Environmental Benefits of Transportation Planning & Future Freight Policy

AAPA Energy and Environment Seminar
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Environmental Benefits of TransportationPlanning & Future Freight Policy

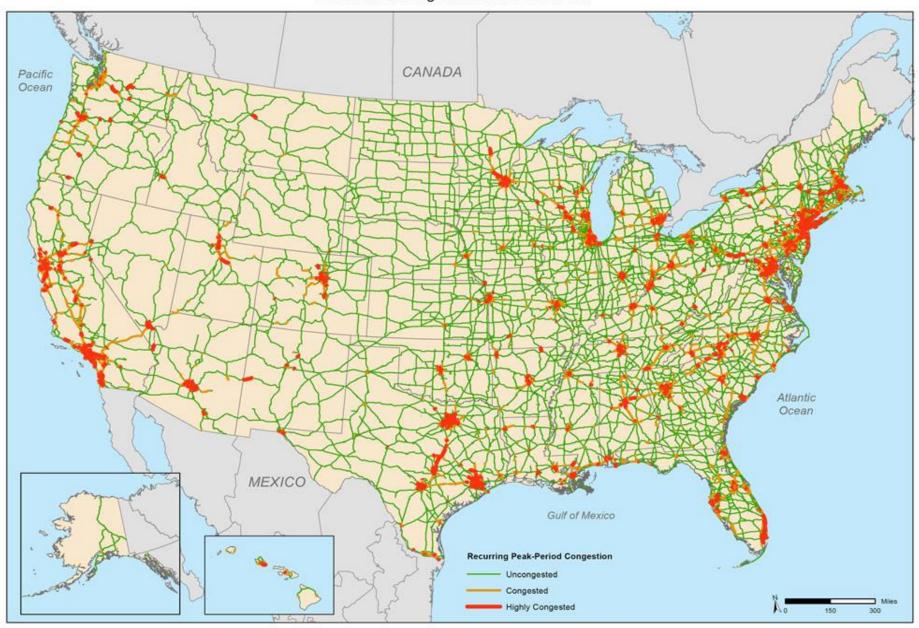
Bill Jones

Dan Yuska, MARAD

Meg Patulski, U.S. EPA

Heather Wood, Virginia Port Authority

Peak-Period Congestion on the NHS: 2011



Notes: Highly congested segments are stop-and-go conditions with volume/service flow ratios greater than 0.95. Congested segment have reduced traffic speeds with volume/service flow ratios between 0.75 and 0.95. The volume/service flow ratio is estimated using the procedures outlined in the Highway Performance Monitoring System Field Manual, Appendix N. NHS mileage as of 2011, prior to MAP-21 system expansion.

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.4, 2013.

