Short Sea Shipping: Water Highways
SHORT SEA SHIPPING
A DEFINITION:

“The movement of goods and people by water without crossing a major ocean”
WHAT IS SHORT SEA FOR NORTH AMERICA?

DOMESTIC MOVES VS. THE 40 FOOT CONTAINER
WHY DOMESTIC OVER INTERNATIONAL?

92% OF ALL FREIGHT ON OUR HIGHWAYS MOVES IN 53’ DOMESTIC TRAILERS
The Problem

Strangulation of the Region’s Commercial Highway System

- Bi-state highways b/w NJ & NY moved > 250 million vehicles in 2002
- The number of trucks is expected to double in the next 10 years
- Hudson River Crossings are strangulating New England Economy
- Negative Impact on Cost of Living, Open Space, Air Quality, Manufacturing, Sustainability
Coastwise Coalition: “16 million more TEUs - 11,000 truck loads each day on the highways”

Driving Forces

• Highway Congestion - Can’t expand Highways
• Unpredictability
• Need for “Just in Time” Service
• Trade Activity will Double in Next 10 Years
• Rail – Only Long Haul
WHO UNDERSTANDS THIS ?????
TIME CHANGES EVERYTHING!

Acceptance Index

Time
WHAT IS PLANNED?

- The Freight Diversion Model
- The Short Sea Port of the 21st Century
Port Pairing
Specific Links that Tell a Story

- What Moves
- At What Cost
- Catchment Area Size
- Volumes
The Model

Today

Tomorrow

150
200

50
100
150
200

Today Tomorrow
Prospective Cargo Hinterlands for Short Sea Shipping Traffic Between Jacksonville and the Bristol County Ports

Source: Global Insight Transearch Database
Shipper Preferences

% Differential Cost

% Diversion

Bayonne

Jacksonville

Break Even Diversion

7%

% Differential Cost

5 10 15 20 25 30 35 40
The Mathematical Model & What it Predicts
Assumptions: Service Hurdle/ Cost Hurdle

DECISION TREE

Service Hurdle

> 2 Days

≤ 2 Days

NO!

Cost Hurdle

≤ Cost

> Cost

Will Consider!!!!

NO!

To Limit Model to Workable Numbers
The Mathematical Model
What it Predicts

Elastic Demand

Change in Cost for one Mode (Truck)

Results in a Corresponding Change
Not necessarily Linear in Other Mode (Short Sea)
IN SUMMARY

- Very difficult to reach breakeven on short hauls (< 300 miles)
- Demand is Elastic – Shipper (trucker) preference can and will change in the right economic climate
TO OUR SHALLOW DRAFT MUNICIPAL PORTS:
BE A SCOUT, BE PREPARED

THE INEVITABLE: Short Sea is Coming

A NETWORK IS ONLY A NETWORK
W/ BEGINNINGS, ENDINGS AND NODES
Architectural Rendering of the Fall River Multi-use Facility
Rick Armstrong
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