

PI No. 0017906, Chatham County, GA

# Community Meeting

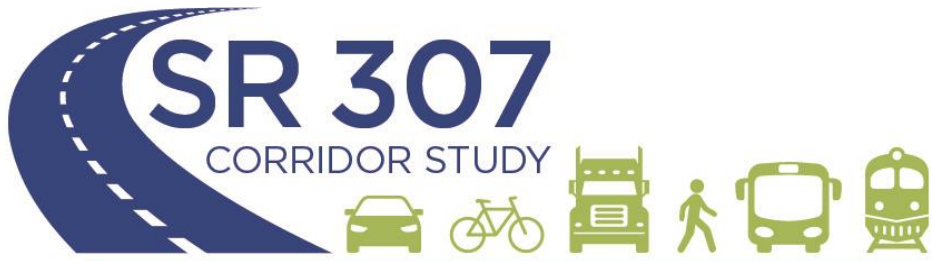
Corridor Assessment/Needs Identification  
November 8, 2021

*Prepared for:*



*Prepared by:*

**Kimley»»Horn**



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# Agenda



Study Goals



Meeting Purpose



Corridor Overview



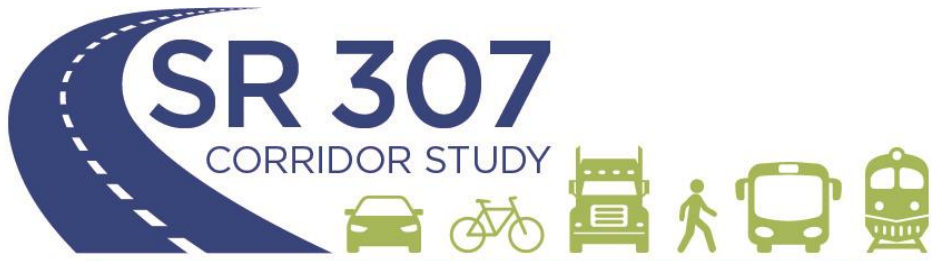
Initial Research



Potential Improvements



Next Steps



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# Study Goals

01

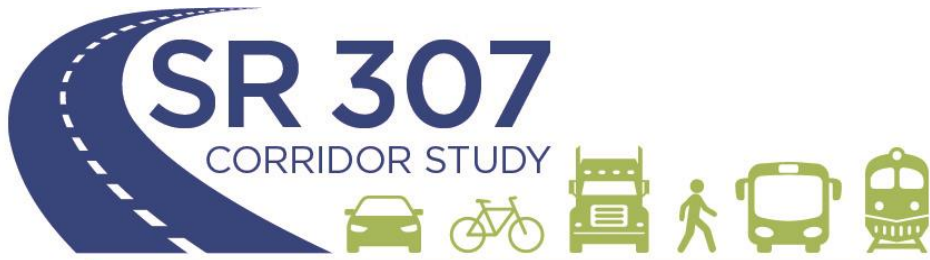
Identify and prioritize SR 307 improvements

02

Plan projects through the CORE MPO's Metropolitan Transportation Plan (MTP) process

03

Fund projects in the CORE MPO's Transportation Improvement Program (TIP) and Total Mobility 2045 Plan



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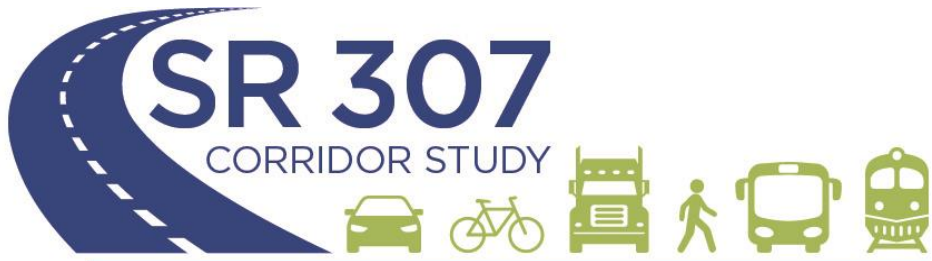
# Key MTP Objectives

Improve safety, security, accessibility, mobility, and sustainability of transportation options available to people and freight

Lower the frequency and severity of crashes for cars, trucks, pedestrians, and bicyclists

Improve emergency response time and evacuation routes

Reduce congestion by improving access to businesses and maximizing freight truck travel time reliability



