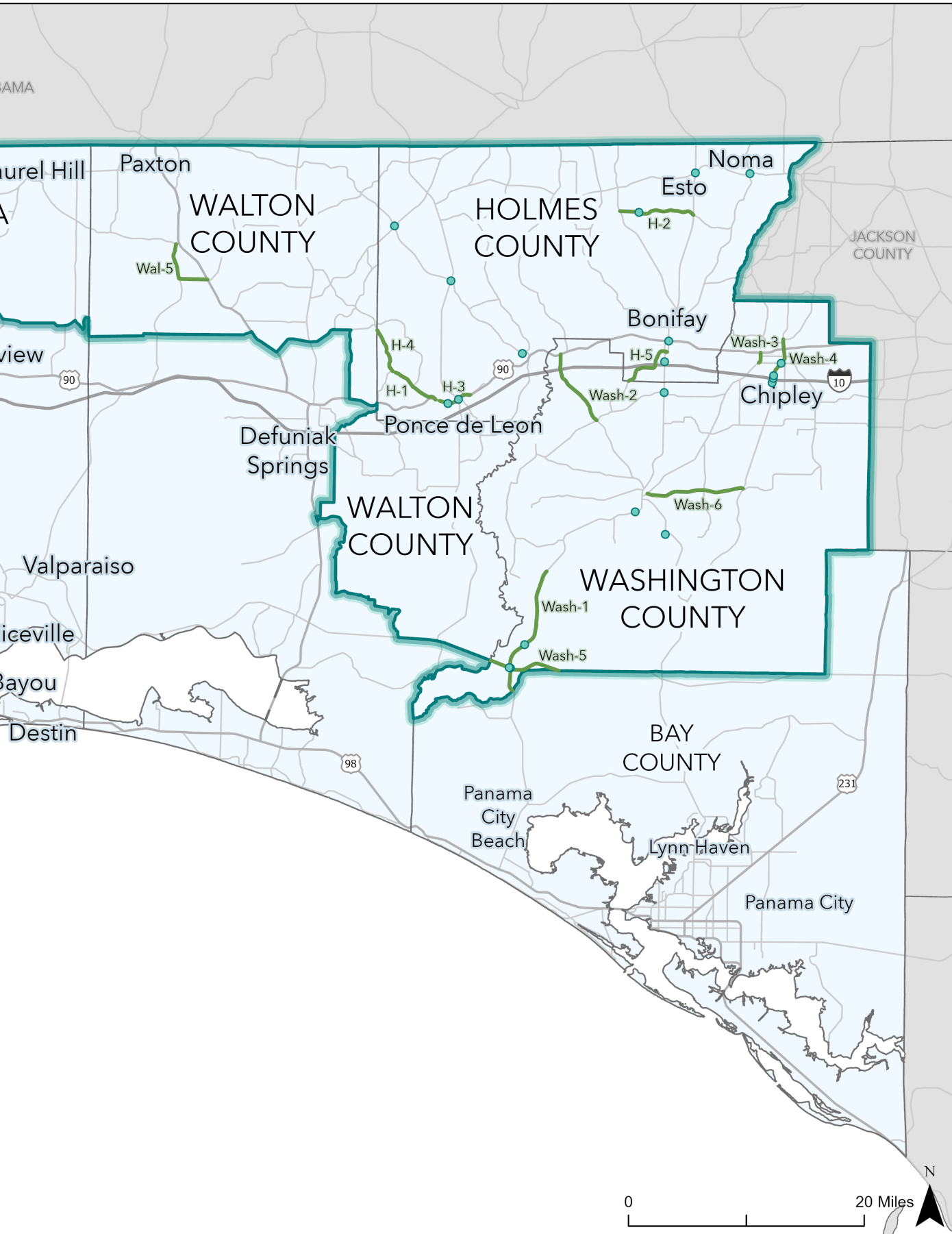
TABLE 20: BAY COUNTY TPO PRIORITY INTERSECTIONS

Bay County TPO Top Intersections			
EPDO Rank	Roadway	Intersection	County
1	ALLISON AVE	US-98/SR-30A/PANAMA CITY BEACH PKWY	Bay
2	SR-368/E 23RD ST	US-231/SR-75	Bay
3	PIPELINE RD	US-231/SR-75	Bay
4	BAYOU GEORGE DR	US-231/SR-75	Bay
5	W 17TH ST/BAYVIEW AVE	US-98/SR-30A	Bay
6	THOMAS DR/WILDWOOD RD	US-98/SR-30/PANAMA CITY BEACH PKWY	Bay
7	PRYOR AVE	SR-30/FRONT BEACH RD	Bay
8	JOAN AVE	SR-30/FRONT BEACH RD	Bay
9	CR-390/E HWY 390	US-231/SR-75	Bay
10	SR-22/WEWA HWY/ E 3RD ST	US-98/SR-30A/N TYNDALL PKWY	Bay
11	US-98/SR-30A/15th ST	SR-77/MLK BLVD	Bay

Rural Areas



MAP 10: RURAL AREAS TIER 1 PRIORITY PROJECTS AND INTERSECTIONS



Rural Areas

TABLE 21: RURAL AREAS TIER 1 PRIORITY PROJECTS

Rural Areas Priority Projects					
Segment Number	Roadway	Begin	End	County	Jurisdiction
Walton-5	CR-2A	US-331	SR-2	Walton	State
Holmes-1	CR-10A	HWY 183A	US-90/SR-10	Holmes	State
Holmes-2	CR-160	CR-79	CR-177	Holmes	State
Holmes-3	US 90	HWY 10A	E MAIN ST	Holmes	County
Holmes-4	CR-183A	WALTON CO LINE	HWY 10A	Holmes	State
Holmes-5	COUNTY RD 173	CR-79	WASHINGTON CO LINE	Holmes	State
Washington-1	SR-79/DOG TRACK RD	BAY CO LINE	SUGARDOLL RD	Washington	County
Washington-2	CR-279/PATE POND RD	US-90/SR-10/HWY 90	DOUGLAS FERRY RD	Washington	State
Washington-3	SR-277	CR-280/BRICKYARD RD	US-90/SR-10	Washington	State
Washington-4	FL-77/MAIN ST	GLENWOOD AVE	I-10	Washington	State
Washington-5	FL-20/CAPT FRITZ RD	WALTON CO LINE	BAY CO LINE	Washington	County
Washington-6	CR-278/PIONEER RD	CR-77	CR-277	Washington	County

TABLE 22: RURAL AREAS PRIORITY INTERSECTIONS

Rural Areas Top Intersections			
EPDO Rank	Roadway	Intersection	County
5	SR-97	US-29/SR-95	Escambia
1	CR-181/DAN M PADGETT RD	SR-81/SAMSON HWY	Holmes
2	AVE DOCK CARROLL RD	SR-160	Holmes
3	RAILROAD ST	US-90/SR-10	Holmes
4	GATOR LN	CR-181/N CYPRESS ST	Holmes
5	SR-79	SR-2	Holmes
6	CR-181	SR-185	Holmes
7	SR-173	SR-2	Holmes
8	SR-81/SAMSON HWY	US-90/SR-10	Holmes
9	SR-79/S WAUKESHA ST	US-90/SR-10	Holmes
10	ST JOHNS RD/SON-IN-LAW RD	SR-79/S WAUKESHA ST	Holmes
1	JAMES POTTER RD	SR-79	Washington
2	SR-20/CAPT FRITZ RD	SR-79/DOG TRACK RD	Washington
3	NADIA AVE	SR-77/MAIN ST	Washington
4	BLUE LAKE RD	SR-77	Washington
5	CR-280/BRICKYARD RD	SR-77/MAIN ST	Washington
6	COOK CIR	SR-79/MAIN ST	Washington
7	I-10 WB OFF RAMP	SR-77/MAIN ST	Washington
8	TWIN POND RD	HOLMES VALLEY RD	Washington
9	JIFFY LN	SR-20/ CAPT FRITZ RD	Washington
10	CR-280/DOUGLASS FERRY RD	SR-79	Washington

Countermeasures

Project-Specific Countermeasures

The countermeasures presented in this chapter represent high-level recommendations that are adaptable at the Federal Highway Administration (FHWA) and are proven to be effective at reducing roadway fatalities and serious injuries.

