

CRTPA

**REGIONAL
FREIGHT STUDY**



Agenda

- Study Introduction
- Existing Conditions
- Future Conditions
- Needs and Recommendations
- Group Discussion



Purpose and Goals

Identify freight movement trends, challenges, and opportunities for improvement within the four-county region.

Goals



Safety



System Connectivity
and Function



Partnerships



Resiliency



Supply Chain



Emerging
Technologies

Study Schedule

January 2023

March 2024

Stakeholder Engagement

Committee Meetings

Interviews with Industry Representatives

Data Collection

Literature Review

Known Freight Flows and Volumes

Conditions

Movement Trends

Existing/Planned Development

Priority Areas

Anticipated Growth

Recommendations

Policy

Infrastructure

Technology

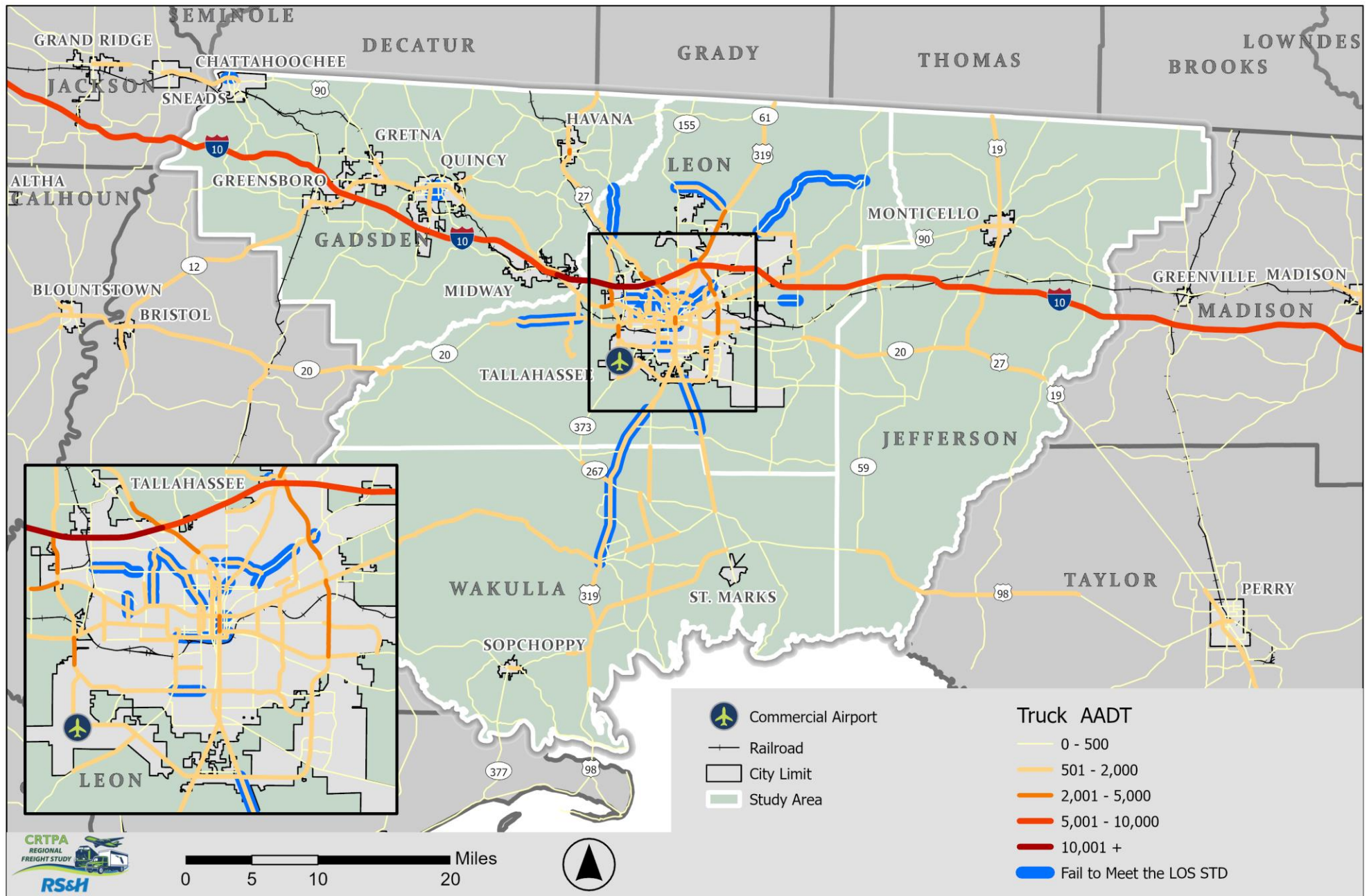
Stakeholder Engagement

