



Illinois Marine Transportation Initiative

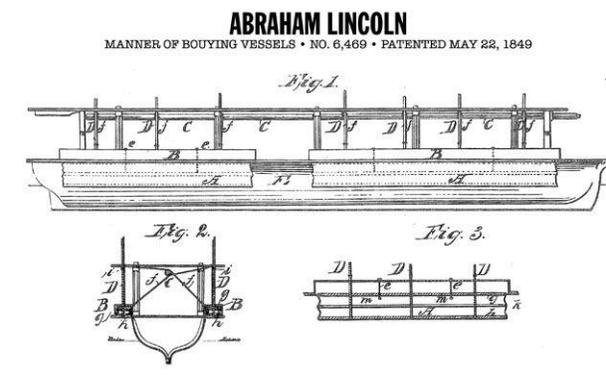
ILLINOIS STATE FREIGHT
ADVISORY COUNCIL (ISFAC)
OCTOBER 2018



Talking Points

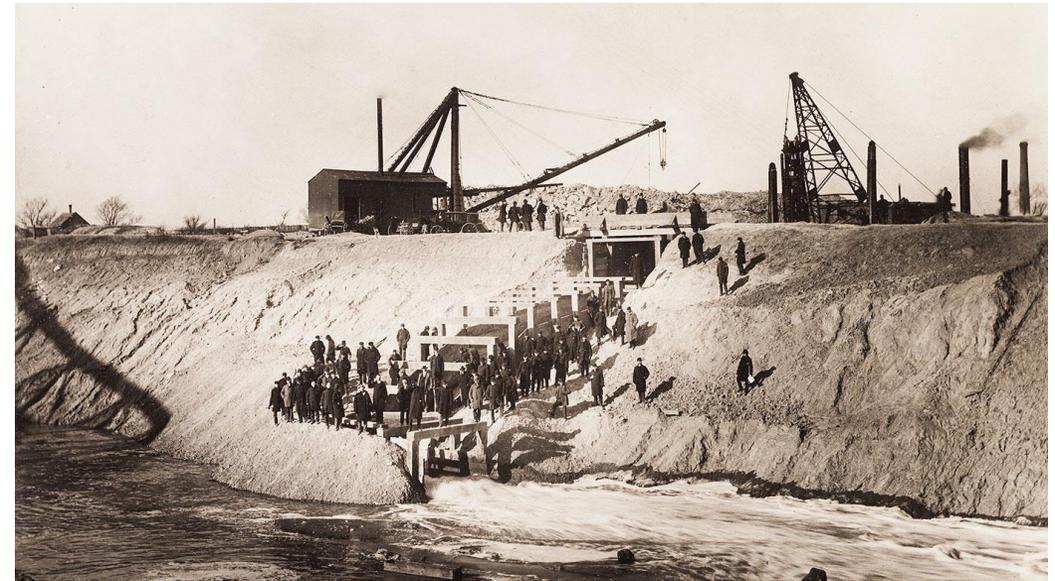
- Background and Drivers
- Guiding Principles
- Channeling Collaboration
- Success
- Next Steps





Illinois Marine Transportation System (IMTS)

- Lake Michigan
- Illinois River
- Chicago Area Waterway Canal System
- Mississippi River
- Kaskaskia River
- Ohio River



IMTS Facts



- 1,118 miles of navigable inland waterways pass through or border the state
- 28 lock and dam facilities
- 19 public port districts
- 350+ active terminals
- 1.7 million jobs
- 102.5 billion in total wages

IMTS FACTS

- 108 million tons of freight valued at nearly \$32 billion
- Freight moving on the system accounted for 8.8% of the total Illinois freight volume in 2014

Figure 1-28: Illinois Waterborne Tons (000) in 2014 for the Top 20 Commodity Groups by Type of Flow