The countermeasures matrix was developed to serve as a guide for developing project activities when pursuing planning improvements, updated designs, or construction for each Priority Project.

The groups shown in [Tables 23-26](#) below correlate directly with the countermeasures toolkit which provides information on all applicable Proven Countermeasures for that safety focus area.

**TABLE 23: FLORIDA-ALABAMA TPO
PROJECT SPECIFIC COUNTERMEASURES**

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Escambia-1	S PACE BLVD		●		●	●
	Escambia-2	N W ST				●	●
	Escambia-3	N DAVIS HWY		●		●	●
	Escambia-4	BRENT LN/SR-296				●	●
	Escambia-5	N PALAFOX ST		●	●	●	●
	Escambia-6	W MICHIGAN AVE/SAUFLEY FIELD RD		●		●	●
	Escambia-7	US-90/W CERVANTES ST		●		●	●
	Escambia-8	N HWY 95A		●		●	●
	Escambia-9	W KINGSFIELD RD			●	●	●
	Escambia-10	W JACKSON ST		●		●	●

the local level. These countermeasures are derived from Proven Safety Countermeasures developed by the
us injuries.

**TABLE 23: FLORIDA-ALABAMA TPO PROJECT
SPECIFIC COUNTERMEASURES CONTINUED**

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Escambia-11	DOG TRACK RD					
	Escambia-12	SR-292/GULF BEACH HWY/BARRANCAS AVE					
	Escambia-13	N 9TH AVE					
	Escambia-14	N DAVIS HWY					
	Escambia-15	AIRPORT BLVD					
	Escambia-16	S NAVY BLVD/SR-295					
	Escambia-17	N T ST					
	Escambia-18	CERNY RD					
	Escambia-19	MASSACHUSETTS AVE					
	Escambia-20	W DETROIT BLVD					

TABLE 23: FLORIDA-ALABAMA TPO PROJECT SPECIFIC COUNTERMEASURES CONTINUED

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Escambia-21	W CERVANTES ST	●	●	●	●	●
	Escambia-22	N ALCANIZ ST	●	●	●	●	●
	Escambia-23	UNIVERSITY PKWY	●	●	●	●	●
	Escambia-24	N TARRAGONA ST	●	●	●	●	●
	Escambia-25	W FAIRFIELD DR/CR-727	●	●	●	●	●
	Escambia-26	W PENSOLA BLVD	●	●	●	●	●
	Santa Rosa-1	HWY 90	●	●	●	●	●
	Santa Rosa-2	NAVARRE PKWY	●	●	●	●	●
	Santa Rosa-3	WOODBINE RD	●	●	●	●	●
	Santa Rosa-4	HWY 87 S	●	●	●	●	●

TABLE 24: OKALOOSA-WALTON TPO PROJECT SPECIFIC COUNTERMEASURES

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Okaloosa-1	MIRACLE STRIP PKWY E	●	●	●	●	●
	Okaloosa-2	EMERALD COAST PKWY	●	●	●	●	●
	Okaloosa-3	JOHN SIMS PKWY	●	●	●	●	●
	Okaloosa-4	BEAL PKWY	●	●	●	●	●
	Okaloosa-5	N FERDON BLVD	●	●	●	●	●
	Okaloosa-6	RACETRACK RD	●	●	●	●	●
	Walton-1	US-331	●	●	●	●	●
	Walton-2	US-90/SR-10	●	●	●	●	●
	Walton-3	US-98/SR-30	●	●	●	●	●
	Walton-4	SR-20	●	●	●	●	●
	Walton-6	US-331/SR-83	●	●	●	●	●

TABLE 25: BAY COUNTY TPO PROJECT SPECIFIC COUNTERMEASURES

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Bay-1	US-98/SR-30					
	Bay-2	9TH ST/BECK AVE/SAINT ANDREWS BLVD					
	Bay-3	E 3RD ST/SHERMAN AVE					
	Bay-4	SR-30/FRONT BEACH RD					
	Bay-5	SR-368/W 23RD ST					
	Bay-6	US-98/SR-30					
	Bay-7	THOMAS DR					
	Bay-8	SR-20					
	Bay-9	SR-389/N EAST AVE					
	Bay-10	US-231					
	Bay-11	SR-30/FRONT BEACH RD					
	Bay-12	EVERITT AVE/CHERRY ST					
	Bay-13	US-98/SR-30A/PANAMA CITY BEACH PKWY					

TABLE 26: RURAL AREAS PROJECT SPECIFIC COUNTERMEASURES

TIER 1 PRIORITY PROJECT SEGMENTS	Segment ID	Roadway Name	Speed Management	Pedestrian/Bicyclist	Roadway Departure	Intersections	Lighting
	Walton-5	CR-2A	●		●	●	●
	Holmes-1	CR-10A			●		●
	Holmes-2	CR-160			●	●	●
	Holmes-3	US 90			●	●	
	Holmes-4	CR-183A			●		●
	Holmes-5	COUNTY RD 173	●		●		●
	Washington-1	DOG TRACK RD			●	●	●
	Washington-2	PATE POND RD	●		●	●	●
	Washington-3	SR-277	●		●	●	●
	Washington-4	MAIN ST		●	●	●	
	Washington-5	CAPT FRITZ RD			●	●	●
	Washington-6	PIONEER RD			●	●	●

Regional and Systemic Countermeasures

Systemic countermeasures are low to moderate-cost safety measures applied at multiple locations with similar safety issues. The countermeasures outlined in this section are based on the top KSI crash types and represent regional initiatives that can be undertaken at a variety of locations to bolster safety infrastructure throughout the region's transportation network. The top crash types for KSI crashes in the ECRC region are listed below in [Table 27](#). Contributing factors for KSI crashes in the region are listed in [Table 28](#). Countermeasures typically address one or multiple safety focus areas. For the Emerald Coast region, data trends have identified several crash types that can be mitigated throughout the region through the implementation of countermeasures related to **pedestrian/bicyclist, intersections, roadway departures, crosscutting, and speed management**. Examples of systemic countermeasures by safety focus areas can be found in [Figure 18](#). These improvements can be applied to corridors throughout the region to address one specific issue in several locations.

