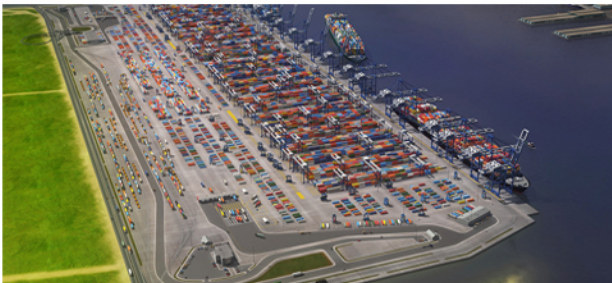


64 Express

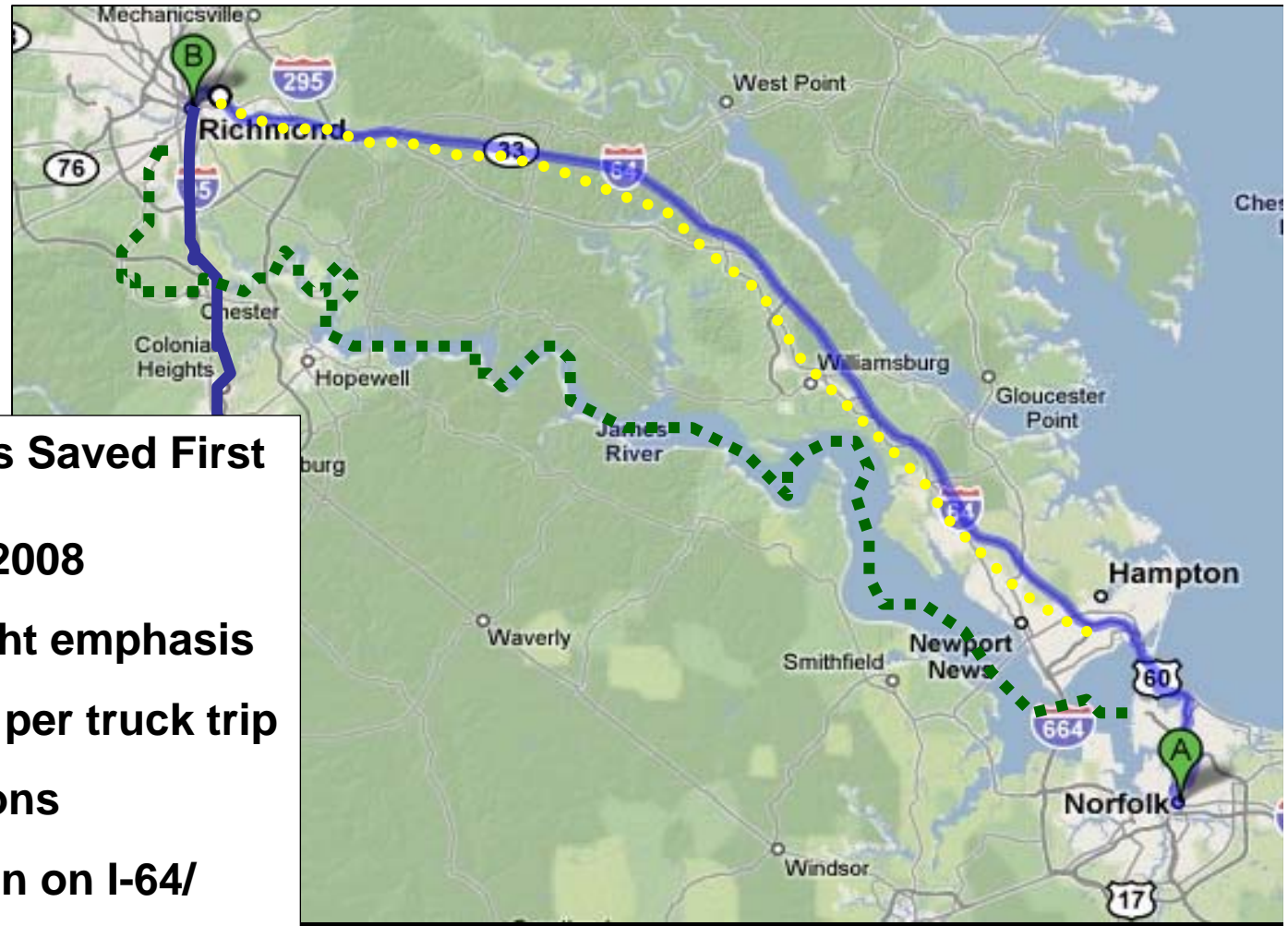
Jeff Keever
Deputy Executive Director
Virginia Port Authority
March 17, 2010



- Owned and Operated by James River Barge Line, LLC, a Norfolk Tug Holding
- Virginia's Green Transportation Solution



64 Express Route



- **12,000+ Truck Trips Saved First Year of Operation**
Service began 12/2008
- **Oversize/Overweight emphasis**
- **30+ gal. fuel saved per truck trip**
- **Emissions reductions**
- **Relieves congestion on I-64/ Hampton Blvd**
- **Public/Private Partnership-**
\$2.3m from Richmond MPO