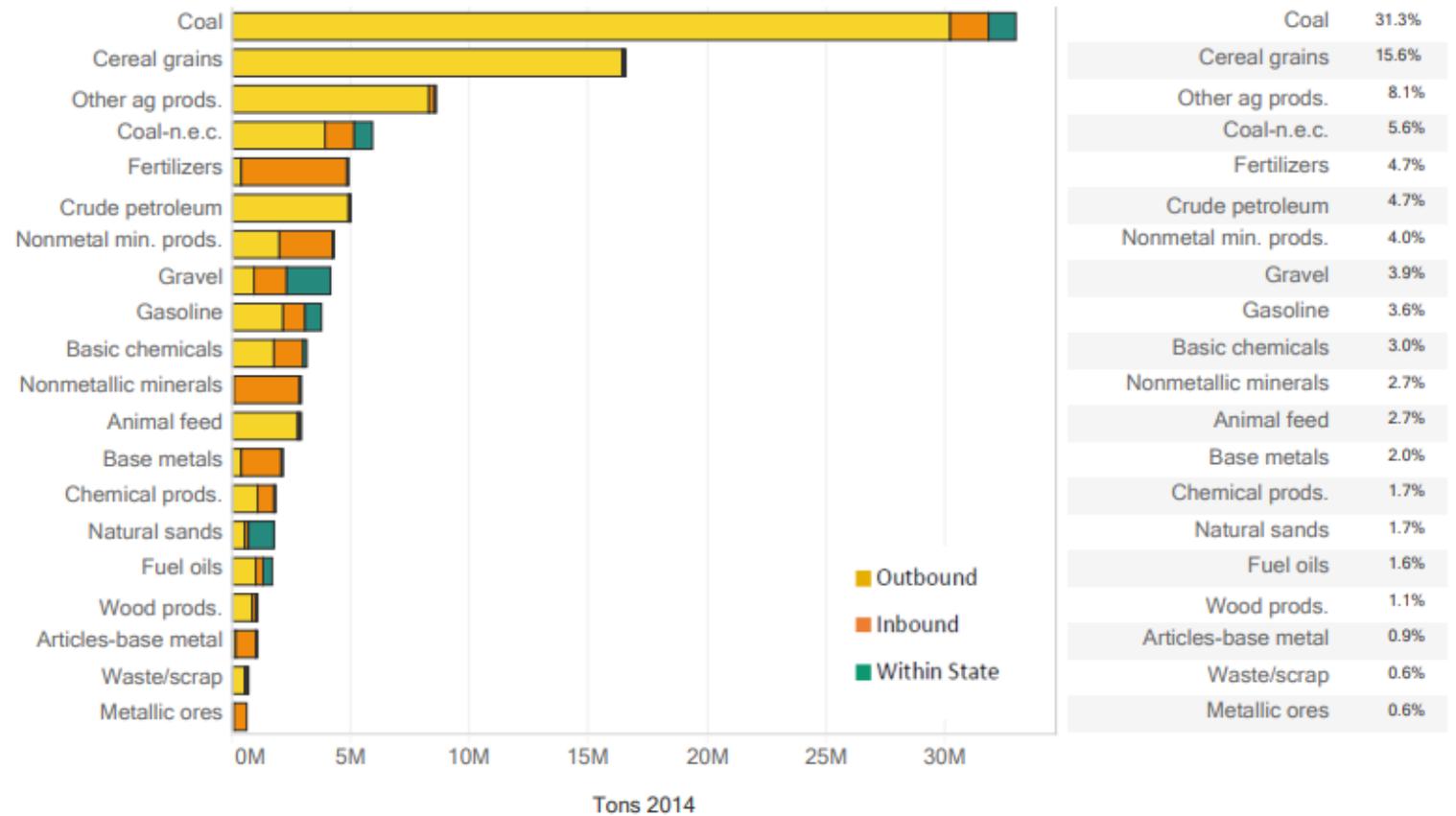


Figure 1-29: Estimated Illinois Waterway Freight Tons by County of Origin, 2014

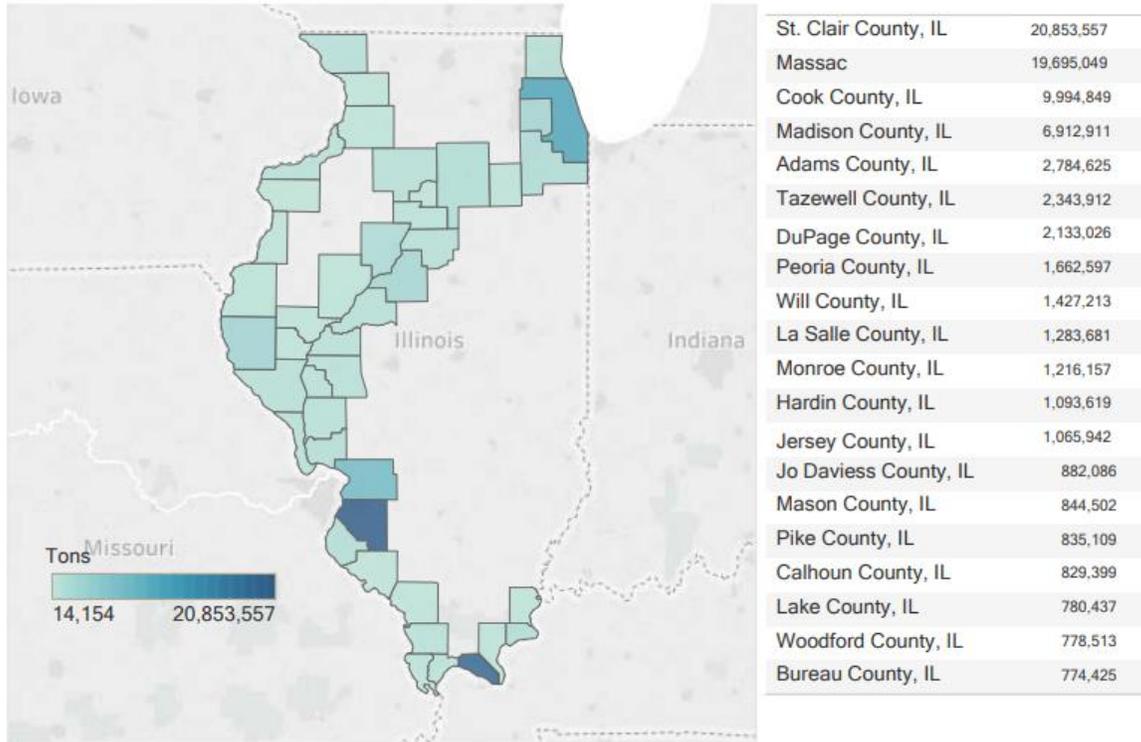