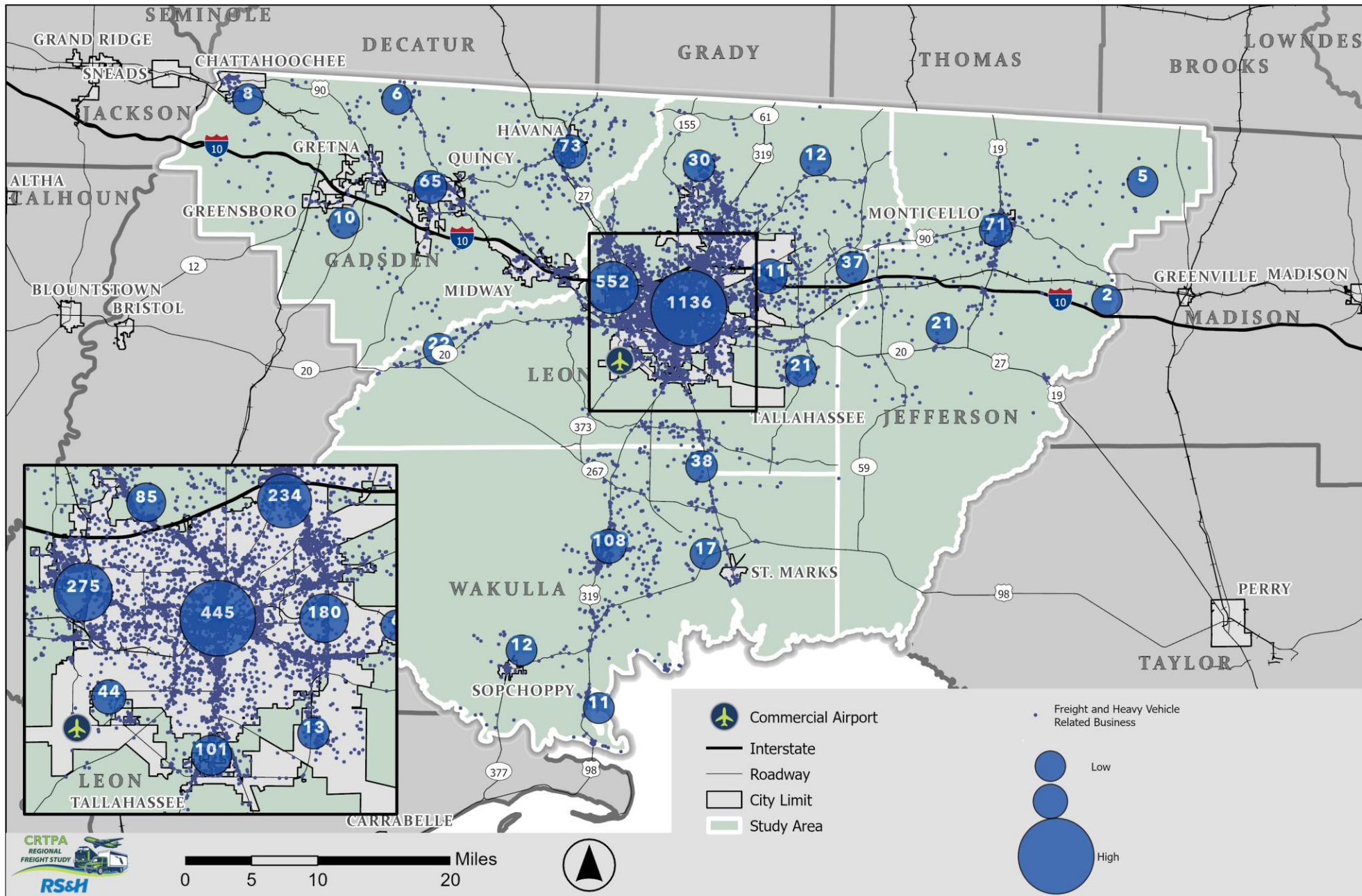
- Two Stakeholder Committee meetings
- Eight Individual/small group meetings
- Stakeholders included
 - Amazon
 - County planning staff
 - FDOT representatives
 - Economic Development staff
 - Airport/rail/and port representatives



Existing Conditions Review







Source: ESRI Community Analyst

Passenger Rail Consideration

- *“FDOT is potentially supportive of a service restoration in this corridor as an Amtrak National Network long-distance train that would not require operating financial support from the state”*
(FDOT Rail System Plan Ch 3, 2022)
- **Met with FDOT and rail representatives:**
 - Both groups indicated that infrastructure improvements would be needed.
 - Development of passenger rail would require increased logistical coordination with freight movements.