Convenient Access to Shipping Lines

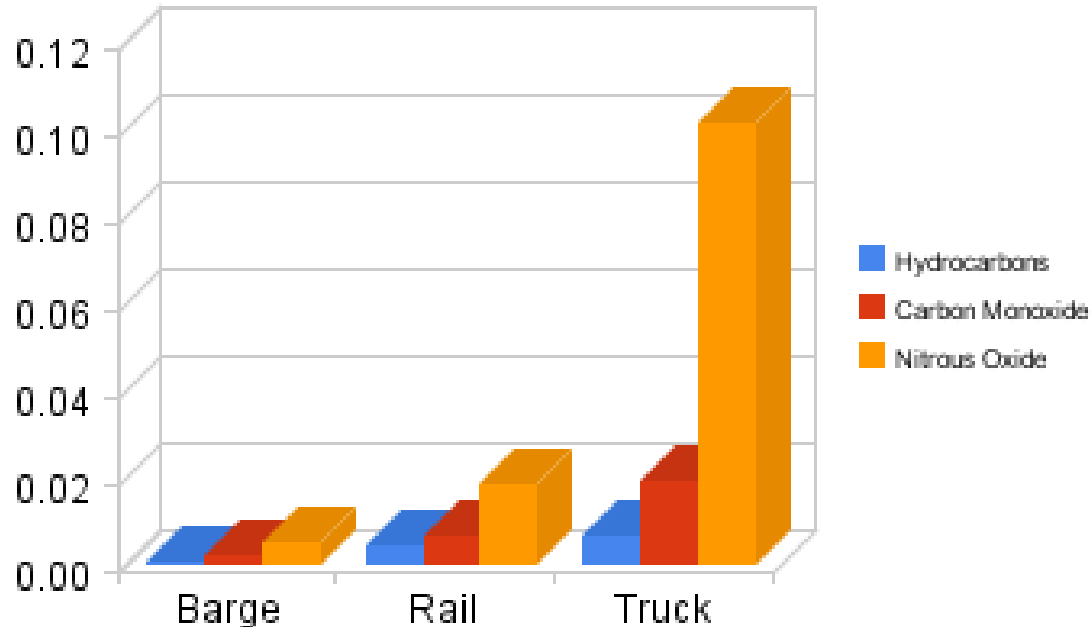


Why The 64 Express Makes Sense



- Environmental Responsibility
 - Tugs used in Barge operation burn ultra low sulfur fuel
 - Reducing road traffic reduces hydrocarbons and Nitrogen Oxide emissions
 - Every container moved via barge reduces diesel fuel consumption by 31 gallons

Pounds of Emission Per Ton Mile



Hampton Roads Gateway & Corridors



2005: 2 Million TEU **2020: 4.4 Million TEU**
120% Increase in 15 years = 2.4 Million more TEU, or about
1.4 Million More Truckloads in 2020



- **Economy:** International trade drives the U.S. economy but congestion represents a serious impediment. Transportation should enable trade.
- **Environment:** transportation produces 33.8 percent of U.S. carbon monoxide fossil fuel emissions. From 1990 to 2003, transportation greenhouse gas emissions increased more than twice that of any other sector.
- **Energy:** Gas prices reached \$4.00 per gallon. Gas prices are once again increasing

Advantages of the Marine Highway



- **Gridlock:** A single vessel can shift over 450 trucks or 225 rail cars from road and rail corridors to underutilized waterways.
- **Environment:** On average, inland vessels generate 38% less greenhouse gases than truck and 28% less than rail per ton-mile.
- **Energy:** Inland vessels move one ton of freight 370% further than trucks (576 miles compared to trucking 155 miles) and 139% further than rail's 413 miles.
- **Safety:** Inland marine transportation is by far the safest versus truck or rail.



Mitigating Road Construction Cutbacks



Funding is tight and we struggle as a country with an increasingly aged and therefore demanding infrastructure.

The 64 Express comes just in time to allow a mode shift from truck to barge and that shift will help reduce highway congestion between Richmond and Hampton Roads.

Intra-Harbor Barge Service



Between
NIT – PMT
107,800
Truck
Trips/yr.

Environmental Defense Fund



In it's first year of operation
Clay 4 the 64 Express outpaced
 expectations by 60%

Shipping Case Study #2
64 Express, Virginia

The James River Barge Line started the "64 Express" a nighttime tug/barge container service between the ports of Richmond and Hampton Roads. The tugs used for this operation run on low sulfur diesel (ULSD) in IMO-compliant Tier 2 engines, and are operated by the Barge Company—an innovative, environmentally conscious newcomer to the tug and barge business.

The coastal highway helps moderate congestion in Hampton Roads and along the Interstate 64 corridor, which can be a bottleneck for international cargo shipments. The service moves approximately eighty 40-foot containers each week, and the group plans to grow the service to one or three times weekly in the future.

Environmental benefits

At this time, greenhouse gas and criteria pollutant reductions have not been determined. However, it appears that the 64 Express does reduce emissions and congestion. The service runs at night, and without sunlight the components in diesel emissions produce less ground-level ozone.

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Courtesy 64 Express

, 2008.

- ...ed to trucking, every container moved by barge eliminates around 25 gallons of fuel emissions.¹⁰
- Once the service begins three-days-a-week operation, fuel savings will be much higher.

Funding

The 64 Express is supported through a grant from the Richmond metropolitan planning

64 Express

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