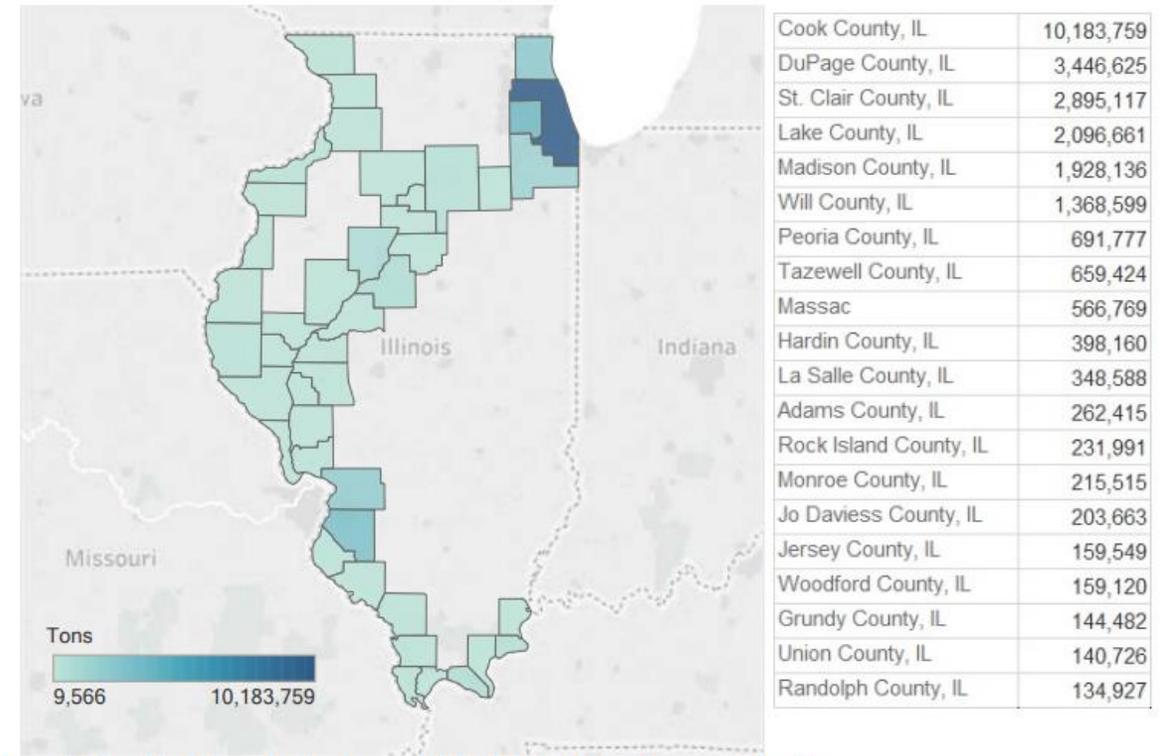


Figure 1-30: Estimated Illinois Waterway Freight Tons by Destination County, 2014



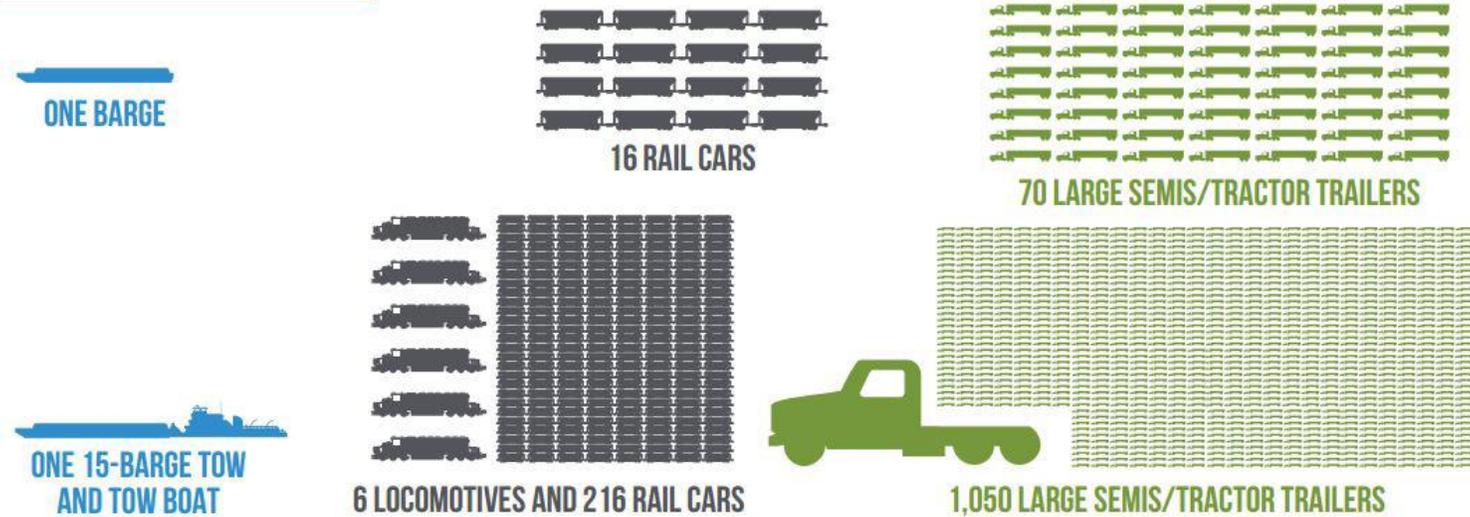
IMTS Freight Flows

COMPARE ...

