SHRP 2 Round 5: Integrating Freight Considerations into Highway Capacity Planning Process

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(Presentation at TNMUG)

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The Intermodal Freight Transportation Institute (IFTI)

What is SHRP2

- Second Strategic Highway Research Program (SHRP2)
 - Created in 2006 to find strategic solutions in four focus areas









Safety

Reliability

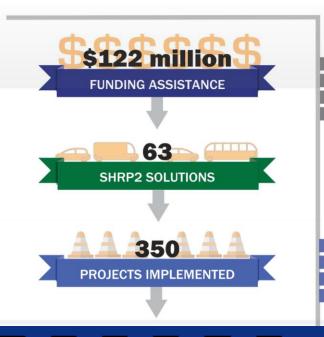
Renewal

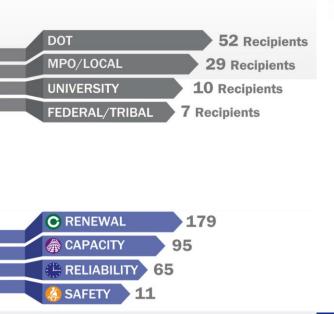
Capacity



What is the Progress of SHRP2

350
SHRP2 projects nationwide





Team Members

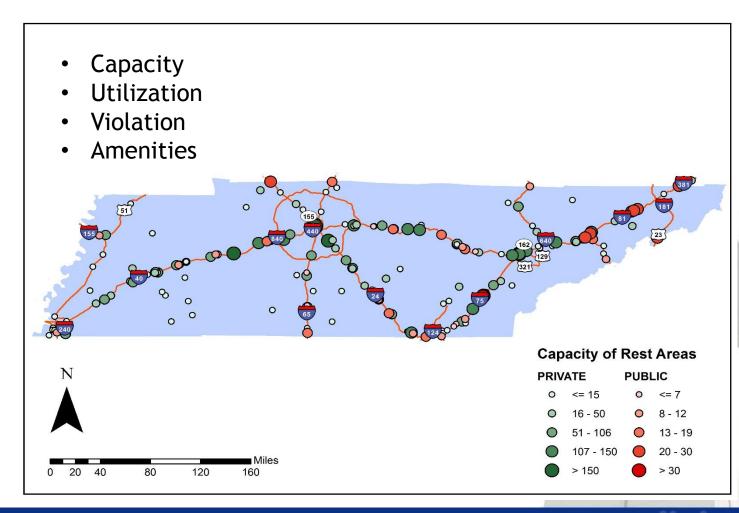
- Tennessee DOT
- Jackson MPO
- University of Memphis

• Project manager: Aayush Thakur, TDOT

Project Overview

- Focus Area: Capacity
- January 2016-June 2017
- Framework to obtain performance measures to enhance highway capacity planning
 - Truck Parking
 - Recurring and non-recurring freight corridor reliability
 - Freight and land use integration (ongoing)
- Community visioning
 - Engage stakeholders (e.g. public, planning agencies)

Truck Parking



THE UNIVERSITY OF MEMPHIS. Freight Reliability 1.6 Truck GPS Data 1.4 Census Tracts in Shelby County 1.2 Travel Time (hours) 8.0 0.6 0.4 0.2 5 10 15 20 25 30 35 40 45 0

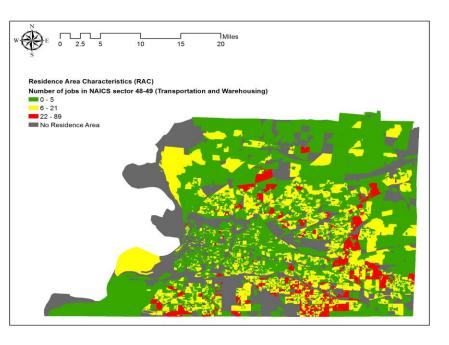
Trip Length(miles)

Free Flow

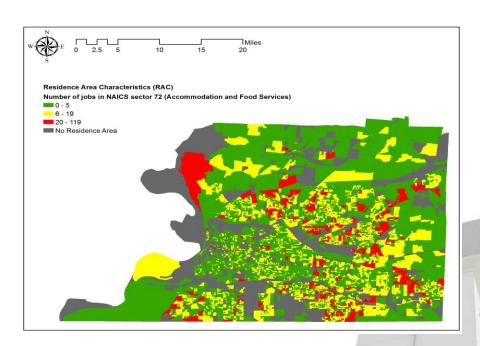
Recurring Congestion
 Non-Recurring Congestion



Freight and Land Use (Ongoing)



Transportation and Warehousing



Accommodation and Food Services

Generate possible demand for trucks by commodity using GPS data

Community Visioning

- A survey to understand how freight is analyzed at planning and operational level
- Please complete the survey and return before the last session of TNMUG
 - No personal information is requested
 - Only views and opinions
 - The responses will be kept completely confidential



Students/Post-docs involved

- Undergraduate students (2)
 - Ronald Edward Coupland
 - Lambert Marks
- Graduate Students (8)
 - Maxim Dulebenets
 - Mania Flaskou
 - Nikolas Delligiannis
 - Khademul Haque
 - Afrid Sarkar
 - Karlis Pujats
 - Santosh Bhattarai
 - Samuel Jordan
- Post-docs (1)
 - Bryan Higgs





Thank you