Future Conditions Review



Future Conditions Review: Population

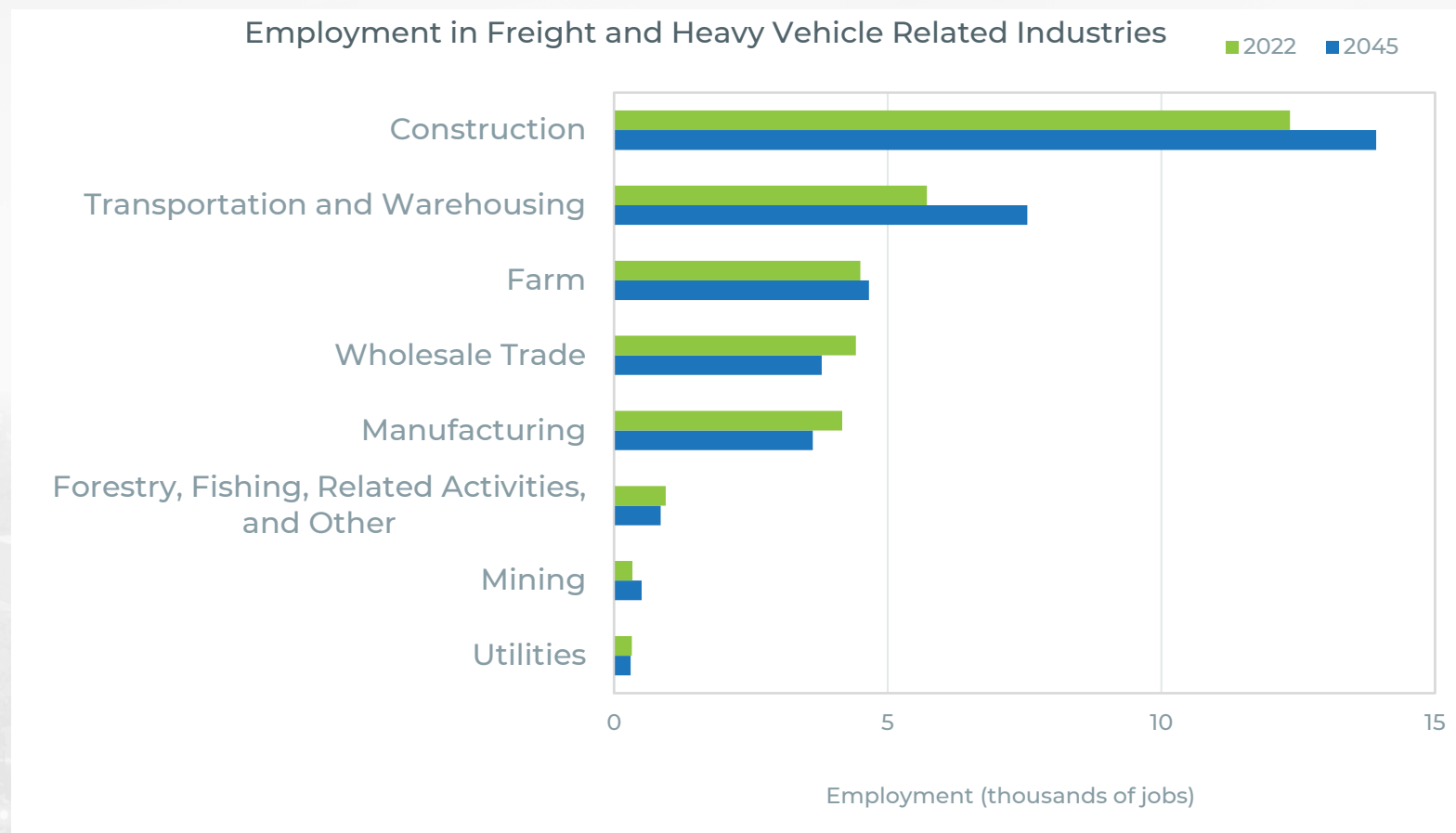
- More People = More Demand
- Florida outpaces CRTPA
- Impacts still exist