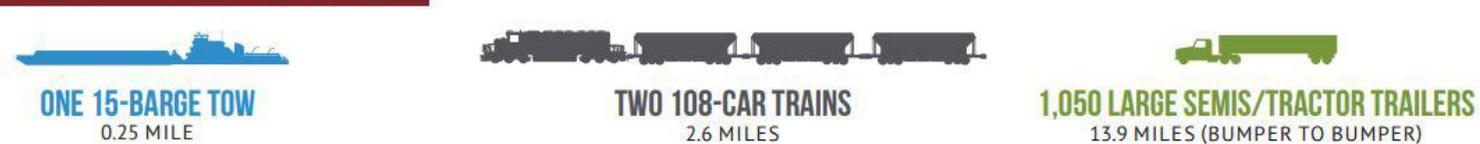
CARGO CAPACITY



EQUIVALENT UNITS

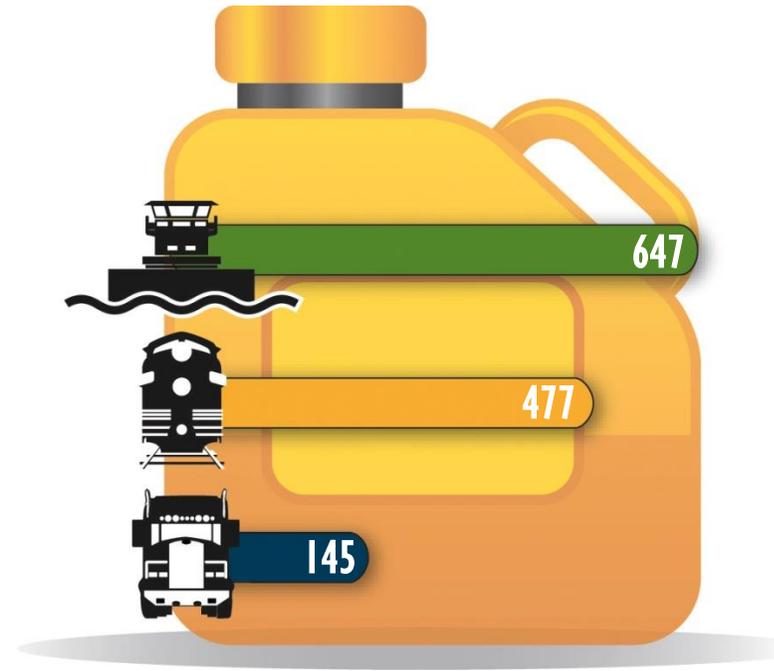


EQUIVALENT LENGTHS



Transporting freight by water is also the most energy-efficient choice.

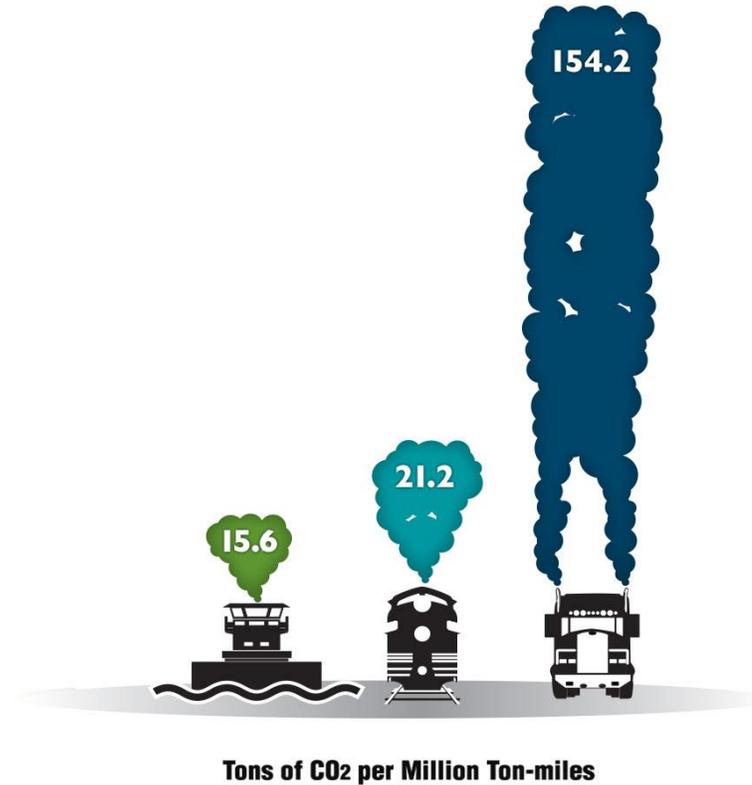
Barges can move one ton of cargo 647 miles per gallon of fuel. A rail car would move the same ton of cargo 477 miles, and a truck only 145 miles.



