

ATRI

- 501(c)(3) charitable research organization
- Governed by 15 member Board of Directors
- RAC:
 - Freight Carriers
 - Federal/State Government
 - Labor
 - Suppliers/vendors
 - Academia



Board of Directors

















YRC Worldwide











Key Realities

Rail

Water/Maritime

Air Cargo



Key Realities

- Trucking
 - **■** 6%-7% of GDP
 - Deregulated?
 - HOS/Equipment/Routing/Insurance
 - Highly Competitive
 - 640K Carriers with U.S. DOT; 100K in last 3 years
 - 68% of Tonnage; 86% of Revenue
 - 7% of vehicles; 15.5% of VMTs
- New Regulations: HOS; HM Endorsements, etc.



Strategic Issues

Fuel Cost Volatility

Jan. '02 -\$1.16/Gallon Oct. '04 -\$2.20/Gallon Sept. '05 \$3.02/Gallon ■ May '06 -\$2.89/Gallon March '07 -\$2.79/Gallon Sept '07 -\$2.87/Gallon \$3.30/Gallon Oct. '07 -Nov. '07 -\$3.40/Gallon

Operating Margins

Q1 2007 Average: 3.6%; 1.8% - 5.6%

Shipper Contracts Dictate Operations/Costs

- Is Six Sigma/TQM Backfiring?
 - Supply Chain Elasticity/Flexibility/Dynamism is Disappearing



Freight Transportation Planning...

- Multiple Agencies Involved
 - Federal Highway Administration
 - State DOTs
 - MPOs / RDCs
 - Municipalities

Not to mention: FMCSA, CBP, USDA, TSA, IRS, PHMSA, etc.



Freight Transportation Planning Products

- UPWP
- Policy Plans
- City Comp Plans
- TIPs
- STIPS
- Long-Range Plans

Shortest window: Approx. 2 years...



Juxtaposed with Freight Industry...

- 6 24 Months Planning
- Slim Margins: 3.6%
- High Data Sensitivity
- Unreasonable Shipper Contract
 Expectations (e.g. 95% 98% ontime delivery)

Longest window: Approx. 2 years...

Top Industry Issues: 2005 vs 2006

Top Industry Issues – 2005

- 1. Fuel Costs
- 2. Driver Shortage
- 3. Insurance Costs
- 4. Hours-of-Service
- 5. Tolls/Highway Funding
- 6. Tort Reform/Legal Issues
- 7. Overlapping/Burdensome Regulations
- 8. Congestion
- 9. Environmental Issues
- 10. Truck Security

Top Industry Issues – 2006

- 1. Driver Shortage
- 2. Fuel Issues
- 3. Driver Retention
- 4. Hours-of-Service
- 5. Congestion
- 6. Government Regulations
- 7. Highway Infrastructure
- 8. Tort Reform
- 9. Tolls/Highway Funding
- 10. Environmental Issues

2007: Drum Roll Please...