TABLE 27: TOP CRASH TYPES FOR KSI CRASHES IN THE EMERALD COAST REGION

Top Crash Types	
Crash Type	Killed or Serious Injury Crash Percentage
Left Turn	16%
Off Road	16%
Rear End	14%
Other	11%
Pedestrian	11%
Angle	9%
Rollover	7%

TABLE 28: CONTRIBUTING FACTORS FOR KSI CRASHES IN THE EMERALD COAST REGION

Contributing Factors	
Contributing Factors	Percent of Killed or Serious Injury Crashes Involving Contributing Factors
Distracted Driving	24%
Drugs and Alcohol	16%
Aggressive Driving	9%
Speeding	6%
Total	55%

A Note on Contributing Factors

Factors that significantly contribute to crashes in the Emerald Coast region include distracted driving, drug and alcohol use, aggressive driving, and speeding. These contributing factors contribute to 55% of fatal and serious injury crashes. While some countermeasures can address these issues, crash contributing factors are largely behavioral and can also be addressed through programmatic and enforcement measures. These countermeasures are detailed in the Strategies and Recommendations section of this plan.

FIGURE 18: EXAMPLES OF SYSTEMIC COUNTERMEASURES BY SAFETY FOCUS AREA

PEDESTRIAN/ BICYCLIST COUNTERMEASURES



Crash Type: Pedestrians

- Develop or update pedestrian infrastructure plans at the county or region-wide level that will enhance existing pedestrian safety infrastructure
- Crosswalk visibility enhancements such as high-visibility ladder crosswalks, improved lighting that illuminates pedestrians with positive contrast that avoids shadows, enhancing pedestrian roadway signage, rectangular rapid flashing beacons (RRFBs)
- Leading pedestrian intervals at signalized intersections
- Installing sidewalks and other walkways

Crash Type: Bicyclists

- Implement or update bicycle infrastructure plans at the county or region-wide level that will enhance existing bicycle safety infrastructure
- Installing bicycle lanes, including separated bike lanes
- Constructing multi-use paths or wide sidewalks to accommodate bicyclists

ROADWAY DEPARTURES COUNTERMEASURES



Crash Type: Off Road, Rollover, Head On

- Rumble strips along edge lines and center lines
- Guard rails installed on roadsides and median barriers
- Improved visibility around horizontal curves by having unobstructed clear zones
- Widening shoulders

CROSSCUTTING COUNTERMEASURES



Crash Type: Off Road, Rollover, Head On

- Install lighting to increase visibility
- Develop local road safety plans
- Conduct road safety audits at the county or city level
- Apply pavement friction treatment to enhance friction and resist skidding

INTERSECTIONS COUNTERMEASURES



Crash Type: Left Turn, Angle

- Adding traffic signals to unsignalized intersections
- Not allowing permissive left turns at signalized intersections
- Enhancing roadway visibility at intersections

Crash Type: Rear End

- Outfitting traffic signal backplates to have retroreflective borders that improve signal and intersection visibility
- Install advanced intersection warning signs for intersections with low visibility

SPEED MANAGEMENT COUNTERMEASURES



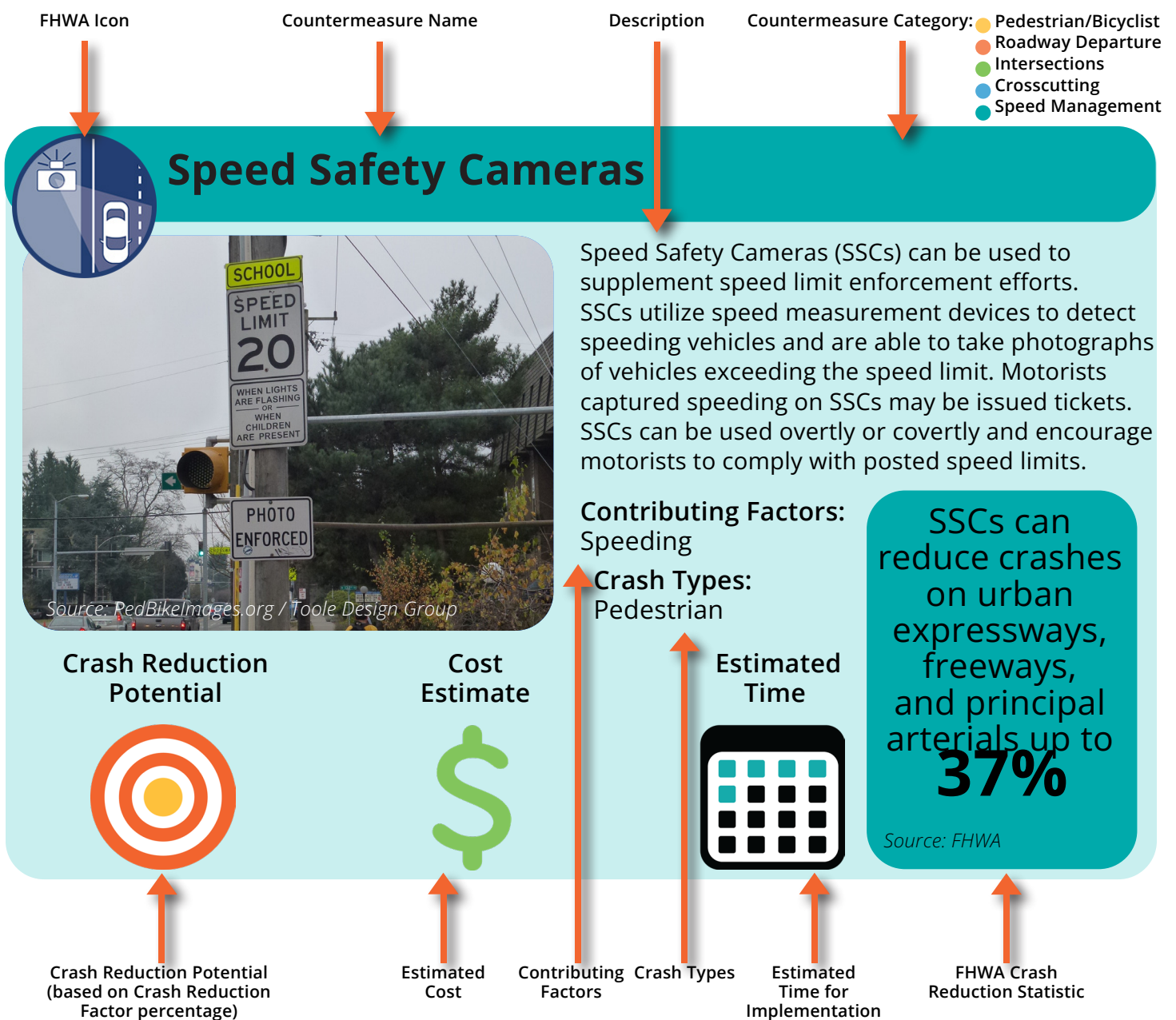
Contributing Factor: Speeding

- Develop speed management plans at the county or city level
- Conducting engineering studies to determine appropriate speed limits for roadways
- Installing speed safety cameras to enforce safe speeds

Countermeasures Toolkit

The Countermeasures Toolkit was developed to provide a comprehensive overview of potential safety countermeasures that may be used to address concerns relating to Tier 1 Priority Projects. This toolkit is intended to help communities with implementation when pursuing projects identified in the countermeasure matrices in **Tables 23-26** above. The Countermeasures Toolkit is based entirely on the Federal Highway Administration's (FHWA) Proven Safety Countermeasures. The Proven Safety Countermeasures are 28 strategies that are effective at reducing roadway fatalities and serious injuries. Strategies are divided into five categories: Pedestrian/Bicyclist, Roadway Departure, Intersections, Crosscutting, and Speed Management. The Countermeasures Toolkit includes descriptions of these 28 strategies, as well as information regarding implementation area, crash reduction effectiveness, cost, and implementation time. Crash reduction effectiveness was gauged using the Crash Reduction Factor (CRF) percentage as reported by the FHWA Crash Modification Factors (CMF) Clearinghouse. CRFs are the estimated percent reduction in crashes that can be expected from a countermeasure and are based on a body of published research.