	Leon	Gadsden	Wakulla	Jefferson	CRTPA Region	Florida
2022 Population (000s)	299.13	43.97	35.17	14.92	393.19	22,276.13
2045 Population Medium Projection (000s)	337.9	44.9	44.1	16	442.9	27,270.00
Total Population Change 2022-2045 (000s)	38.77	0.93	8.93	1.08	49.71	4,993.87
% Population Change 2022-2045	11.47%	2.07%	20.25%	6.75%	11.22%	18.31%

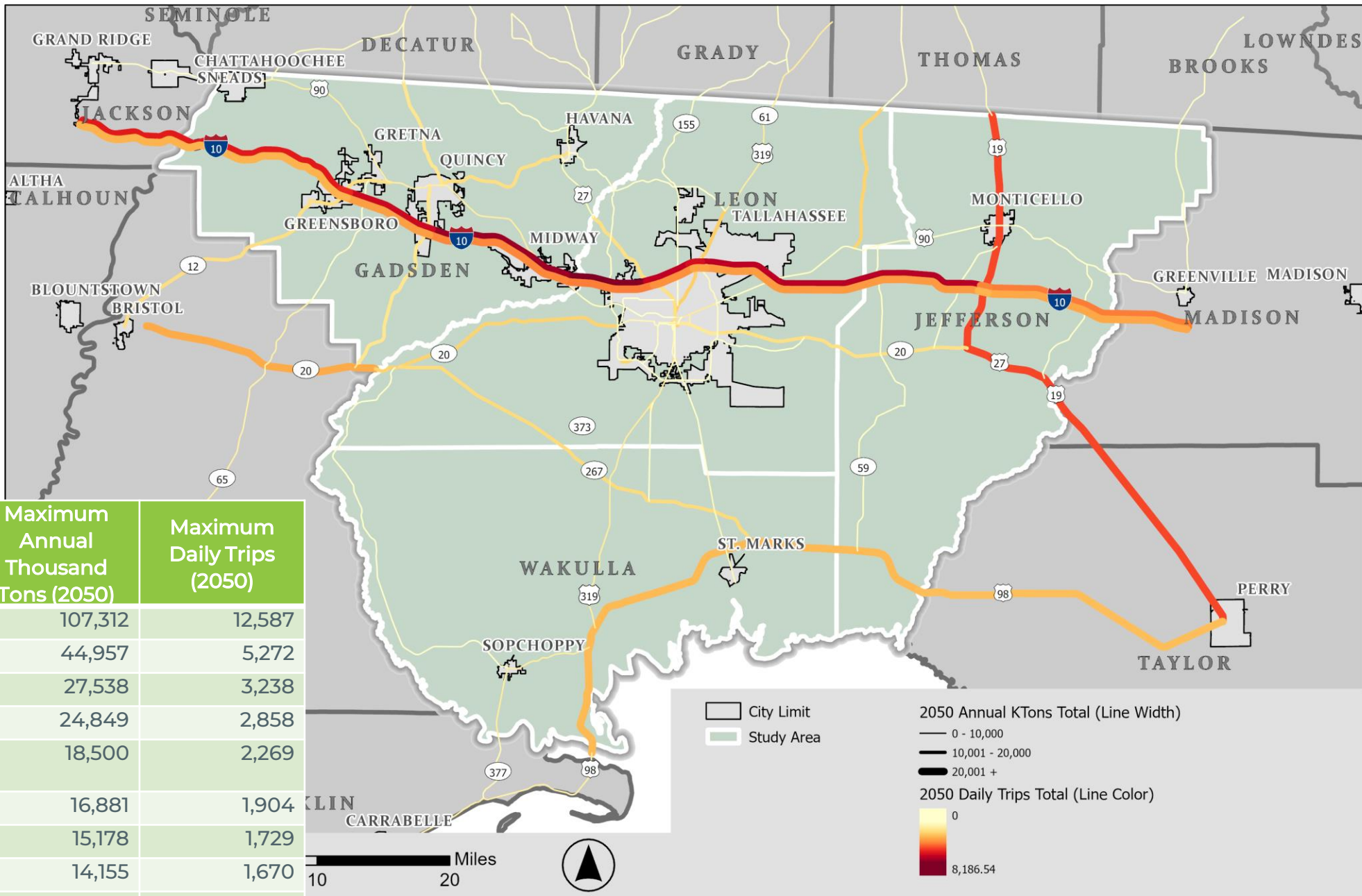
Source: BEBR

Future Conditions Review: Freight Employment

- Ability to respond to demand
- Construction
- Transportation / Warehousing
- Farming and Mining