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# Meeting Purpose

Review existing  
conditions

Identify other  
problems and  
potential solutions

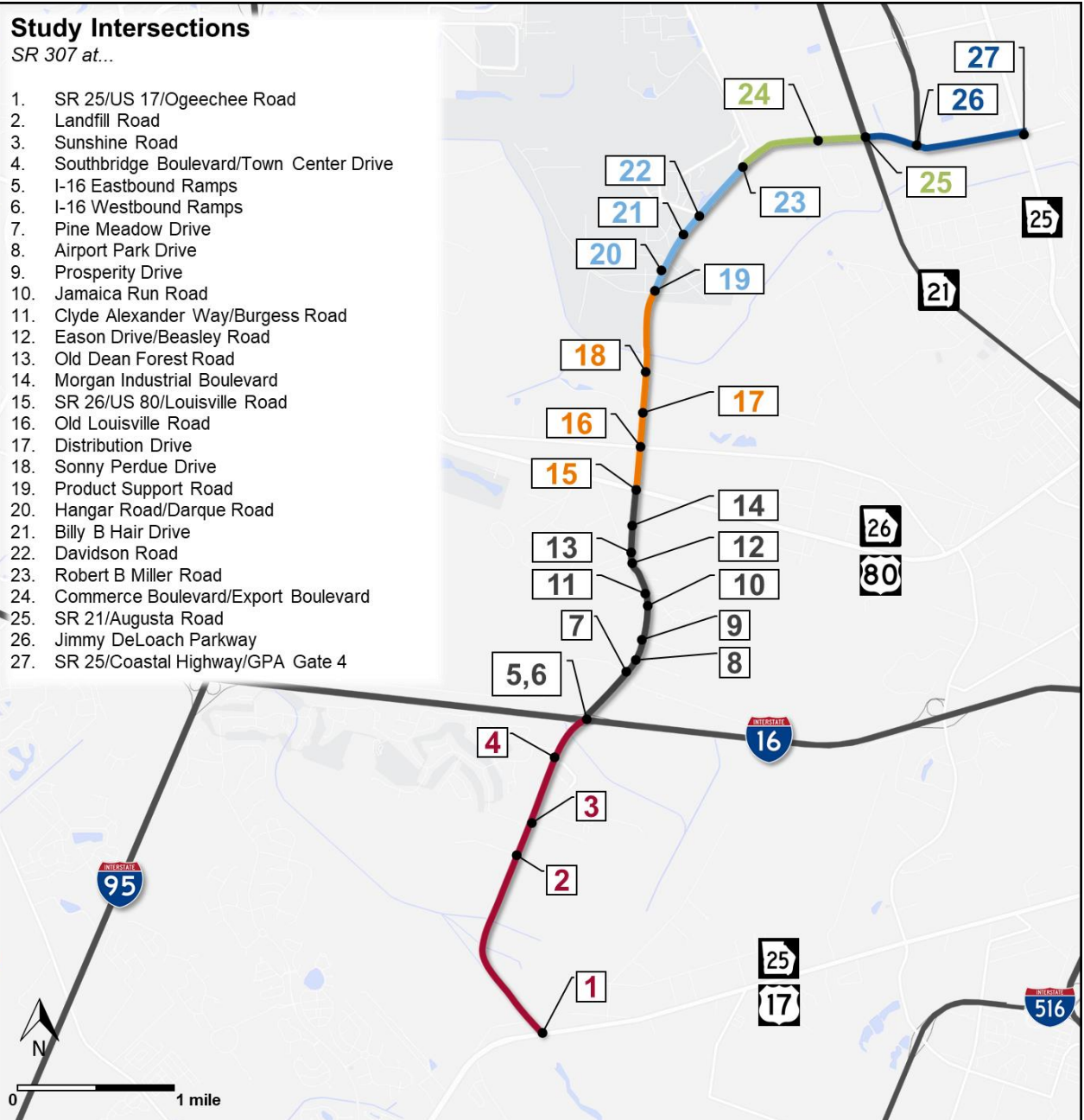
# Corridor Overview



## Study Intersections

SR 307 at...

- SR 25/US 17/Ogeechee Road
- Landfill Road
- Sunshine Road
- Southbridge Boulevard/Town Center Drive
- I-16 Eastbound Ramps
- I-16 Westbound Ramps
- Pine Meadow Drive
- Airport Park Drive
- Prosperity Drive
- Jamaica Run Road
- Clyde Alexander Way/Burgess Road
- Eason Drive/Beasley Road
- Old Dean Forest Road
- Morgan Industrial Boulevard
- SR 26/US 80/Louisville Road
- Old Louisville Road
- Distribution Drive
- Sonny Perdue Drive
- Product Support Road
- Hangar Road/Darque Road
- Billy B Hair Drive
- Davidson Road
- Robert B Miller Road
- Commerce Boulevard/Export Boulevard
- SR 21/Augusta Road
- Jimmy DeLoach Parkway
- SR 25/Coastal Highway/GPA Gate 4





The Village at Town Center

SAS Urgent Care	Animal Hospital
HYDRO-CAR	PETROLIA
Nails Spa	MZU
PATRICK'S	Emerald Amusement
ROBERTS PROPERTIES	

**CenterPoint**  
INTERMODAL CENTER

ATG
Newell Recycling
Quala Sustainable Concrete Solutions
Port Logistics Group
Vulcan Materials Company
UPS   DAMCO
FNS FNS, INC.
THE TRIANGLE GROUP

NVS  
NORFOLK SOUTHERN

# SR 307

CORRIDOR STUDY



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# Primer

Where is traffic the worst?

