

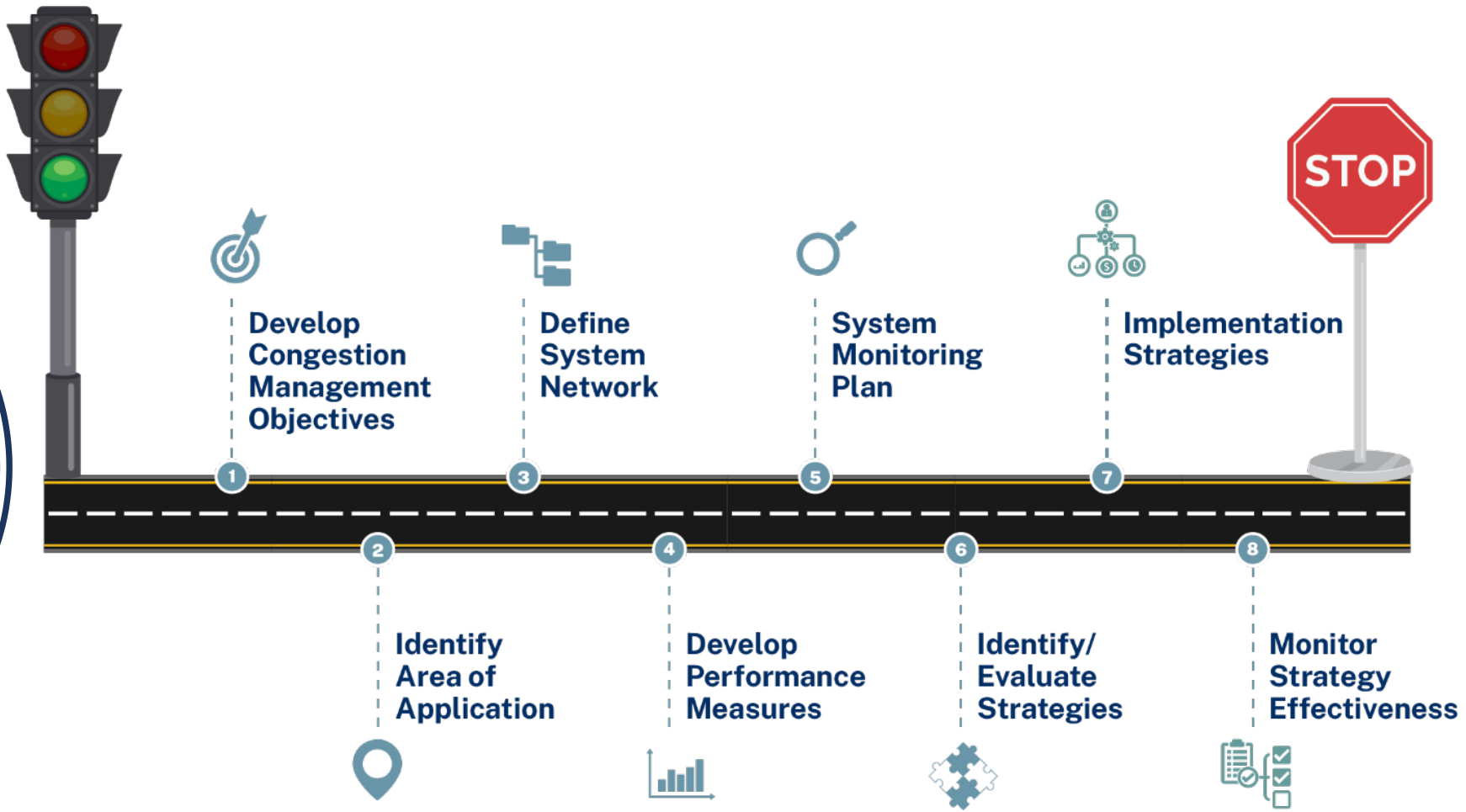


CRTPA BOARD RETREAT

CONGESTION MANAGEMENT PLAN (CMP)

January 16, 2024

**STEPS IN THE
CONGESTION
MANAGEMENT
PLAN
PROCESS**





CONGESTION MANAGEMENT PLAN COORDINATION

- CMP Technical Task Force – members comprised of CRTPA's Technical Advisory Committee
 - June 6, 2022
 - June 8, 2023
- Stakeholder Interviews
 - Gadsden County Public Works Department
 - Jefferson County Public Works Department
 - Leon County Public Works Department
 - The Regional Traffic Management Center (RTMC)
 - City of Tallahassee Underground Utilities and Public Infrastructure
 - Wakulla County Public Works Department





GOALS, OBJECTIVES AND PERFORMANCE MEASURES

Goal #1: Safety

Objectives

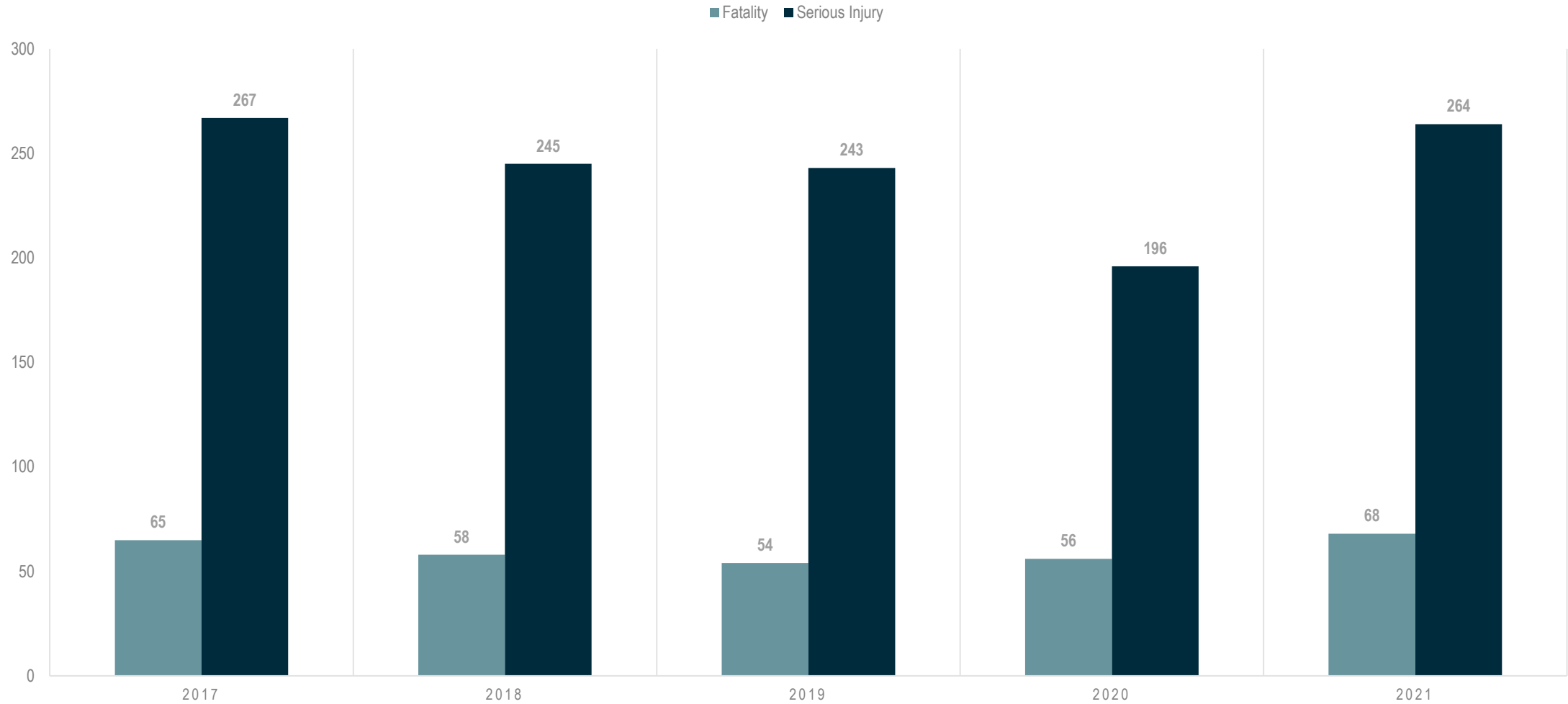
1. Reduce the Number of Automobile Crashes
2. Reduce the Number of Non-Motorized Crashes
3. Reduce the number of Fatalities

