

# Mid-America Freight Coalition

– April, 22, 2014

## Planning for One Transportation System – Marine Highways

Kevin Schoeben  
Deputy Director  
Office of Planning and Programming  
Illinois Department of Transportation

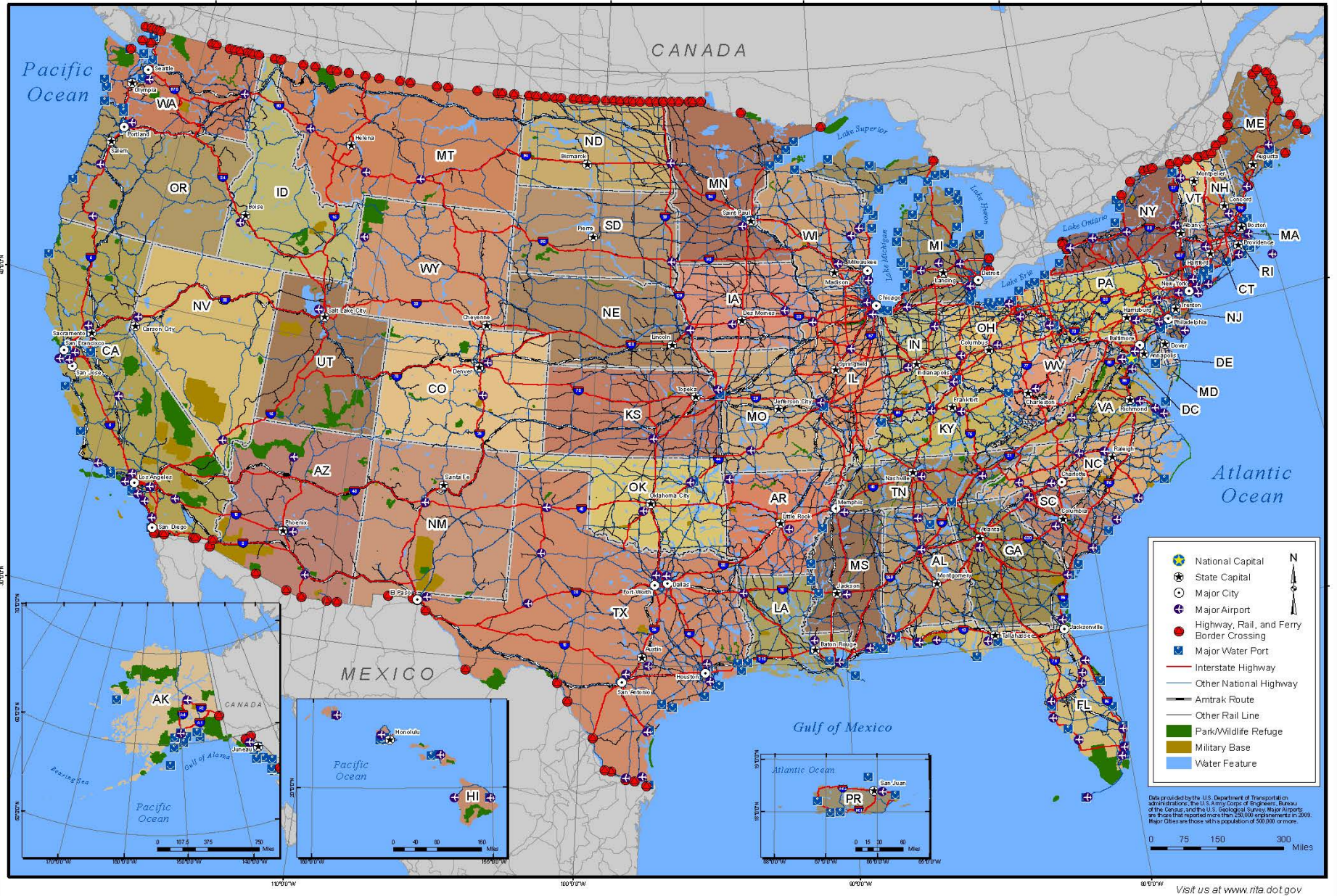


# Presentation Highlights

- Illinois' Freight Facts
- Planning for One Transportation System
- Maritime Corridor Planning & Studies
- Keeping Maritime Freight Mobility in Forefront



# Major Transportation Facilities of the United States 2011

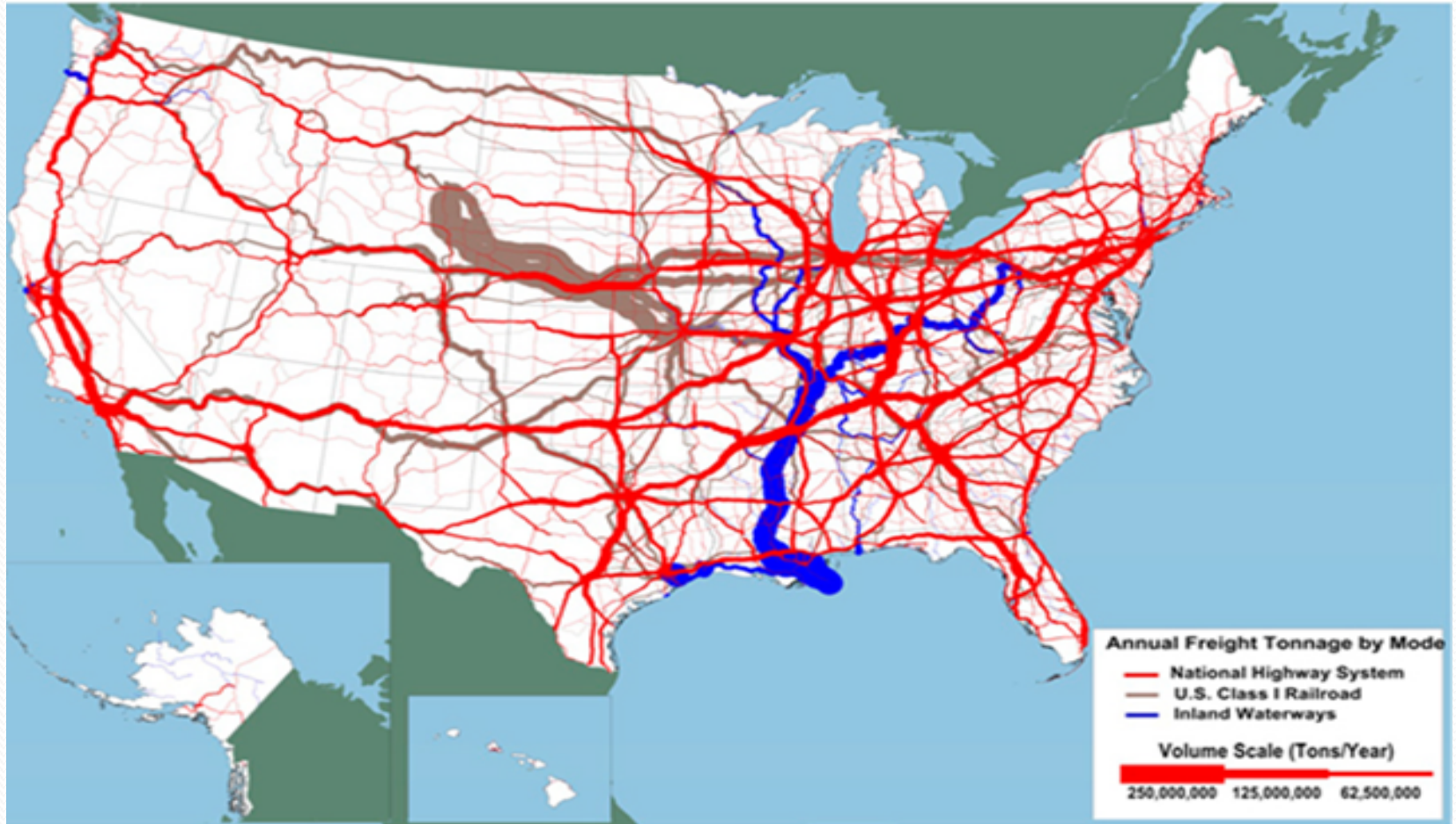


Data provided by the U.S. Department of Transportation, administrations, the U.S. Army Corps of Engineers, Bureau of the Census, and the U.S. Geological Survey. Major Airports are those that reported more than 250,000 enplanements in 2009. Major Cities are those with a population of 500,000 or more.