Where are the most trucks?

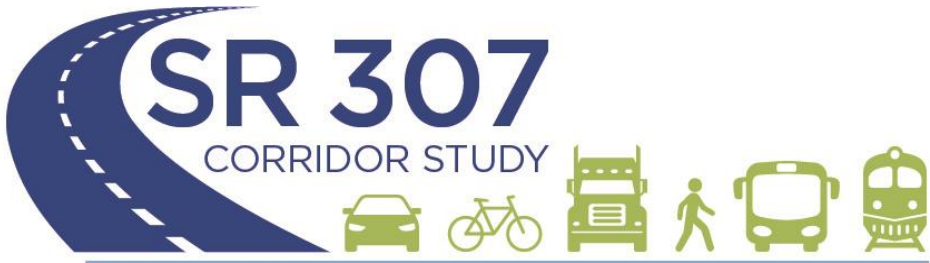
Which are the worst intersections?

Where are the most crashes?

What area has the greatest growth potential?

Freight corridor or commuter corridor?





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# Daily Traffic

Segment 1: 12,800 VPD

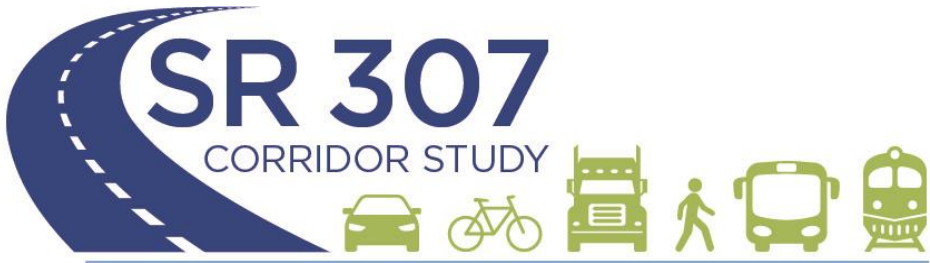
Segment 2: 20,300 VPD

Segment 3: 18,800 VPD

Segment 4: 17,000 VPD

Segment 5: 15,500 VPD

Segment 6: 9,500 VPD



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# Trucks

Segment 1: 3.9%

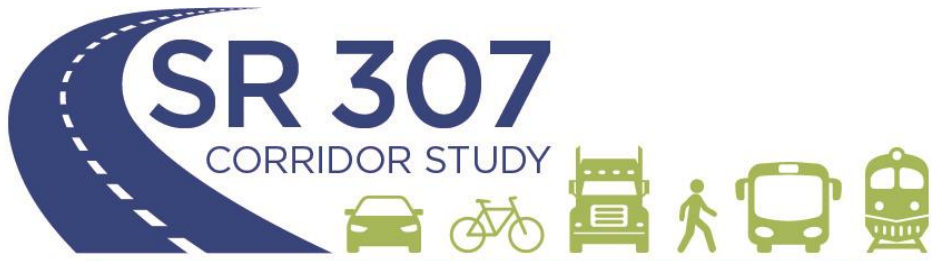
Segment 2: 15.1%

Segment 3: 22.0%

Segment 4: 22.7%

Segment 5: 31.4%

Segment 6: 57.6%



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# AM Traffic

Segment 1

Segment 2

Segment 3

Segment 4

Segment 5

Segment 6

Airport Park Drive LOS D

SR 26/US 80/Louisville Road LOS D

Distribution Drive LOS F

SR 21/Augusta Road LOS E



***Eastbound SR 26/US 80/Louisville Road at  
SR 307/Dean Forest Road***

# SR 307

CORRIDOR STUDY



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# PM Traffic