Performance Measures

1. Number of Fatal and Serious Injury Crashes
2. Serious Injury Rate
3. Fatality Rate

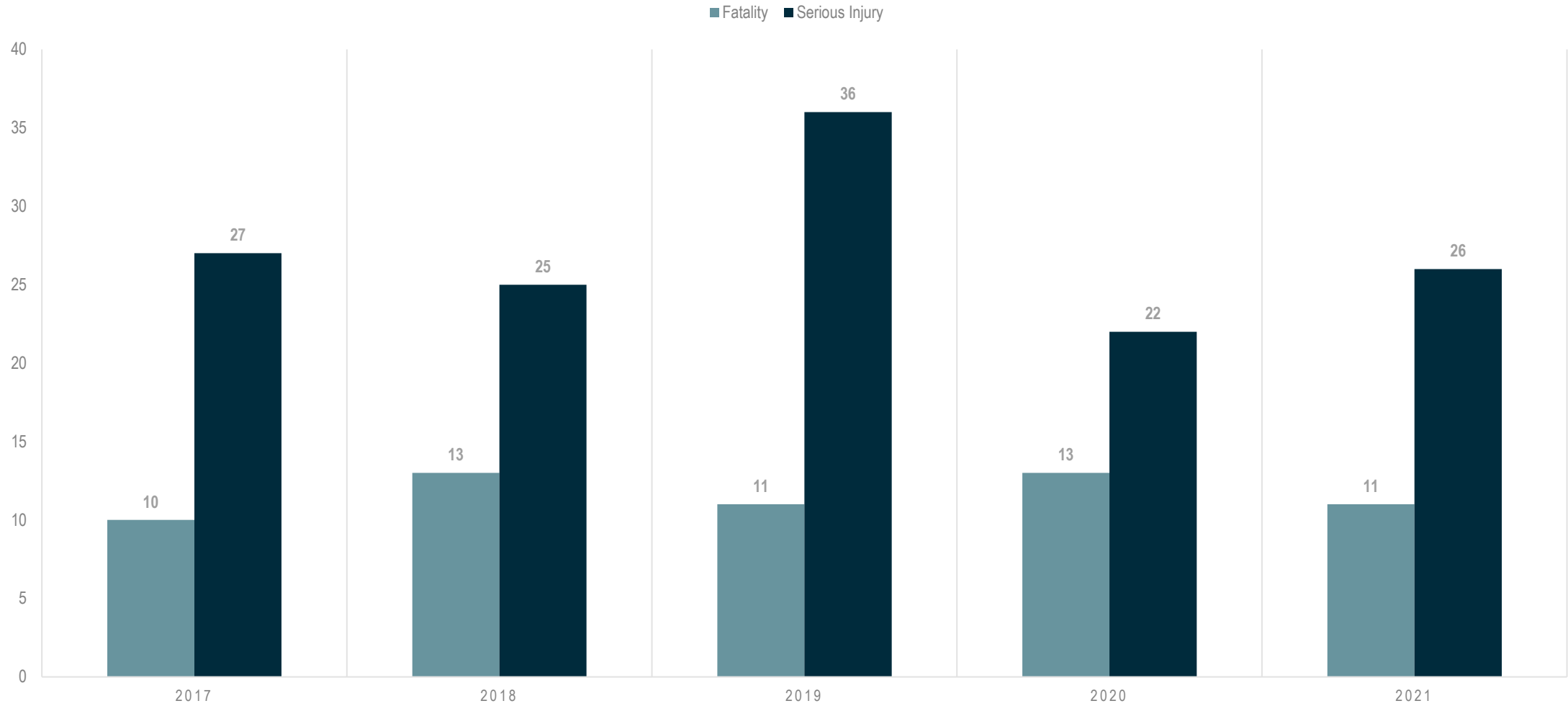
ALL MODE FATAL & SERIOUS INJURY CRASHES (CRTPA)

ALL MODE FATAL AND SERIOUS INJURY CRASHES (CRTPA)



BICYCLE/PEDESTRIAN INVOLVED FATAL & SERIOUS INJURY CRASHES (CRTPA)

BICYCLE/PEDESTRIAN INVOLVED FATAL AND SERIOUS INJURY CRASHES (CRTPA)



GOALS, OBJECTIVES & PERFORMANCE MEASURES

Goal #2: Incorporate Multimodal Options

Objectives

1. Reduce Nonrecurring Congestion
2. Achieve Adopted Level of Service (LOS)
3. Increase percentage of Work Trips made by Transit, Bicycling, or Walking

