America’s Marine Highway Initiative

Presented by:
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Trends in Port Growth

• Rapid Growth Has Led to Congestion and Stress on the Intermodal System

• Terminal Delays, Rail Service Problems, Highway Congestion, and Growing Community Concerns About Port Impact on Quality of Life

• Container Ports are Evaluating and Trying a Variety of Approaches
  – Extended Gate Hours
  – Shuttle Trains
  – Virtual Container Yards
  – Enhanced On-dock Rail
  – Agile Port Concepts
  – Short Sea Shipping
Short Sea Shipping

• Three Types of Ocean Service Strategies
  – Coastwise or Domestic Shipping of Bulk Cargo
  – Short-Distance, On-Water Container Moves
  – “Trucking on Water” – Truck Trailers On Barge
Benefits of Short Sea Shipping

- Improved Freight Mobility
- Improved Air Quality
- Reduced Need to Build Roadways & Rail Lines
- Improved Customer Service
- Truck Driver Availability
- Remove Trucks from Congested Roads
- Make Marine Terminal Acreage More Productive
- Provide Economic Development Opportunities
Public Benefits

**CONGESTION MITIGATION & HIGHWAY CONSTRUCTION COST AVOIDANCE**

Highway Capacity Construction Cost Savings

**AIR QUALITY IMPROVEMENT FROM REDUCED FUEL EMISSIONS**

NOx

VOC

Particulate Matter

**DISTRIBUTION CENTER JOBS & TAXES**

Jobs, Sales, Taxes from New Distribution Warehousing Activities

**REDUCTIONS IN NITROGEN OXIDES & ENERGY USE**

The Virginia Port Authority
Logistics Benefits

• Mainline Ship to Barge
  – Avoid Truck Gate Delays, Congestion & Costs
  – Reduced Assessment & Royalty Charges
  – Accelerated Yard Turnover/Terminal Utilization

• Local Delivery
  – Short Distance to Customers’ Premises
  – Local Trucking Available
Logistics Benefits

• Regular Delivery to Feeder Terminal
  – No Chassis Required on Barge
  – No Empty Return Required
  – No Over-the-Road Weight Restrictions
  – Location at Center of Market Close to Customers
Implementation Challenges

- Government Policy & Planning Issues
- Harbor Maintenance Tax
- Jones Act Requirements
- Costs of Port Modifications
- Added Handling Costs
- Potential Strains on Port Capacity
- Industry Acceptance
PIDN Trade cluster analysis

- **Dense Trade Cluster:** Hanover, PA & Hanover, MD
- **Worcester & Framingham, MA**
- **Reading, PA & Camden, NJ**
- **Pittsburgh, PA**
- **East Hartford, CT & Springfield, MA**
- **Rochester, NY**
- **Albany, NY**
- **Buffalo, NY**
- **Syracuse, NY**

**Total:** 2,332,696 TEUs

**PONYNJ Immediate Trade Region:**
- 0 - 500 TEUs: 786,047
- 501 - 5,000: 590,598
- 5,001 - 10,000: 495,557
- 10,001 - 15,000: 125,860
- 15,001 - 20,000: 92,230
- 20,001 - 900,000: 75,549

**PONYNJ % Share:**
- 25.2%
- 38.4%
- 44.5%
- 29.9%
- 40.0%
- 48.3%
- 30.3%
- 40.8%
- 51.2%

**Total % Share:** 35.2%
**PIDN Business Arrangement**

- **THE PORT AUTHORITY OF NY & NJ**
  - Contract $25/box payment ($5/box repayment after break-even)
  - Stevedoring Rate (Near or at cost)

- **Federal Marine Terminals**
  - TRAC Lease

- **Columbia Coastal Transport**
  - Sole Source

- **New York State Dept. of Transportation**
  - Federal CMAQ funds (80% reimbursement of net deficit)

- **NY/NJ Terminal Operators**
  - Stevedoring Rate (Near or at cost)

- **Tug Company**
  - Contract (Bid)

- **Ocean Carriers**
  - Price competitive with trucks

- **Shippers**

**Price competitive with trucks**

**Stevedoring Rate (Near or at cost)**

**Sole Source**

**Contract (Bid)**

**Federal CMAQ funds (80% reimbursement of net deficit)**

**THE VIRGINIA PORT AUTHORITY**
Keys to Success

• Must Compete on Price with Truck Alternatives – *On Their Terms*

• Remove Costs from the System to Enhance Viability
  – HMT, Lift Costs, etc.

• “Critical Mass”, “Network Economies” are Crucial – Must Have Equipment At Feeder Port
  – Carrier Boxes, Per Diem Arrangement
  – Chassis Pool
  – Free Time for Empties
  – Match Loads to Use Empties

• Communicate Savings to Entire Decision Chain
Keys to Success (Cont.)

• Identify & Exploit Market Niches
  – Fumigation of Logs, Heavy Cargo, Project Cargo, Soybeans

• Knowledgeable, Flexible, Persistent Intermodal Operator is Critical

• System Optimization Through Advanced Information Systems

• Trucking Industry Plays Crucial Role

• Targeted, Predictable, Reliable Government Policy in Support of Cross-Jurisdictional Implementation
Recommendations

1. Establish Hampton Roads to Richmond Barge Operation Pilot Project (*VDOT*)

2. Establish Task Force to Explore Potential for Additional Barge Services (*VPA*)

3. Establish Task Force to Evaluate Potential for Intraharbor Barge Service in Hampton Roads (*VPA*)

4. Consider CMAQ Funds for Pilot Project to Test Intraharbor Barge Service Concept (*VDOT*)

5. Educate MPOs About Congestion Reduction Benefits of Waterborne Transportation (*VDOT*)
Recommendations

6. Negotiate Special Labor Rates & Gang Sizes for Barge Operations (VPA)

7. Actively Advertise Hampton Roads to Richmond Barge Service (VPA)

8. Explore Incentives to Encourage Short Sea Shipping (VDOT)

9. Establish a Task Force to Identify Customers for Short Range Barge/Ferry Services (VPA)