



smart rivers '21

# Challenges Facing Transforming Inland Ports into Integrated Transportation Centers

Bruce Lambert  
Institute for Trade and Transportation Services

Patrick Donovan  
West Virginia Public Port Authority

Lynn Soporowski, PE  
Kentucky Cabinet of Transportation

Mike Tagert  
Tenn-Tom Waterway Council

# Some Questions per Smart Rivers?

smart rivers '21

- Are we using our river port resources in the most efficient manner possible to encourage freight mobility and economic growth?
- Can we connect to other modes?
- Can we support future cargo or vessels?



# Outline

smart rivers '21

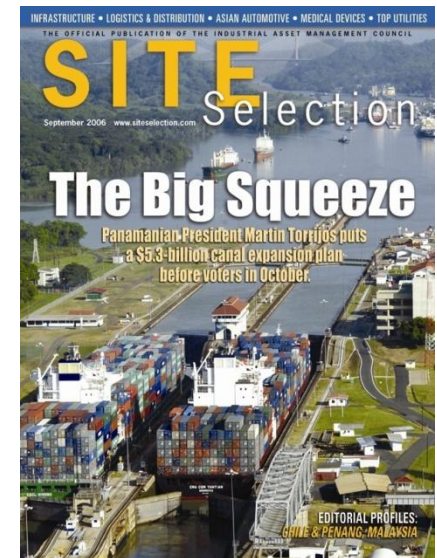
- Trends in Economic Development
- Waterways and Ports
- WV, KY, Tenn-Tom
- Common Elements Going Forward

# Site Selection November 2008 Survey

smart rivers '21

- Ease of permitting and regulatory procedures
- *Transportation infrastructure*
- Existing work-force skills
- State and local tax scheme
- Utility infrastructure
- Land/building prices and supply
- Workers' comp rates
- Flexibility of incentives programs
- Higher education resources
- Availability of incentives

<http://www.siteselection.com/issues/2008/nov/Cover/>



# KPMG: “Bridging the Global Infrastructure Gap: Views From the Executive Suite.”

smart rivers '21

- Senior executives are concerned that the current infrastructure inadequately supports their businesses. Indeed, only 14 percent believe that infrastructure is “completely adequate” in this regard.
- The quality and availability of infrastructure directly affect where businesses locate and expand their operations, according to 90 percent of senior executives surveyed.
- Infrastructure will become more important over the next five years and 77 percent
- of business executives surveyed fear there will not be enough infrastructure investment to support the long-term growth of their organizations.
- Eighty percent of executives want governments to partner with the private sector to finance major infrastructure projects.

<http://www.kpmg.com/Global/IssuesAndInsights/ArticlesAndPublications/Pages/Bridging-global-infrastructure-gap.aspx>

# Trends in Economic Development

smart rivers '21

- Business Park Concept
- Greenfield-Brownfield development
- Clusters versus Growth Poles
- Site Selection Criteria
- Operational considerations
- Integrated Logistic Supply Chain Centers
- Firms locating big facilities with access to transportation infrastructure, not people
- Potential access to alternative energy is discussed (wind, water, solar)

# The Shipper

smart rivers '21

- Demands low-cost, reliable service
- Mode and geographically neutrality
- Wants “just in time” services – does not want or care about your “problems” (carrier or infrastructure)
- Firms outsourcing the “Headaches” of logistics
- No one believes congestion will go away
- Often ignore primarily “freight” infrastructure beyond immediate facility

# Unique Characteristics of Inland Ports

smart rivers '21

- Most are landlord ports – differentiate from private terminals
- Most are operated by State, County or Local Governments
- Economic Development “Catalysts”
- Civic Pride and Competition
- Very capital intensive, but may not be profitable
- Port Authorization extends beyond river’s edge