Performance Measures

1. Planning Time Index (PTI)
2. Facilities Meeting LOS
3. Percent of Work Trips made by Transit, Bicycling, or Walking

Goal #3: Increase Network Connectivity

Objectives

1. Promote Multimodal Connectivity through Facility Enhancements

Performance Measures

1. Percent of CMP Network with Bicycle and Pedestrian Facilities

Goal #4: Increase Access to Key Destinations

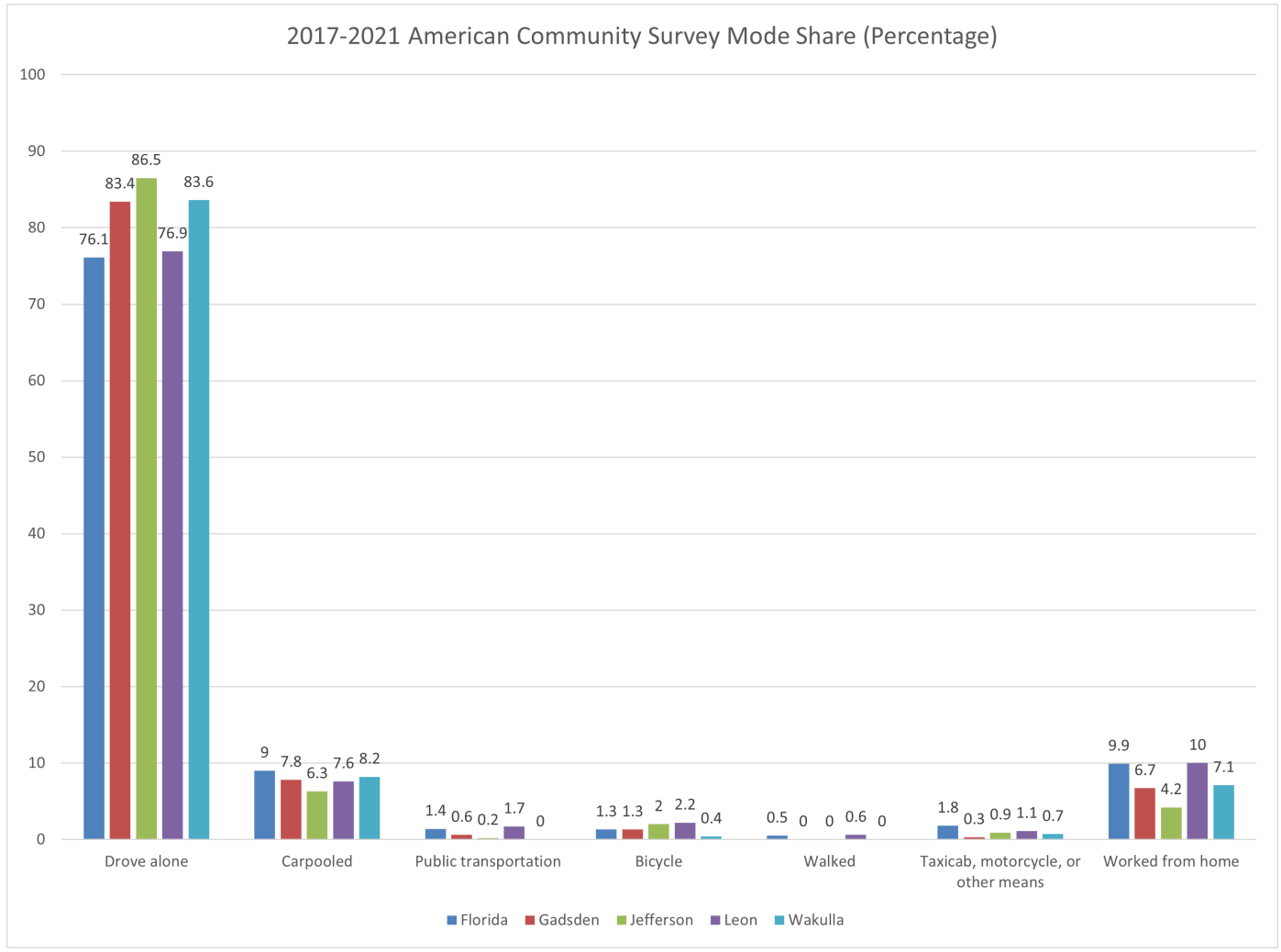
Objectives

1. Improve access to residential/employment clusters
2. Utilize Context Sensitive Solutions/Complete Street Strategies

Performance Measures

1. Percent of Population within ½ Mile of Transit
2. Percent of Population within ½ Mile of Bike/Pedestrian Facility

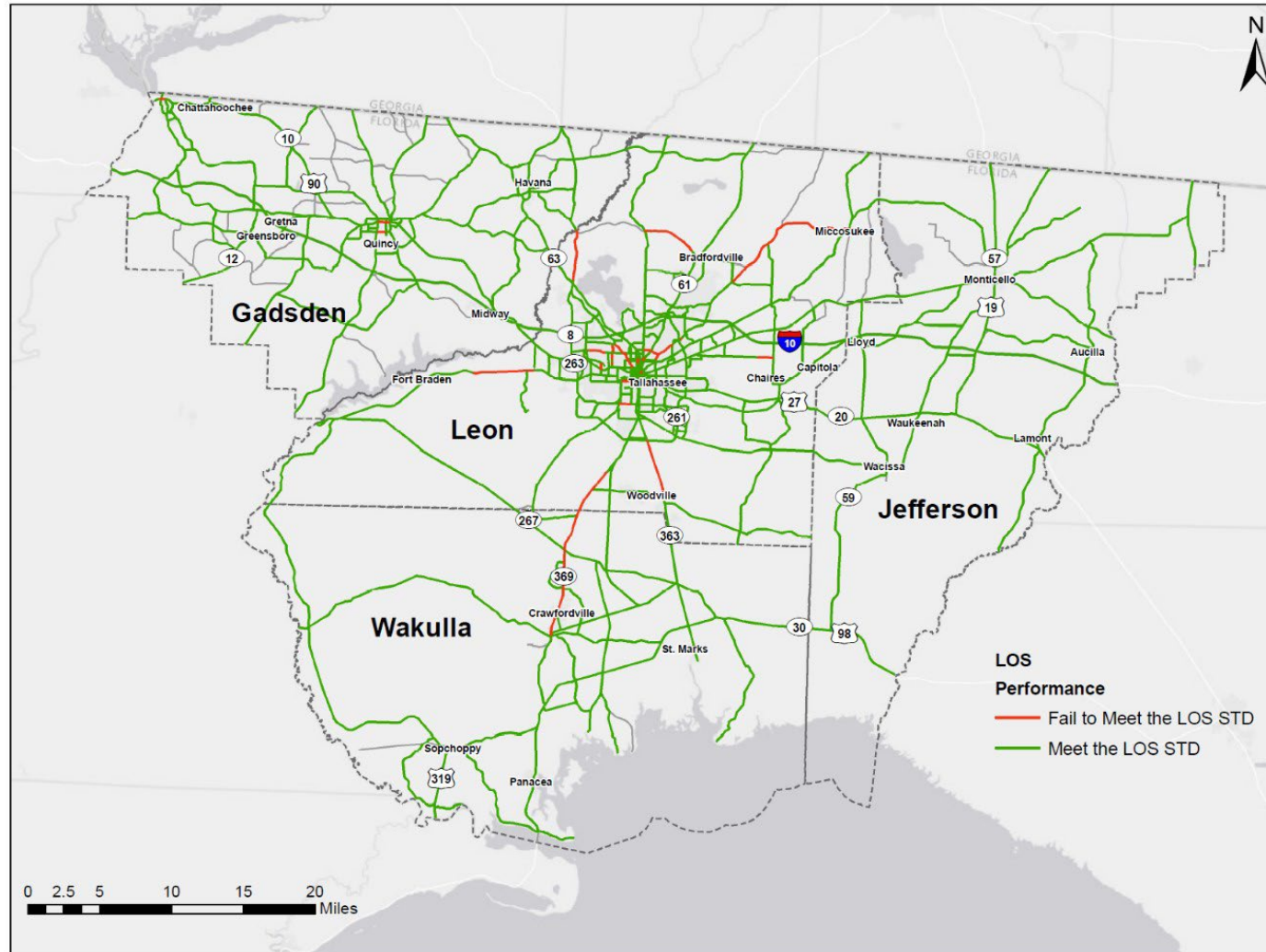
CRTPA MODE SHARE



Using the American Community Survey Mode Share Data (Census Data) from 2017-2021, mode share information for Florida and the CRTPA Counties are presented, which includes:

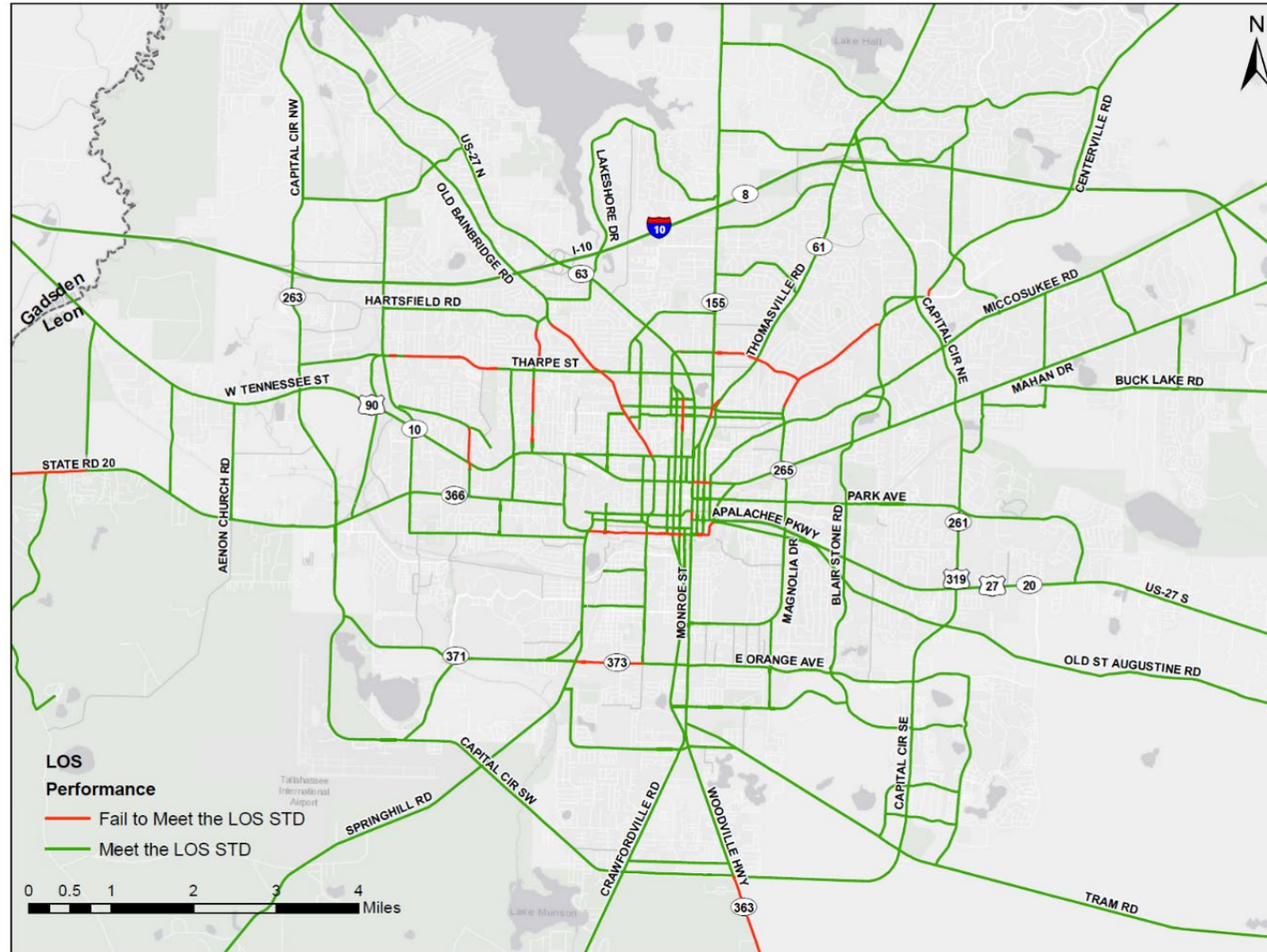
- Percentage of trips drove alone
- Percentage of trips carpoled
- Percentage of trips using public transportation
- Percentage of trips using bicycle
- Percentage of trips walked
- Percentage of trips by taxicab, motorcycle, or other means
- Percentage working from home

RECURRING CONGESTION – LEVEL OF SERVICE – CRTPA AREA



Roadway volume was extracted for the CMP network in the format of Average Annual Daily Traffic (AADTs). The AADTs were first analyzed using FDOT's Generalized Service Volume Tables to determine the LOS letter grade based on area types.