Guide to the Countermeasures Toolkit



Crash Reduction Potential



Low

CRF is lower than
33%



Medium

CRF is between 33%
and 66%



High

CRF is greater than
66%

Cost Estimate



Low

Cost is less than
\$10,000



Medium

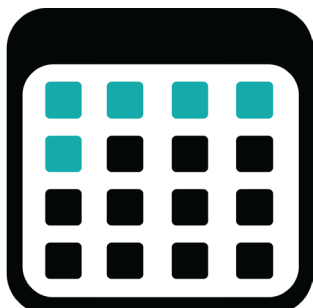
Cost is between
\$10,000 and
\$100,000



High

Cost is greater than
\$100,000

Estimated Time



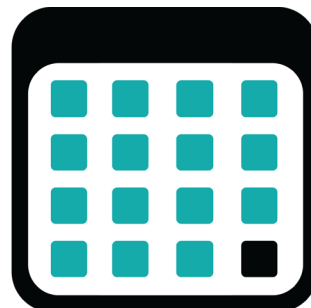
Short

Implementation
time is less than 2
years



Medium

Implementation
time is between 2
years and 5 years



Long

Implementation
time is greater than
5 years



Crosswalk Visibility Enhancements



Source: FHWA

Crosswalk visibility enhancements such as high-visibility crosswalks, lighting, signing, and pavement markings increase pedestrian visibility and can decrease crashes involving vulnerable road users. Crosswalk visibility enhancements can be implemented on multi-lane roadway crossings where vehicle volumes are higher than 10,000 vehicles per day (AADT). These enhancements may be used alone or in combination with one another.

Contributing Factors:

All

Crash Types:

Pedestrian

Estimated Time

High-visibility crosswalks can reduce pedestrian injury crashes up to **40%**

Source: FHWA

Crash Reduction Potential



Cost Estimate



Leading Pedestrian Interval



Source: FHWA

By allowing pedestrians to enter the crosswalk 3 to 7 seconds before vehicles have a green light, pedestrians may better establish their presence and be more visible to vehicles turning left or right. Leading pedestrian intervals can reduce crashes by decreasing conflicts between vehicles and pedestrians in the crosswalk.

Contributing Factors: All

Crash Types: Pedestrian

Estimated Time

13% reduction in pedestrian-vehicle crashes at intersections

Source: FHWA

Crash Reduction Potential



Cost Estimate





Medians and Pedestrian Refuge Islands



Source: FHWA

Medians and pedestrian refuge islands provide pedestrians crossing roadways with sheltered areas to stop and wait for traffic to clear before crossing. Having access to sheltered areas within the roadways allows pedestrians to only cross one direction of traffic at a time, making roadway crossings safer. Roadways in locations with significant pedestrian and vehicle traffic and with speeds greater than 35 MPH should consider installation of medians or pedestrian refuge islands.

Contributing Factors:

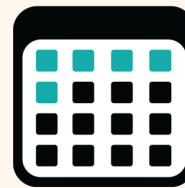
All

Crash Types: Pedestrian

Estimated Time

Crash Reduction Potential

Cost Estimate



Median with marked crosswalk:

46%

reduction in pedestrian crashes

Source: FHWA



Pedestrian Hybrid Beacons



Source: FHWA

Pedestrian hybrid beacons are traffic control devices used for pedestrian crossings mid-block or at unsignalized intersections. When activated, the beacons flash a series of yellow and red warning lights that direct motorists to a stop. Pedestrian hybrid beacons are very effective on roadways where gaps in traffic are infrequent, the speed limit is over 35 MPH, there are three or more lanes of traffic, or the roadway has an AADT of over 9,000 vehicles per day.

Contributing Factors:

All

Crash Types: Pedestrian

Estimated Time

Crash Reduction Potential

Cost Estimate



55% reduction in pedestrian crashes

29% reduction in total crashes

Source: FHWA



Rectangular Rapid Flashing Beacons



Source: PedBikeImages.org / Michael Frederick

Rectangular Rapid Flashing Beacons (RRFBs) supplement existing mid-block or unsignalized crosswalks by calling attention to pedestrians through the activation of flashing lights. RRFBs can reduce crashes by enhancing driver awareness of pedestrians and increasing motorist yielding rates at crosswalks.

Contributing Factors:
All

Crash Types: Pedestrian

Crash Reduction Potential



Cost Estimate



Estimated Time



RRFBs can increase motorist yielding rates at crosswalks up to **98%**

Source: FHWA



Road Diets (Roadway Reconfiguration)



Source: PedBikeImages.org / Dan Burden

A road diet or roadway reconfiguration typically involves converting a four-lane undivided roadway to a three-lane roadway, consisting of two lanes and a center two-way left-turn lane. Removing a lane calms traffic, reduces speeding, allows space for pedestrian refuge islands or bicycle lanes, and reduces crashes. Road diets can be used in conjunction with other complete streets tactics to create a more bike and pedestrian-friendly environment.

Crash Types: Left Turn, Pedestrian, Bicyclist, Rear End
Contributing Factors:
All

Crash Reduction Potential



Cost Estimate

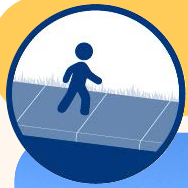


Estimated Time



Four-lane to three-lane road diet: **19-47%** reduction in total crashes

Source: FHWA



Walkways



Source: PedBikeImages.org / Dan Burden

Walkways include any dedicated pathways for people walking or utilizing wheelchairs. Sidewalks, multi-use paths, pedestrian walkways, or even roadway shoulders may be considered walkways and can improve pedestrian mobility. By implementing dedicated walkways, pedestrian-vehicle conflicts can be reduced or avoided.

Contributing Factors:
All

Crash Types: Pedestrian

Crash Reduction Potential



Cost Estimate



Estimated Time



Installation of sidewalks:

65-89%

reduction in crashes involving pedestrians on roadways

Source: FHWA



Bicycle Lanes



Source: PedBikeImages.org / Dan Burden

Bicycle lanes should be considered to provide a dedicated space for bicyclists to ride. Bicycle lane design may be altered to be suitable for the roadway, and in some cases separated bike lanes may be most effective. Roadway factors such as number of lanes, traffic volume, user needs, and land use context should be considered when installing bike lanes.

Contributing Factors:
All

Crash Types: Bicyclist

Crash Reduction Potential



Cost Estimate



Estimated Time



Bicycle lane additions can reduce crashes up to

49%

for total crashes on urban 4-lane undivided roads

Source: FHWA



Longitudinal Rumble Strips and Stripes



Longitudinal rumble strips are raised lines on roadways that alert motorists who have departed from the travel lane. Found on the shoulder, edge line, or center line, longitudinal rumble strips can reduce lane departure crashes through increased driver awareness. Rumble strips are edge line or center line rumble strips that have been painted over to increase visibility of the pavement markings, especially during dark conditions.