Visit us at [www.rita.dot.gov](http://www.rita.dot.gov)



# Tonnage on Highways, Railroads, and Inland Waterways: 2007 Map



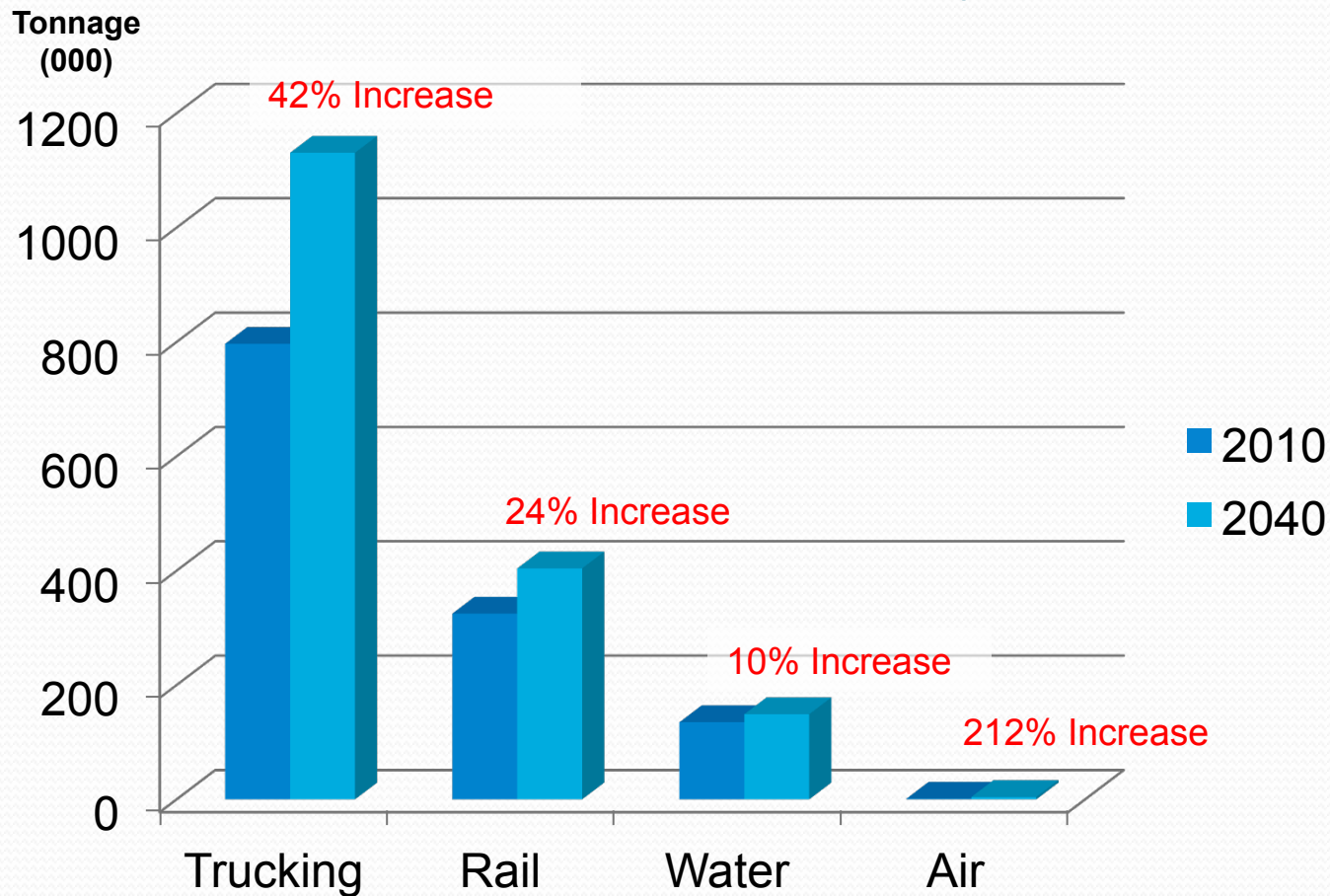


# Illinois Freight Mobility Plan – 2010/2040

- In 2010 - 1.26 Billion tons of goods moved  
(30% Outbound, 28% Inbound & 42% Interstate)
- In 2010 - 63% trucks; 26% rail; 11%  
waterways; and a tenth of 1% by air.
- **2040 - 34% increase to 1.7 Billion tons**
- 2040 - 67% trucks; 24% rail; 9% waterways;  
and two tenths of 1% by air

# Illinois Based Freight Tonnage

## 2010 – 2040 Growth by Mode

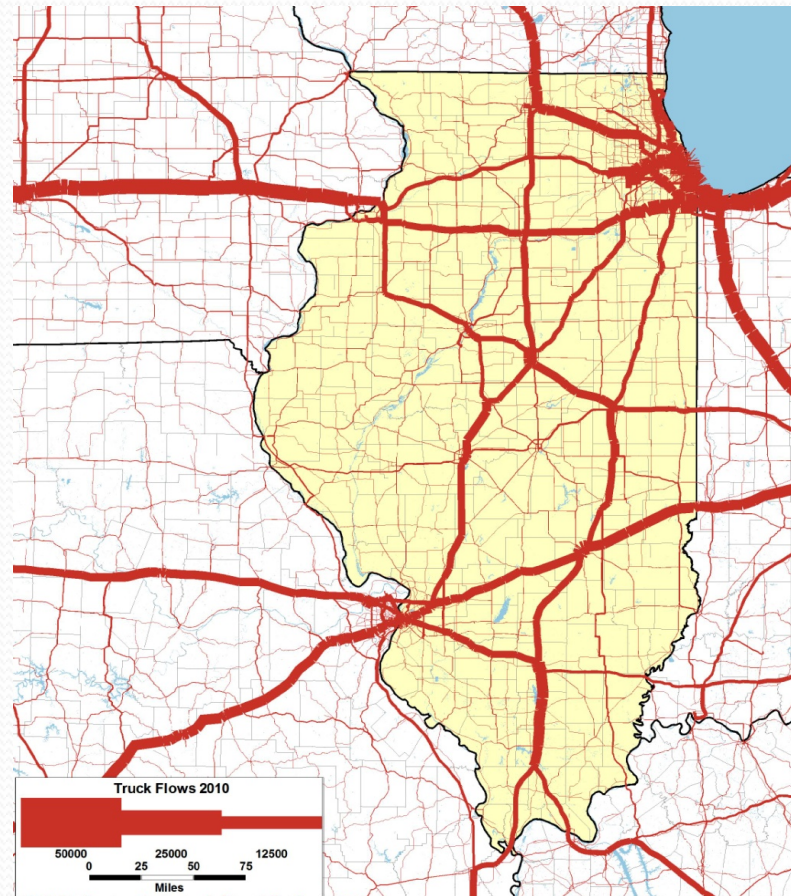


Source: Illinois Freight Mobility Plan (2012)



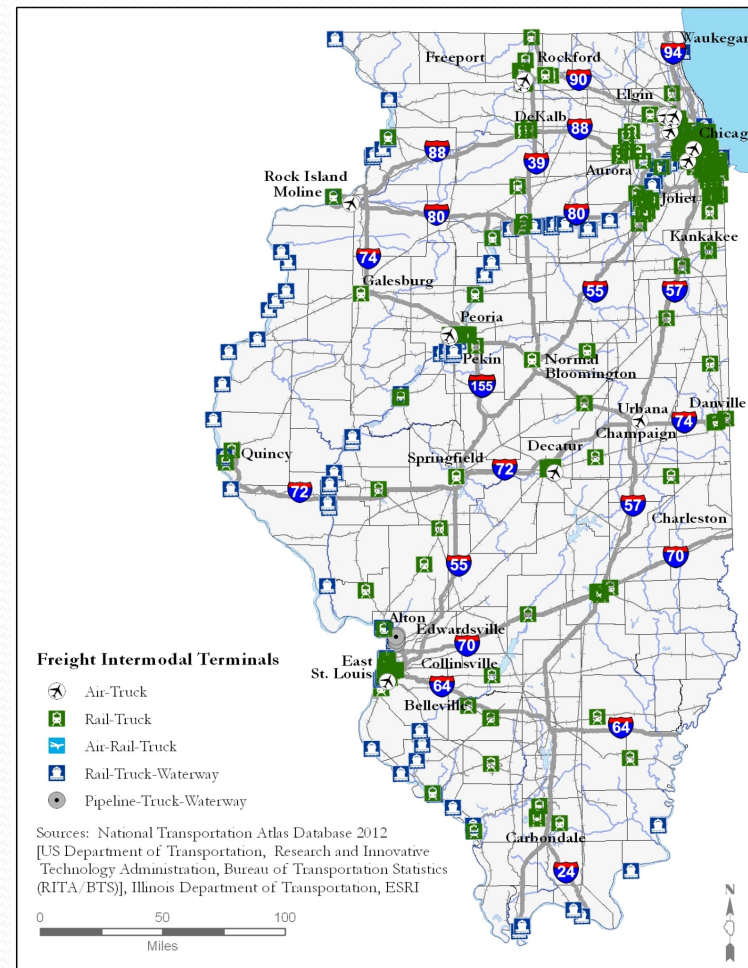
# 2010 Truck Flows - Third in the nation for Trucking Volume

