



# I-75 North Vision Study

## I-75 Relief Task Force Meeting

Presented by:  
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Florida Department of Transportation

*NOTE: Information is preliminary and subject to change*

DECEMBER 7, 2015



## Agenda

- I-75 North Corridor Vision Study Purpose
- Existing I-75 North Corridor Characteristics
- Possible Futures of the I-75 North Corridor
- Next Steps





## Study Purpose



## Study Purpose

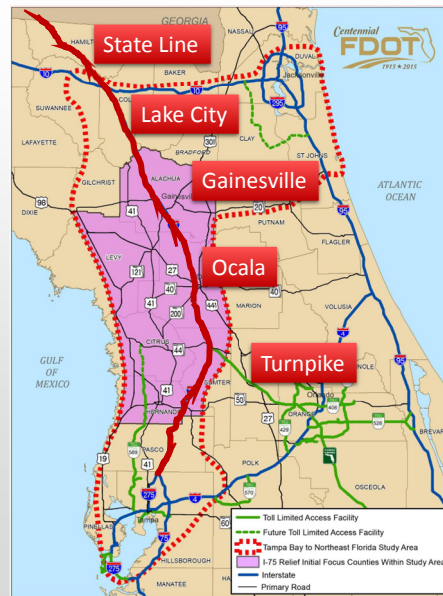
- How do you transform and modernize the North I-75 Corridor?
- Look at anticipated growth in travel demand along the North I-75 Corridor
- Develop an ultimate plan of how the North I-75 Corridor can safely accommodate future travel demand and freight





## Study Limits

- I-75/ I-275 interchange to the Florida-Georgia border
- 32 interchanges over 200 miles
- Covers Eight Counties from Pasco to Hamilton



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## How Is This Study Different From Previous Studies?

- Conclusion will inform the Future Corridors planning process for the Tampa Bay to Northeast Florida Study
- The ultimate North I-75 Corridor
- Updated information on freight movement in the corridor



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# Existing I-75 North Corridor Characteristics



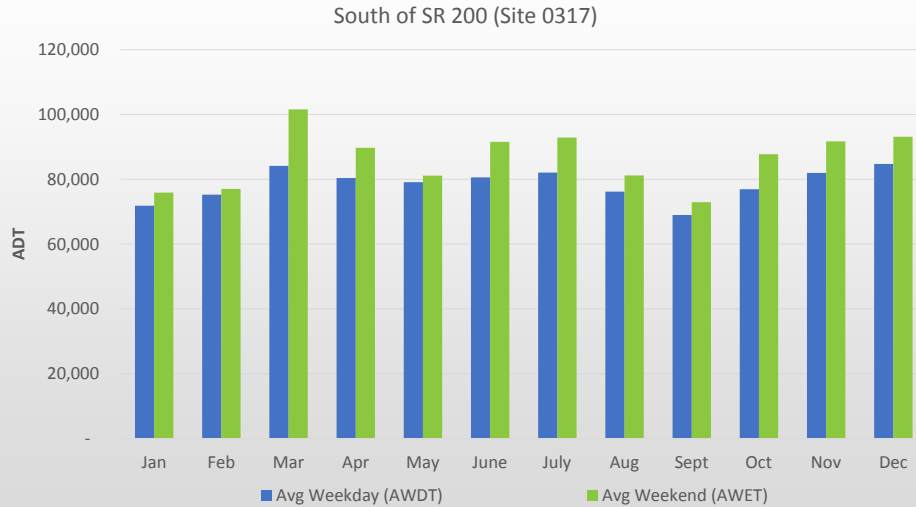
## I-75 Existing Characteristics

- Traffic Volumes
- Freight and Truck Volumes
- OD Patterns
- Lane Closures/Delay
- Safety
- Possible Future I-75 North Corridor Alternatives
- Next Steps