Source: Woods And Poole



Corridor	Maximum Annual Thousand Tons (2050)	Maximum Daily Trips (2050)
I 10	107,312	12,587
US 19	44,957	5,272
SR 20	27,538	3,238
US 98	24,849	2,858
Thomasville Rd	18,500	2,269
SR 267	16,881	1,904
SR 12	15,178	1,729
US 27	14,155	1,670
Apalachee Pkwy	10,473	1,194
Mahan Dr	9,835	1,127

Source: FAF5

Needs and Recommendations



Performance Management

• Connectivity Measures

Measure	Description
Population Density	People per square mile
Transportation Infrastructure Density - State Roads	State roads per square mile
Transportation Infrastructure Density - SIS Roads	SIS roads per square mile
Transportation Infrastructure Density - NHFN Roads	NHFN roads per square mile
Transportation Infrastructure Density - Bridges	Bridges per square mile
Transportation Infrastructure Density - SIS Rail	SIS rail per square mile
All Traffic Impact Density	AADT per square mile
Truck Traffic Impact Density	AADTT per square mile

• Safety Measures

Measure	Description
Crash Per Million Vehicle Miles Traveled Density	Crash Per Million Vehicle Miles Traveled per census tract
Fatal Crash Per Million Vehicle Miles Traveled Density	Fatal Crash Per Million Vehicle Miles Traveled per census tract

