

AAPA Facilities Engineering Seminar & Expo

Wade M. Battles

New Orleans
Nov 9, 2011

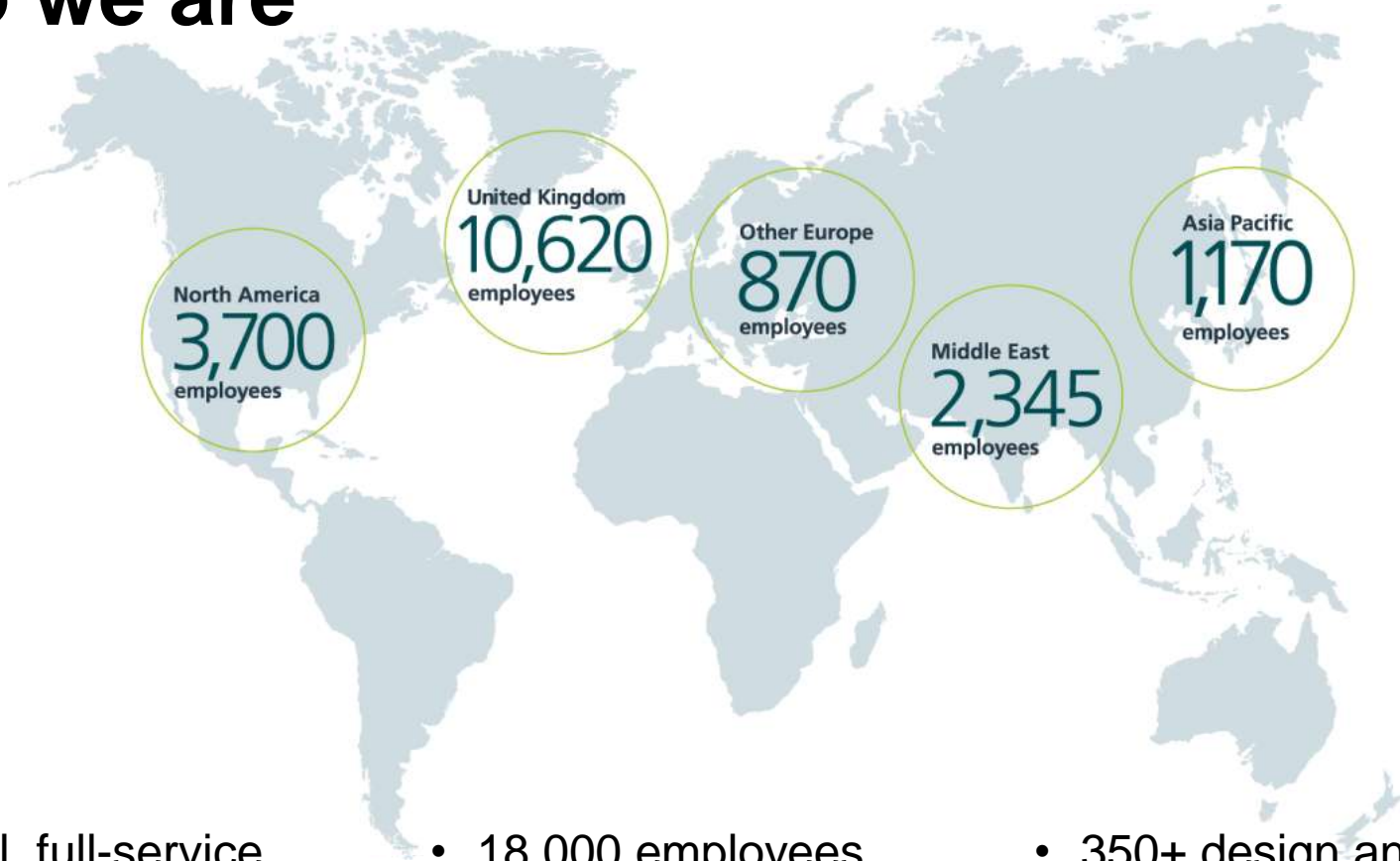
Opportunities for Port Growth Through Marine Highway Development