## Average Daily Traffic Monthly Variation



NOTE: Information is preliminary and subject to change

Source: FDOT, Transportation Statistics Office

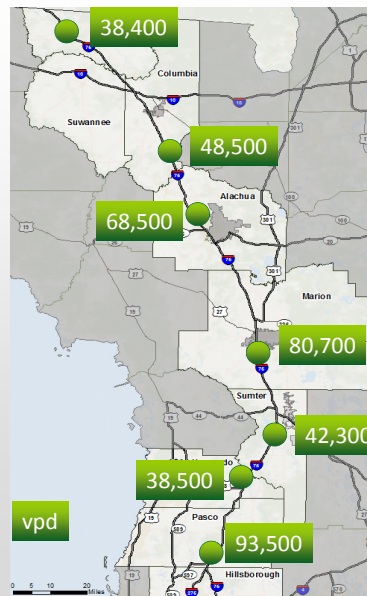


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## I-75 Existing Traffic Volumes

- Over 38,000 vehicles per day (vpd) enter and leave Florida
- Traffic volumes reach 68,500 vpd south of SR 222 near Gainesville
- Traffic volumes spike to over 80,000 vpd immediately south of Ocala in proximity to SR 200
- Traffic volumes drop significantly after the Turnpike to less than 40,000 vpd
- In the proximity of the interchanges for CR 54 and SR 56 in Pasco County, traffic volumes rise to 93,500 vpd



NOTE: Information is preliminary and subject to change

Source: FDOT, Transportation Statistics Office



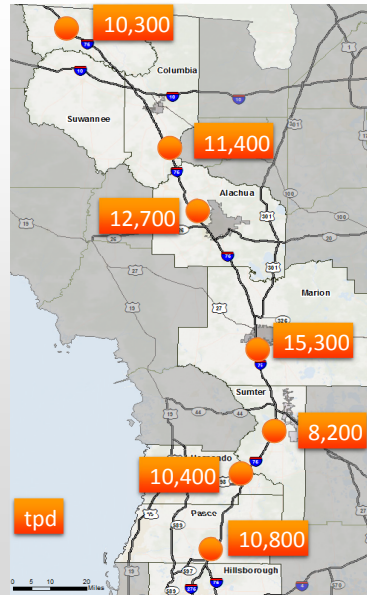
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## Existing Truck Volumes

- Over 10,000 trucks per day (tpd) enter and leave Florida
- Truck volumes increase to over 12,500 tpd south of SR 222 near Gainesville
- Traffic volumes peak with more than 15,000 tpd in proximity to SR 200 south of Ocala
- Truck volumes drop significantly after the Turnpike
- In the proximity of the interchanges for CR 54 and SR 56 in Pasco County, truck volumes increase back to more than 10,000 tpd



NOTE: Information is preliminary and subject to change

Source: FDOT, Transportation Statistics Office



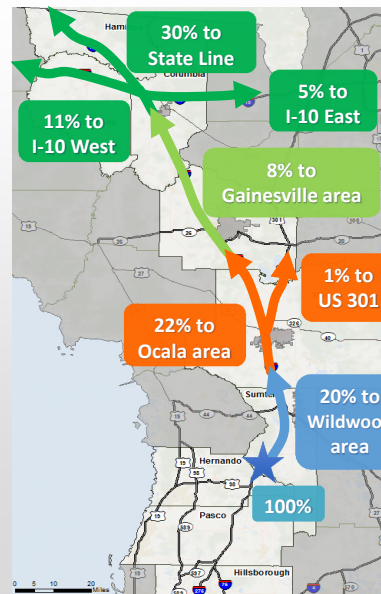
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## Origin-Destination Movements:

I-75 South of Turnpike

Northbound Direction



NOTE: Information is preliminary and subject to change

Source: Bluetooth data collected in July 2015 by Florida Transportation Engineers, O/D movement analysis by CDM Smith, August 2015



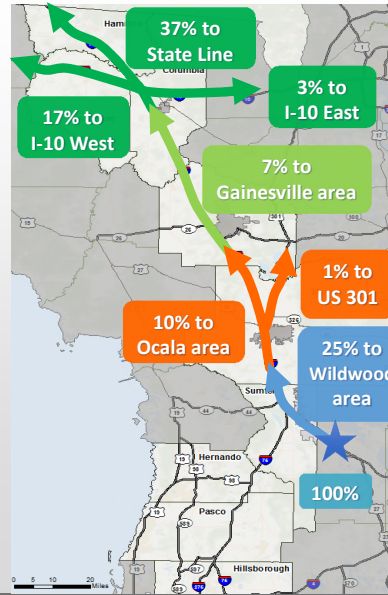
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## Origin-Destination Movements:

Turnpike South of I-75

Northbound Direction



NOTE: Information is preliminary and subject to change

Source: Bluetooth data collected in July 2015 by Florida Transportation Engineers, O/D movement analysis by CDM Smith, August 2015



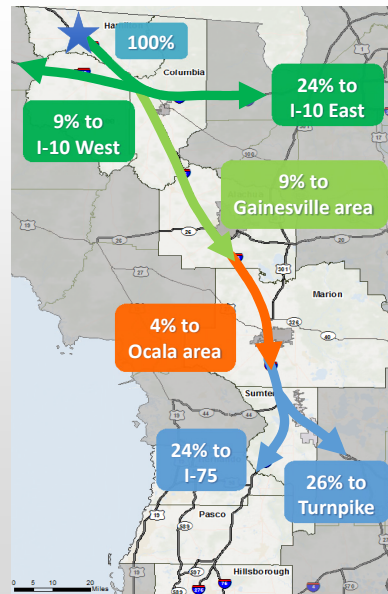
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## Origin-Destination Movements:

I-75 North of I-10

Southbound Direction



NOTE: Information is preliminary and subject to change

Source: Bluetooth data collected in July 2015 by Florida Transportation Engineers, O/D movement analysis by CDM Smith, August 2015



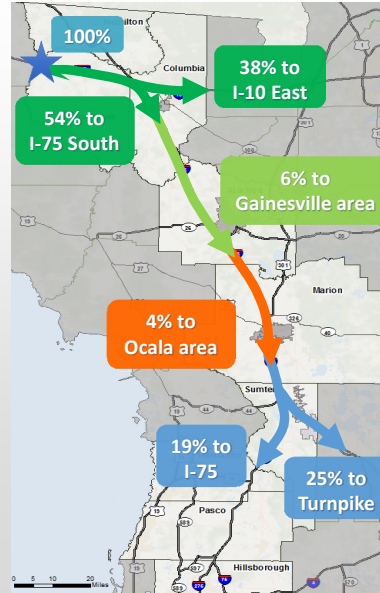
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# Origin-Destination Movements:

I-10 West of I-75

Eastbound Direction



NOTE: Information is preliminary and subject to change

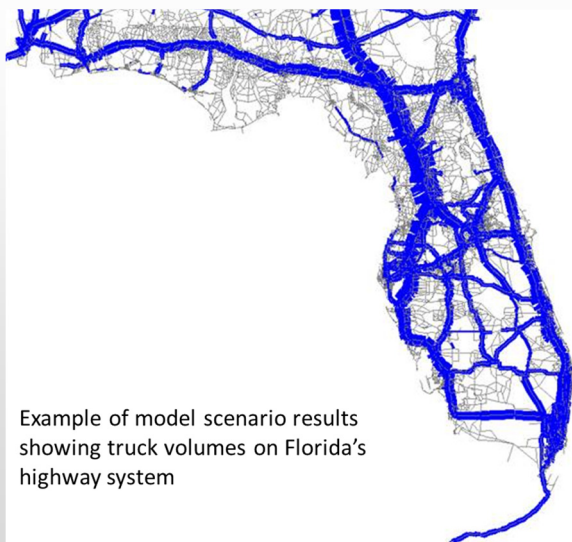
Source: Bluetooth data collected in July 2015 by Florida Transportation Engineers, O/D movement analysis by CDM Smith, August 2015



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# Existing Freight Data Analysis



Example of model scenario results showing truck volumes on Florida's highway system



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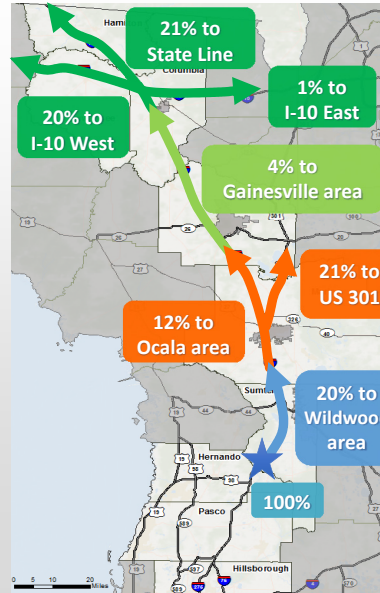