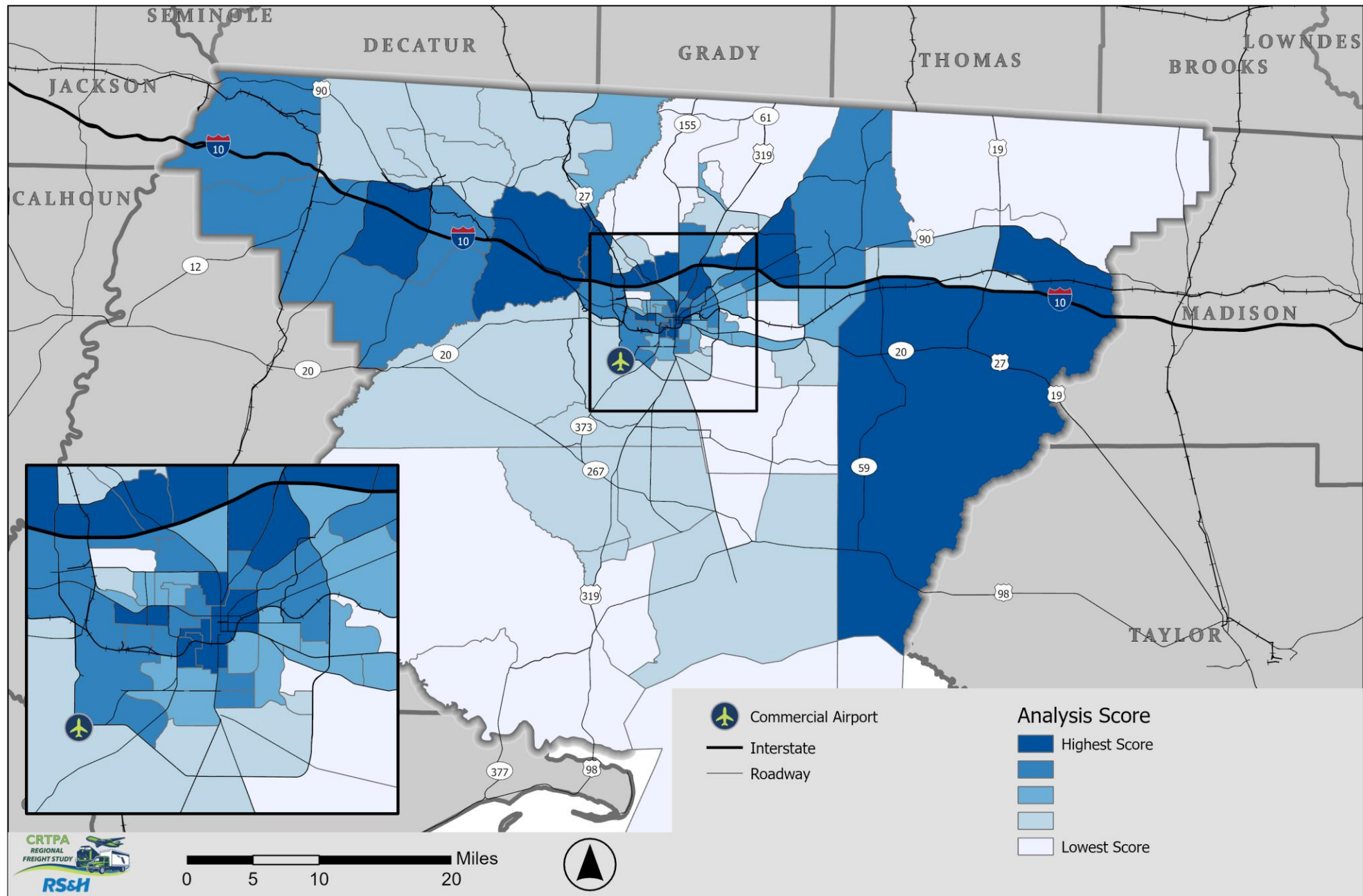


Performance Management

• Reliability Measures

Measure	Description
Truck Miles Traveled Density	Annual truck miles traveled per census tract
Ton-Miles Delay Density	Delay per ton-mile traveled per census tract
Lift Capacity Density	Annual truck volume per census tract
Freight Mobility Index Density	Ton-miles of travel times average speed per census tract
Truck Miles Traveled Reliability Density	Truck VMT at LOS D or above per census tract





Source: Census; RS&H Analysis

Needs

- Land Use and Policy

- Air Travel Expansion
- Encourage Intermodal Development
- Freight Origin/Destination
- Freight parking/staging
- Introduce freight friendly zoning and land use descriptions
- Regional cooperation beyond municipal boundaries

- System Safety

- Roadway and Intersection Crash Hotspots
- Rail Crossing Modification



Needs Continued

- System Capacity and Efficiency

- Bottleneck (top 10 for 2022)
- Bridge rehabilitation and improvements
- Continued Industry Development
- Efficient flow of traffic
- Failing LOS
- Increased capacity to manage and store cargo
- Main line track improvements for capacity expansion and train speed Improvements
- Port/airfield access
- Regional Mobility Plan projects
- System redundancy
- Top ten Planning Time Index (PTI) roadway
- Top ten 2050 freight corridors
- Travel time reliability
- Truck parking availability and awareness
- Truck routing
- Yard, track, and operation equipment improvements for capacity expansion and train speed Improvements

Planning Level Cost Estimates

Planning Analysis Estimates	Unit	Cost Per Unit
Corridor Analysis	Mile	\$20,000 to \$40,000
Intersection Improvement Study	Intersection	\$20,000 to \$35,000
Intersection Improvement Study and New Signal	Intersection	\$240,000
Design/Engineering	Varies	Assume Additional 10-15% of Infrastructure Cost
Infrastructure Cost Estimates*	Unit	Cost Per Unit
Mill and Resurface 4 Lane Urban Roadway	Mile	\$1,500,000
Mill and Resurface 6 Lane Urban Arterial	Mile	\$2,500,000
Widen 2 to 4 Lane Urban Arterial	Mile	\$10,000,000
Widen 4 to 6 Lane Urban Arterial	Mile	\$9,000,000
Widen 4 to 6 Lane Urban Interstate	Mile	\$15,000,000

Source: *[FDOT Cost Per Mile Reports](#) with rounding applied
ROW costs not included

Recommendations – Infrastructure (47 Total)