# So What Is The Range of an Inland Port?

smart rivers '21

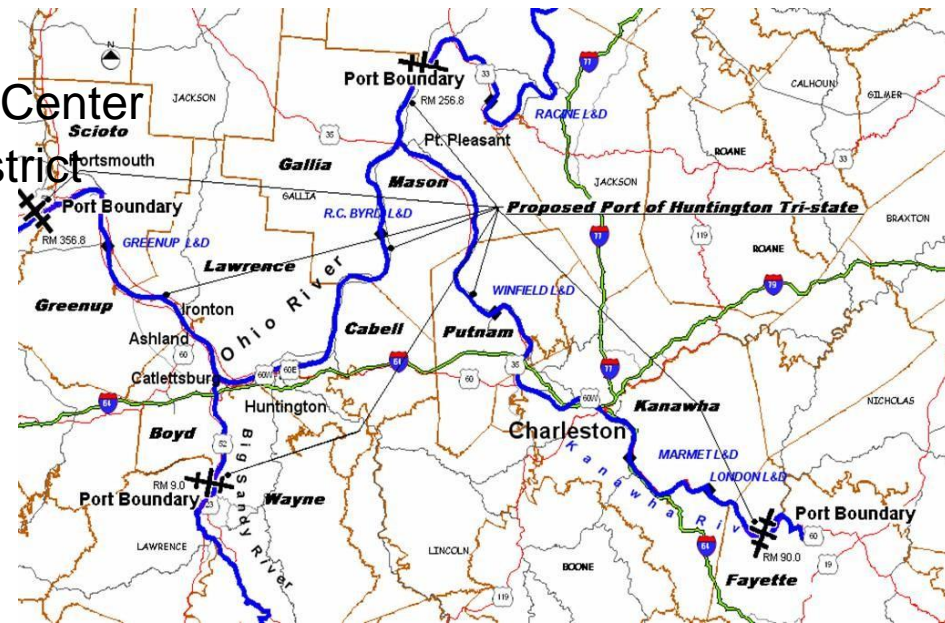
- Various by many different factors:
  - International or domestic cargos
  - System reliability
  - Scale and intermodal connectivity
  - Industrial versus non-industrial use
  - Single user or multiuse facilities
- Range – 0 to 10,000 miles!

# West Virginia Public Port Authority – Mission Statement

smart rivers '21

Develop the potential of intermodalism by combining highway, rail, and water transportation infrastructure to maximize overall economic advantages to business, industry, and the citizens of West Virginia.

Developing a Regional Port  
Jackson County Maritime and Industrial Center  
Kanawha Valley Local Port Authority District  
Buffalo-Putnam Port District  
Cabell-Wayne Port District, Inc.  
Port of Huntington Tri-State  
Weirton Port & Industrial Center



