Marine Transportation Infrastructure: Investing In Our Future

By Sean T. Connaughton

September 24, 2008
Why Invest In Marine Transportation Infrastructure?
U.S. Trade and Gross Domestic Product

Source: U.S. Department of Transportation based on U.S. Department of Commerce data
U.S. Port Container Traffic (projected to 2037)
Growth of Intermodal Trade Flowing Through U.S. Ports
FEDERAL INVESTMENT LAGGING
Trust Fund Surplus Skyrocketing

Sources: AAPA, Budgets of the United States, Energy and Water Development Appropriations Acts, MARAD, and the Corps of Engineers.
Challenges To Infrastructure Investment
Decentralization and Fragmentation

- Federal Leadership
  - Transportation Policy And Funding
- Regional Coordination
  - Major Corridor Infrastructure
  - Road And Rail Capacity Constraints
- State and Local Interests
  - Planning
  - Community And Land Use Issues
Waterside Challenges

- **Dredging**
  - Larger Vessels and Increased Trade Require Deeper and Wider Channels
  - Maintenance dredging is falling behind in many ports. The Harbor Maintenance Trust Fund must be used to address this backlog

- **Locks and Dams**
  - Investment and Modernization of the Nation’s Lock System is essential to the increased movement of commodities on America’s Marine Highway
  - Inland Waterways Trust Fund Declining Since 2002

- **Navigation Systems**
  - Maintenance and Upgrade Requirements
Environmental Concerns

- **Growing Green**
  - Environmental excellence is needed in every segment of the MTS to protect the environment and alleviate public concerns

- **Expedited, Streamlined Environmental Processes at the Federal, State and Local Levels**
  - Improve collaboration between industry stakeholders, government agencies and the concerned public

- **Conflicting Rules And Regulations**
  - Federal Regulations
  - State Regulations
National Defense Challenges

- National defense requirements for surge sealift must be planned for and provided in America’s commercial ports, particularly those designated as Strategic Ports.
- Commercial cargo growth makes it difficult for Strategic Ports to retain adequate infrastructure for military deployments.
- National defense requirements for ports will likely not be provided by ports at their sole expense.
Financing Needed Infrastructure
Where We Are
Infrastructure Financing

- **Port Expenditures**
  - $30 Billion 1946-2005
    - $500 Million Per Year During 59 Year History
    - $1.627 Billion Per Year 2001-2005

- **Port Investments – Traditional**
  - Local Taxes and Bonding Authority
  - Subsidies and Other Federal Support
  - Dredging Support
  - Private Sector Investments

Note: In 2006, 1.8% of total represents Federal capital spending for water transportation infrastructure
Infrastructure Finance (cont.)

- Port Investments – Non-Traditional
  - There should be consideration of a national framework for financing port and MTS expansion.
  - Increase Private Sector Investment In MTS Infrastructure
  - Increase Use of Public-Private Partnerships
The Way Forward
Federal Programs and Initiatives

- **Smart Use of Federal Funds**
  - Make MTS infrastructure projects permanently eligible for funding under Title 23 for surface transportation.
  - e.g., Focus on Projects of National and Regional Significance

- **Shift in What to Fund**
  - e.g., Use the “Corridors of the Future” Program as a Foundation

- **Project Selection Criteria**
  - e.g., Use TIFIA Program Selection Criteria
“Corridors of the Future” Program

The Corridors of the Future program selection criteria are:

- Amount of congestion reduction for the project
- National significance (long-term benefits, including economic development, facilitate international trade, and/or improve passenger and freight mobility
- Mobility improvements
- Cost
- Potential to attract private sector participation
- Innovative approach (extra weight for an innovative approach to finance and delivery)
- Contribution to U.S. economic growth
- Benefits to users of the project
- Environmental review process (extra weight given for innovative methods for completing the environmental review process)
Investment Tools

Financing transportation projects within the current fiscal environment include the following:

- Public-Private Partnerships
- User Fees
- Debt Financing
- Use of Tax-Based Revenue
# Public-Private Partnerships

## The Seven Most Popular PPP’s and the Varying Levels of Public or Private Responsibility for Each PPP

<table>
<thead>
<tr>
<th>Public Responsibility</th>
<th>Private Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Bid Build Design Build</td>
<td>Private Contract Fee Services</td>
</tr>
<tr>
<td>Build Operate Transfer (BOT)</td>
<td>Design Build Finance Operate (DBFO)</td>
</tr>
<tr>
<td>Long Term Lease Agreement</td>
<td>Build Own Operate (BOO)</td>
</tr>
<tr>
<td>Long Term Lease Agreement</td>
<td>Build Own Operate (BOO)</td>
</tr>
<tr>
<td>Build Operate Transfer (BOT)</td>
<td>Design Build Finance Operate (DBFO)</td>
</tr>
<tr>
<td>Design Bid Build Design Build</td>
<td>Private Contract Fee Services</td>
</tr>
</tbody>
</table>

The diagram above illustrates the varying levels of public and private responsibility for each of the seven most popular Public-Private Partnerships (PPP’s). Each partnership model (such as Build Own Operate (BOO) or Build Operate Transfer (BOT)) is positioned along a spectrum, with different symbols (such as arrows) indicating the shift from public to private responsibility.
User Fees

- Those who control the infrastructure are responsible for collecting the fees.
- The fees are tied to the specific project and are protected from being diverted to other uses.
- The fees will not result in significant diversion of traffic to other routes.
- The fees are designed such that all users pay a fair share – meaning that, if a project has multiple beneficiaries, each category of its beneficiaries pays an equitable share and no one category is expected to pay for it all.
Debt Financing and Borrowing

- **Private Activity Bonds**
  - used to attract private investment for projects that have some public benefit resulting in reduced financing by allowing private participation in tax exempt facility bonds, while still maintaining the tax exempt status of the bonds

- **State Infrastructure Banks**
  - an umbrella under which a variety of innovative finance techniques can be implemented to offer a renewable source of capital for loans at or below market interest rates for specific types of infrastructure investments

- **Transportation Finance Infrastructure and Innovation Act**
  - a critical tool in the U.S. Department of Transportation’s ability to leverage private sector resources in transportation infrastructure financing by providing Federal credit assistance to major transportation investments of critical national significance
Tax-Based Strategies for Increasing Revenues

Criteria:

- Sufficient Public Support Based on Cost/Benefit Analysis
- Tax Receipts Protection from Non-Transportation Related Projects (i.e. trust funds)
- Dynamic Tax Rate Indexing
Conclusions

- America’s ports and Marine Transportation System are a success story, but face challenges.
- America’s ports and Marine Transportation System are critical to the national economy. Their importance will only grow as globalization continues.
- There is a need for greater Federal leadership to address the Nation’s global transportation requirements.