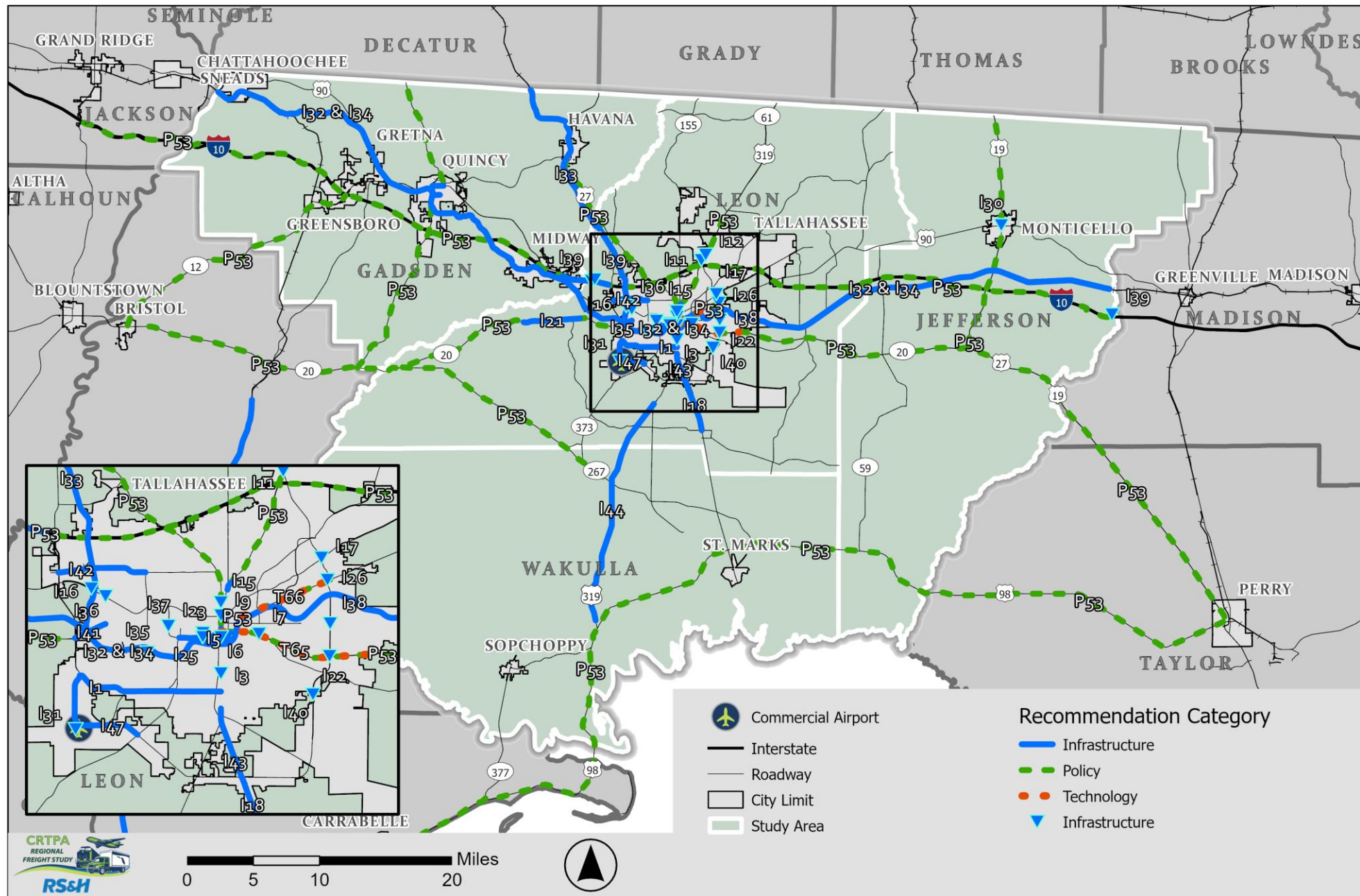
Recommendation ID	System Feature	Termini/Crossroads	Recommendation(s)	Term	Estimated/ Planned Cost
I4	S Bronough St	SR 366/SR 371/W Madison St/W Gaines St	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$20,000 to \$35,000
I39	Truck Parking Infrastructure	Regional Rest Areas	Support FDOT efforts for redevelopment and consideration of truck parking enhancements.	Mid	\$15,554,285
I30	US 90/ Washington St	US 19/Jefferson St	Coordination with FDOT oversize load permitting to remove this route from their accepted maps OR Consider a geometry update of the intersection to allow oversize loads.	Short	\$20,000 to \$35,000
I11	SR 61/Thomasville Rd	US 319/Capital Circle	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$20,000 to \$35,000
I12	US 319 N/Thomasville Rd	Killarney Way/Maclay Rd	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$20,000 to \$35,000
I45	I-10	Gadsden/Leon County Line to West of Capital Circle NW	Widen from 4 to 6 Lanes.	Long	\$89,628,374
I46	I-10	(Midway) US 90 Interchange to Gadsden/Leon County Line	Widen from 4 to 6 Lanes.	Long	\$59,864,305
I5	SR 371/Gaines St	Lake Bradford Rd to Apalachee Pkwy	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$40,000-\$80,000
I6	SR 61/ S Monroe St	SR 371/CR 1555/Gaines St	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$20,000 to \$35,000
I7	US 27/Apalachee Pkwy	SR 265 Magnolia Dr	Consider the development of a planning study along the corridor to assess potential improvement.	Mid	\$20,000 to \$35,000