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ATKINS

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Who we are

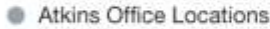


- Global, full-service professional planning, design, and construction consultant of choice
- 18,000 employees worldwide
- 85% of business from repeat clients
- 350+ design and personnel awards for excellence and innovation
- 65% of ACASS ratings “Exceptional” or “Very Good”

Who we are: ENR rankings

Top 500 design firm	11
General building	29
Government Offices	7
Transportation	12
Airports	15
Highways	9
Marine and Port Facilities	10
Mass Transit and Rail	18
Power	33
Wind Power	9
Nuclear Power	22
Transmission and Distribution Plants	18
Offshore and Underwater Facilities	14
Pipelines	21
Sanitary and Storm Sewers	17
Sewerage and Solid Waste	26
Transmission Lines and Aqueducts	12
Water Supply	25
Water Treatment & Desalination Plants	16
Wastewater Treatment Plants	24

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- 80 offices in U.S. coast to coast
- 11 offices in Texas
- 350 employees in Houston

- Port and maritime clients

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INEOS

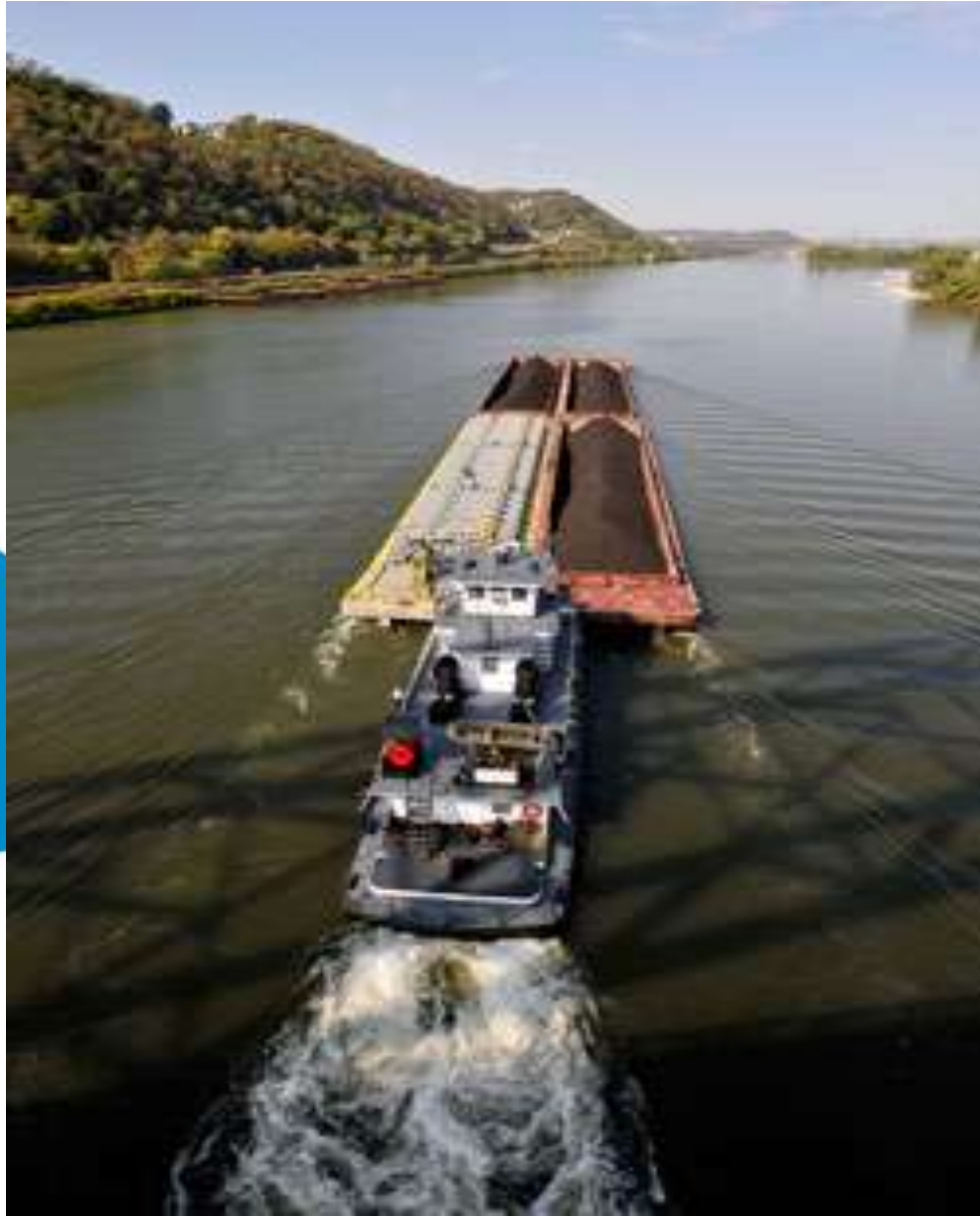


What we do

www.atkinsglobal.com

- Water and Environment
- Terminal Master Planning
- Asset Management
- Project Management
- Construction Management
- Port Security and Safety
- Port Automation
- Environmental Science and Permitting
- Marine Structural Engineering
- Marine Structural Inspection
- Wharf Repair and Rehabilitation
- Rail Infrastructure Design and Rehabilitation