## Truck Origin-Destination Movements:

I-75 South of Turnpike

Northbound Direction



NOTE: Information is preliminary and subject to change

Source: FDOT, Statewide Freight Model (FreightSIM, 2015)



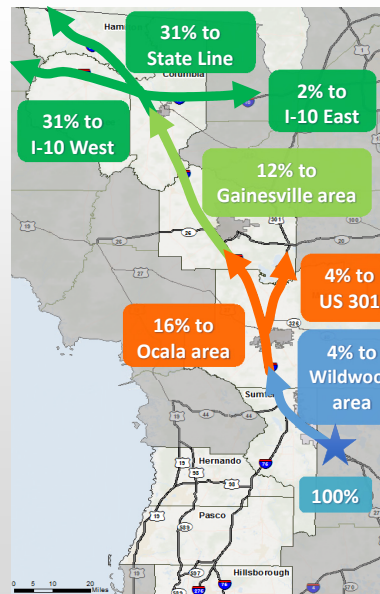
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## Truck Origin-Destination Movements:

Turnpike South of I-75

Northbound Direction



NOTE: Information is preliminary and subject to change

Source: FDOT, Statewide Freight Model (FreightSIM, 2015)

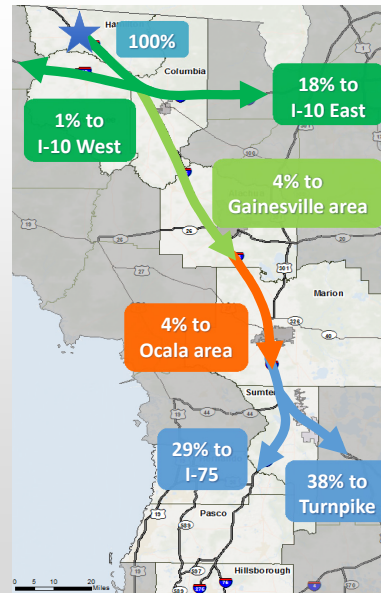


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## Truck Origin-Destination Movements:

I-75 North of I-10  
Southbound Direction



NOTE: Information is preliminary and subject to change

Source: FDOT IHS Global Insight Transearch Data, Statewide Freight Model (FreightSIM, 2015)



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## Existing Freight Data Analysis

- Most of the movements by truck to and from the study area are within Florida
- Georgia is the top trading partner with the study area
- The commodities leaving the study area are more agricultural and natural resources oriented
- The commodities coming into the study are more industrial in nature
- More than 75 percent of all truck trips to and from the study area are less than 500 miles in length



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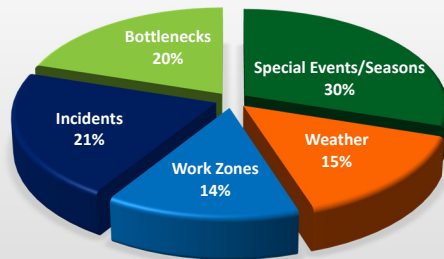
Source: FDOT, IHS Global Insight Transearch Data



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## Causes of I-75 Congestion



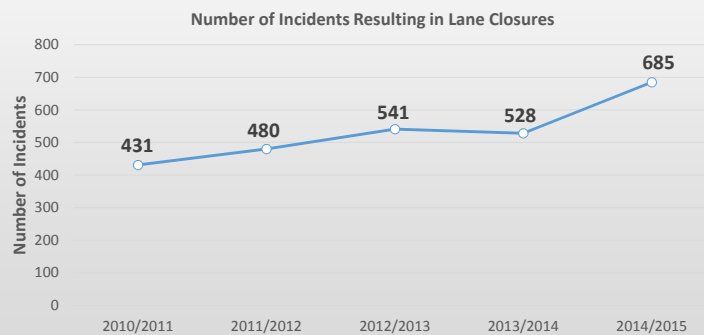
NOTE: Information is preliminary and subject to change