RECURRING CONGESTION – LEVEL OF SERVICE – URBAN INSET



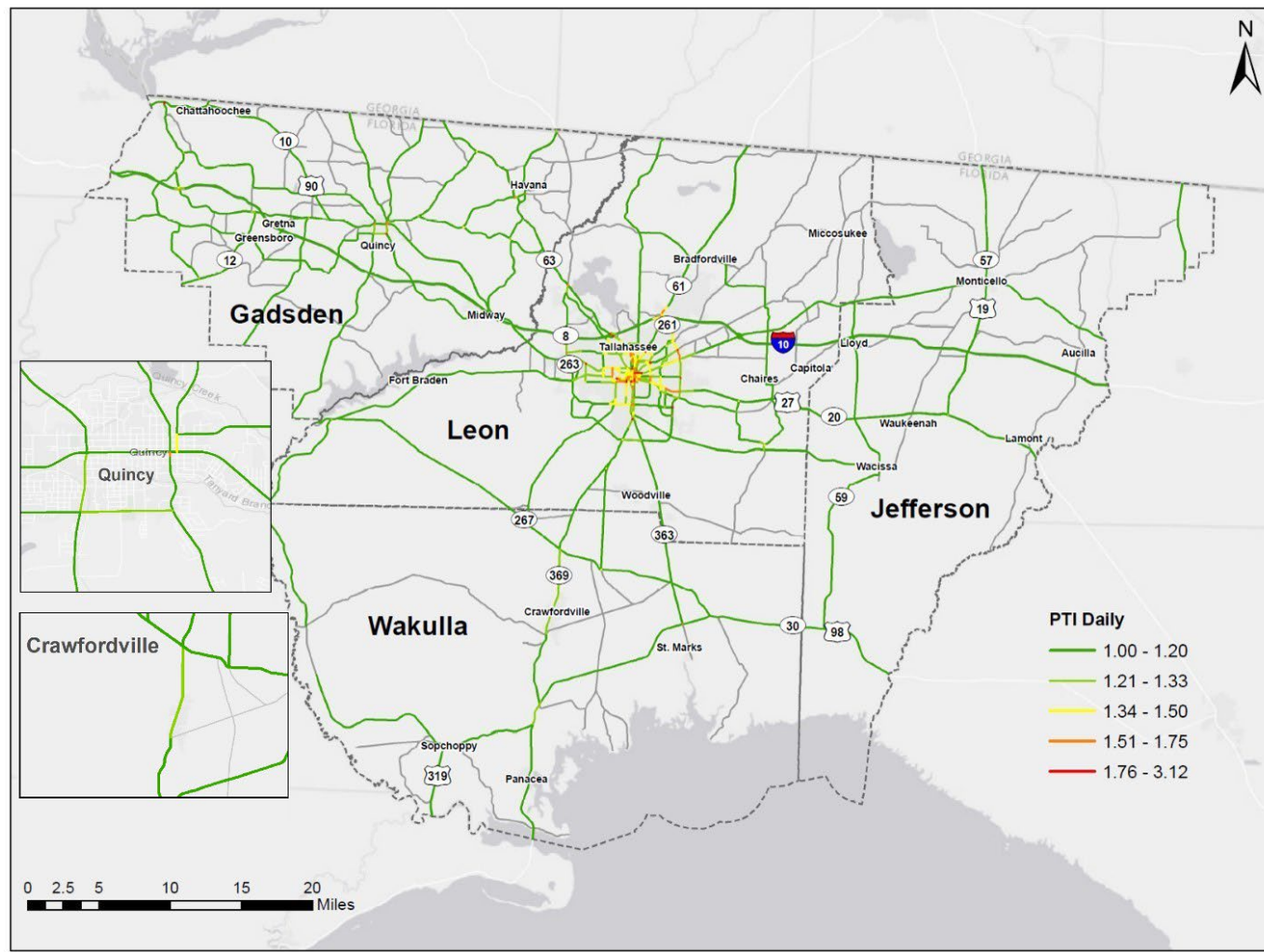
LEVEL OF SERVICE – FAILED SEGMENTS USING GENERALIZED TABLES (TOP 10 BY VOLUME)

Rank	Location	County	Urbanized	AADT	LOS	Performance
1	East Tennessee Street between Monroe Street and N. Meridian Street	Leon	Yes	37000	F	Fail to meet the STD
2	Monroe Street between Apalachee Parkway and E. Jefferson Street	Leon	Yes	34500	F	Fail to meet the STD
3	Gaines Street between Lake Bradford Road and Monroe Street	Leon	Yes	24000	F	Fail to meet the STD
4	Centerville Road between Welaunee Boulevard and Glenncrest Lane	Leon	Yes	21500	F	Fail to meet the STD
5	Orange Avenue between Springhill Road and Wahnish Way	Leon	Yes	20400	F	Fail to meet the STD
6	Bannerman Road between North Meridian Road and McBride Point	Leon	No	20200	F	Fail to meet the STD
7	East Gaines Street between Calhoun Street and South Meridian Street	Leon	Yes	19800	F	Fail to meet the STD
	South Meridian between East Gaines Street and East Lafayette Street					
8	Thomasville Road between 6th Avenue and N. Gadsden Street	Leon	Yes	19000	F	Fail to meet the STD
9	Betton Road between Thomasville Road and Centerville Road	Leon	Yes	18800	F	Fail to meet the STD
10	Gaines Street between Lake Bradford Rd and Monroe Street	Leon	Yes	16800	F	Fail to meet the STD

LEVEL OF SERVICE – FAILED SEGMENTS USING CONTEXT CLASSIFICATION (TOP 10 BY VOLUME)

Rank	Location	County	AADT	Context Classification	LOS	Performance
1	Bannerman Road between North Meridian Road and McBride Point	Leon	20,200	C3R	D	Fail to meet the STD
2	Crawfordville Highway between Shadeville Rd and Ivan Church Road	Wakulla	17,100	C3C	D	Fail to meet the STD
3	Crawfordville Highway between Ivan Church Road and Bloxham Cutoff Road	Wakulla	15,700	C2	E	Fail to meet the STD
4	Woodville Highway between Oak Ridge Road and Capital Circle	Leon	15,000	C2	E	Fail to meet the STD
5	Crawfordville Highway between Bloxham Cutoff Road and Pixie Circle	Wakulla	15,000	C2	E	Fail to meet the STD
6	Crawfordville Highway between Pixie Circle and county limit	Wakulla	15,000	C1	E	Fail to meet the STD
7	Crawfordville Highway between county limit and north of Glover Road	Leon	13,900	C2	D	Fail to meet the STD
8	Crawfordville Highway between north of Glover Road and Wakulla Springs Road	Leon	13,900	C1	D	Fail to meet the STD
9	Buck Lake Road between Buck Lake Trail and Chairs Crossing Road	Leon	11,500	C2	D	Fail to meet the STD
10	Centerville Road between Bradfordville Road and SR 59	Leon	10,200	C2	D	Fail to meet the STD

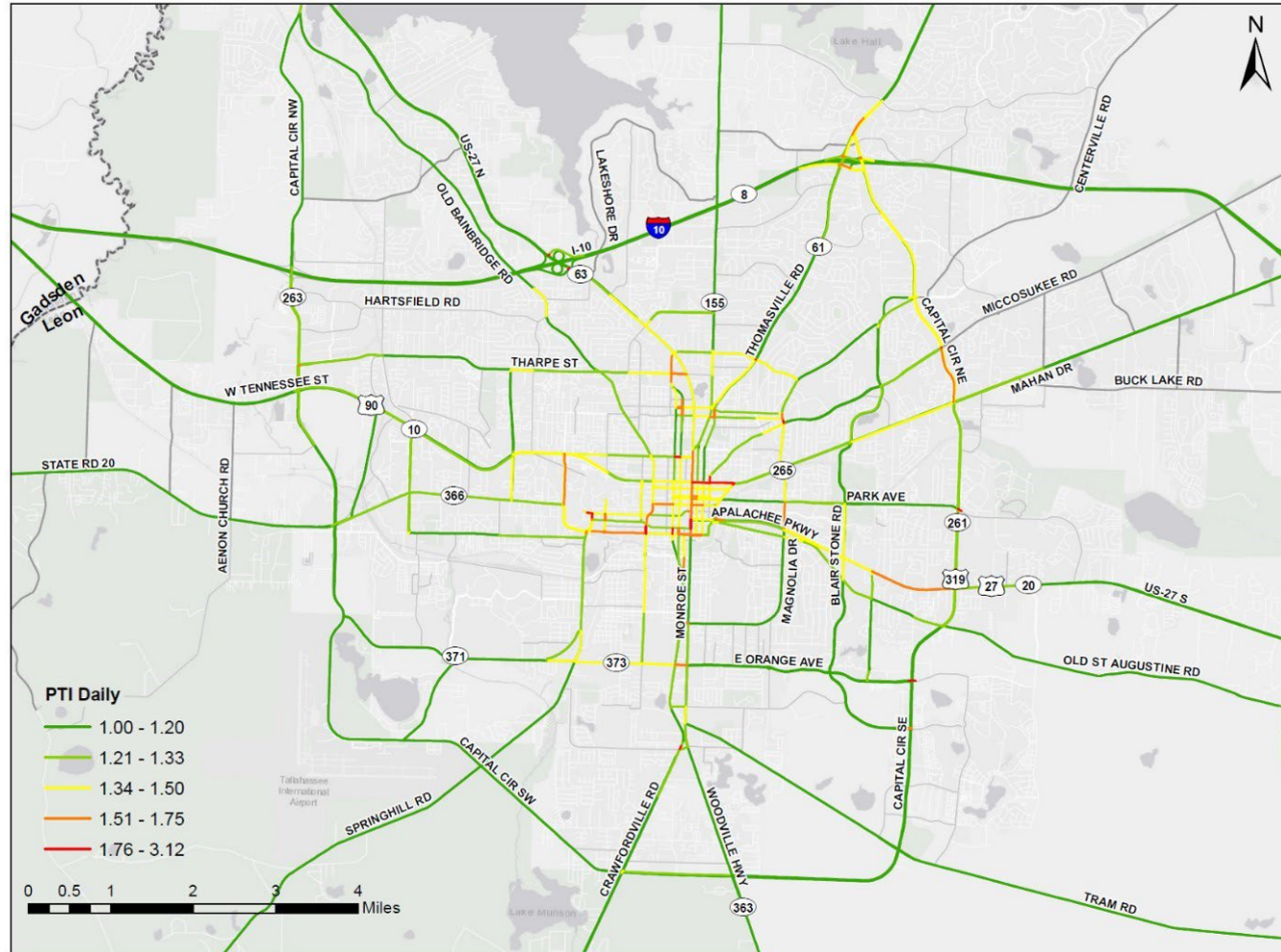
NONRECURRING CONGESTION – PLANNING TIME INDEX (DAILY) – CRTPA AREA



Consistent travel times make it easier to conduct trip planning and increase the likelihood of on-time arrival. Nonrecurring congestion has a ripple effect that decreases the predictability of travel times. The Planning Time Index (PTI) represents the additional travel time that a traveler should budget for to ensure on-time arrival 95 percent of the time



