Integrating Logistical Data

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The Data Center
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Transportation leadership you can trust.
18th Century/Sail Era
Colonial economies were built on water transport; it cost as much to move a ton of goods 30 miles inland as across the Atlantic; 2 out of 3 settlers lived within 50 miles of the Atlantic coast; coastal and Atlantic trade dominated.
19th Century/Rail Era
Regional economies were built on rail technology that freed business and industry from ports; east-west rail lines were built to follow development of the Midwest and West; domestic trade dominated.
20th Century/Truck Era
National economy was built on truck and highway technology that freed business and industry from rail terminals; an east-west and north-south Interstate highway grid was built to connect cities and regional economies; Pacific and Gulf trade expanded
21st Century/Information Era
Global economy is being built on information, telecommunications, and low-cost, long-haul transport by water, rail, and air; north-south NAFTA trade is expanding rapidly.
Freight Tons, Value, and Ton-Miles by Mode 2002

Average Annual Daily Truck Traffic
1998

Source: FHWA Freight Analysis Framework
Total Logistics Cost
Percentage of U.S. Gross Domestic Product

U.S. Freight Tonnage Forecast
1998 to 2020

With moderate economic growth (about 3 percent CAGR), import/export freight tonnage could double and domestic freight tonnage could increase by about 60 percent.

Source: AASHTO Freight-Rail Bottom Line Report, 2003 (prepared by Cambridge Systematics, Inc.)
Vehicle Miles of Travel and Lane Miles
1980 to 2003

VMT Index/Lane-mile Index (1980 = 100)

Source: Federal Highway Administration, Highway Statistics

Current Dollars (in Billions)

- Average Annual Gap to “Maintain” = $38 billion
- Average Annual Gap to “Improve” = $92 billion

Estimated Highway and Transit Program Levels and HTF Account Balances Under the Administration’s Revised SAFETEA Proposal (Assuming Level Funding After 2009)

Current Dollars (in Billions)

Congested Highways
1998

Source: Federal Highway Administration Highway Freight Analysis Framework data
Potentially Congested Highways 2020

Source: Federal Highway Administration Highway Freight Analysis Framework data
Highway Speeds – Truck Probes

Corridor Data Based on March 19, 2003
From 12:00pm - 4:00pm PST
Truck Speed Calculation Based on 50-mile increments

Corridor's included in analysis are (I5, I10, I45, I65, I70)

Source: American Transportation Research Institute for FHWA, Travel Times in Freight Significant Corridors Project.
Truck Congestion Bottlenecks
Annual Truck Hours of Delay at Urban Highway Interchanges, 2004

Oregon-Washington Origins and Destinations for Truck Freight Crossing the I-5 and I-205 Bridges at Portland-Vancouver

With Tonnage of Freight on Truck Routes Used to Access Bridge

Note: Commodities shipped to or from British Columbia are assigned to Whatcom County

Volume of Truck Freight on Routes Used to Access I-5 and I-205 Columbia River Bridges, 1998, All Commodities

Source: Cambridge Systematics based on Reebie Associates TRANSEARCH data, 1998
Annual Congestion Costs
85 Metropolitan Areas

Source: Based on data reported by Texas Transportation Institute (TTI).

Annual Costs (in Billions of 2002 Dollars)

- Very Large Urban Areas
- Medium Urban Areas
- Large Urban Areas
- Small Urban Areas

Source: Based on data reported by Texas Transportation Institute (TTI).
2003 Congested Roads In Georgia

Congestion Level

- **Moderate**
- **Severe**

Source: Cambridge Systematics based on Georgia DOT and Atlanta Regional Commission data.
Highway Speeds – Automobile Probes

Source: Cambridge Systematics based on Indiana DOT and Indianapolis MPO data.
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