Contributing Factors:

Distracted Driving,
Speeding, Weather
Conditions

Crash Types: Off Road,
Rollover, **Estimated**
Time

Head On



**Crash Reduction
Potential**



**Cost
Estimate**



Center line
rumble strips:

44-64%

reduction in head-on fatal and injury crashes on two-lane rural roads

Source: FHWA



Median Barriers



Median barriers separate opposing traffic and reduce cross-median and head-on crashes on roadways. Median barriers are most effective on roadways with median widths of 30 feet or less and an AADT greater than 20,000 vehicles per day. Barriers can be flexible cable barriers, metal-beam guardrails, or concrete barriers.

Contributing Factors:

Distracted Driving,
Speeding, Weather
Conditions

Crash Types: Off Road,
Head On

**Estimated
Time**



**Crash Reduction
Potential**



**Cost
Estimate**



Median barriers installed on rural four-lane freeways can reduce cross-median crashes

by
97%

Source: FHWA



Roadside Design Improvements at Curves



Source: FHWA

Crash Reduction Potential



Cost Estimate



Roadside design improvements at curves can reduce road departure crashes by implementing elements that can slow vehicles, allow for motorists to regain control, or prevent vehicles from departing the roadway. Elements such as slope flattening, widened shoulders, and metal guardrails can decrease fatalities and serious injuries associated with lane-departure crashes along curved roadways.

Contributing Factors:

Distracted Driving,
Speeding, Weather
Conditions

Crash Types: Off Road,
Rollover **Estimated Time**



22%
reduction in
crashes when
increasing
distance to
roadside
features from
3.3 ft to 16.7 ft

Source: FHWA



SafetyEdge



Source: FHWA

Crash Reduction Potential



Cost Estimate



SafetyEdge technology creates a 30-degree slope at the end of roadway pavement, as opposed to a 90-degree drop-off that can cause to become unstable after leaving the roadway. SafetyEdge can prevent off-road crashes that result from road drop-off by allowing for increased vehicle control on a more gentle slope. SafetyEdge is most effective on roadways where curbs or guardrails are not present.

Contributing Factors:

Distracted Driving,
Speeding, Weather
Conditions

Crash Types: Off Road,
Rollover **Estimated Time**



11%
reduction in
fatal and injury
crashes
21%
reduction in
run-off-road
crashes

Source: FHWA



Wider Edge Lines



Source: FHWA

Wider edge lines allow for drivers to more clearly distinguish the travel lane and identify road alignment ahead. Widened edge lines are generally increased from the standard 4 inches to a width of 6 inches. Increasing the width can decrease roadway departure crashes.

Contributing Factors:

Speeding, Weather Conditions

Crash Types: Off Road

Crash Reduction Potential



Cost Estimate



Estimated Time



Wider edge lines can reduce crashes up to **32%** for non-intersection, fatal, and injury crashes on rural two-lane roads

Source: FHWA



Enhanced Delineation for Horizontal Curves



Source: FHWA

Enhanced delineation for horizontal curves includes a variety of strategies that may be used to increase curve visibility and driver awareness. Strategies such as pavement markings, chevron signs, retroreflective signs, and dynamic curve warning signs can assist in alerting drivers to upcoming curves.

Contributing Factors:

Speeding, Distracted Driving, Weather Conditions

Crash Types: Off Road, Rollover

Crash Reduction Potential



Cost Estimate



Estimated Time



Chevron signs can reduce nighttime crashes by **25%**
In-lane curve warning pavement markings can reduce crashes by **35-38%**

Source: FHWA



Corridor Access Management



Source: PedBikeImages.org / Dan Burden

Corridor access management can enhance safety by controlling entry and exit points along a roadway. Tactful access management can enhance safety for all roadway users, facilitate biking and walking, and reduce congestion. Driveway closure, consolidation, and relocation can reduce entering and exiting vehicles along a roadway, reducing chaos. Raised medians can also be used to limit cross-roadway movements, reducing crash risk. Roundabouts may be used to limit left-turns and U-turns.

Contributing Factors:

Speeding, Aggressive Driving

Crash Types: Angle, Left Turn, Bicyclist, Pedestrian

Crash Reduction Potential



Cost Estimate



Estimated Time



Reduce fatal and injury crashes along urban and suburban arterials by **25-31%**

Source: FHWA



Dedicated Left- and Right-Turn Lanes at Intersections



Source: PedBikeImages.org / Dan Burden

Providing auxiliary turn lanes allows for dedicated space that separates slowing and stopped traffic from moving vehicles. Turn lanes allow motorists to slow before turning, reducing crashes. Dedicated turn lanes are most impactful at stop-controlled two-way intersections but can provide safety improvements at many types of intersections.

Contributing Factors:

Distracted Driving, Speeding

Crash Types: Rear End, Left Turn, Angle

Crash Reduction Potential



Cost Estimate



Estimated Time



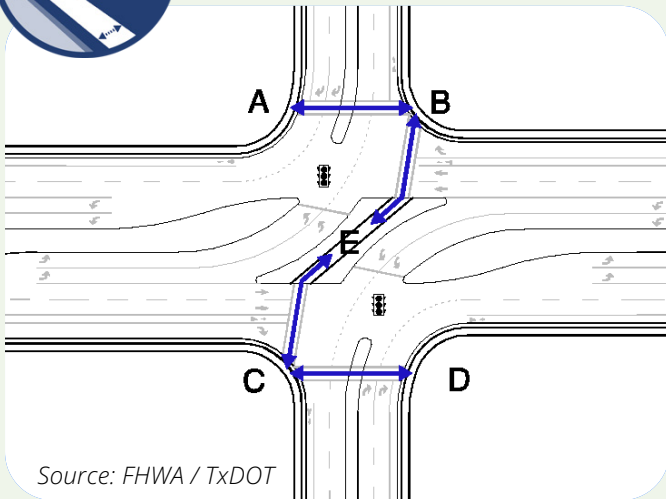
Left-turn lanes: **28-48%** reduction in total crashes

Right-turn lanes: **14-26%** reduction in total crashes

Source: FHWA



Reduced Left-Turn Conflict Intersections



Source: FHWA / TxDOT

Reduced left-turn conflict intersections minimize the potential for severe crash types, including angle and head-on crashes, by modifying left-turn movements. Such intersections generally forgo a standard left-turn lane in favor of a Reduced Conflict Intersection that relies on cross-street approaches. Restricted Crossing U-Turn (RCUT) intersections may also be used to restrict left-turns.

Contributing Factors:
Aggressive Driving

Crash Types: Left Turn, Angle, Head On

Crash Reduction Potential



Cost Estimate



Estimated Time



Two-way stop controlled intersection converted to RCUT:
54%
reduction in fatal and injury crashes

Source: FHWA



Roundabouts



Source: PedBikeImages.org / Toole Design Group

Roundabouts utilize a circular intersection configuration to safely and efficiently move traffic. Vehicle speeds are naturally reduced, and left turns are avoided. Roundabouts also minimize conflict points by giving circulating traffic the right of way and ensuring all entry points must yield to oncoming traffic.