Source: Estimated by CDM Smith from multiple sources (SunGuide Lane Closure Data, FDOT Traffic Count Data, FDOT SIS Bottleneck Analysis)



## I-75 Lane Closures due to Incidents

- Over the last 5 years, incidents have caused at least one I-75 lane or ramp to be closed 2,665 times in the study area



NOTE: Information is preliminary and subject to change

Source: SunGuide Traffic Management System, FDOT





## I-75 Lane Closures

- I-75 from the Turnpike North through Alachua County represents 40% of the I-75 study area mileage, but accounts for 50% of the lane closures



NOTE: Information is preliminary and subject to change

Source: SunGuide Traffic Management System, FDOT

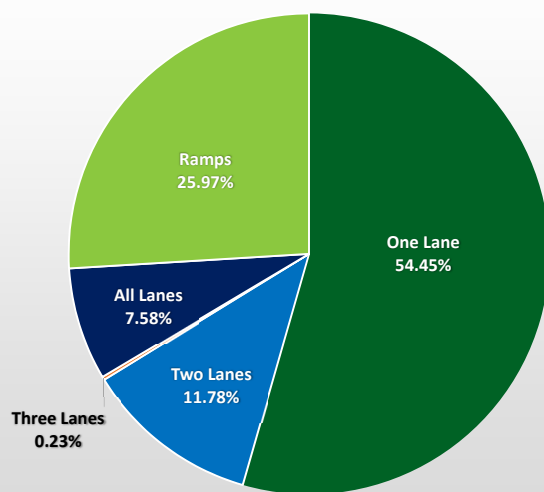


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## I-75 Lane Closures due to Incidents

- On average, every 9 days all lanes in one direction are blocked due to an incident in the study area
- On average, every 16 hours, one or more lanes or ramps are blocked due to an incident in the study area



NOTE: Information is preliminary and subject to change

Source: SunGuide Traffic Management System, FDOT



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## Existing I-75 Lane Closures

- Lane Closures (due to incidents)
  - Alachua – 785
  - Marion – 417
  - Sumter – 278
- Impacts
  - Travel Time Reliability
  - Economic Development



*NOTE: Information is preliminary and subject to change*

Source: SunGuide Traffic Management System, FDOT



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## Existing I-75 North Crash Rates



May 13, 2015

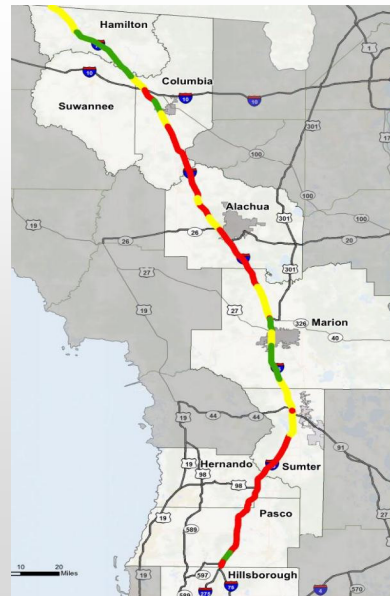






## 2014 Existing Crash Rates

- Most of the I-75 corridor has crash rates greater than the statewide average for similar facilities
- High (> 90% of Statewide Average)
  - Medium (70 to 90% of Statewide Average)
  - Low (0% to 70% of Statewide Average)



NOTE: Information is preliminary and subject to change

Source: Florida Department of Transportation, Safety Office



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## I-75 Safety

- Significant Truck Traffic (24 % south of I-10)
- Heavy Tourist traffic on weekends
- Smoke/Fog/Visibility Issues at Paynes Prairie State Park



NOTE: Information is preliminary and subject to change

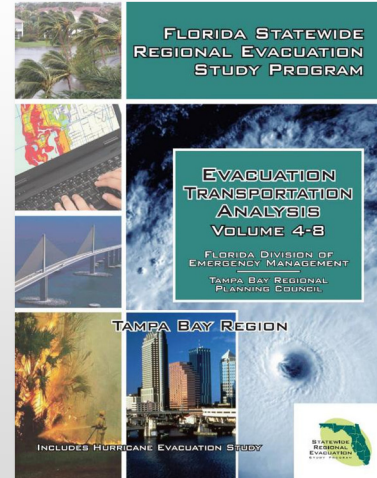


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## Existing Emergency Evacuation