Segment 1

Segment 2

Segment 3

Segment 4

Segment 5

Segment 6

Clyde Alexander Way LOS D

SR 26/US 80/Louisville Road LOS D

Distribution Drive LOS F

Hangar Road LOS D

SR 21/Augusta Road LOS D

SR 25/Coastal Highway LOS D



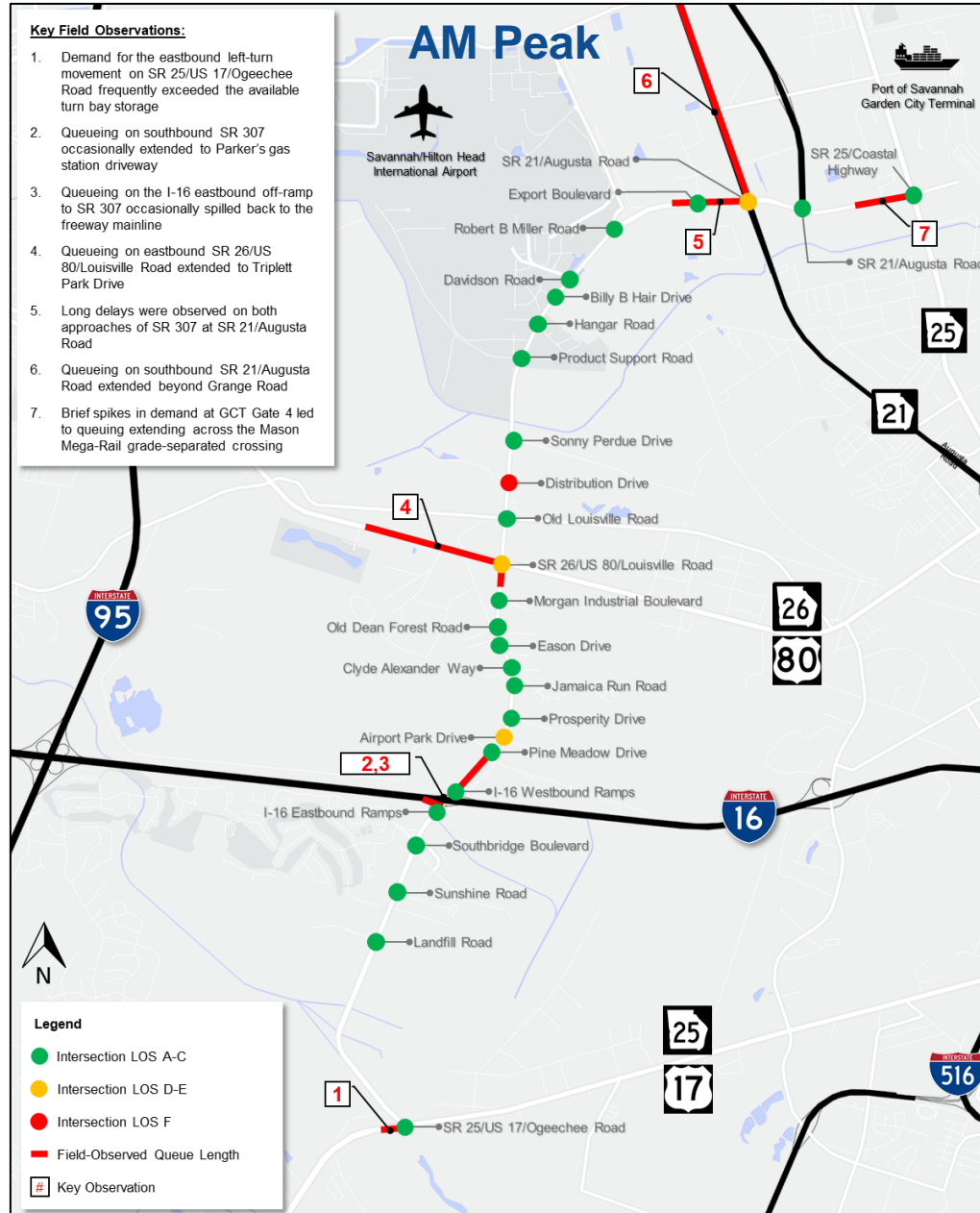
***Westbound SR 307/Bourne Avenue at  
SR 21/Augusta Road***

# Traffic Summary

## Key Field Observations:

1. Demand for the eastbound left-turn movement on SR 25/US 17/Ogeechee Road frequently exceeded the available turn bay storage
2. Queueing on southbound SR 307 occasionally extended to Parker's gas station driveway
3. Queueing on the I-16 eastbound off-ramp to SR 307 occasionally spilled back to the freeway mainline
4. Queueing on eastbound SR 26/US 80/Louisville Road extended to Triplett Park Drive
5. Long delays were observed on both approaches of SR 307 at SR 21/Augusta Road
6. Queueing on southbound SR 21/Augusta Road extended beyond Grange Road
7. Brief spikes in demand at GCT Gate 4 led to queueing extending across the Mason Mega-Rail grade-separated crossing