- 140,745 miles of roadway
- 26,000 bridges
- 2,182 interstate miles, 3<sup>rd</sup> in nation
- U.S. Dot Draft Primary Freight Network – 1,512 miles (3<sup>rd</sup>)



# Illinois Freight Intermodal Terminals

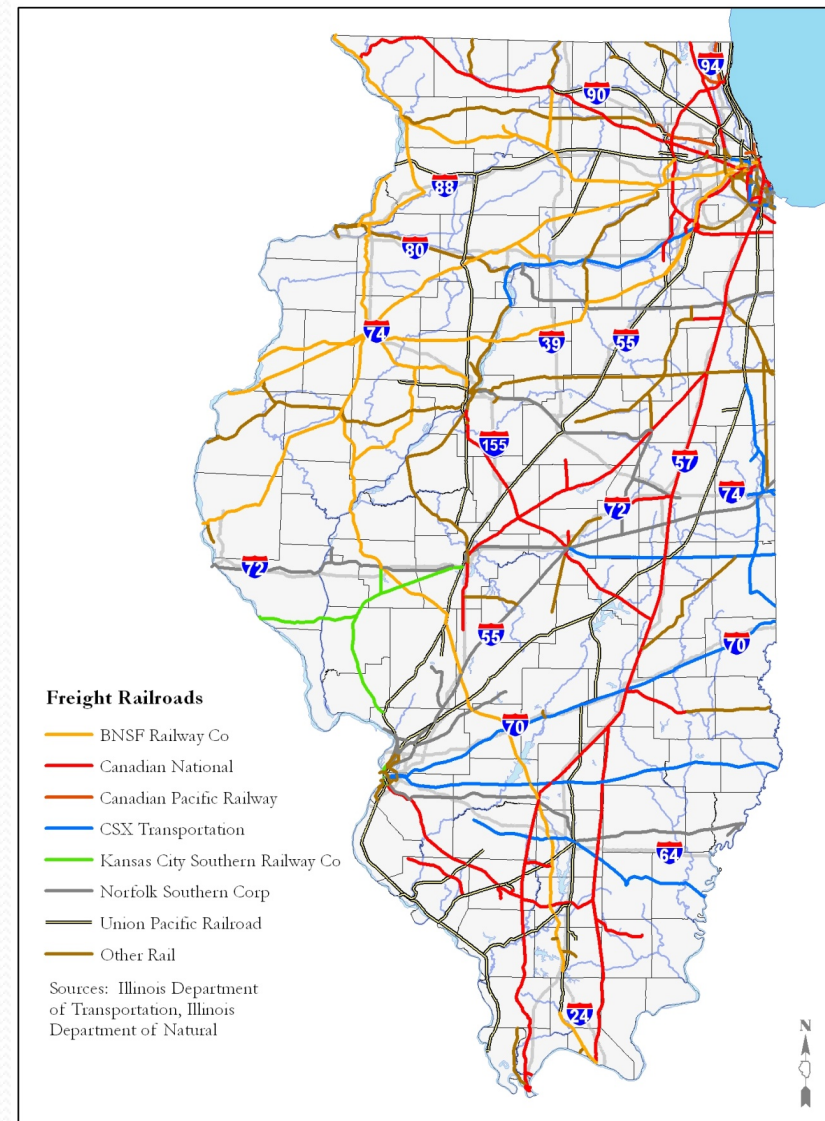
- 2<sup>nd</sup> in Nation in Rail Intermodal Traffic
- Chicago area has 19 Intermodal Terminals supporting six Class I RRs
- Location & Accessibility
- Strive to give private enterprise maximum flexibility and access





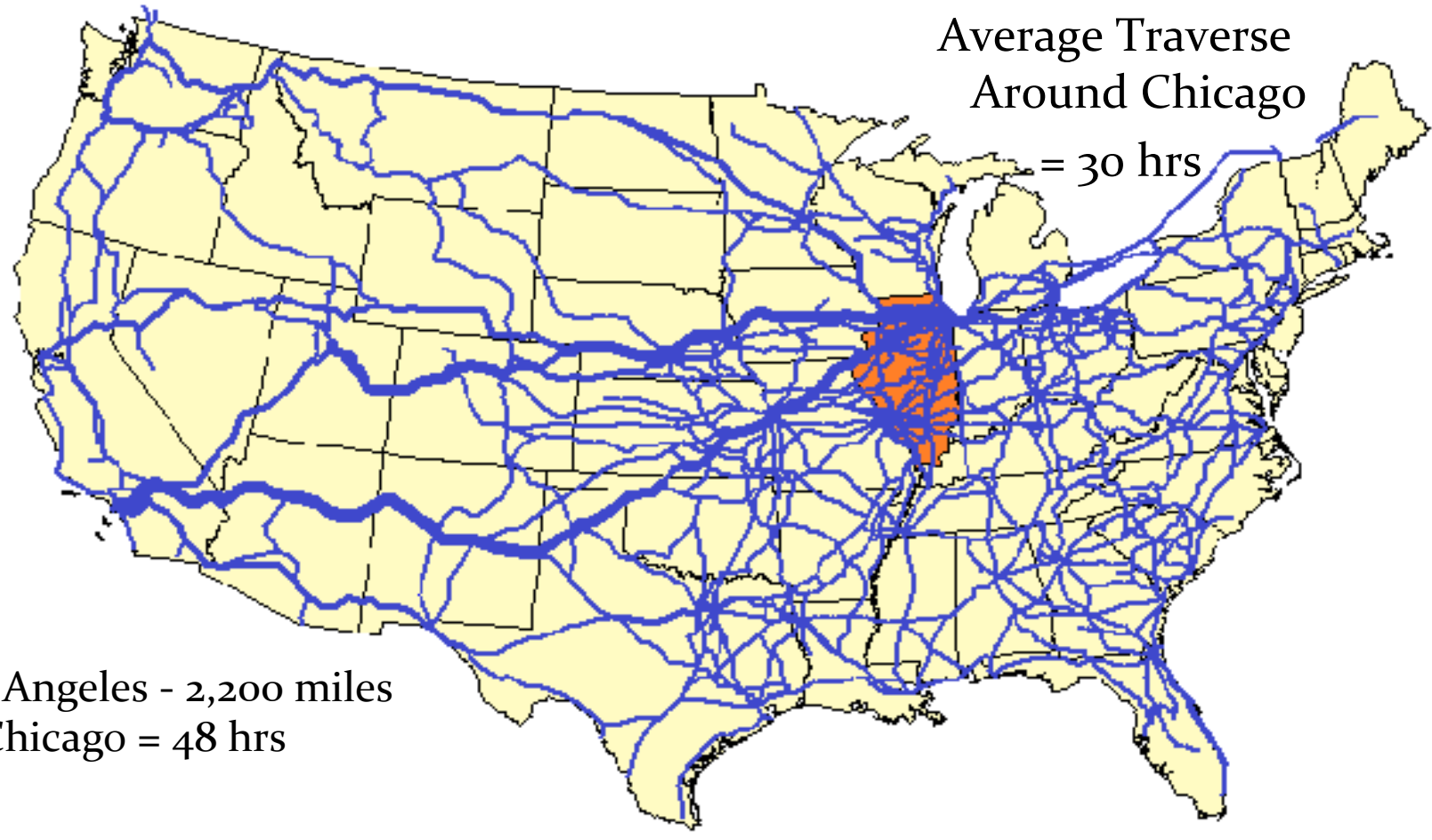
# Illinois Freight Railroads – 9,400 Miles

