Using Big Data to Evaluate Freight Policies: A Case Study from TN

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Joint Work

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BIG DATA IN VISIBILITY

- **Top priority** across public and private sector over the past year

- Opportunities to create **big, useful** data, and put it to work

- **Leveraging** transportation data to improve freight **planning, policies and operations**
Address the number of hours that a commercial motor vehicle (CMV) driver may drive and be on duty before rest is required.

“Formerly, when a driver finished work between 1 a.m. and 5 a.m. on Saturday, he could go back to work Sunday night. Now he can’t start until 5 a.m. Monday.”


Define a minimum amount of time before a driver may return to duty and the total number of hours he may be on-duty in a week.
What do we know so far?

- Dec. 2011 USDOT Study

  Cost/benefit analysis:
  - Costs to the industry
  - Benefits from accident and fatality reduction
  - Health benefits/costs the new rules will have

- Does not address increased congestion

Case Study Area
FROM BIG DATA......
TO VISIBILITY (1)

Existing Truck Trip Patterns in TN

Average Trip Times on I-40
...TO VISIBILITY (2)
To Policy Evaluation

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<th>Time of Arrival</th>
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<th>A to C</th>
<th>B to C</th>
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<th>C to E</th>
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Thank you

Q/A

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