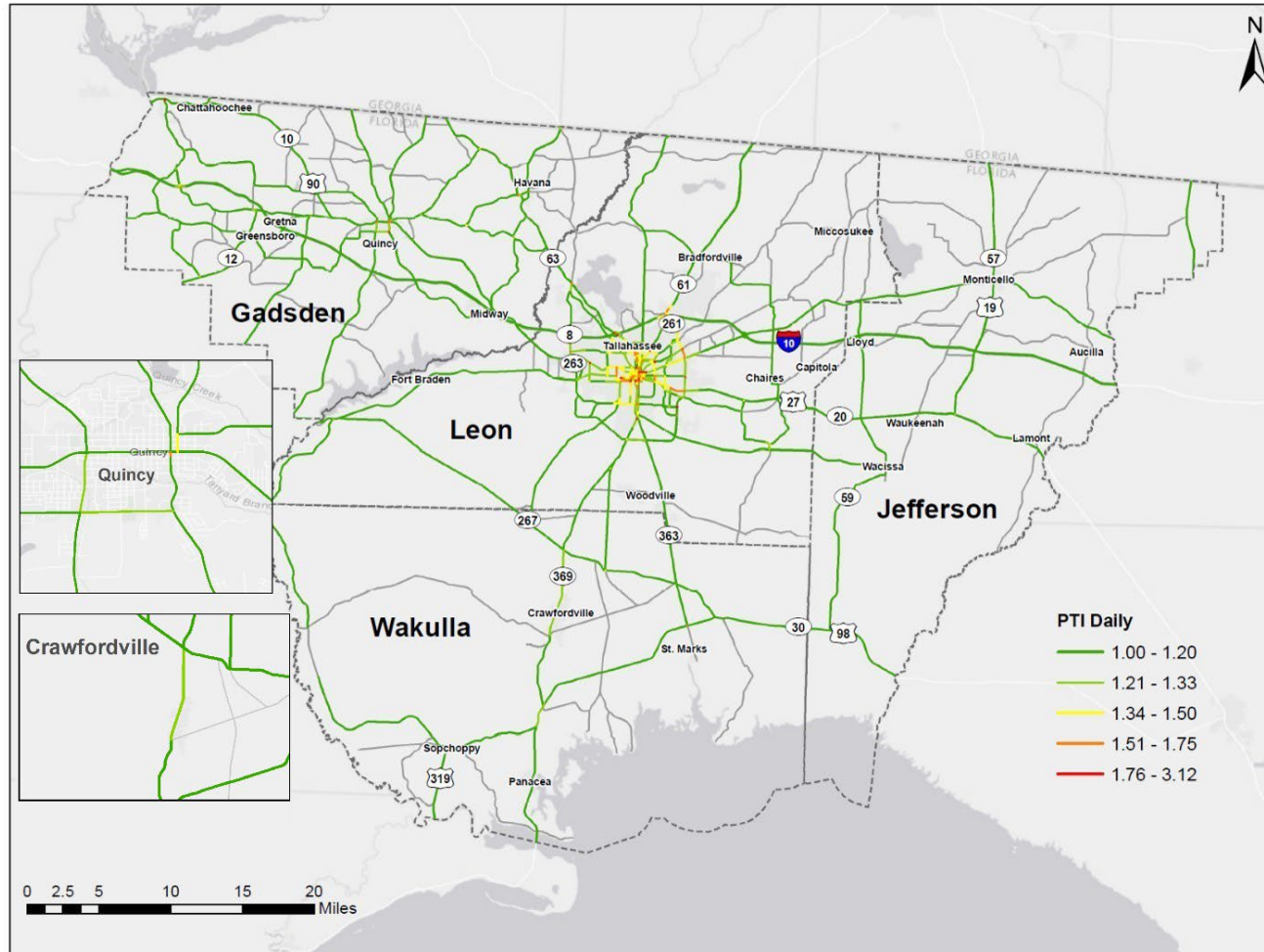
NONRECURRING CONGESTION – PLANNING TIME INDEX (DAILY) – URBAN INSET



DAILY PTI – TOP 10 LOCATIONS

Rank	County	Location	PTI	Speed (MPH)	5 th Percentile Speed (MPH)
1	Leon	Northbound Varsity Drive intersecting with West Pensacola Street	3.12	7.3	2.4
2	Leon	Westbound Orange Avenue intersecting with Capital Circle Southeast	2.04	18.2	8.9
3	Leon	Southbound Appleyard Drive intersecting with West Tennessee Street	2.04	17.0	8.3
4	Leon	Westbound Miccosukee Rd intersecting with Capital Circle Northeast	2.01	15.7	7.8
5	Leon	Southbound Railroad Avenue between West Madison Street and West Gaines Street	2.00	8.5	4.3
6	Leon	Southbound South Monroe Street between East Madison Street and Apalachee Parkway	1.97	13.8	7.0
7	Leon	Southbound Franklin Boulevard intersecting with East Tennessee Street	1.96	15.9	8.1
8	Leon	Eastbound West Brevard Street between North Bronough Street and North Duval Street	1.90	10.8	5.7
9	Gadsden	Westbound Martin Luther King Jr. Boulevard intersecting with South Adams Street	1.90	10.1	5.3
10	Leon	Northbound South Bronough Street between West Gaines Street and West Madison Street	1.88	14.5	7.7