- 7 Class I Railroads
- 3 Regional RRs
- 26 Short Line RRs
- 9 Terminal Carriers
- 3<sup>rd</sup> in Rail Volume
- 7,821 Public RR Grade Crossings



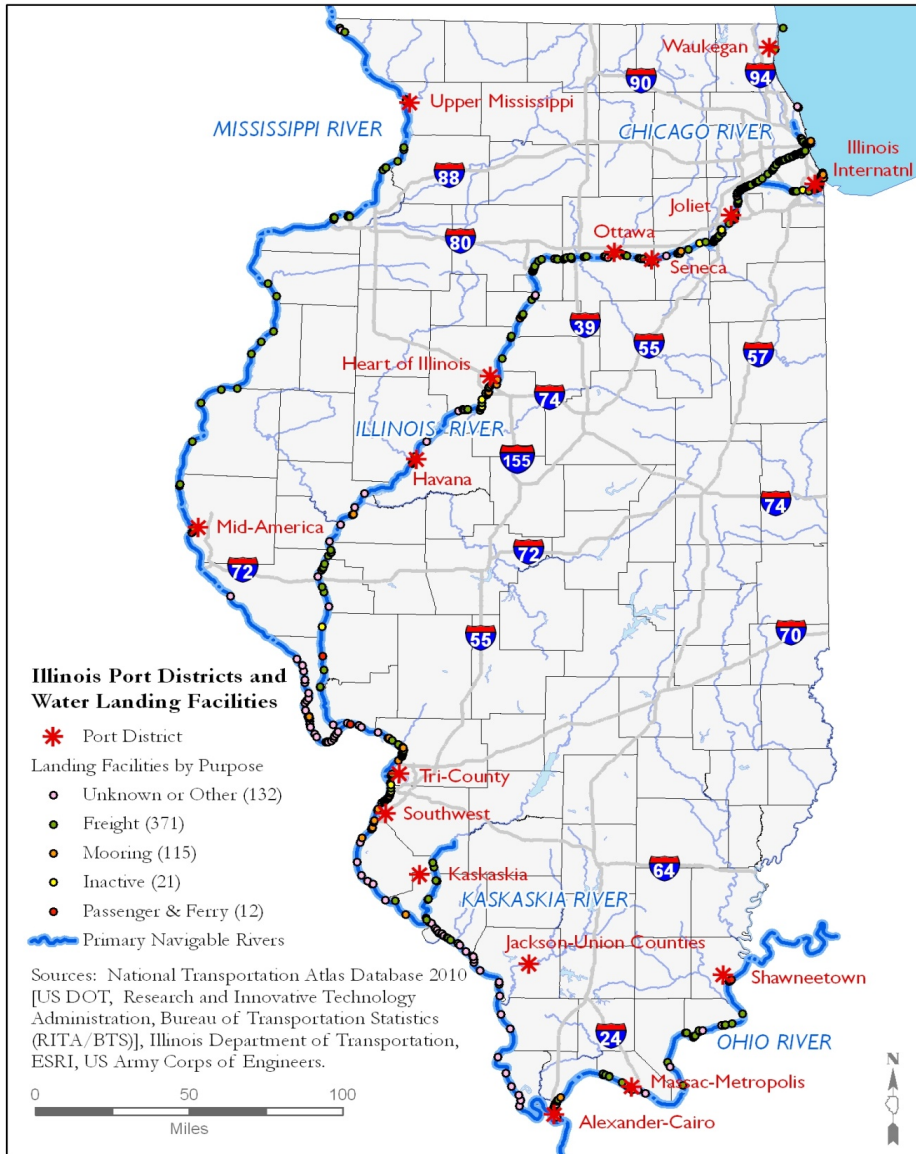
# Rail Density – Illinois' Central Position

- 1,300 Daily Trains through NE Region





# Illinois Port Districts and Water Landing Facilities- 1,095 Miles of Navigable Waterways



## Outbound -2010

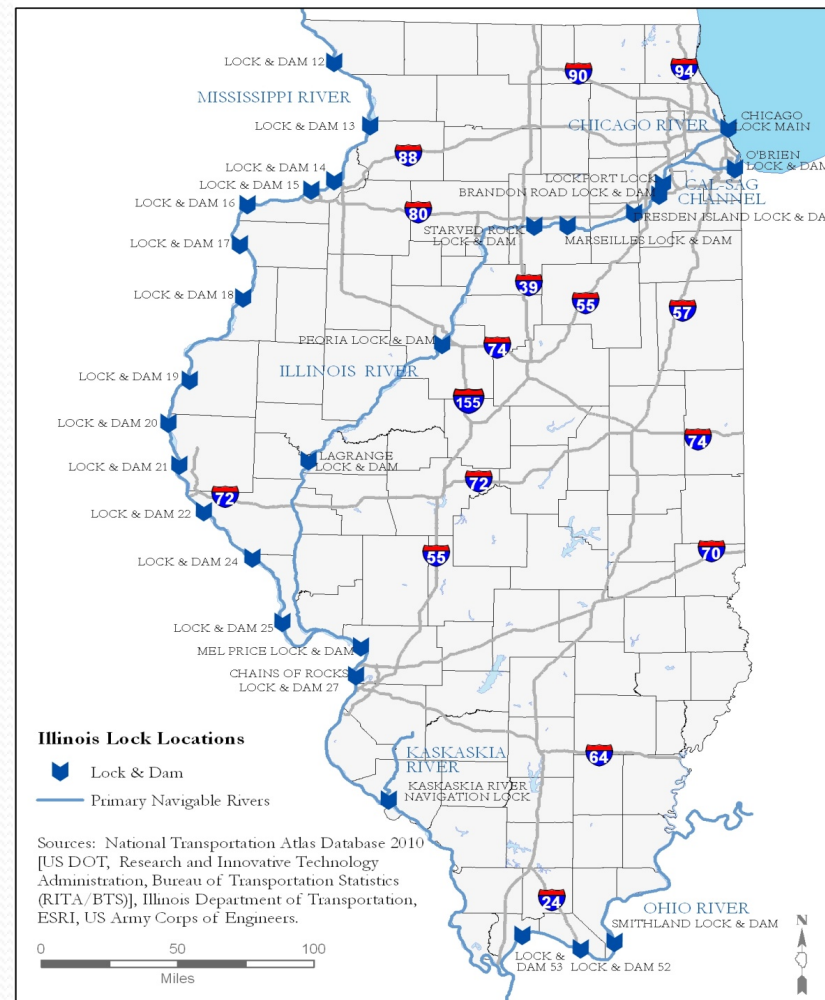
COMMODITY	%	TONNAGE (in millions)
Coal	56	58.4
Agriculture	25	26.2
Petro/Gas	11	11.8
Other	8	7.8
<b>TOTAL</b>	<b>100</b>	<b>104.2</b>

## Inbound -2010

COMMODITY	%	TONNAGE (in millions)
Stone/Ore	36	6.3
Fertilizer/Chem	20	3.5
Metal Products	14	2.5
Other	30	5.2
<b>TOTAL</b>	<b>100</b>	<b>17.5</b>

# Lock & Dams

- Illinois between two great national assets – Great Lakes & Mississippi River
- 5 Locks on Mississippi River & two on Illinois River approved but not yet funded







# Planning for One Transportation System

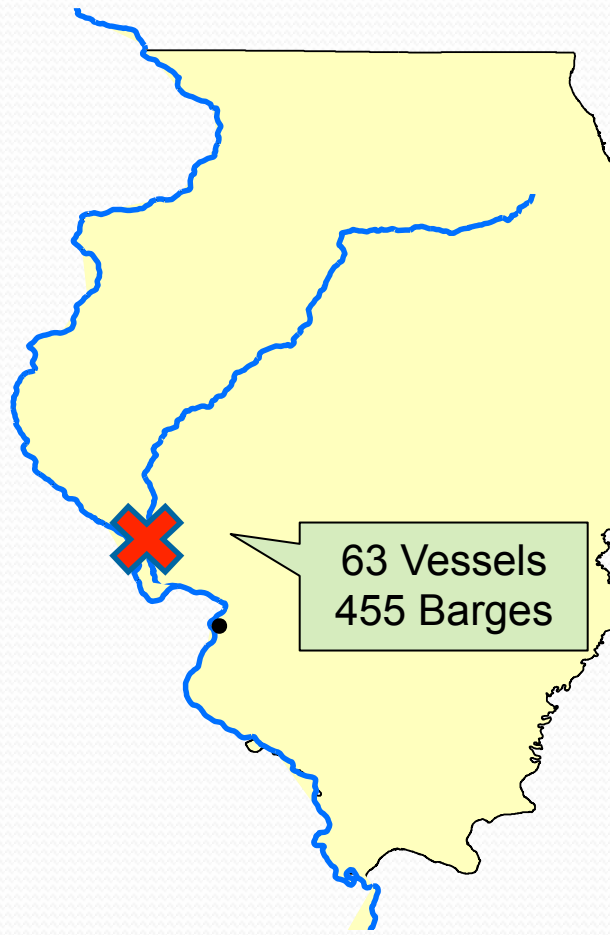
# Vision – Prepare for Future

Illinois DOT Secretary Schneider

- IDOT must plan for One Transportation System for the next 5, 10, 20, 40 years by integrating Multi-modal Planning and Programming.