# Kentucky Public Ports

smart rivers '21

## PUBLIC RIVERPORTS IN KENTUCKY



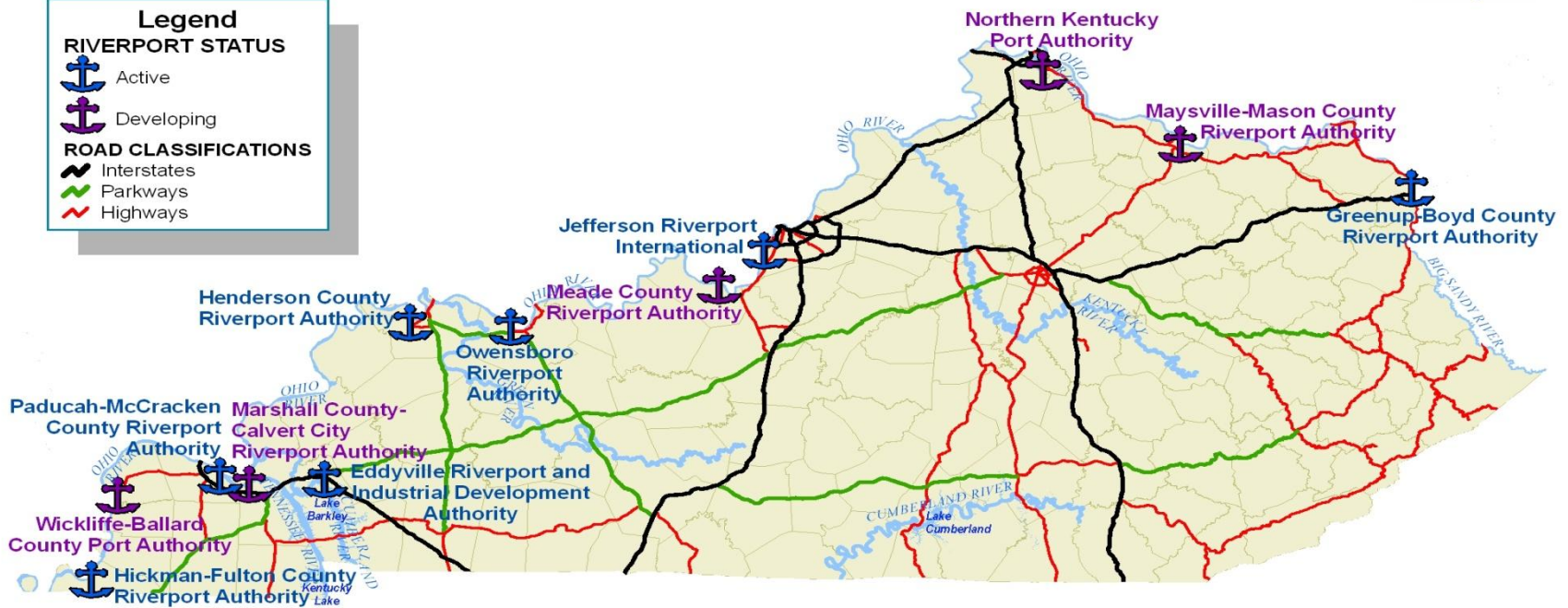
**Legend**

**RIVERPORT STATUS**

- Active (Blue anchor icon)
- Developing (Purple anchor icon)

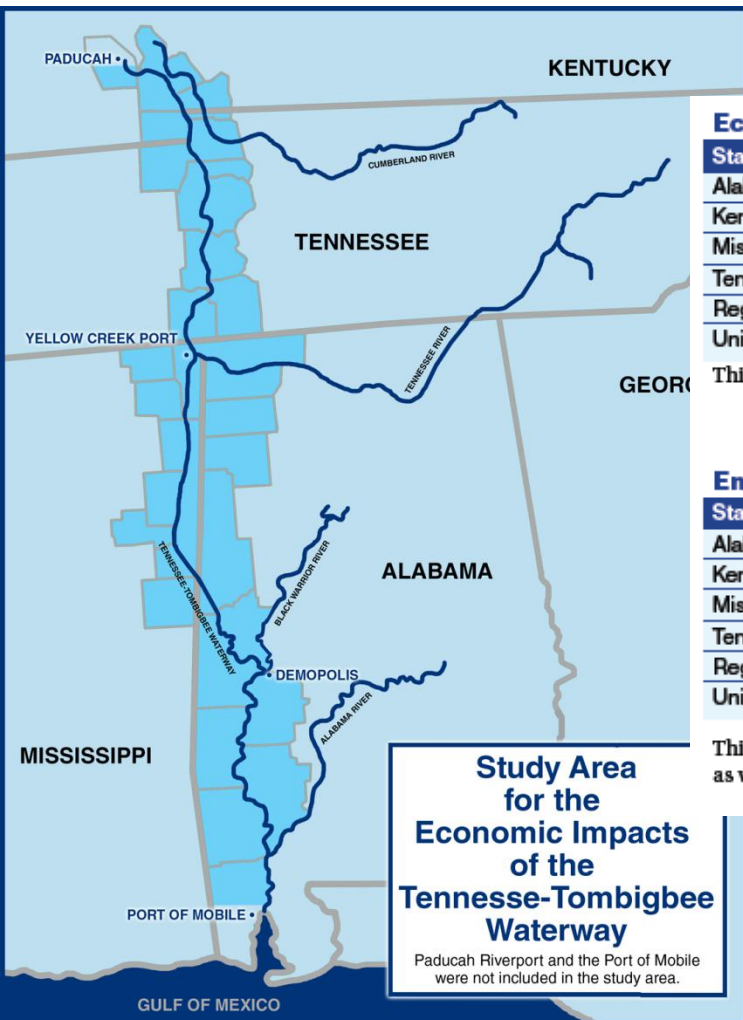
**ROAD CLASSIFICATIONS**

- Interstates (Black line with red and blue stripes)
- Parkways (Green line)
- Highways (Red line)



# Tenn-Tom Waterways Economic Benefit

smart rivers '21



**Study Area for the Economic Impacts of the Tennessee-Tombigbee Waterway**  
 Paducah Riverport and the Port of Mobile were not included in the study area.