## AM Peak



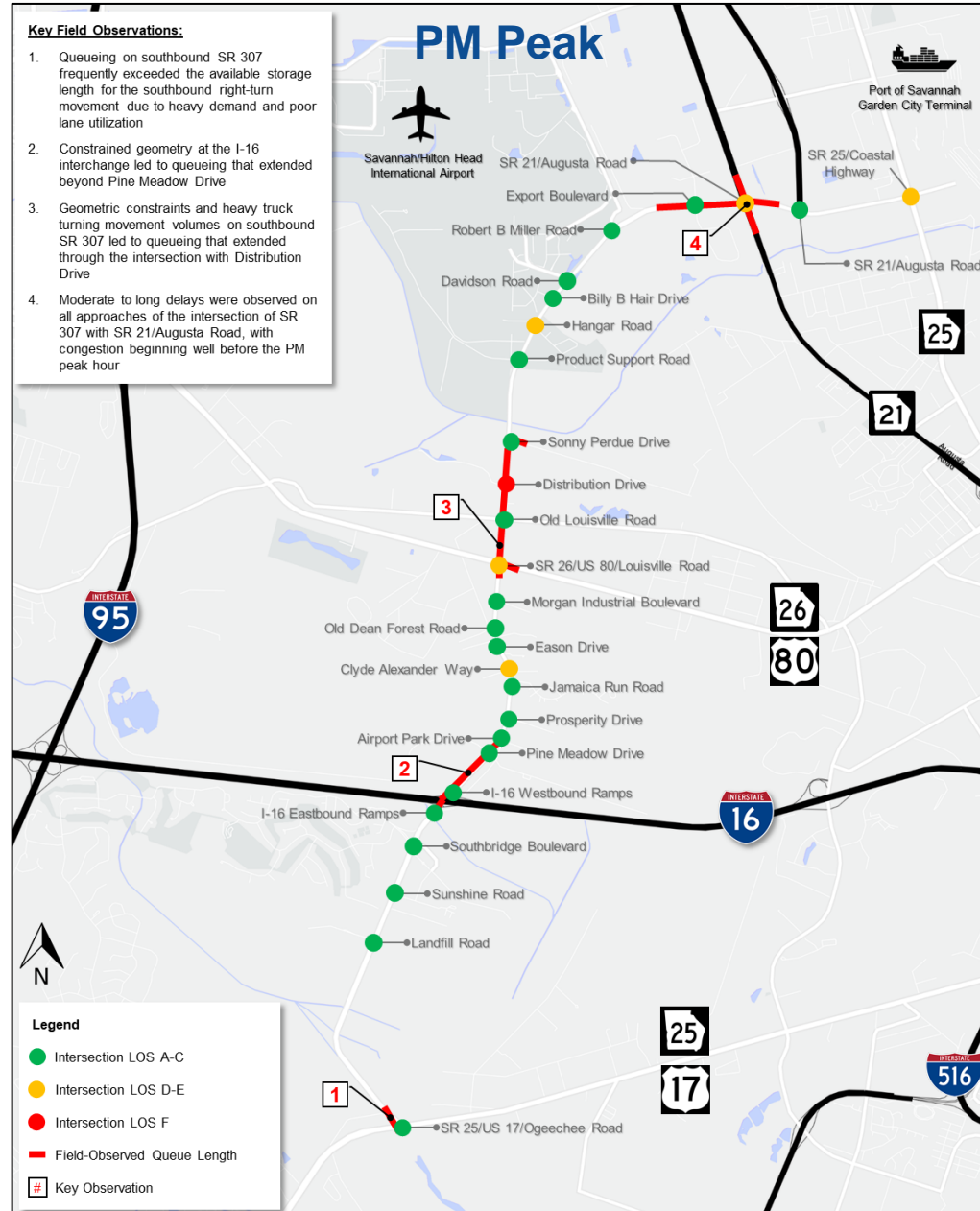
**Legend**

- Intersection LOS A-C
- Intersection LOS D-E
- Intersection LOS F
- Field-Observed Queue Length
- # Key Observation

## Key Field Observations:

1. Queueing on southbound SR 307 frequently exceeded the available storage length for the southbound right-turn movement due to heavy demand and poor lane utilization
2. Constrained geometry at the I-16 interchange led to queueing that extended beyond Pine Meadow Drive
3. Geometric constraints and heavy truck turning movement volumes on southbound SR 307 led to queueing that extended through the intersection with Distribution Drive
4. Moderate to long delays were observed on all approaches of the intersection of SR 307 with SR 21/Augusta Road, with congestion beginning well before the PM peak hour

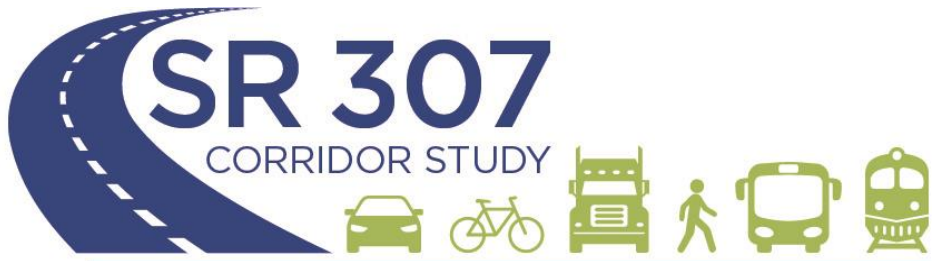
## PM Peak



**Legend**

- Intersection LOS A-C
- Intersection LOS D-E
- Intersection LOS F
- Field-Observed Queue Length
- # Key Observation