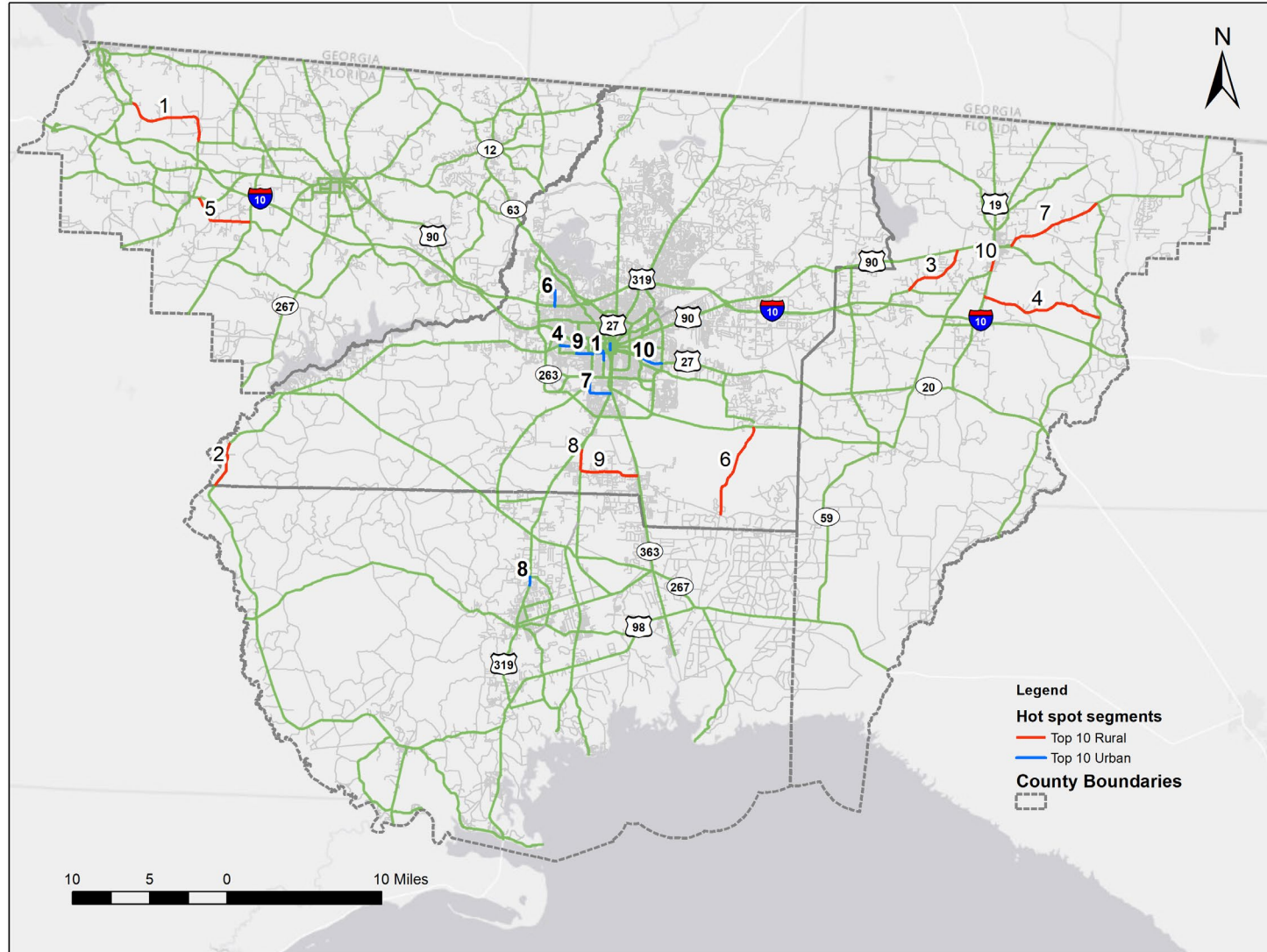
NONRECURRING CONGESTION – PLANNING TIME INDEX (PEAK HOUR) – CRTPA AREA



PEAK HOUR PTI – TOP 10 LOCATIONS

Rank	County	Location	PTI	Speed (MPH)	5th Percentile Speed (MPH)
1	Leon	Northbound S Monroe St between E Madison St and E Gaines St	2.92	8.7	3.0
2	Leon	Northbound Varsity Dr E intersecting with W Pensacola St	2.74	5.5	2.0
3	Leon	Southbound Appleyard Dr intersecting with W Tennessee St	2.51	14.2	5.7
4	Leon	Westbound Miccosukee Rd intersecting with Capital Cir NE	2.25	12.5	5.5
5	Leon	Southbound Railroad Ave between W Madison St and W Gaines St	2.24	5.1	2.3
6	Leon	Northbound S Monroe St between Jefferson St and Apalachee Pkwy	2.22	9.5	4.3
7	Leon	Eastbound W Gaines St between S Monroe St and S Duval St	2.22	8.1	3.7
8	Leon	Eastbound Betton Rd intersecting with Thomasville Rd	2.18	13.0	6.0
9	Leon	Westbound Orange Ave E intersecting with Capital Cir SE	2.17	13.9	6.4
10	Leon	Northbound S Monroe St between W Tennessee St and E Jefferson St	2.12	9.1	4.3

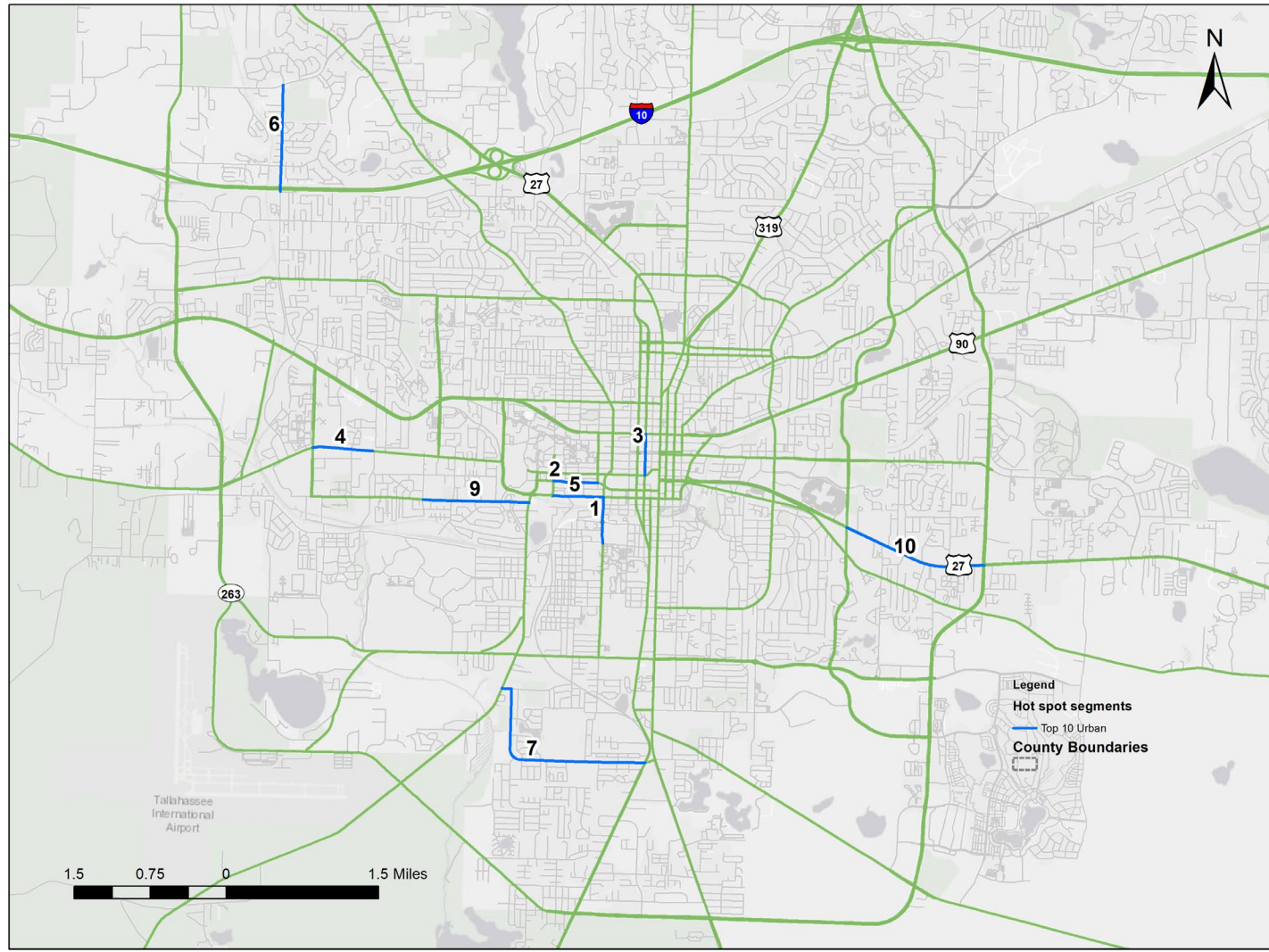
SAFETY ANALYSIS – HOT SPOT SEGMENTS - CRTPA AREA



To determine safety hotspots, separate crash analyses were conducted at both the segment level and intersection level. The roadways in the 4 counties were screened for safety issues with an emphasis on fatalities and serious injuries.

To develop the safety plan, sites with at least 3 fatal or serious injury crashes were selected.

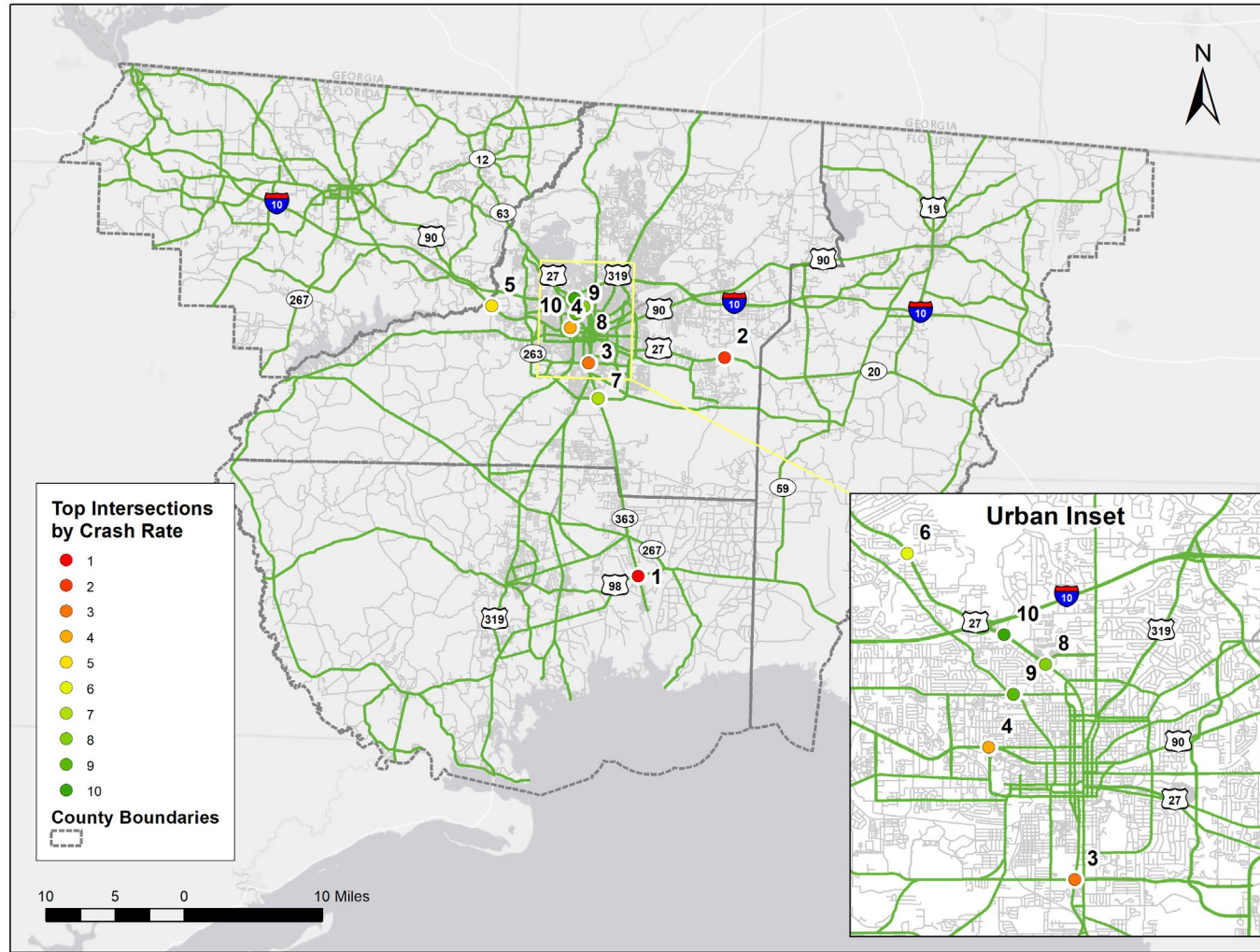
SAFETY ANALYSIS – HOT SPOT SEGMENTS – URBAN INSET



