2015 Urban Mobility Scorecard

Scott Weber, Transportation Planner & Analyst
James Winters, Regional Planner & Policy Analyst
Introduction

1. Congestion Trends
2. Compounding Problems
3. Possible Solutions
Chicago Metropolitan Region

- Ranked 8th worst in “Yearly Delay per Auto Commuter”
- Ranked 14th worst in “Travel Time Index”
- Ranked 5th worst in “Excess Fuel per Auto Commuter”
- Ranked 7th worst in “Congestion Cost per Auto Commuter”
Who Wrote the Urban Mobility Scorecard?

• The Texas A&M Transportation Institute (TTI) is a Transportation Research Agency hosted at Texas A&M University
• Over 200 professionals from both public and private sector contribute
• Endowed with $65 million
Who Wrote the Urban Mobility Scorecard?

“Our Mission is to identify and solve transportation problems through research; to transfer technology and knowledge; and to develop diverse human resources to meet the transportation challenges of tomorrow.”

- TTI Mission Statement
What Data were used in the Report?

- INRIX traffic data from vehicle probes and in-road sensors
- Data gathered at 15-minute intervals for all major roads (113 million miles of centerline across the U.S.)
Causes and Impacts of Congestion
Causes and Impacts of Congestion - Economy

• The recovery of the Great Recession (2008) has lead to the following:
  • More vehicles traveling because of lower gas prices and higher average wages
  • More freight traffic
  • Decreased investment in public infrastructure
Coincident Index
Northwest Indiana Compared to National and State Averages

Moving 12-Month Total on ALL Roads

Source: US Department of Transportation
Causes and Impacts of Congestion - Freight

Tons of Domestic Highway Freight Shipments, 1998 - 2020
(Millions)

- 1998: 10,439
- 2010: 14,930
- 2020: 18,130
Causes and Impacts of Congestion - Freight

Average Daily Truck Traffic: 1998

Average Daily Truck Traffic: 2020
Causes and Impacts of Congestion

Freight traffic accounts only represent 7% percent of urban travel, however freight accounts for 18% of the cost per vehicle.
Total Delay in the U.S.

Hours of Delay (millions) in the U.S. from 1982-2014
Total Delay in NW Indiana

Hours of Delay (millions) in Northwest Indiana from 2013-2015

2013
2014
2015
Total Delay in the U.S. and NW Indiana

Hours of Delay (millions) in the U.S. and NW Indiana from 1982-2015

45% increase 2013-2014

10% increase 2014-2015

1.5% increase 2013-2014
Cost of Congestion in the U.S.
Cost of Congestion in NW Indiana (millions 2014 $)

- 2013: Cost of congestion is approximately 250 million dollars.
- 2014: Cost of congestion increases to approximately 330 million dollars.
- 2015: Cost of congestion continues to rise, reaching approximately 400 million dollars.
Solutions

• Add Capacity in Critical Corridors
• Provide Choices
• Change the Use Pattern
• Diversify the Development Pattern
• Realistic Expectations
Add Capacity in Critical Corridors

• National Efforts
  • Intercounty Connector, Maryland/DC
Add Capacity in Critical Corridors

• National Efforts
  • Intercounty Connector, Maryland/DC
  • Shoulder Lane Use on I-495, Tysons Corner, VA
Add Capacity in Critical Corridors

• NIRPC Efforts
  • New Expressway Projects: Illiana Expressway
Add Capacity in Critical Corridors

• NIRPC Efforts
  • New Expressway Projects: Illiana Expressway
  • Bottleneck improvement projects: NWI At-Grade Crossing Study
Add Capacity in Critical Corridors

- NIRPC Efforts
  - New Expressway Projects: Illiana Expressway
  - Bottleneck improvement projects: NWI At-Grade Crossing Study
  - Regional Improvements: Regional Corridors Study
Provide Choices

- National Efforts
  - San Francisco Highway vs Transit
Provide Choices

• National Efforts
  • San Francisco Highway vs Transit
  • Smartphone Applications
Provide Choices

• NIRPC Efforts
  • Intelligent Transportation Systems
Change The Use Pattern

• National Efforts
  • Flexible work-time options
Change The Use Pattern

- National Efforts
  - Flexible work-time options
  - Telecommunication options
Change The Use Pattern

- NIRPC Efforts
  - Flexible work-time options
  - Telecommunication options

III. Time and Leave

A. Business Hours

The Northwestern Indiana Regional Planning Commission is open to the public on Monday through Friday, with the exception of holidays.

Business hours extend from 8:30 a.m. until 4:30 p.m.

All employees are required to work for a 7 hour work day exclusive of a lunch period between the hours of 7:00 AM and 5:00 PM. All employees are required to work between the core hours of 8:00 AM and 3:00 PM.

With the exception of employees who perform functions which required a fixed schedule (e.g., reception or telephone answering duties) outside of core hours, employees may begin the work day at any time between 7:00 AM and 9:00 AM. For salaried employees, the regular work day then extends to a point in time equaling 7 full hours plus an amount equal to the employee’s scheduled lunch period. A comparable calculation is appropriate to part-time employees.

Flextime may be suspended in order to ensure attendance at required or general meetings, to ensure the completion of assigned job tasks, or to attend to job tasks identified by the employee’s supervisor. To the extent that it is possible to do so, suspensions in flextime will be: (1) scheduled in advance; and (2) issued infrequently.

All employees will sign in when entering the building and sign out when leaving. This can either be done by entering the time or making a check mark in the appropriate box. When leaving before the end of a work day or if an employee
Change The Use Pattern

- NIRPC Efforts
  - Flexible work-time options
  - Telecommunication options
  - Could do more to influence the use pattern
Diversify the Development Patterns

• National Efforts
  • Mixed-Use Development
Diversify the Development Patterns

- NIRPC Efforts
  - Creating Livable Communities
Realistic Expectations

• National Efforts
  • Educational Awareness: 2015 Urban Mobility Scorecard
Realistic Expectations

• National Efforts
  • Educational Awareness: 2015 Urban Mobility Scorecard
  • Performance Measures that set realistic goals
Conclusions

• Traffic congestion is a growing problem
• Better data help pinpoint the symptoms of the congestion problem
• No silver bullet solution to the problem, only a menu of options
• Traffic congestion goes hand in hand with economic growth