Contributing Factors:
Speeding

Crash Types: Left Turn, Angle, Pedestrian, Bicyclist

Crash Reduction Potential



Cost Estimate



Estimated Time



Two-way stop controlled intersection to roundabout:
82%
reduction in fatal and injury crashes

Source: FHWA



Multiple Low-Cost Countermeasures at Stop-Controlled Intersections



Source: FHWA

Crash Reduction
Potential



Cost
Estimate



Multiple low-cost countermeasures may be utilized at stop-controlled intersections to fortify safety by increasing driver awareness. Low-cost countermeasures may include oversized advanced intersection warning signs with flashing beacons, supplemental street name plaques, retroreflective signposts, enhanced pavement markings, oversized advance stop signs, and removal of sight-blocking vegetation. Utilizing several low-cost countermeasures maximizes resources by choosing highly effective strategies.

Contributing Factors: Speeding, Distracted Driving

Crash Types: Rear End, Left Turn, Angle



27%

reduction in fatal and injury crashes at rural intersections

Source: FHWA



Yellow Change Intervals



Source: FHWA

Crash Reduction
Potential



Cost
Estimate



Signalized intersection safety can be improved through modified yellow change intervals. The yellow signal indication indicates to motorists that the green signal has ended, and a red signal will soon follow. By ensuring that the yellow signal indication is adequate length, crashes related to red-light running may be avoided. Transportation agencies should regularly review and update yellow change interval timing policies.

Contributing Factors:

Speeding, Red-Light Running

Crash Types: Left Turn, Angle, Rear End



36-50%

reduction in red light running

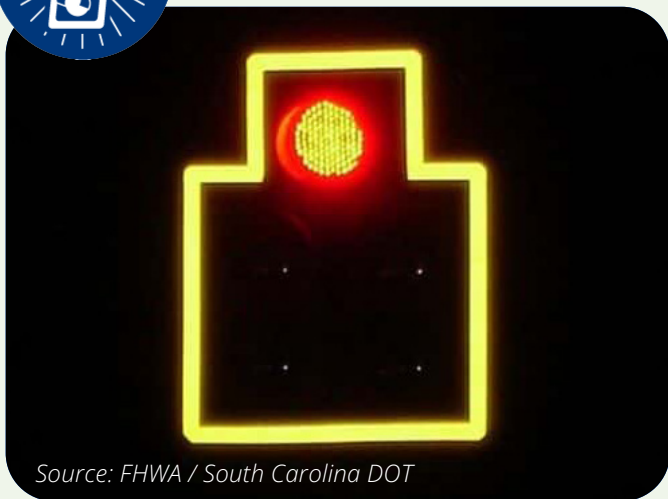
8-14%

reduction in total crashes

Source: FHWA



Backplates with Retroreflective Borders



Source: FHWA / South Carolina DOT

Retroreflective borders added to traffic signal heads improve signal visibility in both daytime and nighttime conditions. The addition of retroreflective borders is effective for all motorists, including aging or color vision deficient drivers. Enhancing signal visibility can decrease rear-end crashes by improving intersection visibility.

Contributing Factors:

Distracted Driving

Crash Types: Rear End

Crash Reduction
Potential



Cost
Estimate



Estimated
Time



Retroreflective
borders added
to signal
backplates:

15%

reduction in
total crashes

Source: FHWA



Local Road Safety Plans



Source: PedBikeImages.org / Dan Burden

Local road safety plans can be used to identify, analyze, and prioritize roadway safety improvement. Plans can be tailored to local needs and issues and can prioritize locally owned roadways that have high crash rates. The implementation of a local road safety plan can effectively guide funding to address a jurisdiction's most urgent safety needs and may establish a timeline for implementation and evaluation.

Contributing Factors:

All

Crash Types: All

Crash Reduction
Potential



Cost
Estimate



Estimated
Time



25%

reduction in
county road
facilities in
Minnesota
after LRSP
implementation

Source: FHWA



Pavement Friction Management



Source: FHWA

Pavement friction can reduce crashes associated with intersections and road departures. Adequate friction is critical for intersections and roadway curves, where frequent slowing, stopping, and turning can polish the pavement and create slippery segments. High friction surface treatments may be used to enhance friction and resist skidding.

Contributing Factors:

Speeding, Distracted Driving, Weather Conditions

Crash Types: Rear End, Off Road

Estimated Time

20%

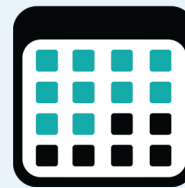
reduction of total crashes at intersections

Source: FHWA

Crash Reduction Potential



Cost Estimate



Road Safety Audits



Source: PedBikeImages.org / Dan Burden

Road safety audits are performed by a multidisciplinary team independent of the project. Such audits consider all transportation users, account for human factors, and consider the capabilities of road users. Road safety audits can reduce costs through the early identification and mitigation of roadway safety issues, and ultimately reduce the number and severity of crashes through safer roadway designs.

Contributing Factors:

All

Crash Types: All

Estimated Time

10-60%

reduction in total crashes

Source: FHWA

Crash Reduction Potential



Cost Estimate





Lighting



Source: PedBikeImages.org / Dan Burden

Crash Reduction Potential



Cost Estimate



Adequate lighting can reduce crashes by making hazards and obstacles more visible to motorists, increasing reaction time. Enhanced lighting can also illuminate pedestrians and bicyclists utilizing the roadway, making crashes less likely. Lighting can be installed continuously along roadways or used to illuminate intersections and pedestrian crossings. Horizontal and vertical illuminance levels should be considered when implementing lighting to avoid shadowing or silhouetting pedestrians.

Contributing Factors:

All

Crash Types: All

Estimated Time



Can reduce nighttime injury pedestrian crashes at intersections by
42%

Source: FHWA



Speed Safety Cameras



Source: RedBikeImages.org / Toole Design Group

Crash Reduction Potential



Cost Estimate



Speed Safety Cameras (SSCs) can be used to supplement speed limit enforcement efforts. SSCs utilize speed measurement devices to detect speeding vehicles and are able to take photographs of vehicles exceeding the speed limit. Motorists captured speeding on SSCs may be issued tickets. SSCs can be used overtly or covertly and encourage motorists to comply with posted speed limits.

Contributing Factors:

Speeding

Crash Types: All

Estimated Time



SSCs can reduce crashes on urban expressways, freeways, and principal arterials up to
37%

Source: FHWA



Variable Speed Limits



Source: FHWA

On roadways where conditions are likely to change frequently due to factors such as crashes, congestion, or weather, variable speed limit (VSL) signs can be used to respond to such changes. Providing variable speed limits can reduce fatal and serious injury crashes by being able to respond to a changing roadway environment.

Contributing Factors:

Speeding

Crash Types: All

Crash Reduction
Potential



Cost
Estimate



Estimated
Time



VSLs can
reduce fatal
and injury
crashes by
51%

Source: FHWA



Appropriate Speed Limits for All Road Users



Source: FHWA

Maintaining target speeds allows for drivers to have enhanced awareness of roadway conditions and other transportation users, reducing the likelihood of a crash. Appropriate speed limits should take a range of roadway factors into account, such as pedestrian and bicycle activity, crash history, land use context, traffic volume, and roadside conditions.

Contributing Factors:

Speeding

Crash Types: All

Crash Reduction
Potential



Cost
Estimate



Estimated
Time



A 10%
reduction in
mean speed
has a crash
reduction factor
of
32%

Source: FHWA

Strategies and Recommendations

Current plans and policies regarding roadway safety in the region were reviewed to determine strengths and weaknesses. From this review, strategies and actions related to the USDOT Safe System Approach principles were developed to provide general guidance for implementation of the Safety Action Plan throughout the region. Time frames and Metrics were assigned to each action to create measurable goals.