## Economic Impact 1996-2008 (in Millions)

State	Direct	Indirect	Induced	Total
Alabama	\$15,217.1	\$550.3	\$718.8	\$16,486.2
Kentucky	\$887.2	\$163.1	\$559.1	\$1,609.4
Mississippi	\$6,854.7	\$1,333.0	\$1,276.6	\$9,464.3
Tennessee	\$2,361.6	\$38.1	\$47.1	\$2,446.8
Regional	\$25,320.5	\$2,093.3	\$2,641.1	\$30,054.9
United States	\$25,320.5	\$5,822.6	\$11,380.6	\$42,523.7

This table shows the impact from private investment and ports operating in the Tenn-Tom Waterway region.

## Employment Impact 1996-2008

State	Direct	Indirect	Induced	Total
Alabama	8,384	3,879	7,567	19,830
Kentucky	8,046	1,201	5,850	15,097
Mississippi	12,145	7,858	13,440	33,443
Tennessee	507	271	493	1,271
Regional	29,191	13,292	27,806	70,289
United States	29,191	29,001	79,471	137,663

This table indicates the number of jobs that were directly and indirectly created based on industry-to-industry transactions, as well as the number of jobs that were created based on employee spending in the local economy.

# Common Elements Going Forward

smart rivers '21

- Information and Education
- Institutional
- Operational
- Financial

# Information and Education – Do They Know Me?

smart rivers '21

- Public Sector –
  - Do Ports provide economic benefits?
  - Are inland ports for navigation only or commercial development?
  - Are these benefits well understood, and if so, by whom?
    - “Invisible part” of system
    - Tie to economic growth not understood
- Private Sector
  - Understand my services, facilities, etc.?

# Institutional – Do People Really Care?

smart rivers '21

- Public Sector
  - Can we move beyond being only a checklist on a scorecard?
  - Can we transform decision makers into agents for change – internalize the debate?
  - Perception of Corporate Welfare
  - Nontraditional participants will be more engaged in debate
    - Kentucky Waterways of the Interim Committee on Transportation
- Private Sector – Want to see partners not conflicts

# Operational – What Does It Take To Get Moving?

smart rivers '21

- Ports are Corridors
- Maintenance not properly developed or conducted
- Reliability and other factors often outside of port's direct control
- People do not understand inland component of port activity
- Timelines are very different



# Financial – Is the Money There?

smart rivers '21

- As public entities, hard to secure funding
  - State and local funding is uneven or even prohibited
  - Can not say what I get back for investment (wetlands, etc.)
  - Scale of investment hard to rationalize
  - Tax receipts versus tax burdens
- Concerns over relationship with private terminals
- Port traffic subject to external fluctuations – no guarantees exist!
- Funding needs differ also – market variability
- Public Private Partnerships

# What Happens After A Project Is Developed?

smart rivers '21

- Improved Operations (no change in fleet or routing, but per movement costs decline and/or reliability improves),
- Change in Routings (realignment of services with existing equipment already in trade),
- Change in the Capacity and Economies of Scale (larger equipment),
- Induced Service or Calls (new equipment enter service),
- Decline in use.

Only improved operations are easy to quantify before the project is built, but the changing in capacity is expected to generate other benefits normally not quantified in base feasibility study.

# Where Are We Today?

smart rivers '21

- Previous capital expenditures lead to economic growth
  - Mature, Reliable, Robust industry
  - Congestion and Maintenance threatening system operations
  - Lock and Dam Replacement is critical
  - Business want to utilize water as an alternative
- Ports as more than points on a river
  - Facilities on water provide other opportunities not moving on waterways
  - Ports engage in getting people on water –geographically locate first then select port
  - “Recouple” transportation to Economic Growth
  - Economic development = people development