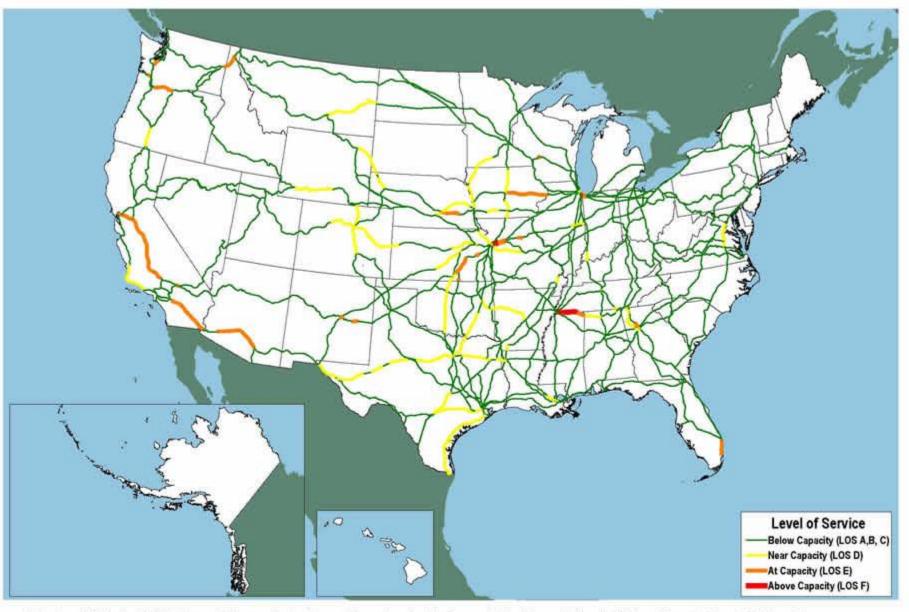
Peak-Period Congestion on the NHS: 2040



Notes: AADTT is average annual daily truck traffic and includes all freight-hauting and other trucks with six or more tires. AADT is average annual daily traffic and includes all motor vehicles. NHS mileage as of 2011, prior to MAP-21 system expansion.

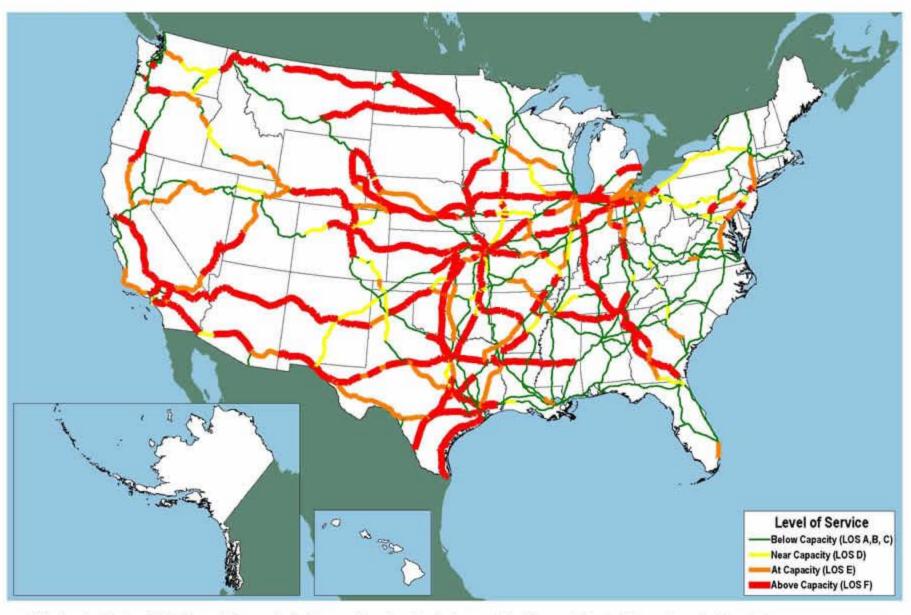
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.4, 2013.

Current Train Volumes Compared to Current Capacity



Note: Level of Service (LOS) A through F approximates the conditions described in Transportation Research Board. *Highway Capacity Manual 2000* period Source: Association of American Railroa *National Rail Infrastructure Capacity and Investment Study*, Jdy prepared by Cambridge Systematics, Inc. (Washington, DC: September 2007), figure 4.4, page 4-10.

Train Volumes in 2035 Compared to Current Capacity



Note: Level of Service (LOS) A through F approximates the conditions described in Transportation Research Board, *Highway Capacity Manual 2000*. Source: Association of American Railroads, *National Rail Infrastructure Capacity and Investment Study*, prepared by Cambridge Systematics, Inc. (Washington, DC: September 2007), figure 5.4, page 5-5.