Several strategies, actions, and recommendations may be implemented when considering remediation of the region's Priority Projects and enhancing safety throughout the transportation network. The developed strategies aim to be high-level for adaptability at the local level for jurisdictions across the region.

The recommendations and strategies are consistent with the USDOT Safe System Approach objectives that center on protecting human lives by promoting safer transportation planning practices. The five Safe System Approach objectives that were utilized to inform these strategies are:

- **Safer People**
- **Safer Roads**
- **Safer Speed**
- **Safer Vehicles**
- **Post-Crash Care**

Each of the suggested actions address a related theme identified in the policy review. Themes include:



Communications



Connectivity



Data Analytics



Design



Funding



Partnership



Planning



Technology

The strategies and recommendations found in [Tables 29-33](#) may be implemented to inform policy, influence transportation user behavior, and influence roadway designs. The selection on the following page includes a highlighted list of strategies and recommendations that can be used to achieve these goals. The full list of strategies and recommendations can be found in [Appendix 6](#).

TABLE 29: SAFER PEOPLE STRATEGIES AND ACTIONS

PRINCIPLE: SAFER PEOPLE			
STRATEGY	ACTION	THEME ADDRESSED	RESPONSIBLE PARTY
Foster a culture of roadway safety for all users through engagement, education, outreach, and programming	Develop a Roadway Safety Strategic Outreach Plan and toolkit for educating the public and to address issues specific to roadway safety in the Emerald Coast region.		ECRC
	Complete Safety Action Plans at the City and County level that are consistent with the ECRC regional action plan to identify major concerns on the local network and identify countermeasures to address these concerns.		Local jurisdictions and counties
	Create and maintain targeted educational programs for the public focused on improving specific behaviors identified by analyzing crash behavior trends within HINs.		Local jurisdictions, non-profit partners
	Incorporate safety improvements at or near transit stops to improve safe transit access.		Local jurisdictions, ECRC, FDOT
Ensure multi-agency coordination on priority safety outcomes	Coordinate with local law enforcement to implement a High Visibility Enforcement (HVE) toolkit to target specific roadway safety issues.		Local law enforcement

TABLE 30: SAFER ROADS STRATEGIES AND ACTIONS










PRINCIPLE: SAFER ROADS			
STRATEGY	ACTION	THEME ADDRESSED	RESPONSIBLE PARTY
Prioritize Safety improvements along the HIN.	Conduct annual safety audits for crashes along HIN segments to enhance data collection.		Local jurisdictions
Design roadways to mitigate human risk	Diversify and maximize funding sources for long-term projects, including SS4A, RAISE grants, and HSIP funding.		Local jurisdictions, TPOs, ECRC
Prioritize safety improvements for vulnerable road users such as pedestrians, bicyclists, and motorcyclists	Recommend the adoption of consistent pedestrian crosswalk policies throughout the Emerald Coast Region to bolster pedestrian safety, especially at roadway crossings.	 	ECRC, TPOs
Continue to implement street and pedestrian-scale lighting at key locations	Work with local utilities to install or improve lighting along HINs or areas with high night-time crash rates		Local jurisdictions, utility providers, TPOs
Ensure multi-agency coordination on planning-level decisions, programs, and documents to improve safety outcomes	Partner with regional TPOs to review existing bicycle-pedestrian master plans, update outdated recommendations, and implement proven countermeasures to enhance safety within HINs.	 	FDOT, TPOs, counties, cities
	Work with local officials to identify areas where planning level documents can be amended to advocate for the safe travel of all users, such as Comprehensive Plans, Land Development Codes, and other transportation related documents.	 	ECRC, TPOs, counties, cities

TABLE 31: SAFER SPEEDS STRATEGIES AND ACTIONS








PRINCIPLE: SAFER SPEEDS			
STRATEGY	ACTION	THEME ADDRESSED	RESPONSIBLE PARTY
Utilize a data-driven approach to addressing speeding-related concerns along the HIN and increase compliance with target speeds.	Conduct detailed safety analyses on areas identified in the HIN to determine the most effective safety countermeasures.		ECRC, TPOs, counties, cities
	Identify and implement speed compliance enforcement projects along identified HIN corridors to maintain target speeds.	 	Local jurisdictions, TPOs, ECRC
Reduce speed through roadway design	Implement safety measures such as speed feedback signs, reduced lane widths, or raised center islands in areas with frequent speeding.		FDOT, counties, cities
	Inventory all signage and roadway markings along the HIN to identify any gaps in regulation that could contribute to speed related issues and crashes.	 	Local jurisdictions, TPOs, ECRC
	Utilize roadway technology systems to support efficient travel times and maintain target speeds.		FDOT, TPOs, Counties, Cities

TABLE 32: SAFER VEHICLES STRATEGIES AND ACTIONS













PRINCIPLE: SAFER VEHICLES			
STRATEGY	ACTION	THEME ADDRESSED	RESPONSIBLE PARTY
Utilize roadway technologies in conjunction with vehicles and transit to create intelligent transportation systems (ITS)	Implement connected vehicle (CV) technologies to gather information from nearby vehicles and communication broadcasts to enhance roadway safety, efficiency, and increase motorist reaction time.	 	ECRC, TPOs
	Employ the use of geofencing to create virtual geographic boundaries that trigger vehicle alerts when motorists enter these zones. Potential boundaries include school zones or locations with increased pedestrian activity.		ECRC, TPOs, local jurisdictions
	Utilize Advanced Traveler Information System (ATIS) technology to broadcast advanced notification information regarding target speeds, optimal routes, changing road conditions, and crashes.	 	ECRC, TPOs
Encourage the use of personal devices to supplement transportation safety efforts	Educate the public on cell phone apps such as Waze that alert motorists of roadway hazards, approaching first responders, and changes in speed limit.	 	ECRC, TPOs, police and fire departments, local jurisdictions

TABLE 33: POST-CRASH CARE STRATEGIES AND ACTIONS

PRINCIPLE: POST-CRASH CARE			
STRATEGY	ACTION	THEME ADDRESSED	RESPONSIBLE PARTY
Educate every road user	Create or enhance existing educational programs and enforcement campaigns for first responders regarding pedestrian, cyclist, and motorcycle traffic crash victims to improve medical response and reduce mortality.		Local governments, health departments, police and fire departments
Prepare for the impacts of an intensifying and uncertain future	Analyze evacuation clearance times to modify Emergency Management Plan to address climate-related events such as hurricanes and flash flooding.		Local jurisdictions, ECRC
	Evaluate the effectiveness of the current Emergency Management Plan and Regional Evacuation Studies on an annual basis.	 	Local jurisdictions, ECRC
Improve opportunities for enhanced data management and technological integration as it relates to safety conditions	Implement technological enhancements for police and fire operational efficiency and effectiveness relating to roadway safety.		Police and fire departments

Emerging Technologies

Emerging technologies can be integrated into the existing transportation system to enhance safety, efficiency, data and data after-the-fact can be assessed and analyzed to bolster safety programming and guide the decision-making system that can anticipate and predict disturbances, allowing such interferences to be planned for and avoided. Smart technologies can be implemented within the transportation network to create a system that is safer, more efficient, and more resilient.