# Example of Need for Multimodal Approach...





## September, 2012 – Lock 27 (5-Day Closure)



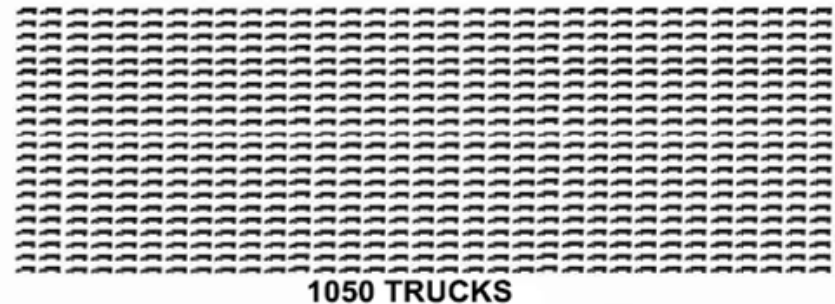


# Comparison of Cargo Capacity

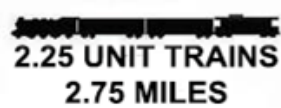
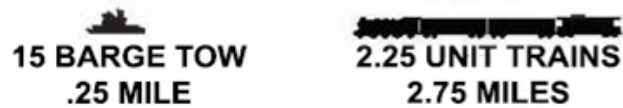
## CARGO CAPACITY

				
<b>BARGE</b>	<b>15 BARGE TOW</b>	<b>JUMBO HOPPER CAR</b>	<b>100 UNIT TRAIN</b>	<b>LARGE SEMI TRUCK</b>
1750 TON	26,250 TON	110 TON	10,000 TON	25 TON
61,250 BUSHEL	918,750 BUSHEL	3,850 BUSHEL	350,000 BUSHEL	779 BUSHEL
1,375,000 GALLONS	20,625,000 GALLONS	30,240 GALLONS	3,024,000 GALLONS	7,885 GALLONS

## EQUIVALENT UNITS



## EQUIVALENT LENGTHS

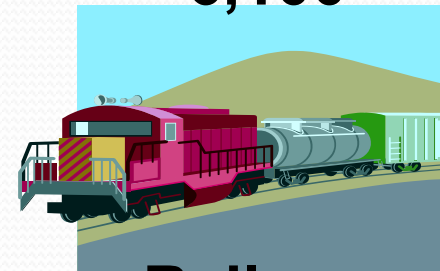


# Tonnage Displacement on Rail & Highways



Impact to Industry:  
- \$15-20 million

6,100



Railcars

26,400



Trucks

# Illinois Freight Mobility Plan for One Transportation System

- Role in promoting more sustainable, effective and efficient connections in order to optimize private sector logistics options.
- Support ALL modes.
- Use strategic freight planning under multi-modal lens to tie intermodal connections across all freight modes.