Ton-miles Traveled per Gallon of Fuel

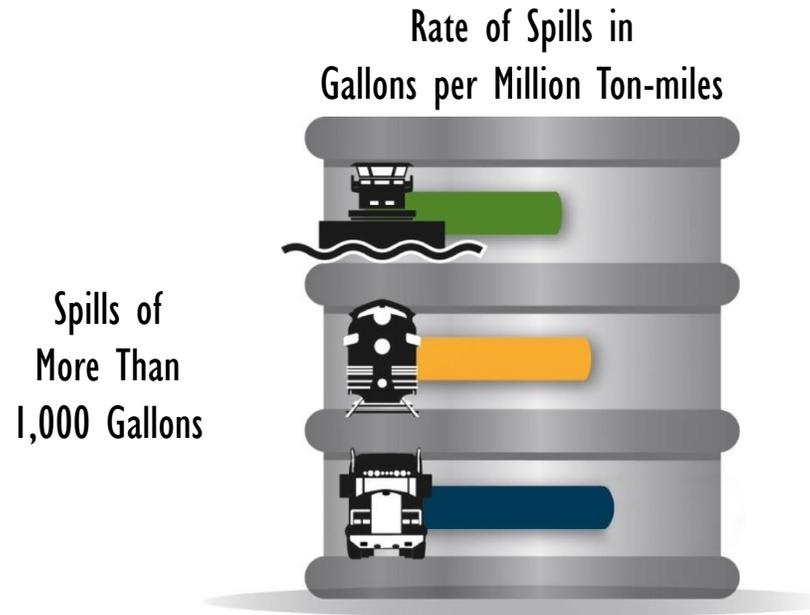
Barges have the smallest carbon footprint among other transportation modes.

To move an identical amount of cargo by rail generates 30% more carbon dioxide than by barge, and 10 times more emissions by trucks than by barge.



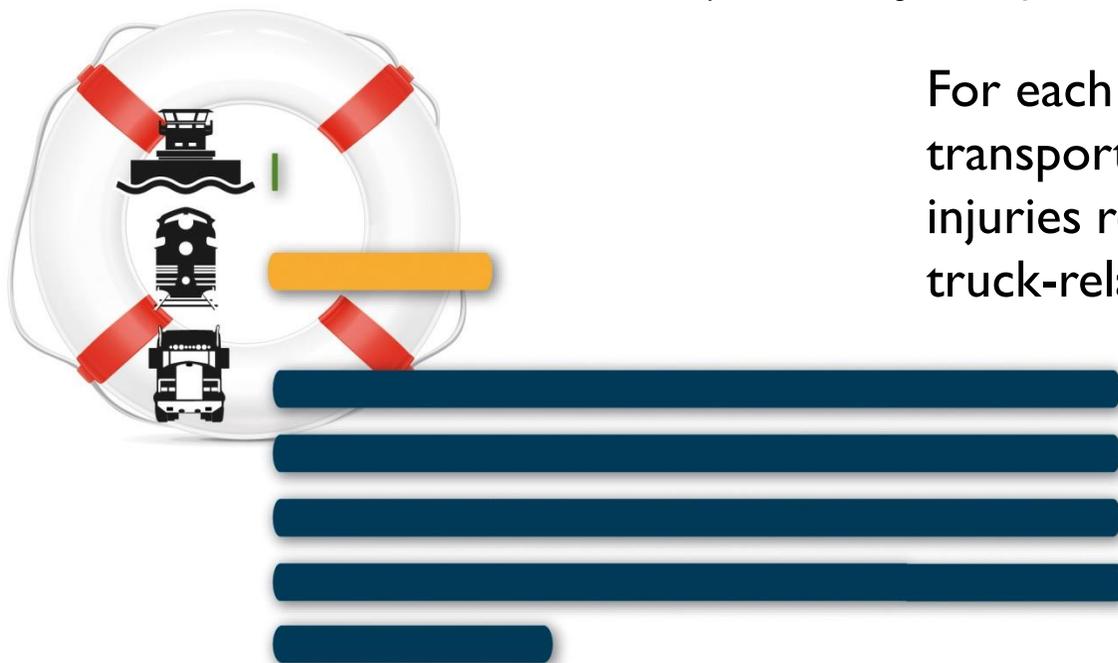
Inland waterways transport moves hazardous materials safely.

Overall, spill rates remain low. Trucks lose 6.04 gallons per one million ton-miles, rail cars 5.95 gallons and barges 2.12 gallons per one million ton-miles.



Inland waterways transport has a low injury record compared to rail or truck.

Ratio of *Injuries* in Freight Transportation



For each *injury* involving barge transportation, there are 80.44 injuries related to rail and 824 truck-related injuries.

Inland waterways transport has a low *fatality* record compared to rail or truck.