Recommendations – Policy (11 Total)

Recommendation ID	System Feature	Recommendation(s)	Term
P52	TLH	Continue coordination with TLH on the development of their foreign trade zone development.	Mid
P50	Highway	Consider the development of truck routing within the region to direct non-local freight movements.	Short
P53	Highway	Continue to monitor the conditions along these corridors and work with agency partners as any issues are identified. I-10; US 19; SR 20; US 98; Thomasville Rd; SR 267; SR 12; US 27/N. Monroe St; US 27/Apalachee Pkwy; Mahan Dr	Short
P54	Parking Areas and Freight Land Uses	Coordinate and stay informed on public/private opportunities for truck parking improvements throughout the region.	Long
P55	Parking Areas and Freight Land Uses	Coordinate with county and municipal staff on the development freight parking and staging standards to accommodate truck needs. Coordination with law enforcement will be key to discouraging unauthorized parking.	Long
P51	-	Continue coordination with municipal partners and encourage the development of intermodal or transload opportunities to encourage multimodal freight movements.	Short
P56	-	Coordinate with county and municipal staff on the development of freight inclusive zoning and land use descriptions.	Short
P57	-	Coordinate with neighboring municipal partners for project cohesion and cooperative opportunities.	Short
P58	FDOT District and Central Office Coordination	Encourage the continued involvement of FDOT staff in conversations related to freight movements within the area. Coordinate with FDOT on freight related project funding opportunities.	Short
P59	-	Promote the identification of freight clusters throughout the region by economic development and municipal staff. This identification can help guide development of comprehensive planning and future zoning/land use decisions.	Short
P49	Port of Port St. Joe	Consider continued coordination with the Port. Development at or near the Port may impact the CRTPA region.	Short

Recommendations – Technology (8 Total)

Recommendation ID	System Feature	Termini/ Crossroads	Recommendation(s)	Term	Estimated/ Planned Cost
T65	US 27/Alapalachee Pkwy	SR 61/ S Monroe St to Conner Blvd	Promote the development and implementation of Adaptive Traffic Signal Control.	Long	\$1,260,569.87
T66	US 90/Tennessee St/ Mahan Dr	US 27/SR 61/N Monroe St to Capital Circle NW	Promote the development and implementation of Adaptive Traffic Signal Control.	Short	\$1,609,477.60
T63	Technology	TLH	Coordinate with TLH on the implementation of autonomous passenger and freight technology testing in the region.	Short	N/A
T60	I-10	Region Wide	Continue coordination with FDOT on the implementation of truck parking counting technologies signage and applications	Mid	N/A
T61	Regional ITS equipment	Region Wide	Continue to promote the development of Intelligent Transportation Systems (ITS) throughout the four-county region. Engage with the Tallahassee-Leon County Regional Transportation Management center and the ITS Master Plan for opportunities to improve general movement throughout the region.	Short	N/A
T64	Tallahassee-Leon County	Region Wide	I-10 Dynamic Messaging Signage and trailblazer signage. Promote the development and implementation of the trailblazer signage system to guide drivers during detour and incident management events.	Mid	\$3,677,037.28
T67	Tallahassee-Leon County	Region Wide	Promote the development and implementation of the equipment necessary for the travel time reliability system.	Mid	\$416,438.26
T62	Technology	Region Wide	Coordinate with rail providers on the implementation of autonomous freight rail technology testing in the region.	Short	N/A



Next Steps



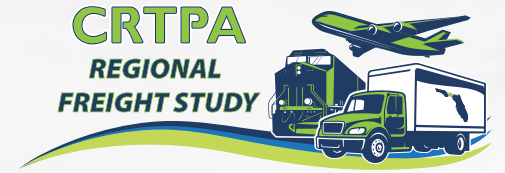
Build from previous efforts and data analysis

Incorporate freight needs and recommendations

Consider regional priorities and funding opportunities

Group Discussion





Thank You!