

# A Systems Approach to National Inland Waterway Security

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# Kentucky Transportation Center



- Public-Private Riverport Inventory
- Kentucky Inland Waterways Commodity Flow Database
- Economic Impact of Inland Waterways in the Region
- Impact of Panama Canal Expansion on Kentucky's Commodity Flows
- Inland Waterway Capacity and Reliability Model
- Development of Inland Waterways Shipment Management System (IWSMS)
- Outreach Projects for the Inland Waterways Industry

# Presentation Format

- Current National Inland Waterway System
- Threat Scenarios
- North American Transportation Security Center
- Maritime Applications

# Current Inland Waterway System

- Traditionally bulk commodities – assumed shift to containerized higher value goods
- Associated with this shift is a more pressing need for timely information
- Frequent lack of timely communication between shippers, carriers and consignees



# Current Communication Requirements

- Certain hazardous cargo to United States Coast Guard
- Commercial freight movements through locks
- Historical Records
- No system in place to collect and disseminate real time information for dedicated public safety and security



# Problematic Information Exchange

## No Locks Traversed

- Product supplier contacts barge company
- Unload barge in supplier/3<sup>rd</sup> party terminal
- As few as 2 knowledgeable parties
- Historical Record passed to USACE

## Locks Traversed

- Towboat required to report number of barges in tow along with commodity types and weights

# Communication Breakdown

- Barge Provider notifies Product Supplier
- Product supplier “expected” to pass information to customer
- Customer/Product supplier “expected” to pass information to receiving 3<sup>rd</sup> party destination port
- Often port does not know what barges to expect or when to expect them







# Result

- Barges are unmanned and may be moored without receiving terminal realizing it
- Receiving port does not know what barges to expect or when to expect them





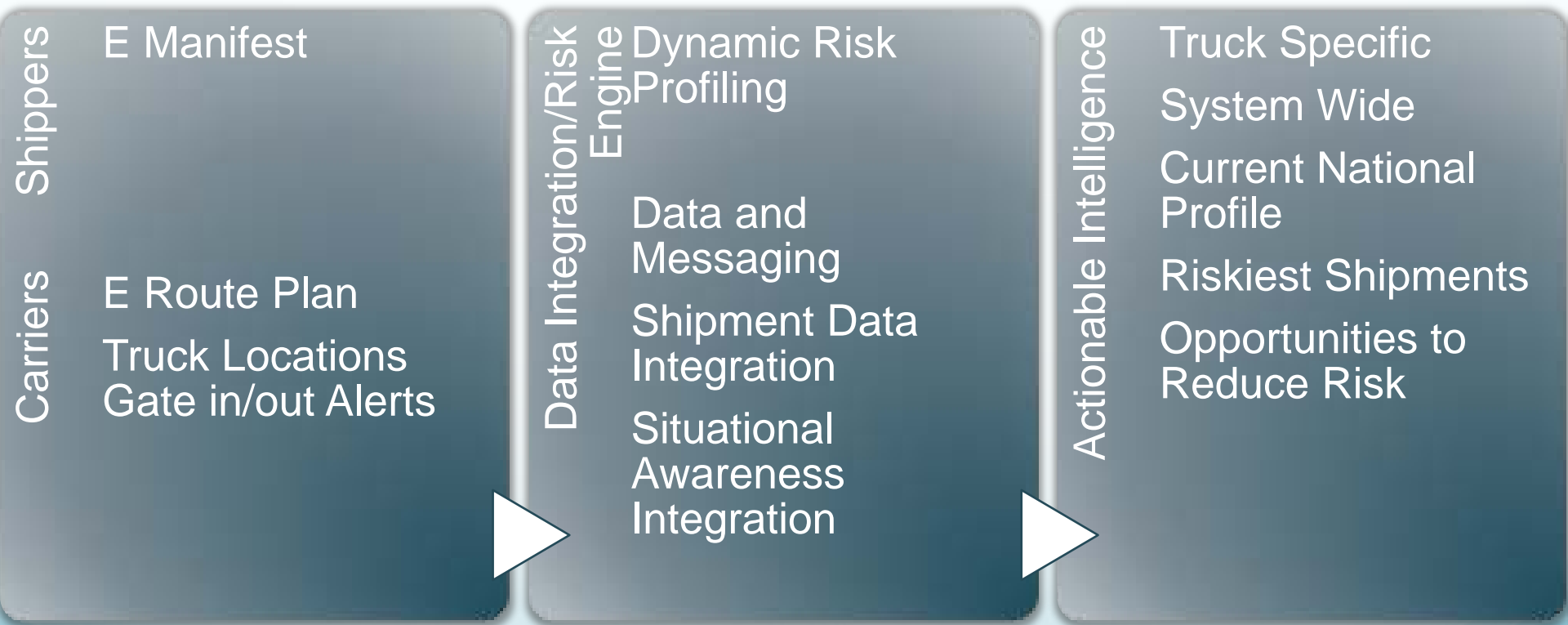
# Security Scenarios

- Cargo from an untracked barge disappears
- Barge used as a launch point in a major city
- Barge used to attack infrastructure
- Theft of high value goods





# North American Transportation Security Center





HAZMAT SUPPLY CHAIN SECURITY

HAZMAT TRUCK SECURITY

Hazmat truck security is important to the country and critical to the bottom line of American business. More text here to describe the importance. [More](#)

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DHS SECRETARY NAPALITANO TO REVIEW TOUGHER HIGHWAY SECURITY MEASURES. Hazmat truck security is important to the country.

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INTELLIGENCE REPORT



PENDING SHIPMENTS:



EN-ROUTE SHIPMENTS:



COMPLETED SHIPMENTS



En-Route Shipments

- Directions
- Florida Republic Pkwy toward Hammond
  - 8. At exit 85C, take ramp left for I-10 East / Stephen E Ambrose Memorial Pkwy toward Bay St Louis
  - 9. At exit 296A, take ramp right for I-75 South / SR-93 toward Tampa
  - 10. At exit 328, take ramp left for Florida's Tpkw toward Orlando
  - 11. Keep right to stay on Florida's Tpkw
  - 12. Keep straight onto I-95 South / SR-9A South
  - 13. Keep straight onto US-1 South / S Dixie Hwy
  - 14. Bear left onto SW 37th Ave / S Douglas Rd
  - 15. Turn right onto Kumquat Ave
  - 16. Turn right onto Pamona Ln
  - 17. Arrive at Pamona Ln
- Copy To Clipboard



Return



# Maritime Applications

- Inland Waterway Shipment Management System:
  - Facilitate compliance with existing Federal regulations
  - Live tracking system providing info to key agencies
  - Improved efficiencies of supply chain
  - Improved safety and security for the nation