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# Crashes 2015 to 2019

1,500 total

9 fatal

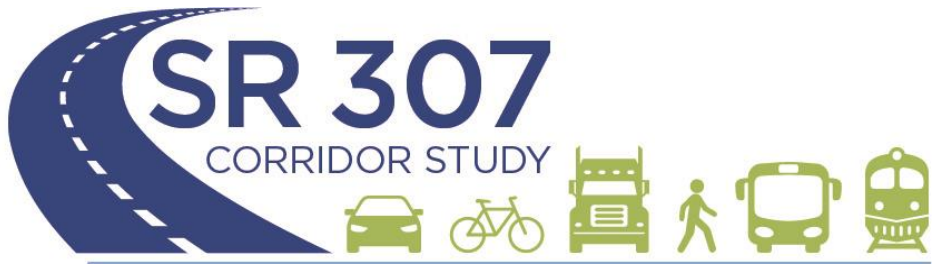
330 non-fatal injuries

Rate is 125% higher than statewide average

Cost of \$28.8 M per year

Clear need for safety investments





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# Crash Rates 2015 to 2019

Segment 1: 730 per HMVMT

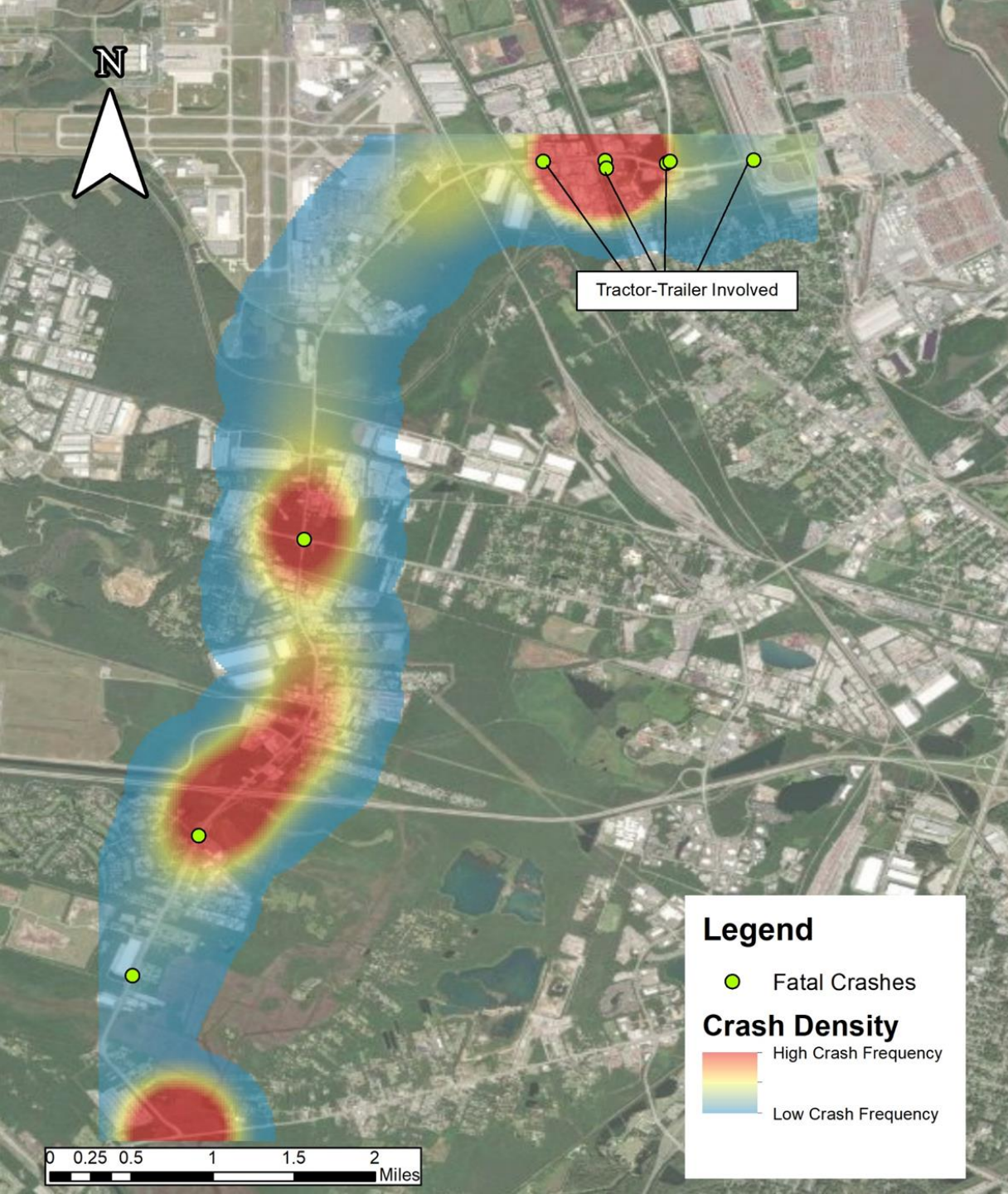
Segment 2: 670 per HMVMT

Segment 3: 300 per HMVMT

Segment 4: 285 per HMVMT

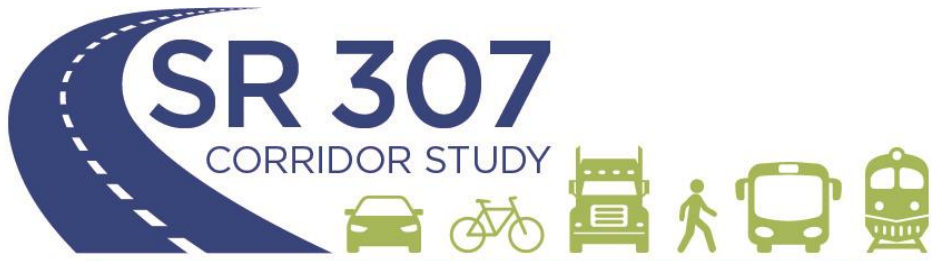
Segment 5: 1,385 per HMVMT

Segment 6: 670 per HMVMT



# Crash Location Map

- SR 25/Ogeechee Road
- I-16 Interchange vicinity
- US 80/Louisville Road
- SR 21/Augusta Road



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# Pedestrians and Bicyclists

Existing bike shoulder from SR 25/Ogeechee Road to Landfill Road