Ratio of *Fatalities* in Freight Transportation

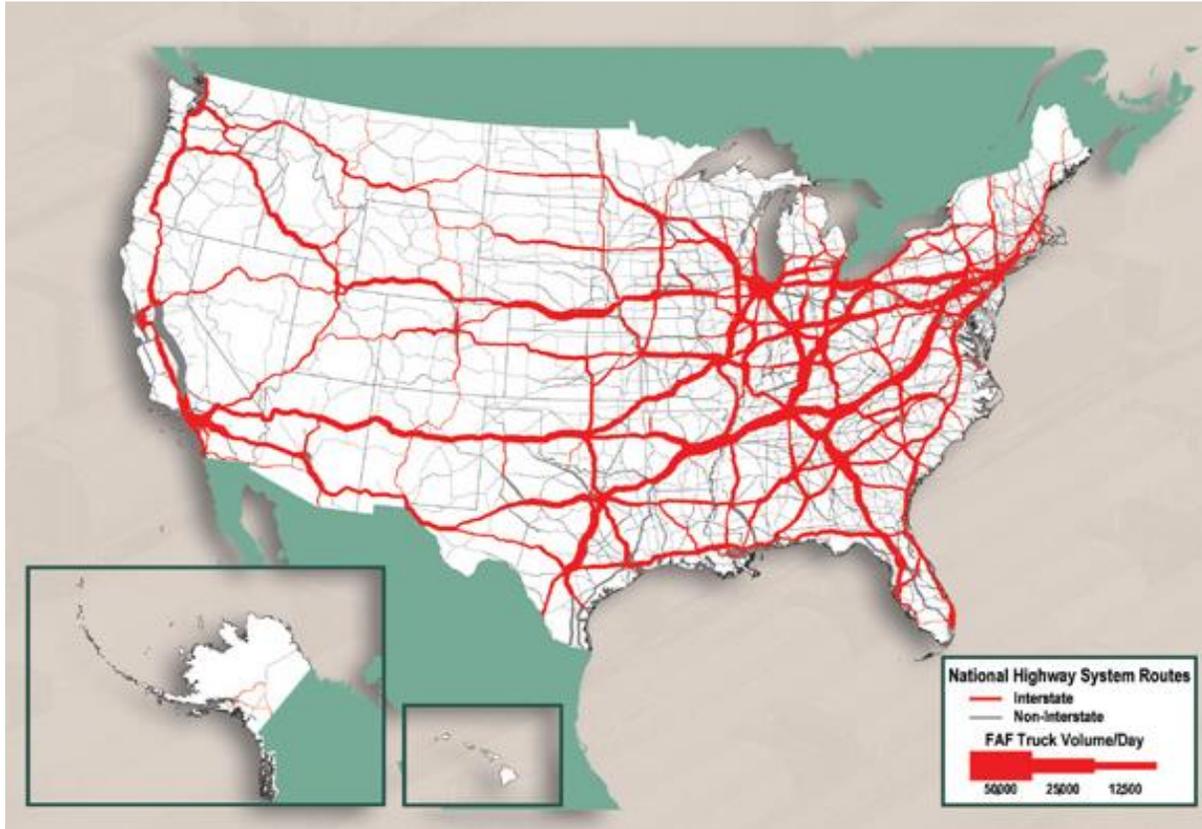


For each barge transportation *fatality*, there are 21.9 fatalities related to rail and 79 truck-related fatalities.



Average Daily Long-Haul Truck Traffic 2011 on U.S. Highways

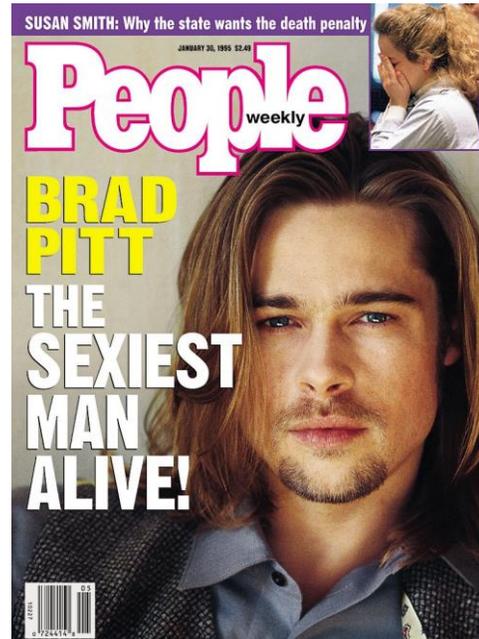
(Federal Highway Administration)



Rivers run
through it...
waterways are
where the
congestion is!

1995

Background - 1995



- IDOT Division of Water Resources transferred to Illinois Department of Natural Resources (IDNR)