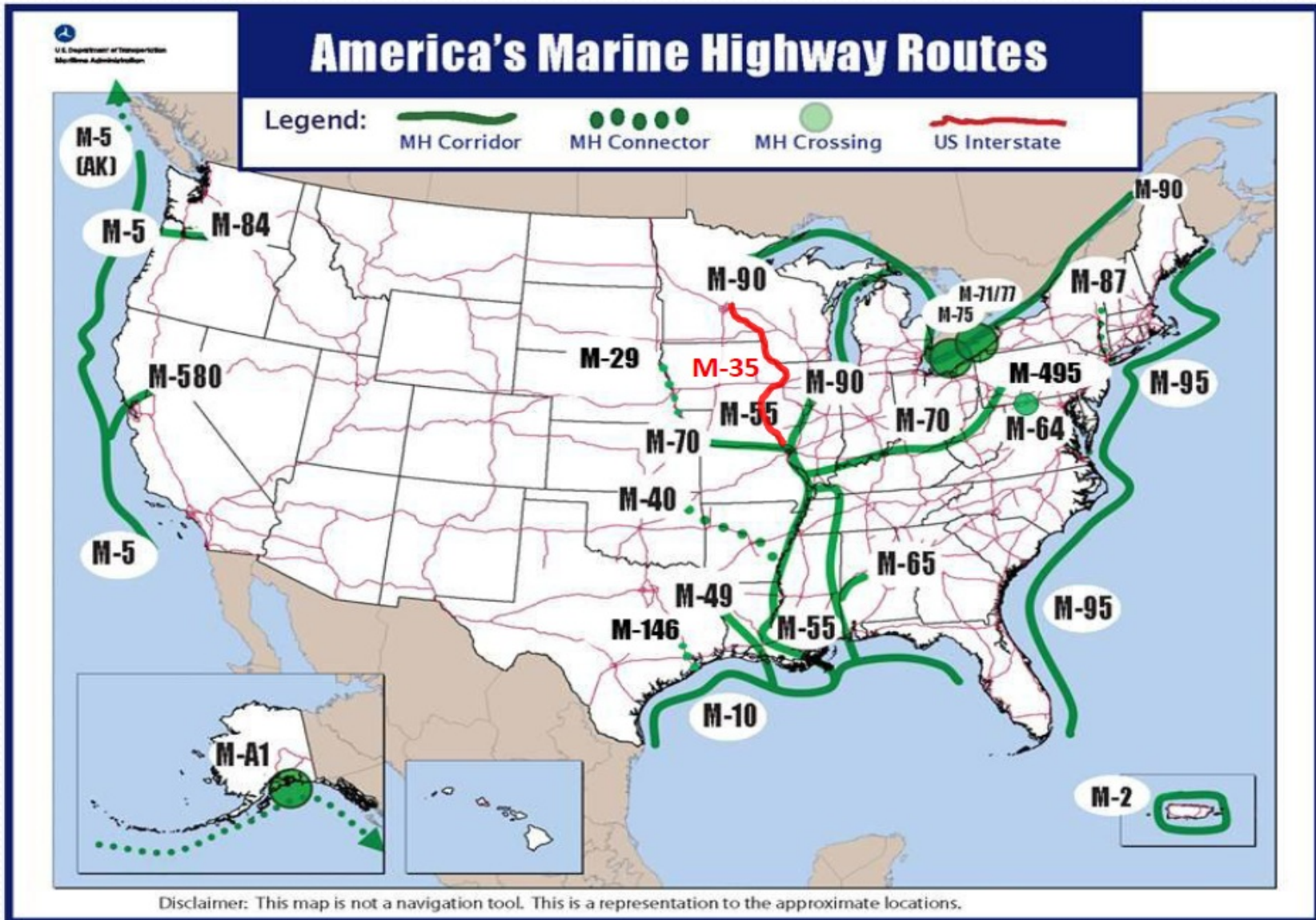


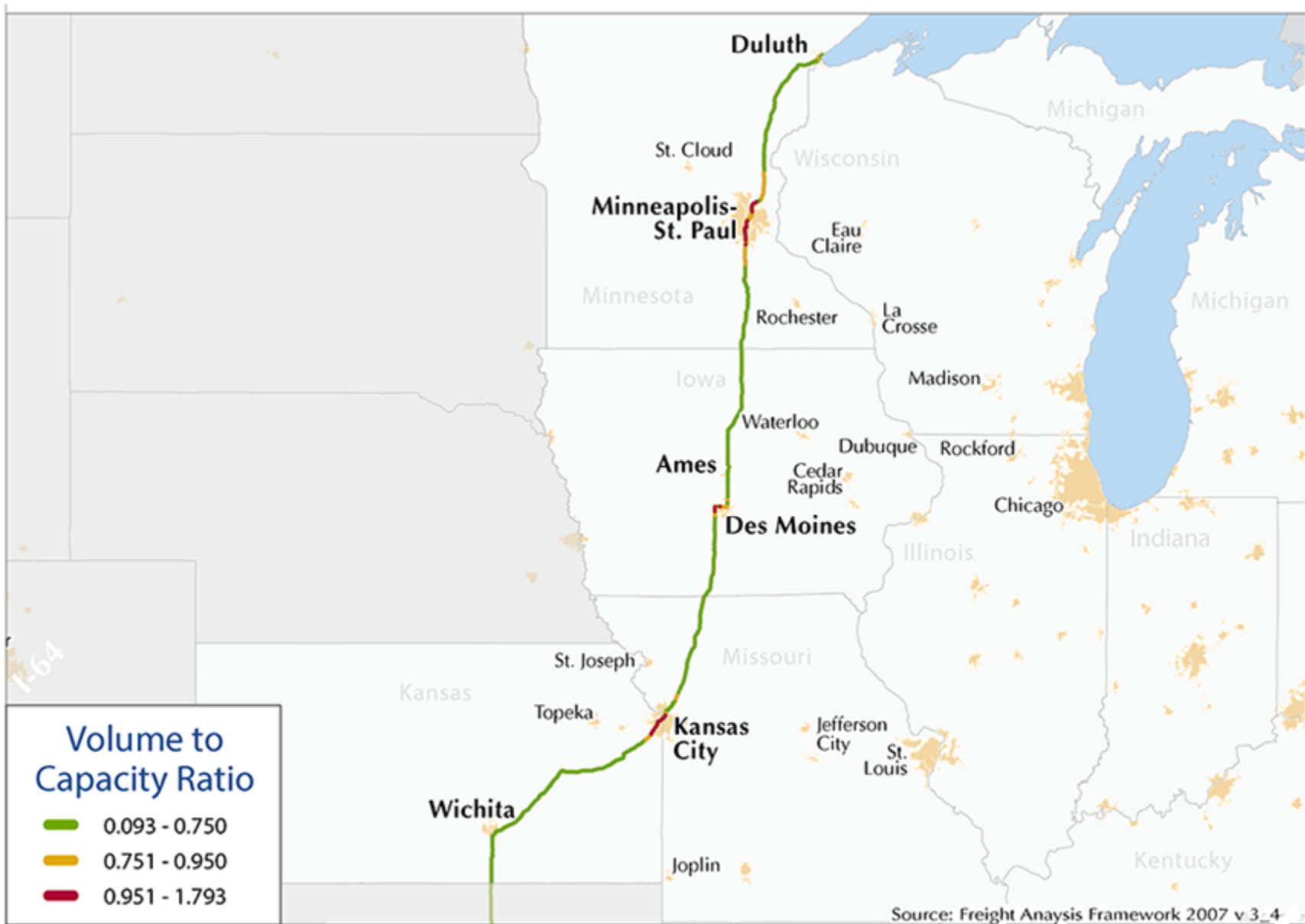


# Maritime Corridor Planning & Studies

# USDOT – Maritime Administration MARAD

## New Corridor Designation M- 35 Upper Mississippi River





**Interstate – 35 Corridor Congestion (Mid-America Freight Coalition)**



# M-35 Co-Sponsors

## *“Waterway of the Saints”*



Illinois Department  
of Transportation

Illinois Department of Transportation



Iowa Department  
of Transportation

Iowa Department of Transportation



Minnesota Department of  
Transportation

Minnesota Department of Transportation



Missouri Department of Transportation



Wisconsin Department of Transportation

### M-35 Marine Highway Benefits Data

State	Cargo tons total - CY 2011	Miss. River Waterway Mileage	Roadway mileage (est.) - Route parallel to Miss. River		Modal Cargo Capacity		State of Good Repair - Maintenance Costs (10.0 cents per VMT for rural road segments)	Emissions Avoided	Value of Annual costs of CO2
			Description	Miles	# of Truckload equivalents	# of Barge equivalents	If cargo is hauled by trucks...	(Difference btwn truck and barge emissions)	(social costs of emissions...estimate of climate change damage...)
<b>Minnesota</b>	43,109,000	190	I-35 from IA - MN state line to Minneapolis	114	1,724,360	1,642.2	\$ 19,657,704.00	189,603	\$ 5,676,713.82
<b>Iowa</b>	9,740,000	312	I-35 from IA - MN state line to SR 27 to IA - MO state line	278	389,600	371.0	\$ 10,830,880.00	133,712	\$ 4,003,337.28
<b>Illinois</b>	109,663,000	580	Davenport, IA to Springfield to St. Louis via I-74 to I-55	266	4,386,520	4,177.6	\$ 116,681,432.00	828,047	\$ 24,791,727.18
<b>Wisconsin</b>	32,042,000	231	Hudson, WI to WI - IA state line (near Dubuque) via I-94 to US 61	259	1,281,680	1,220.6	\$ 33,195,512.00	447,755	\$ 13,405,784.70
<b>Missouri</b>	33,111,000	361	SR 27 @ IA - MO state line to U.S. 61 to St. Louis/Miss. River	185	1,324,440	1,261.4	\$ 24,502,140.00	201,728	\$ 6,039,736.32

DISCLAIMER: The numbers in the table are calculated estimates using data from the sources listed below. For an actual valuation, more in-depth research would be needed. However, this methodology is sufficient for providing general estimations for a marine highway corridor designation application.

# M-55 Study

– *MoDOT, MARAD & IDOT*

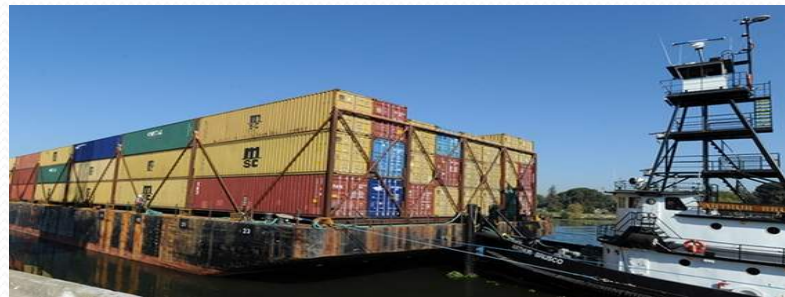
- Viable for RORO and study is starting point for starting service
- Building block for containerized cargo
- Containerized products in study focused on identify preserved grains and soy





# M55 – Study Findings

- Viable for RORO and study is starting point for starting service
- Building block for containerized cargo
- Containerized products in study focused on identify preserved grains and soy