- Tampa Bay Region has a regional clearance time of 66 hours in 2015 for a Level E Evacuation (Tampa Bay RPC and DEM)
- More than 370,000 vehicles are projected to evacuate from the four county region for a level E evacuation
- I-75 identified as a critical link and evacuation route
- I-75 and Turnpike Interchange identified as a critical bottleneck



Source: Florida Division of Emergency Management, Florida Statewide Regional Evacuation Study Program, 2015



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## Summary of Previous Study Findings

- Multiple ways to transform I-75:
  - Add Capacity
  - Improve existing or provide new parallel corridors
  - Improve Interchange Operations
  - Enhance freight connectivity
  - Improve reliability
  - Increase modal choices
  - Reduce crash rates



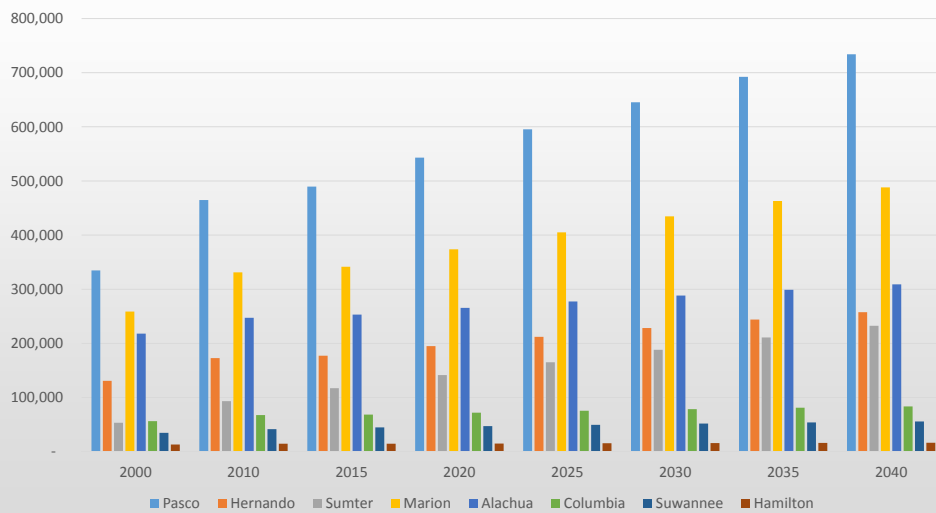
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# Possible Future I-75 North Corridor Operations



## Population Growth



NOTE: Information is preliminary and subject to change

Source: Bureau of Economic Research (BEER), University of Florida



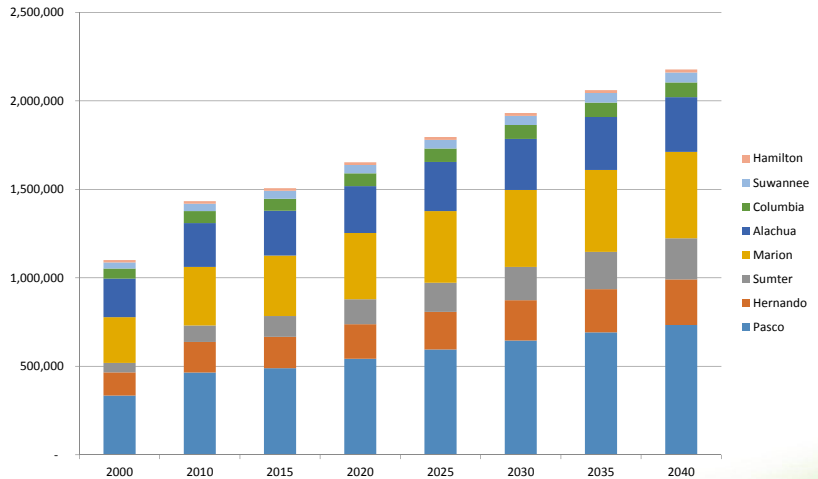


## Population Growth

### Study Area Population

- 2000 = 1.1 Million
- 2015 = 1.5 Million
- 2030 = 1.9 Million
- 2040 = 2.2 Million