Major Railroads Investing Heavily

- Over \$15 Billion Total Capital Investment by Major Railroads in 2013
- \$2.3 billion National Gateway connecting East Coast ports to Midwest [CSX]
- \$2.0 billion Heartland Corridor connecting Hampton Roads to Midwest [NS]
- Over \$1.2 Billion invested in intermodal terminals since 2000 [UP]
- \$4.1 billion Inland intermodal facility at Kansas City supports West Coast imports/exports [BNSF]

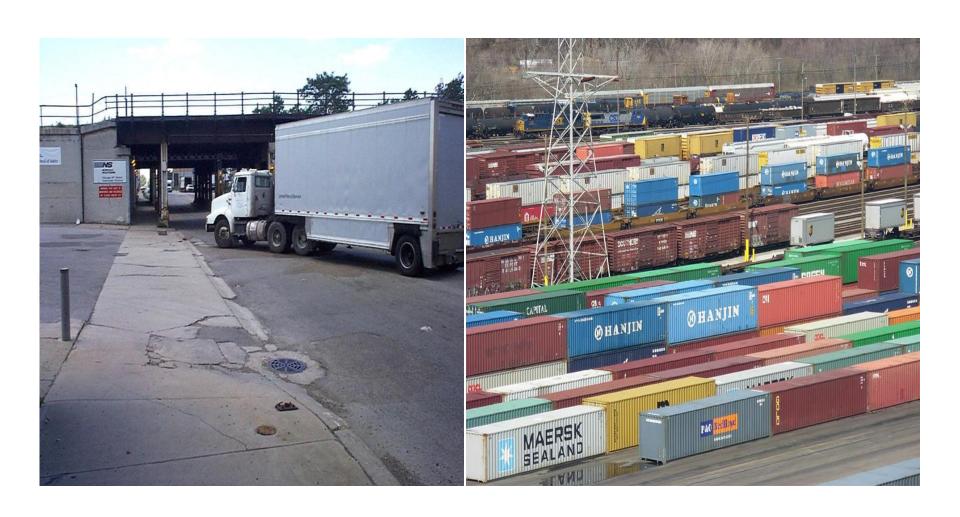


MARINE HWY CORRIDOR EXAMPLES

- James River Barge Line between Norfolk and Richmond, VA (M-64 AMH Corridor)
- Green Trade Corridor between Stockton and Oakland, CA (M-580 AMH Corridor)
- Cross Gulf service between Brownsville, Texas and Manatee, Florida (M-10 AMH Corridor)
- Columbia Coastal Transport Barge Service between Baltimore, MD and Philadelphia, PA and Philadelphia, PA and Norfolk, VA (M-95 AMH Corridor)



The Need for Integrated Collaborative Efforts Intermodal Connectors – *The Last Mile*



Surface Transportation Program Reauthorization







MAP-21 LEGACY

Identify major trade gateways and freight corridors

Expand freight planning at the state and local levels

Promote Public-Private Partnerships (P3)

Continue of TIGER and CMAQ grant programs

Trade Gateways and Freight Corridors

- DOT's First Strategic Objective for Economic Competitiveness: "Improve the contribution of the transportation system to the Nation's productivity and economic growth by supporting strategic, multi-modal investment decisions . . ."
- MAP-21: The U.S. National Freight Strategic Plan shall include "an identification of major trade gateways & national freight corridors that connect major population centers, trade gateways & other major freight generators . . ."
- MAP-21: "It is the policy of the United States to improve the condition and performance of the national freight network to ensure that the national freight network provides the foundation for the United States to compete in the global economy . . ."

State Freight Advisory Committees Increased Port Engagement Opportunities

- MAP-21: U.S. DOT shall encourage each state to establish a freight advisory committee including representatives from the state DOT, local govt, freight carriers, shippers, ports, & freight-related assns
- Advise state on freight priorities & funding needs
- Serve as forum for state freight transportation decisions
- Communicate & coordinate regional priorities
- Promote public & private sector information sharing
- Participate in development of a statewide freight plan



Enhancing Local Planning

- FHWA recently proposed revisions to the regulations governing the development of metropolitan transportation plans and programs for urbanized areas, State transportation plans and programs, and the congestion management process.
- Comment period closes in October.