Existing pedestrian facilities between Landfill Road and Southbridge Boulevard

All existing signalized intersections include pedestrian accommodations

The CORE MPO *Non-Motorized Transportation Plan* recommends a shared use path/trail



***Southbridge Boulevard***



***Old Louisville Road***



***Land Fill Road***



***SR 25/Coastal Highway***

# SR 307

CORRIDOR STUDY



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# Transit

No existing CAT stops along corridor

CAT Route 3 uses small segment to provide two stops within airport

Corridor is outside of Transit District

Hidden demand related to warehouse developments

# SR 307

CORRIDOR STUDY



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# Freight

## Major freight corridors

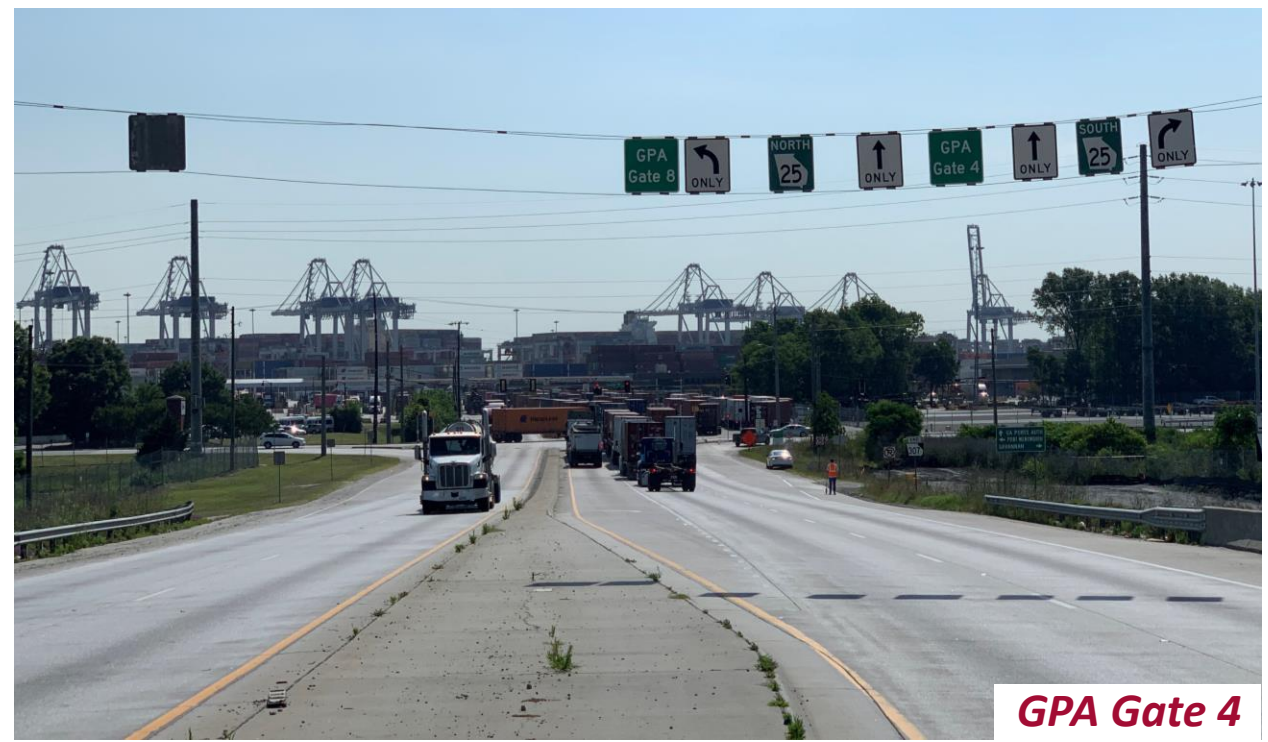
- I-16
- SR 307/Dean Forest Road
- SR 26/US 80/Louisville Road
- Jimmy DeLoach Parkway