Top Industry Issues - 2007

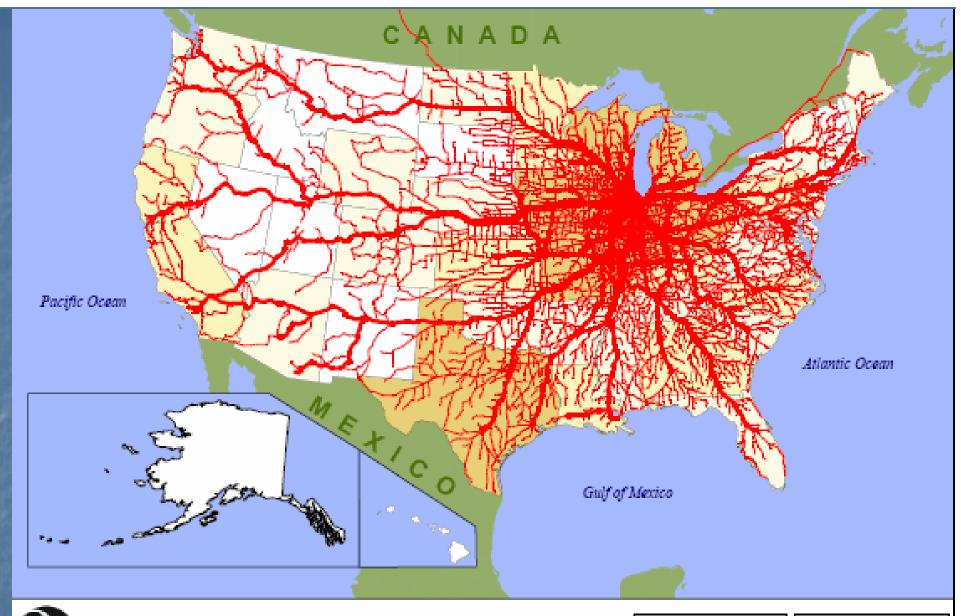
- 1. Hours-of-Service
- Driver Shortage
- 3. Fuel Issues
- 4. Congestion
- 5. Government Regulation
- Tolls/Highway Funding
- 7. Tort Reform
- 8. Truck Driver Training
- Environmental Issues
- 10. On-Board Truck Technology



The Cost of Congestion

- Idled trucks cost industry \$7.8 billion/243 million hours in 2004
- In 2006 industry spent \$97B on diesel fuel
 - 2nd highest operating expense
 - As much as 25% of total operating costs
- No "congestion credit" in HOS

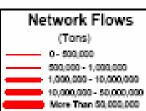






U.S. Department of Transportation Federal Highway Administration Office of Freight Management and Operations Freight Analysis Framework Total Combined Truck Flows (1998)