SAFETY ANALYSIS – SEGMENT HOT SPOTS (TOP 10)

Rank	Location	County	AADT	Miles	Fatality	Serious Injury	Crash Rate (per 100 million VMT)
1	Railroad Avenue between West Gaines Street and Robert and Trudie Perkins Way	Leon	6,300	0.45	0	3	57.59
2	St. Augustine Street between S Woodward Avenue and South Copeland Street	Leon	7,400	0.44	0	3	50.66
3	Hardaway Highway between Lincoln Drive (CR 269A) and Cochran Road	Gadsden	550	6.31	2	1	47.40
4	Duval Street between West Pensacola Street and W Park Avenue	Leon	8,500	0.41	0	3	47.18
5	W Pensacola Street between Appleyard Drive and Mabry Street	Leon	18,800	0.59	2	5	34.40
6	Smith Creek Road between Stoutamire Landing Road and Leon/Wakulla County Line	Leon	600	8.29	1	2	33.04
7	Old Lloyd Road between US 90 and Rabon Road	Jefferson	1,200	4.51	0	3	30.39
8	Drifton-Aucilla between South Jefferson and Salt Road	Jefferson	700	8.14	0	3	28.84
9	Providence Road (CR 274) between Selman Street and Hosford Highway	Gadsden	1,500	4.25	1	2	25.80
10	Old Plank Road between Tram Road and Natural Bridge Road	Leon	1,400	6.38	2	2	24.53

SAFETY ANALYSIS – INTERSECTION CRASH ANALYSIS – CRTPA AREA



Fatal and serious injury crashes occurring within 350 ft of an intersection were classified as intersection crashes. The crash rates for the intersections were calculated using this equation:

$$R = \frac{1,000,000 \times C}{365 \times N \times V}$$

Where:

- R = Crash rate for the intersection expressed as accidents per million entering vehicles (MEV).
- C = Total number of intersection crashes in the study period.
- N = Number of years of data.
- V = Traffic volumes entering the intersection daily. [10](#)

SAFETY ANALYSIS – INTERSECTION HOT SPOTS (TOP 10)

Rank	Location	County	Fatality	Serious Injury	Entering Traffic Volume	Crash Rate (# per million entering vehicles)
1	US 98 and Woodville Highway	Wakulla	2	1	4,875	0.337
2	US 90 and Greensboro Highway (SR 12)	Gadsden	1	2	11,250	0.146
3	Apalachee Parkway and W. Kelly Road	Leon	1	2	12,500	0.132
4	Orange Avenue and S. Adams Street	Leon	4	3	42,400	0.090
5	I-10 and Mahan Drive Interchange	Leon	2	2	26,050	0.084
6	West Tennessee Street and Stadium Drive	Leon	0	7	45,800	0.084
7	West Brevard Street and Old Bainbridge Road	Leon	0	3	21,700	0.076
8	West Tennessee Street and Geddie Road	Leon	0	3	21,900	0.075
9	North Monroe Street and Fred George Road	Leon	2	2	29,350	0.075
10	North Monroe Street and Lakeshore Drive	Leon	0	3	23,500	0.070

STRATEGIES/COUNTERMEASURES – INTERSECTIONS

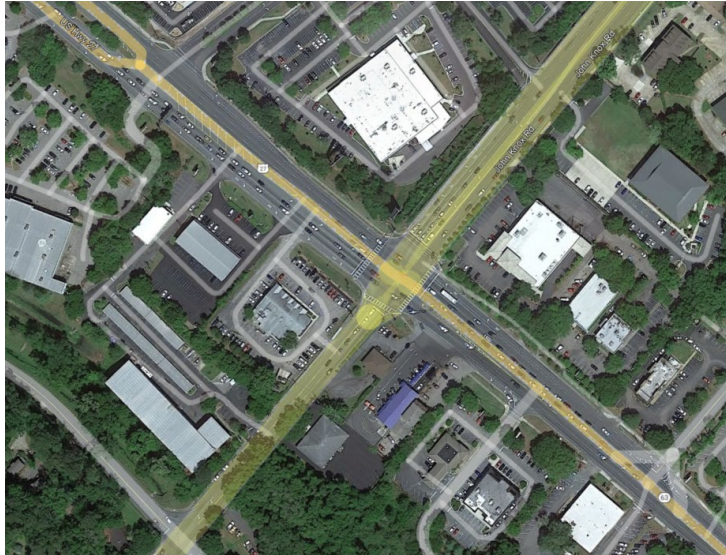
Rank	County	Location	Fatality	Serious Injury	Entering Traffic Volume
1	Wakulla	US 98 and Woodville Highway	2	1	4,875
2	Leon	Apalachee Parkway and WW Kelly Road	1	2	12,500
3	Leon	Orange Avenue and S. Adams Street	4	3	42,400
4	Leon	West Tennessee Street and Stadium Drive	0	7	45,800
5	Leon	West Tennessee Street and Geddie Road	0	3	21,900
6	Leon	North Monroe Street and Fred George Road	2	2	29,350
7	Leon	Capital Circle Southeast and Woodville Highway	0	4	32,350
8	Leon	North Monroe Street and John Knox Road	0	4	46,150
9	Leon	Old Bainbridge Road and West Tharpe Street	0	3	37,750
10	Leon	North Monroe Street and Lakeshore Drive	0	3	43,000

A component of the CMP is to develop strategies to address system deficiencies.

Field reviews were conducted for each location and engineering judgement utilized to develop potential countermeasures for intersections, rural and urban segments.

Further analysis is needed to identify solutions that are likely to resolve documented crashes.

North Monroe and John Knox Road



Potential Countermeasures

1. Roadway Improvements
 - a. Consider median installation on North Monroe Street (northward) to reduce conflicting movements.
2. Signal Phasing
 - a. Change NB left-turn phase to “Protected Only”.

Crash Statistics

Year	All Crashes	Left turn	Rear end
2017	2	1	1
2018	0	0	0
2019	1	1	0
2020	0	0	0
2021	1	0	1
Total	4	2	2

STRATEGIES/COUNTERMEASURES – INTERSECTIONS

West Tharpe Street and Old Bainbridge Road



Crash Statistics

Year	All Crashes	Left turn	Right angle	Head on
2017	1	1	0	0
2018	0	0	0	0
2019	1	0	0	1
2020	0	0	0	0
2021	1	0	1	0
Total	3	1	1	1

Potential Countermeasures

1. Signal Phasing
 - a. Change NB and SB left turn phases to “Protected Only.”
2. Pavement Markings
 - a. Restripe dotted lane line extensions for left turns through the intersection.
3. Pedestrian Detection
 - a. Convert pedestrian detectors to “Countdown” and/or “Audible” detection signals.
 - b. Consider exclusive pedestrian phase (i.e., all traffic approaches stop when pedestrian detectors are activated).

STRATEGIES/COUNTERMEASURES – RURAL SEGMENTS

Rank	Location	County	Fatality	Serious Injury	AADT
1	Hardaway Highway	Gadsden	2	1	550
2	Providence Road	Gadsden	1	2	1,500
3	Smith Creek Road	Leon	1	2	600
4	Crawfordville Highway	Wakulla	1	2	15,700
5	Wakulla Springs Road	Leon	0	4	7,700
6	Oak Ridge Road	Leon	3	2	3,700
7	Old Plank Road	Leon	2	2	1,400
8	Old Lloyd Road	Jefferson	0	3	1,200
9	Aucilla Highway	Jefferson	0	3	700
10	Ashville Highway	Jefferson	0	5	1,800

The ten (10) rural segments with the highest crash rates for the four-county area are listed and were analyzed for potential countermeasures which typically involve **high-speed, horizontal curves, and off-road crashes.**

As a result, common potential countermeasures included actions such as:

- Patching shoulder ruts
- Horizontal alignment/speed advisory signage, and
- Installation of longitudinal rumble strips or
- Profiled pavement markers on the centerline and outside lane line.