## Rail corridors

- 5 rail crossings
- 55 train crossings daily



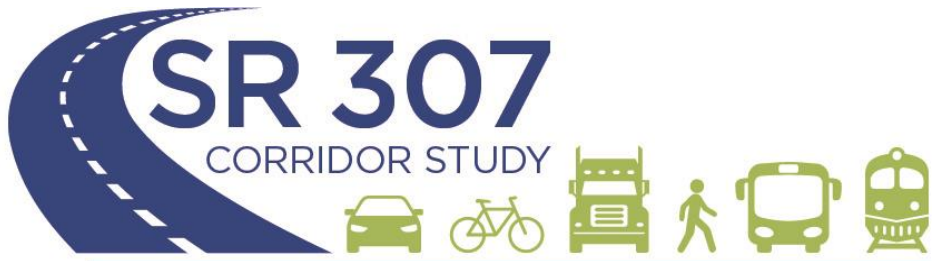
*CSXT Rail Crossing*



*GPA Gate 4*



*Jimmy DeLoach Parkway*



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# Summary

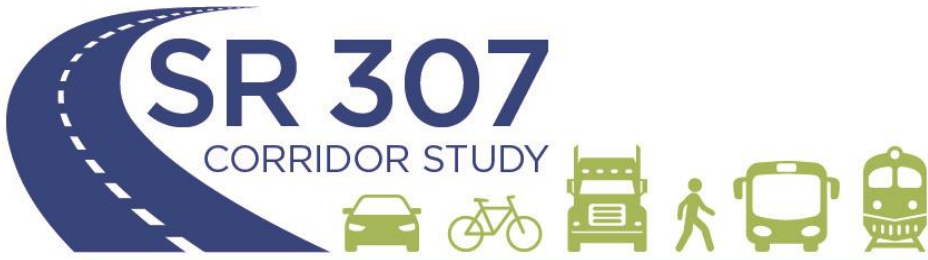
Improvements should reduce the mixing of cars, trains, and freight trucks

Intersections should be improved for freight trucks

Access management strategies should be explored

Transit, Pedestrian, and bicycle facilities should be addressed





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# Potential Improvements

Bridge over SR 21/Augusta Road

Major intersection improvements

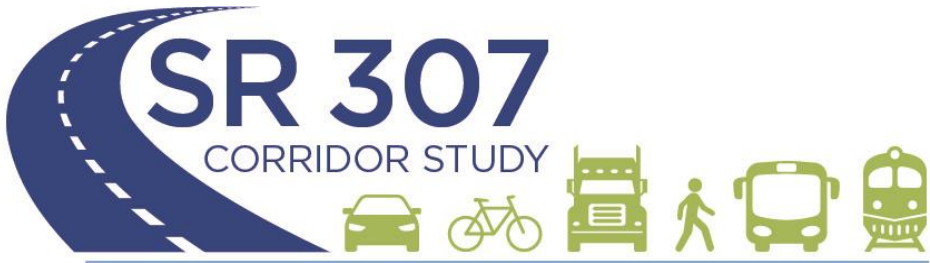
- SR 26/US 80/Louisville Road
- Unsignalized intersections
- Expand freight connected vehicle network

Access control plan to improve safety

- Raised, grassed median
- Innovative intersections

Affordable transportation options

Pedestrian and Bicycle facilities



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# Next Steps

Alternatives and Cost Estimates

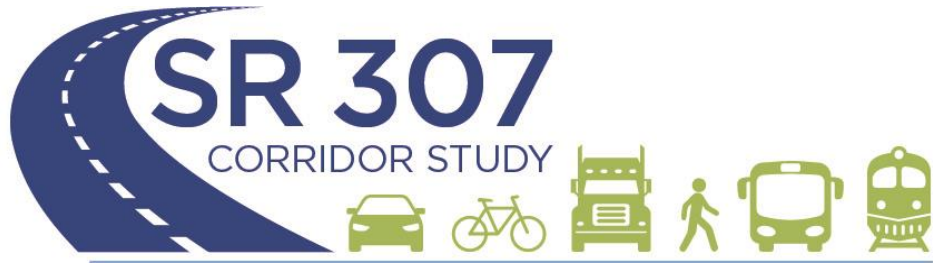
Public Information Open House

SAC Meeting No. 2

MPO Presentations

Updates/Revisions

Final Report



# Thank you for participating!

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Save the date: PIOH

December 7, 2021

5:30 PM to 7:00 PM

City Hall, Garden City