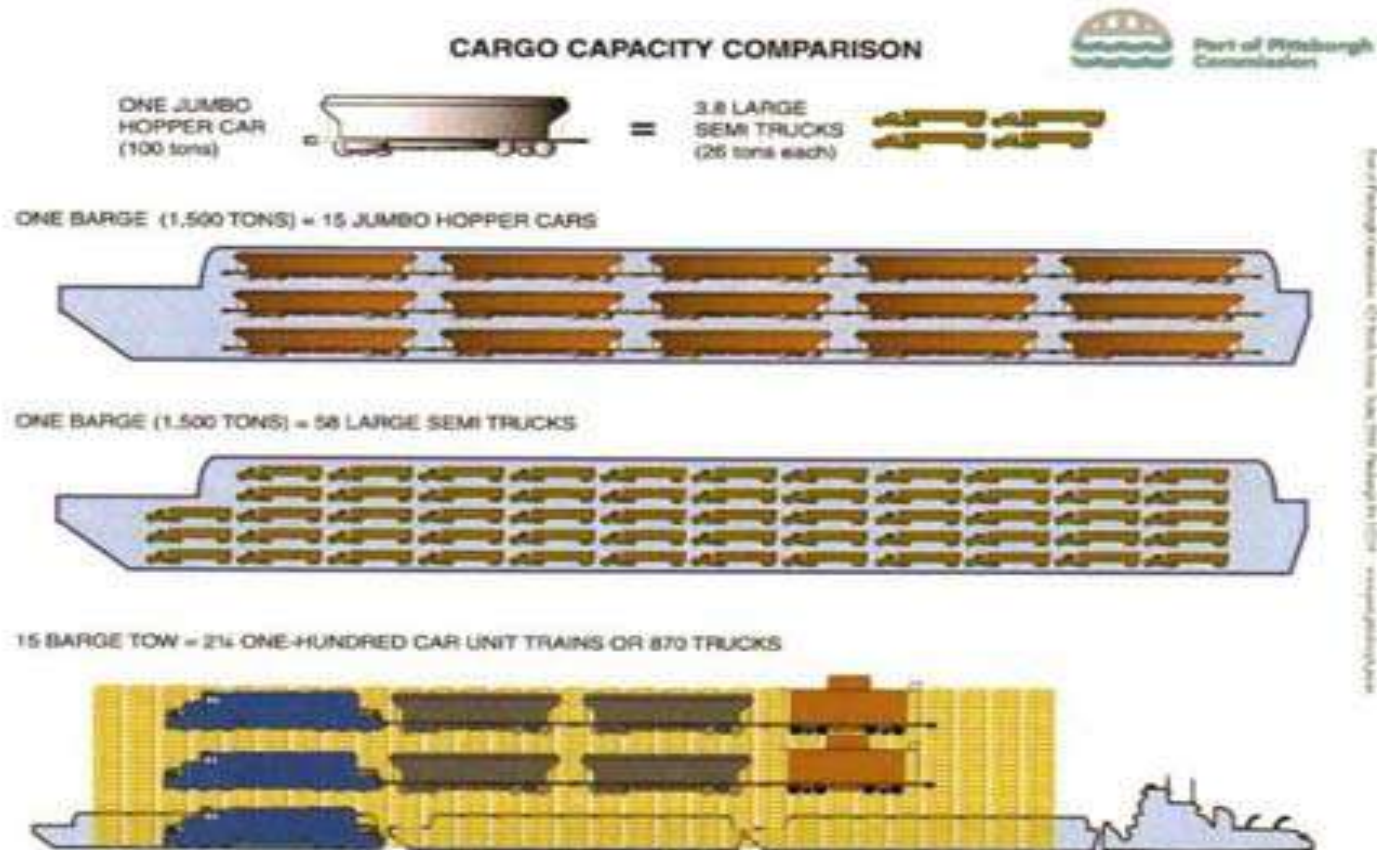
US Inland Barge Traffic



Building an Alternative Transportation Network



Cargo Capacity Comparison



Click on Cargo Comparison Chart to enlarge Chart.



Inland Waterway System Barge Operations

- 38 states served
- 12,000 miles of
- Navigable waterways
- 275 locks
- 818 million tons (2004)
- ½ nations grain and oilseed exports
- 20% of all coal for utility power plants
- 22% of all domestic petroleum shipments



Present US Waterway Volumes

(2004)

Waterway	Tonnage (x 000)	Trip Length miles
• Mississippi	• 270,270	569
• Ohio	• 249,213	240
• GIWW	• 115,768	160
• Tennessee	• 53,225	109
• Cumberland	• 23,418	108
• Columbia/Snake	• 13,129	465





Container on Barge



**Is it a Sustainable
Alternative to Truck
and Rail?**



Study After Study ! Over 100 Studies

- Container on Feeder Barge Service Study – Connecticut DOT 2001
- Container on Barge Pre-Feasibility Study - Port of Pittsburgh – 2003
- Feasibility of COB Along the Texas Gulf Coast Center for Trans UT Austin 2003
- Cascade Gateway Study – Transport Canada 2004
- Short Sea Shipping in the Columbia/Snake River System Pacific NW Waterways Association 2005
- Container on Barge for Missouri Waterways - Missouri DOT – 2006
- Container on Barge Concept Paper Southeastern Ohio Port Authority 2008
- Mississippi Container on Barge Marine Highway Intermodal Supply Chain Mississippi DOT - 2010
- Container on Barge – Heart of Illinois Regional Port District - 2009
- Container on Barge Tenn/Tombigbee Waterway Port of Itawamba - 2011



COB Benefits

- Most efficient transportation mode
- Greater fuel efficiencies
- Less air pollution
- Less highway wear & tear
- Reduces highway and rail congestion
- Reduced urban impacts
- Transportation cost savings
- Less weight restriction
- Hazardous cargo friendly
- High and wide cargo capable
- Project cargo compatible
- Reduced gate paperwork
- Great additional capacity
- Expand the reach of small ports

- Sufficient critical mass cargo volumes
- Jones Act restrictions
- Adequate & dependable marine equipment
- Maintenance of river and intercoastal waterways
- River conditions
- Slower service
- Maintaining schedule
- Draft restrictions
- Additional port handling
- Destination trucking usually required
- Adequate barge port facilities
- Integrated intermodal supply chain