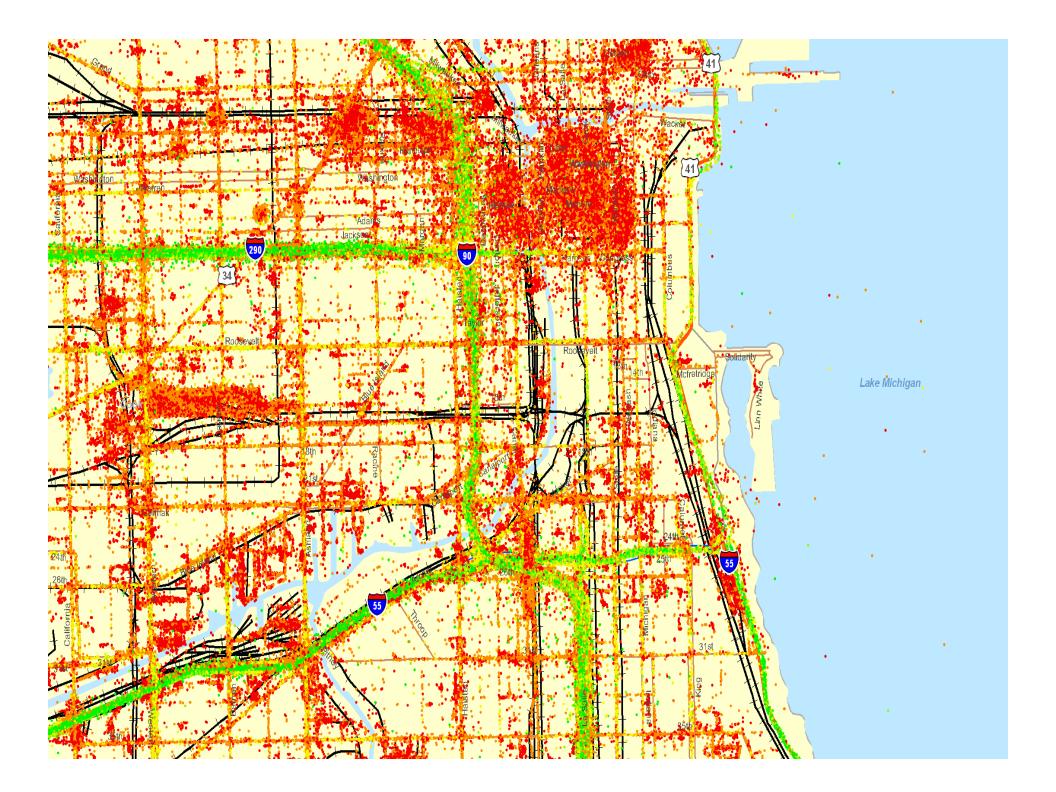
ILLINOIS

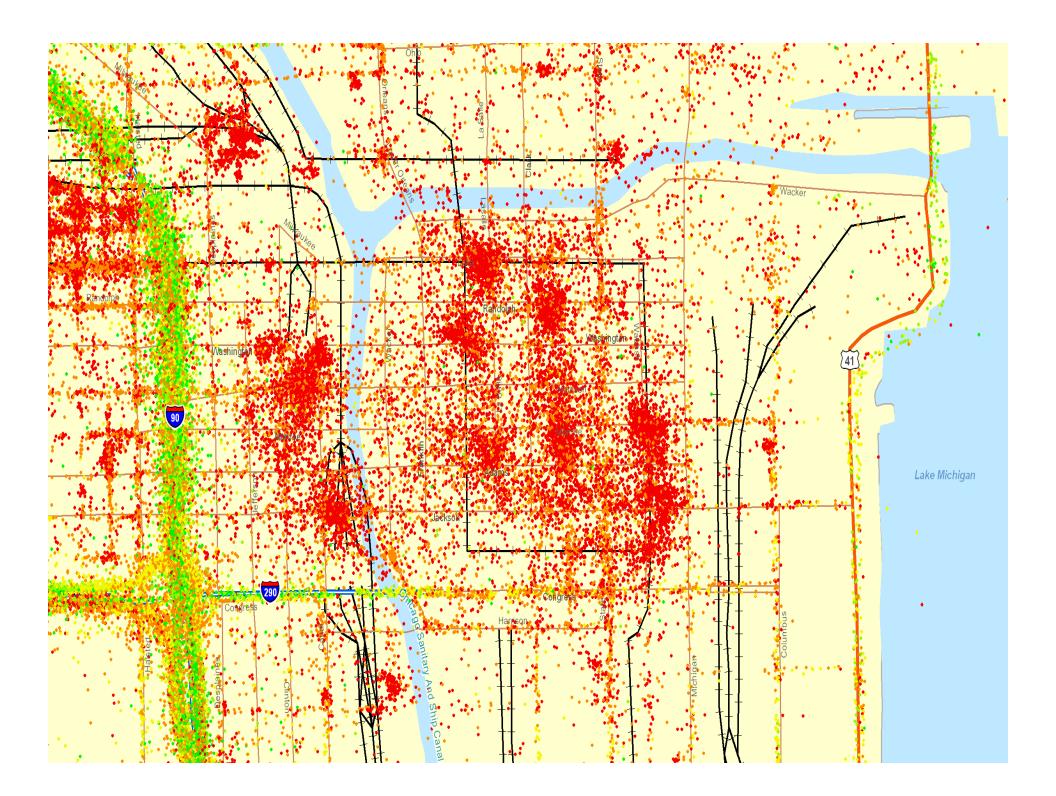


State to State Flows
(Tons)
0-1,000,000
1,000,000-5,000,000
5,000,000-10,000,000
More Than 10,000,000









Top Research Priorities

Measuring the Impact of Shipper Requirements/Productivity Initiatives on Safety Outcomes

- Shipper demands can drive carrier safety decision making – often causing carriers to short-change safety to remain competitive
- Research will examine and explore "cost of productivity"

Measuring the Safety Impacts of Congestion

- Increase understanding of types/severity of crashes involving large trucks occurring in congested conditions
- Develop countermeasures to mitigate congestion-related safety consequences



American Transportation Research Institute

www.atri-online.org

Dan Murray dmurray@trucking.org