Background - 2012

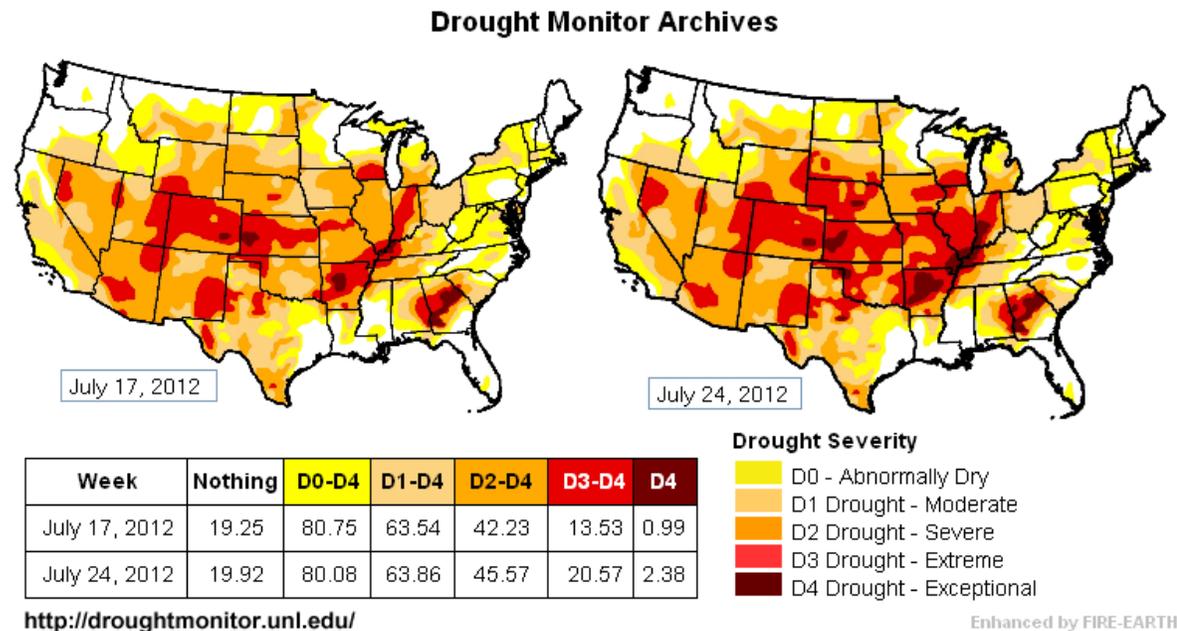
- MAP 21
- Freight performance requirements
- Panama Canal expansion
- Inland waterway transportation system reliability
- IDOT explores reintegration of ports and waterways activities



Drivers – 2012 to Now

- Low water events associated with drought of 2012 and subsequent outages due to flooding and lock and dam failures continued to drive reintegration vision

- 5-day delay at Lock 27
 - 63 vessels – 455 barges
 - Equivalent of 6,100 railcars or 26,400 semi-tractor trailers



Re “vision”

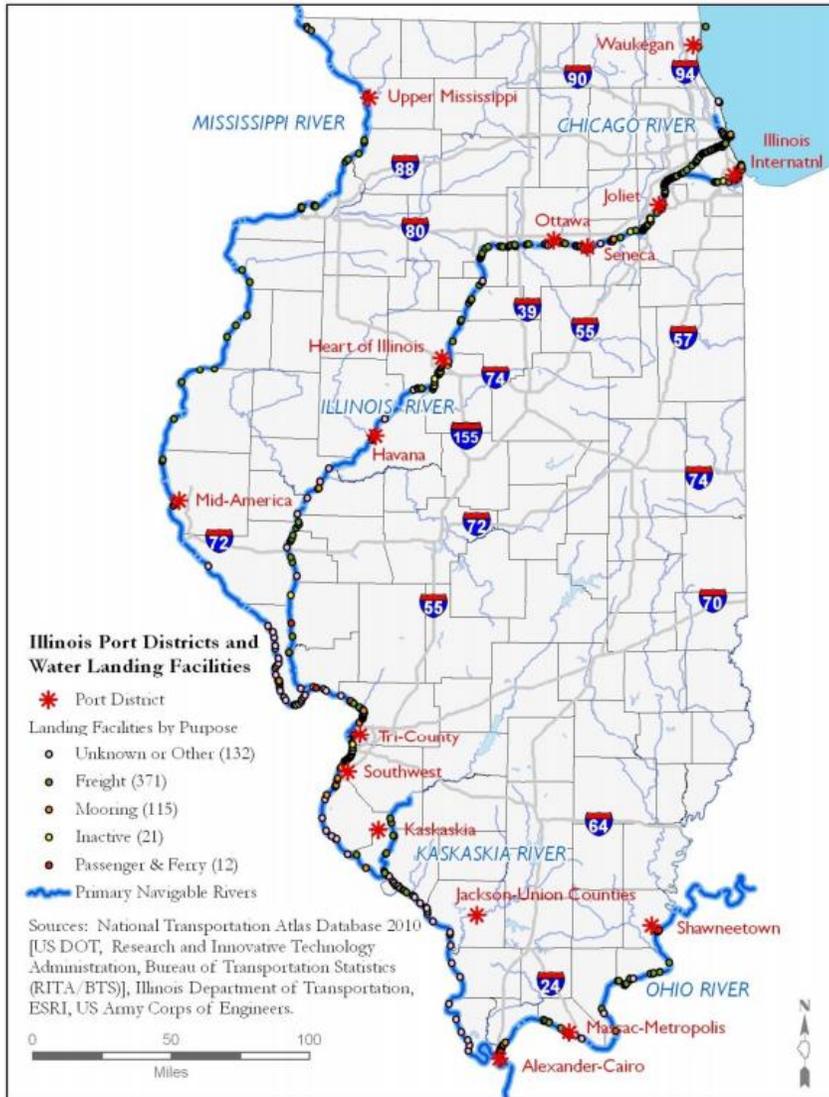


- Forward Strategic Vision Plan
“Building a Better IDOT”
- ...build, operate, maintain, and fund/finance ALL modes of transportation
 - Prioritize multimodal assets
 - Mitigate congestion
 - Strive for sustainability
- Task
 - Reinvigorate Navigable Waterway Activities

The Illinois Marine Transportation Initiative

- Office of Planning and Programming
 - Bureau of Planning
- Empowered through IDOT Vision Plan task and development of 2017 Long Range Transportation Plan
- Channel collaboration, coordination, and planning