Challenges

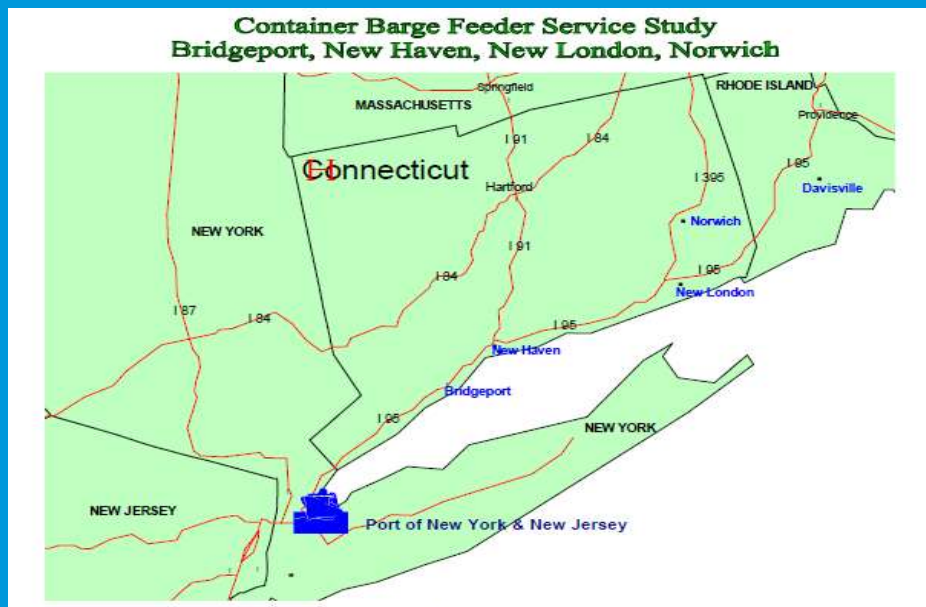


Need dedicated barge ports with:

- Container handling cranes
- Container handling equipment
- Sufficient chassis and or flatbeds
- Sufficient container storage area
- Intermodal connectivity

Port Operations







Success or Failure

Many have tried,
Few have succeeded !



Osprey Line

Weekly service between

Inducement Service to

Houston
New Orleans
Memphis
Baton Rouge

Brownsville
Freeport
Victoria
Beaumont
Lake Charles
Pascagoula

Mobile
St Louis
Chicago
Owensboro
Cincinnati
Pittsburgh

**Ceased operations in
2010**



Columbia Coastal COB Services

- Norfolk VA and Baltimore MD.
- Round trip weekly service
- General cargo service
- Refrigerated cargoes

Other port pairs on
inducement

- Philadelphia PA. and Norfolk VA
- Round trip weekly service.
- Primarily single shipper service
- Service to Freeport Ba. and or Cuba available



Columbia Coastal Transport

Columbia Coastal Transport

Bruce Fenimore

President and chief executive



Despite the economic downturn and its dire consequences for all segments of our industry, things are lining up perfectly for waterborne container barge services linking U.S. ports. Why? Because more shippers and consignees are “going green,” changing the way they do business to reduce their carbon footprint and save energy



Couch Lines Inter-port Barge Operations

- Inner harbor services
- Single shipper or consignee
- Extension of ocean carriers service
- Repositioning of empties
- Project Cargoes
- Concentrated container volumes
- Quick turnaround
- Over highway weight containers
- Oversized cargo
- Hazardous cargos



Tidewater

- Columbia Snake River System
- States of Washington, Oregon, Montana & Idaho
- 465 miles
- 36 ports districts
- 5 terminals
- 51 hours from Lewiston to Portland
- 10 million tons of cargo
- 60,000 containers
- Jumbo barges (274x42x14)
- Petroleum products
- Grain & Agricultural products
- Refrigerated cargo
- Forest products

Can Container on Barge be Sustainable ?





What have we learned ? There are great opportunities but we need -

- Competitive marine equipment
- Cooperation between ports and carriers
- Development of barge port infrastructure
- Exploit inefficiencies in the supply chain
- Commodity mix conducive to COB
- Proper geography & demographics
- Lower value, non-time sensitive cargo
- Adding COB to regular tows
- Defined market
- Labor flexibility

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Thank you