STRATEGIES/COUNTERMEASURES – RURAL SEGMENTS

Old Ridge Road (Wakulla Springs Road to Woodville Highway)



Crash Statistics

Year	All Crashes	Bicycle	Rollover	Off Road	Pedestrian	Other
2017	1	1	0	0	0	0
2018	1	0	0	0	0	1
2019	2	0	1	0	1	0
2020	1	0	0	1	0	0
2021	0	0	0	0	0	0
Total	5	*1	1	1	*1	1

Potential Countermeasures

1. Pavement Markings
 - a. Restripe the St. Marks Trail Crossing (faded/not visible).
 - b. Restripe road (faded/not visible).
 - c. Install longitudinal rumble strips or raised pavement markings on centerline and edge of travel lane line.

2. Trail Crossing Sign Improvements
 - a. Improve trail crossing signage.
 - b. Install Rectangular Rapid Flashing Beacons (RRFBs).
 - c. Change intersection of Oak Ridge Rd and Old Woodville Rd to All-Way Stop-Controlled.

3. Oak Ridge Road near the curve just west of Henry Jones Road
 - a. Fix rutting on shoulder (Shoulder drop-off).
 - b. Install high visibility horizontal curve advisory features.

STRATEGIES/COUNTERMEASURES – RURAL SEGMENTS

Ashville Highway between St. Margaret’s Church Road and Salt Road



Potential Countermeasures

1. Pavement Condition
 - a. Fix rutting on shoulder as needed (Shoulder drop-offs).
2. Pavement Markings
 - a. Install rumble strips or raised pavement markings on centerline and edge of travel lane line.

Crash Statistics

Year	All Crashes	Off Road	Head On
2017	2	2	0
2018	0	0	0
2019	1	1	0
2020	0	0	0
2021	2	1	1
Total	5	4	1

Rutting Picture



Additional Safety Notes:

- Overall pavement condition has degraded (poor to satisfactory).

STRATEGIES/COUNTERMEASURES – URBAN SEGMENTS

Rank	Location	County	Fatality	Serious Injury	AADT
1	Mission Road	Leon	2	1	7,600
2	Pensacola Street	Leon	2	2	18,800
3	Jackson Bluff Road	Leon	0	3	9,600
4	St. Augustine Street	Leon	0	3	7,400
5	Gaines Street	Leon	0	4	20,400
6	Railroad Avenue	Leon	0	3	6,300
7	Duval Street	Leon	0	3	8,500
8	Ridge Road	Leon	1	4	6,600
9	Apalachee Parkway	Leon	0	13	31,000
10	Jefferson Street	Jefferson	0	3	8,000

The ten (10) urban segments with the highest crash rates in the four-county area are listed in the Table. The urban segments analyzed typically involved **crashes related to bicycle and pedestrian conflicts** as well as **rear-end, sideswipe, and left and right-turn angle crashes**.

As a result, common potential countermeasures included improvements such as:

- Enhanced pedestrian facilities (signage, detectors, crosswalks, etc.),
- Median installation, and sight distance improvements.

West Pensacola Street between Appleyard Drive and Mabry Street



Crash Statistics

Year	All Crashes	Pedestrian	Left Turn	Rear End
2017	0	0	0	0
2018	3	2	1	0
2019	2	2	0	0
2020	1	0	0	1
2021	1	1	0	0
Total	7	5	1	1

Potential Countermeasures

1. Segment Signage
 - a. Provide advanced “high pedestrian area” signage (Many pedestrians are present).
2. Segment Congestion
 - a. Install median along West Pensacola Street to reduce vehicle-pedestrian conflicts.
 - b. Install speed feedback signs on West Pensacola Street.
3. Pensacola Street at Cactus Street
 - a. Relocate black fencing on NE corner of intersection to eliminate sight distance problem.
4. Pedestrian Detection
 - a. Convert pedestrian detectors along the segment to “Audible” detection signals.
 - b. Provide Rectangular Rapid Flashing Beacons (RRFBs) at intended pedestrian crossing.

STRATEGIES/COUNTERMEASURES – URBAN SEGMENTS

Apalachee Parkway between Blair Stone Road and Capital Circle Southeast



Potential Countermeasures

1. Segment Congestion
 - a. Reduce posted speed limit on Apalachee Parkway.
2. Apalachee Parkway at Victory Garden Drive
 - a. Remove approximately 6 feet of bushes on NE corner (sight distance issue).

Additional Safety Notes:

- Stop sign location at Evangeline Way should be repositioned.
- Stop sign at the Target driveway was observed to be “loose and leaning”.

Crash Statistics

Year	All Crashes	Left Turn	Right Turn	Bicycle	Angle	Pedestrian	Rear End	Off Road	Other
2017	2	1	0	0	0	0	0	0	1
2018	4	1	0	2	1	0	0	0	0
2019	3	0	0	0	1	1	1	0	0
2020	0	0	0	0	0	0	0	0	0
2021	4	1	1	0	0	0	1	1	0
Total	13	3	1	2	2	1	2	1	1

Recurring Congestion - LOS

County	Location	Project/Strategy	Segment Daily Traffic Volumes	Level of Service
Leon	East Gaines Street between Calhoun Street and South Meridian Street	Heavy bike/pedestrian corridor restricts vehicular improvements	19,800	LOS F
Leon	Gaines Street between Lake Bradford and Monroe Street	Study to evaluate complete street improvements	16,800	LOS F
Leon	East Tennessee Street between Monroe Street and Meridian Street	Study to evaluate complete street improvements	37,000	LOS F
Leon	Thomasville Road between 6th Avenue and North Gadsden Street	Improvements currently in design with FDOT/Blueprint	19,000	LOS F
Leon	Orange Avenue between Springhill Road and Wahnish Way	Four-laning from Wahnish to Lake Bradford Road under design by FDOT	20,400	LOS F
Leon	North Duval Street between 4th Avenue and 8th Avenue	Study to address recurring congestion	16,800	LOS F
Leon	Bannerman Road between N. Meridian Road and McBride Point	Blueprint IA adding capacity, 2 to 4 lanes from Preservation Road to Quail Commons Drive	20,200	LOS D
Leon	West Tharpe Street between Ocala to West Burns Drive	Blueprint IA preparing PD&E Study to identify preferred alternative	14,000	LOS F
Wakulla	Crawfordville Road between Ivan Church and Leon County Line	Widening programmed in LRTP	17,100	LOS E

Based on the congestion and safety analysis, a list of potential projects and strategies has been developed including:

- Recurring Congestion: LOS
- Non-Recurring Congestion: PTI
- Safety: Intersections
- Safety: Urban Segments
- Safety: Rural Segments

IMPLEMENTATION PLAN – PROJECTS & STRATEGIES

Nonrecurring Congestion

County	Location	Project/Strategy	Planning Time Index (PTI)	Supporting Data (Speed MPH)
Leon	Northbound South Monroe between East Madison and East Gaines	Evaluate accessibility issues and queue length problems; signal timing optimization; integration of traffic information systems	2.92	8.7
Leon	Southbound Appleyard Drive intersecting with West Tennessee	Evaluate accessibility issues and queue length problems; signal timing optimization; integration of traffic information systems	2.51	14.2
Leon	Westbound Miccosukee Road at Capital Circle SE	Evaluate accessibility issues and queue length problems; signal timing optimization; integration of traffic information systems	2.25	12.5
Leon	Southbound Railroad Avenue between East Madison and West Gaines Street	Evaluate accessibility issues and queue length problems; signal timing optimization; integration of traffic information systems	2.24	5.1
Leon	Northbound Monroe Street between Jefferson Street and Apalachee Parkway	Evaluate accessibility issues and queue length problems; signal timing optimization; integration of traffic information systems	2.22	9.5
Leon	Eastbound West Gaines Street between S. Monroe and Duval Street	Study to address congestion and safety	2.22	8.1

CMP ACTIONS & RECOMMENDATIONS

As part of the Regional Mobility Plan (RMP) update, consider the forty (40) roadway segments identified in both recurring & nonrecurring congestion for further evaluation and programming.

1

It is recommended that project specific studies be completed for the thirty (30) safety location (intersections, rural and urban segments) and programmed accordingly.

2

The CRTPA should monitor the effectiveness, in concert with local partners, the strategies and projects implemented in the CMP.

3

The CRTPA should periodically reevaluate the CMP Performance Measures associated with the four goals: Safety, Multimodal, Connectivity and Access

4

CMP ADOPTION MARCH 2024



QUESTIONS/DISCUSSION