MPO-Port Collaboration







Puget Sound Regional Council



Philadelphia Regional Port Authority











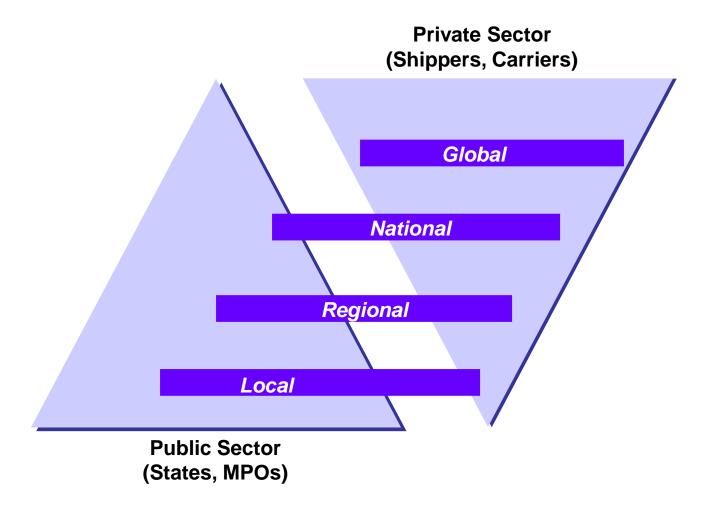






Freight Transportation Perspectives

State and MPO focus is regional and local; private sector focus is increasingly national and global



Source: FHWA

Significant Differences in Objectives & Perceptions can Impede the Privatization/Concession Process

Public Sector

Objectives

- Access capital financing
- Enhance productivity & efficiency
- Maximize competition

Common Perspectives

- Infrastructure drives value
- Maintaining control is critical
- Mandatory capital improvements key
- Minimizing downside (initial payments) & sharing in upside is both fair and necessary

Private Sector

Objectives

- Acceptable risk adjusted financial return
- Balanced competition & transparency, consistent rules

Common Perspectives

- Business drives the value
- Investor bears disproportionate risk
- Market should drive capital investment
- Upside value should accrue to investor & be commensurate with risk

Source: Rich Biter, Florida DOT P3 Workshop

Privatization/Concession Port Examples

- Port of Jacksonville/MOL/Tra Pac Partnership on Container Terminal at Danes Point
- Port of Corpus Christi La Quinta Trade Gateway Marine Terminal
- Port of Oakland Outer Harbor Terminal Area
- Port of Portland--Public Private Partnership for Operation and Management of Terminal 6
- Maryland Port Administration--Seagirt Marine Terminal
- Alabama State Port Authority--Garrows Bend Intermodal Terminal

Transportation Investment Generating Economic Recovery (TIGER) Grants

- Ports are eligible for funding along with hways/bridges, transit & freight/passenger rail
- FY13 -- Port-Related Projects received \$104
 million out of a total allocation of \$474 million
- FY14 -- Seven port-related projects received 13% of the total \$584 million allocation; 5 freight rail and several port related regional planning grants also awarded

Congestion Mitigation and Air Quality (CMAQ)

- Nearly \$30 billion invested in 28,000 projects since 1992; \$2.23 billion in FY14
- Diesel emission reduction projects weren't made a funding priority until 2005
- Are Ports and goods movement projects getting their fair share of funding?
- Given the cost effective opportunities to improve air quality & reduce congestion, ports can make a strong case for additional funding.

CMAQ: PORT GRANT EXAMPLES



> Shorepower





Drayage Truck Replacement





- Drayage Truck Replacement
- Container Barge Service



Tug Repowers

SUMMARY

- Participate on State and Local Freight Advisory Committees
- Work w/partners to identify and prioritize last mile projects
- Push for increased \$\$\$ from CMAQ and TIGER
- AAPA is a great resource and advocate, esp. on National policy issues (e.g., MAP-21 reauthorization)



QUESTIONS?