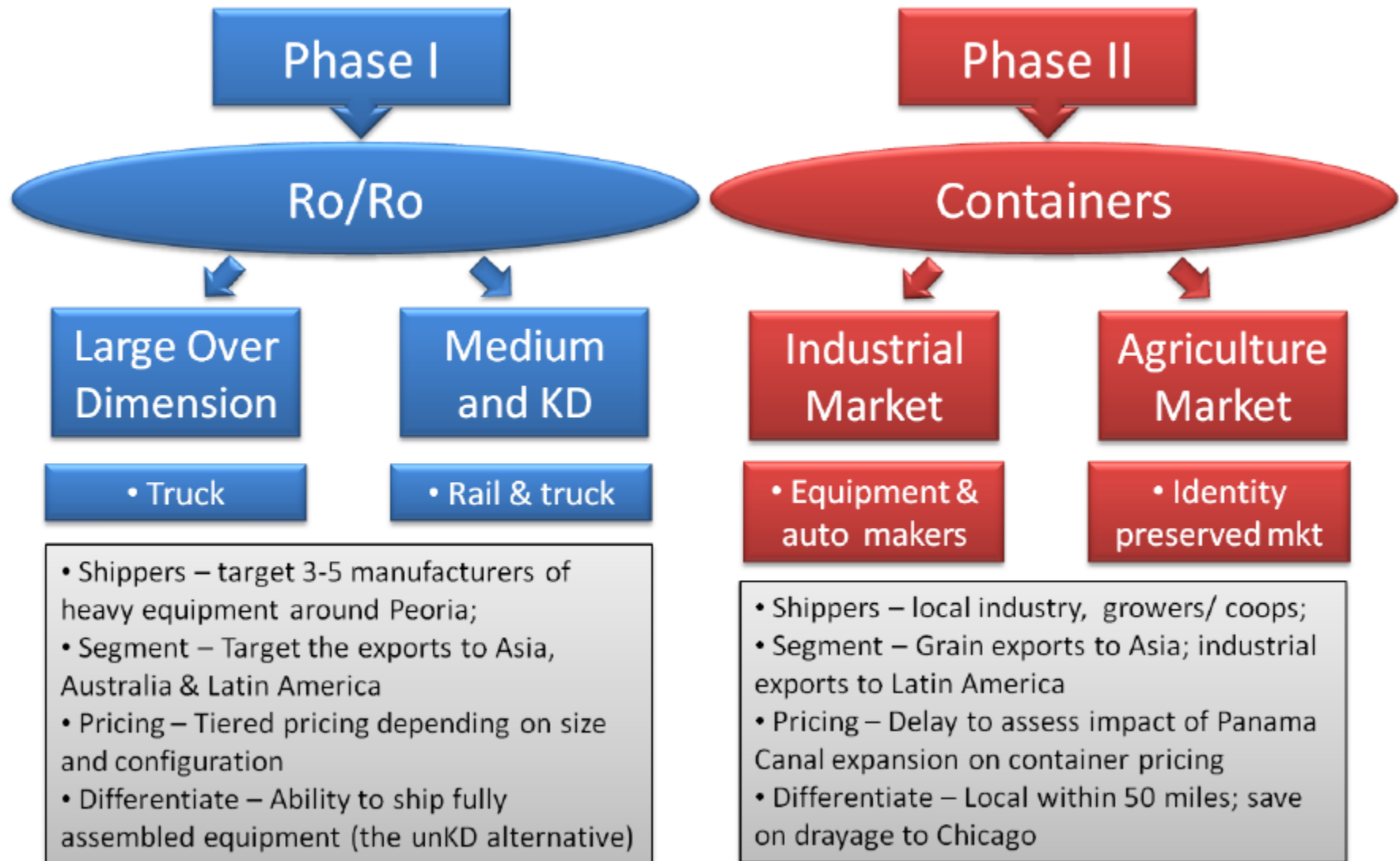


# M-55 Study

Figure 1: Map of the Study Area

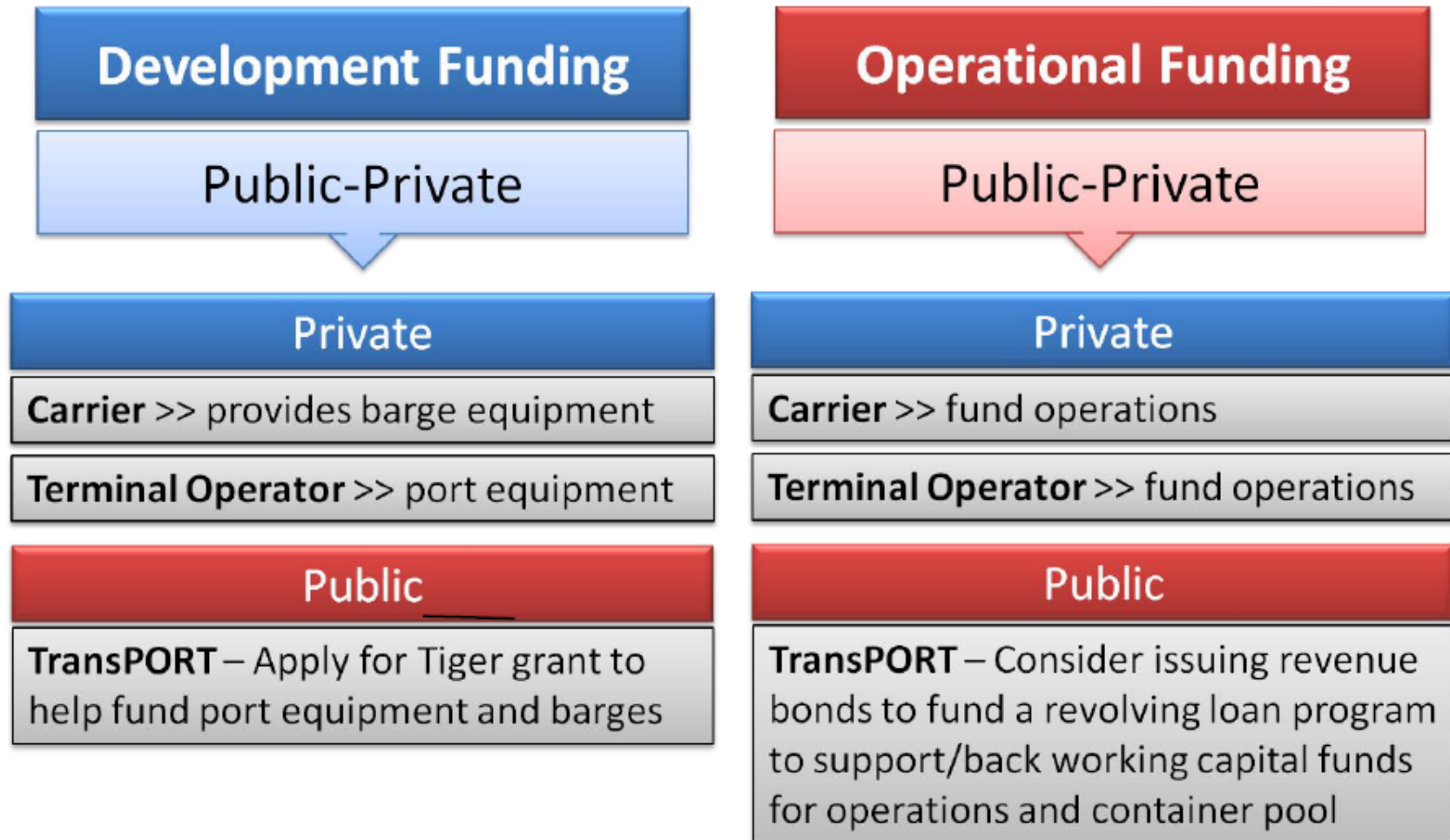


**Figure 1: Market Development Phasing**



KD = Knocked down

**Figure 7: Shared Funding Role for Public and Private Sector**





# M-55 Corridor Benefit

1. Allows IDOT & MoDOT to pull in other stakeholder agencies for Maritime freight opportunities and development
2. Present Study along the entire M-55 Corridor
3. Study helps establish baseline for future port studies for COB opportunities and overall awareness for maritime freight

# Regional Planning Tiger Grant Proposal

## M-90, M-75, & M-71/77



# Unlocking the Value of the Great Lakes-St. Lawrence River Maritime Transportation Report – Council of Great Lakes Governors - Marc-Andre' Roy - CPCS

- Institutionalization of Marine Freight ~ Industry, Agencies, etc.
- Recognize Important Role of GL Maritime System by Governing Leadership
- Commit to Marine Sector Leadership & Facilitate State-Provincial coordination and engage decision-makers with a single voice
- Inventory Marine Infrastructure & Market Industry
- Encourage support of United States and Canada