Guiding Principles

1. Prioritize intermodal and/or multimodal assets;
2. Mitigate congestion;
3. Increase sustainability (economic and environmental);
4. Increase system utility;
5. Better leverage the overall Illinois Freight Transportation Portfolio; and,
6. Avoid introduction of additional burden

Channeling Collaboration

- Connected with public ports and other applicable stakeholders
- Called for projects in anticipation of a Federal or State Capital Program
- Projects throughout the state system were submitted in excess of **\$100 million dollars**
- Used process to make key connections



Key Contacts

- Illinois Department of Natural Resources (IDNR)
- US Department of Transportation Maritime Administration (MARAD)
- US Committee on the Marine Transportation System (CMTS)
- US Army Corps of Engineers (USACE)
- US Coast Guard (USCG)
- Transportation Research Board (TRB) and related committees
- Public ports and private terminals
- Inland Rivers Ports and Terminals Association (IRPT)
- Council of Great Lakes St. Lawrence Governors and Premiers (CGLSLGP)
- Upper Mississippi River Basin Association (UMRBA)
- Waterways Council Inc. and commercial operators
- Regional/metropolitan planning organizations and local units of government

Channeling Collaboration, cont.



- Commissioned report:
An Analysis of the Illinois Maritime Transportation System
- Built upon prior preliminary analysis on “Developing Performance Measures for IMTS” in response to MAP 21 and FAST Act
- Used recommendations for further collaborative efforts

Collaborative Tasks

1. Full integration of marine transportation planning within IDOT
2. Formalize research activities
3. Foster positive relationship and industry promotion



IDOT Integration

COMPLETED

- Report continued progress via Vision Plan
- Include IMTS into Illinois Freight Plan
- Include IMTS into Long Range Plan
- Include IMTS into FY2019-2024 Proposed Multimodal Improvement Program
- Provide technical assistance and funding for port master planning, market analysis, and feasibility analysis
- Develop job descriptions and structure
- Memorandum of Agreement between IDOT and IDNR

TARGETS

- Complete Marine Transportation System Plan Scope in development
- Annual Statewide Transportation Improvement Program (TIP) Submittals
- Seek annual appropriation for capital improvement program
- Clean up legislative language regarding IDOT and IDNR responsibilities and authorities

Formalize Research Activities

COMPLETED

- Study on Developing Performance Measures for IMTS (2015)
- An Analysis of the IMTS (2017)
- Maritime Freight Data Collection System and Database to Support Illinois Efforts (Ongoing)
- Participation with TRB and membership with Inland Water Transportation Committee as Research Coordinator
- Participation on AASHTO Standing Committee on Water Transportation

TARGETS

- Study on beneficial use of dredge materials
- Explore potential for creation of Maritime Cooperative Research Program under TRB
- Peer exchanges with other States and other Countries
- Pooled Fund Program potentials via FHWA

Foster Positive Relationships and Industry Promotion

COMPLETED

- Nurture development of Illinois Public Ports Association
- Establish working relationships with partner and governing agencies
- Inclusion of IMTS information and visuals at IDOT events and on IDOT publications
- Continual participation with trade organizations and stakeholders, including regular port site visits
- Coordination on major statewide maritime issues such as the Illinois Waterway Consolidated Closure

TARGETS

- Formalize interagency transportation working group with IDNR, IDCEO, and IEPA
- Coordinate with IDOT Aeronautics for high quality aerial visuals and imagery
- Create Marine Highway and port signage for surface system
- Publish guidance and information on program and technical assistance available from IDOT and other agencies
- Continued coordination on statewide issues



Success

- Freight Plan and Illinois Competitive Freight Program
 - Greater than 15 Million Granted to port projects for construction
 - Additional funds granted to port and waterway related projects
- Illinois International Port District
 - Rail and roadway improvements at Butler Drive
- America's Central Port
 - Entrance/frontage road improvements to reduce truck delay
 - Dock improvements



Success

- Long Range Planning
 - Included specific objectives, performance measures, and implementation tasks relating to the IMTS
- Local Technical Assistance and Planning
 - 2 port master plans in process
 - 1 port feasibility study in process
 - In discussion with another port interested in developing a master plan



Illinois
PORTS ASSOCIATION



Next Steps

- Scope development and procurement of professional services for Illinois Marine Transportation System Plan
- The planning process and product will be utilized for a variety of purposes

Preliminary System Plan Objectives

- Inform capital needs and priorities
- Increase intermodal connectivity and capability
- Identify engineering, policy, funding, and partnership solutions to meet current and emerging challenges
- Strengthen support programs and technical assistance to waterborne-related transportation businesses and facilities
- Provide business development mechanisms



System Plan Scope Elements

1. Executive summary
2. Study design
3. State, regional, and local maritime issues
4. Inventory of system condition and performance
5. Activity forecasts
6. System Requirements
7. Development standards and sustainability considerations
8. Analysis of system alternatives
9. Multimodal integration
10. Public consultation
11. Development priorities and justification (programmatic)
12. Policy recommendations for all levels (local/state/fed)
13. Economic impact profiles for public ports and navigation facilities



Questions?



Illinois Department of Transportation