Connected vehicles systems, bridge closure notifications, and real-time information sharing can be implemented. These systems may offer predictive vehicle movements and fortify the transportation system against disruptions from sudden changes in traffic patterns.

Technology such as red-light cameras, speed sensors, and closed-circuit television cameras (CCTV) may also be used as means of remote enforcement. Enforcement technology can target roadway segments with a history of illegal driving behaviors, offering the ability to target several corridors concurrently.

Vulnerable road users such as bicyclists and pedestrians can benefit from smart technologies such as detection of unauthorized roadway crossings and enhanced lighting systems scaled for human use or constructed in crossings. Such technologies provide additional protection for multimodal transportation users who are more vulnerable when utilizing roadways.

The integration of smart technologies provides additional opportunities for the region to exceed its safety goals by creating a system where traffic crashes are less frequent. Technological advancements can be leveraged to improve safety throughout the region's transportation network.



Emerging Technologies in Transportation

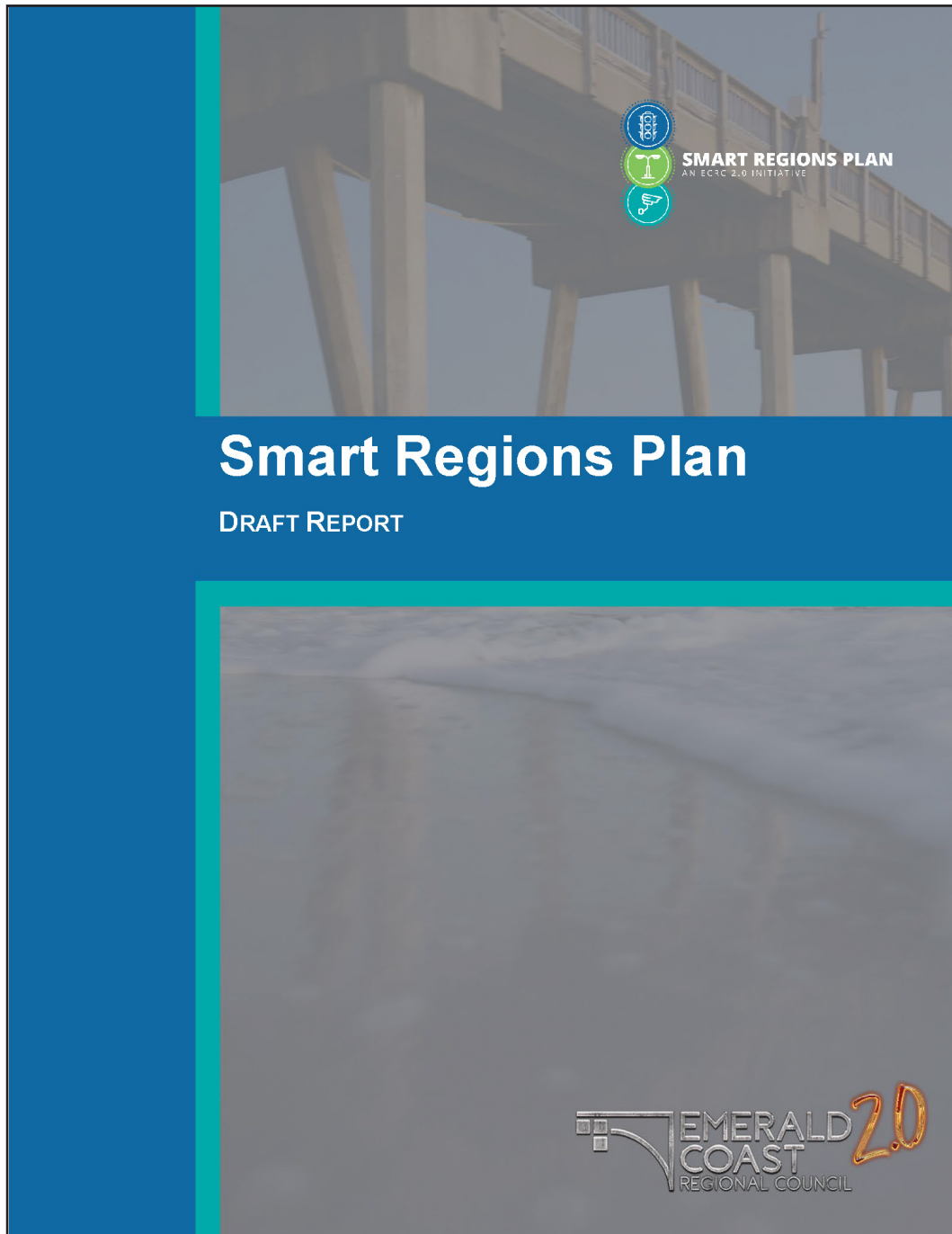
reliability, coordination, and influence driving behavior. By employing technological upgrades, both predictive and decision-making process. Used in conjunction, technological upgrades can assist with the creation of an intelligent and resilient. The Emerald Coast Regional Council's **Smart Regions Plan** aims to identify areas where updated technology can be utilized as a

to avoid traffic bottlenecks and reduce congestion throughout the region. Vehicle Detection Systems (VDS) can provide live updates for all users of the roadway system.

utilized as a
and risk-taking

n sensors at
technologies can
downways.

s and create a
y and security



Emerald Coast Regional Council Smart Regions Plan Cover



CHAPTER 5

MEASURING PROGRESS & NEXT STEPS



Measuring Progress & Next Steps

The ECRC is dedicated to the implementation of the safety projects identified in this plan. It is important to continue monitoring progress toward reducing traffic deaths and serious injuries after the Safety Action Plan has been completed. The ECRC will produce an annual report sharing the progress made toward reducing roadway fatalities and serious injuries. Performance measures presented in the **Figure 19** below should be used to evaluate yearly crash data, monitor progress, and measure the effectiveness of the Safety Action Plan. Annual Report templates for each TPO and the rural areas can be found in **Appendix 7**.

In addition to the crash data, a list of safety improvements initiated or continued in the prior year will be developed. Performance metrics were identified in **Chapter 4** for each action item recommended and should be used for the evaluation process.

Yearly reporting will help determine which projects are effective in reducing traffic fatalities and serious injuries and which projects should be revised or discontinued. Annual reporting will be published on the ECRC project website to ensure transparency and accessibility with the public and stakeholders.



State Road 30A in Walton County

FIGURE 19: ANNUAL REPORT WITH PERFORMANCE MEASURES



SAFE STREETS FOR ALL
AN ECRC 2.0 INITIATIVE

Emerald Coast Regional Council Annual Report

Reporting Year: _____

CURRENT YEAR	PREVIOUS YEAR	PERFORMANCE MEASURES
		Total fatalities in the Emerald Coast region
		Fatality rate for the Emerald Coast region
		Total serious injuries in the Emerald Coast region
		Serious injury rate for the Emerald Coast region
		Number of pedestrian fatalities and serious injuries on all roads
		Number of bicyclist fatalities and serious injuries on all roads
		Number of KSI crashes within transportation underserved areas
		Number of pedestrian and bicycle safety projects constructed in underserved communities
		Number of implemented safety improvements in prior calendar year
		Number of safety projects/strategies continued from prior year.
		Number of safety projects constructed on HIN
		Total number of strategies implemented to date

Safety Improvements Implemented: _____

Safety Improvement/Projects Continued from the Previous Year: _____

Safety Projects Constructed on HIN Segments: _____