**By 2040 Population will double from 2000**



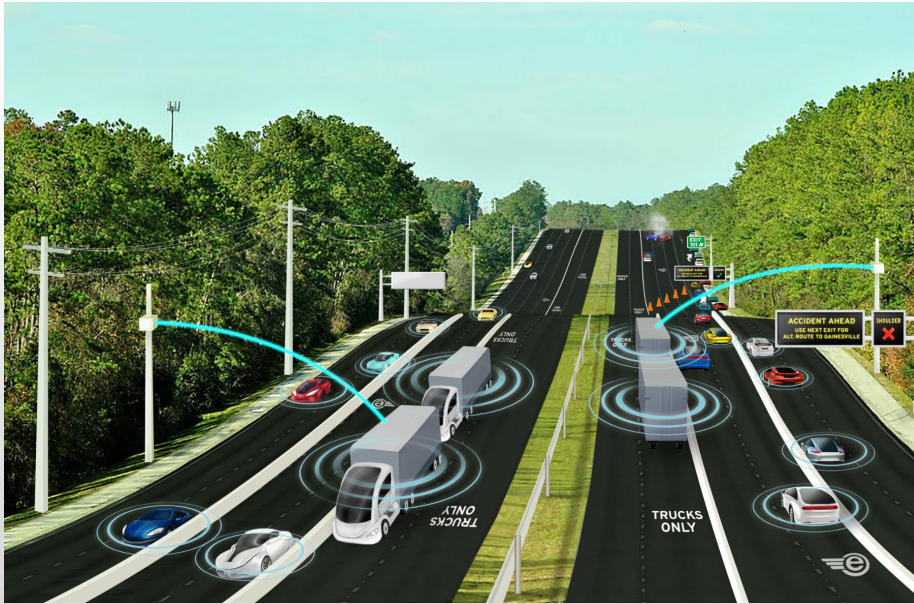
## Changing Technologies







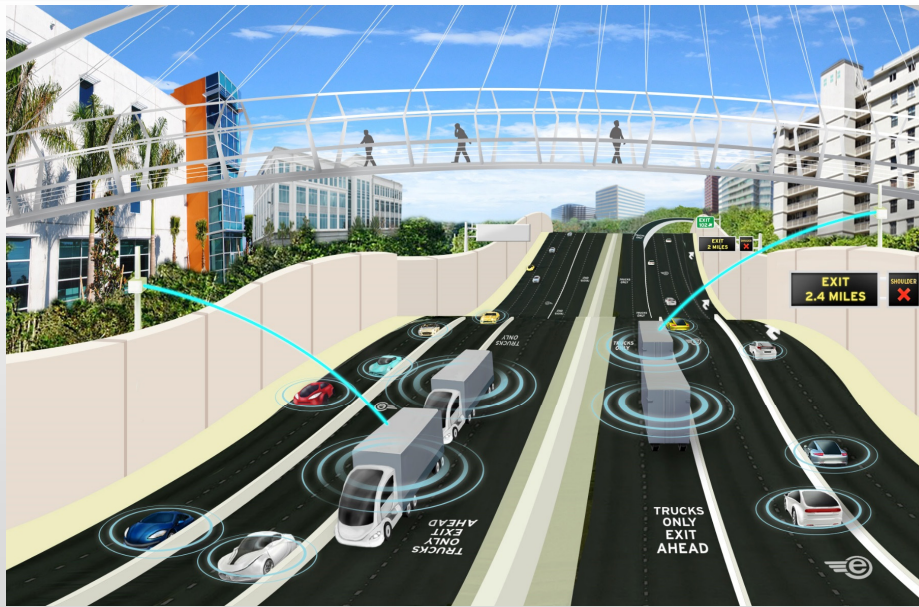
# The Future of I-75



- Rural Possibility



# The Future of I-75



- Urban Possibility







# Next Steps



## Next Steps

- Support I-75 Relief Task Force
- Provide technical analysis such as future travel forecasts and I-75 alternative analysis







Thank You!



## For more information contact:

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