Figure 1-2: Tonnage Loaded and Unloaded at Major GLSLR Ports, 2010

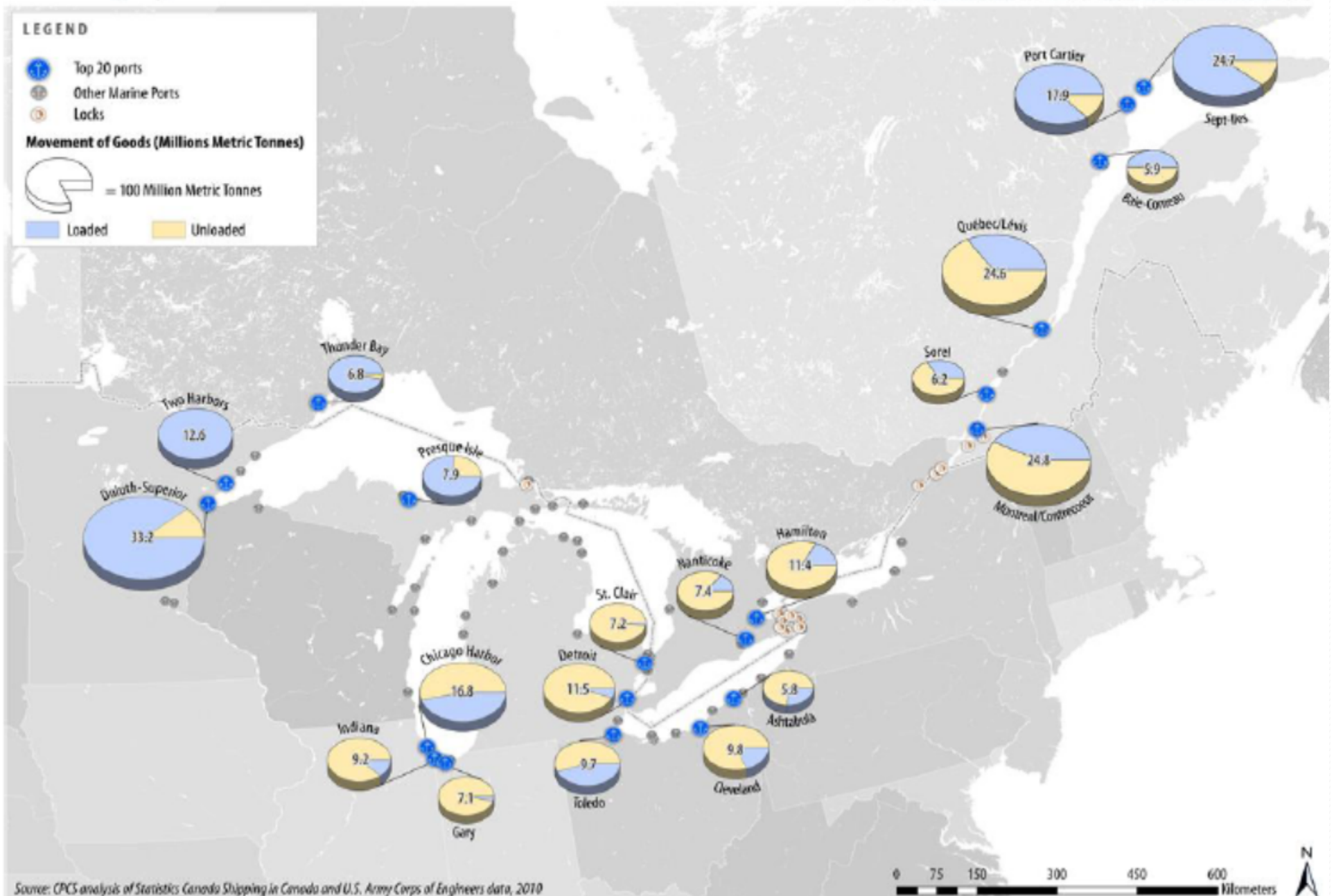
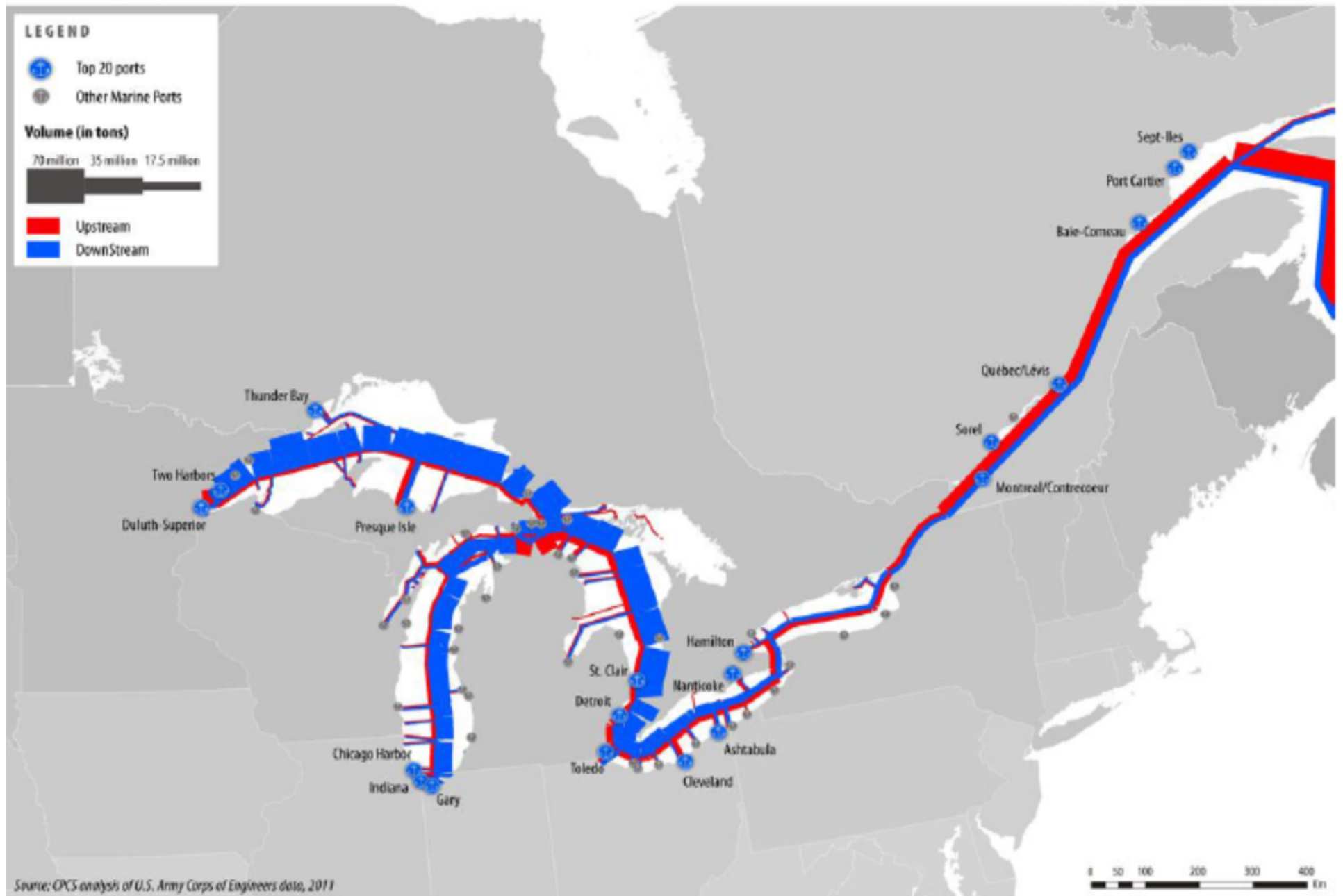




Figure 1-3: Total Tonnage Moved on Inland Waterways in the GLSLR, 2007



Source: CPCS analysis of U.S. Army Corps of Engineers data, 2011

# Regional Planning Tiger Grant

1. Inventory ports, terminals, locks and dams, and intermodal facilities, M-90, M-75, & M-71/77
2. Recommend how system-wide inventory to be used for strategic priorities
3. Identify Maritime statutory, regulatory, policy, technological, or infrastructure funding priorities
4. Conduct commodity flow analysis by involving major private industry
5. Assess Marine infrastructure resiliency in wake of failure and project impact analysis on Modal Diversions

# Regional Planning Tiger Grant

6. Seek MPOs Input on Barriers, First/Last mile, Land Use, Housing, Business and Economic Development, & Mitigation to Community Impacts
7. Assess Risks/vulnerabilities of Weather-related Disasters
8. Advise state DOTs how to include Maritime Freight Planning into Plans
9. Conduct SWOT/ Analysis of PPP for Locks and Dams, Intermodal Facilities, and Port & Terminal Facilities.
10. Identify COB/RoRo SWOT Analysis & Trends in Domestic and Global Freight Movements for All Modes & its Potential Future Impacts



# Keeping Maritime Freight Mobility in Forefront



# MAP – 21 Basic Requirements – Strategic Planning

1. Strategic Plan how DOTs to meet national freight goals & overview of trends, needs, and issues
2. **Freight policies & strategies aimed to guide freight-related decisions and enhance freight mobility & regional collaboration**
3. Condition & performance of state freight system including measurements to be used to guide investment decision-making.

# MARITIME COLLABORATION

- USDOT–MARAD, State DOTs, USACE
- Inland Rivers, Ports & Terminals Assn.
- Upper Mississippi Rivers Basin Assn.
- Upper Mississippi, Ill & Missouri Rivers Assn.
- Big River Coalition & Louisiana Maritime Assn.
- Waterways Council, Inc.
- Mississippi River Cities & Towns Initiative
- Council of Great Lakes of Governors – Maritime Taskforce

# Illinois State Freight Advisory Council (ISFAC)



- Standing Forum
- Public and Private Sector Interests
- Governor's Export Advisory Council Assistance
- <http://www.dot.il.gov/freightcouncil/index.html>
- Focus on Connectivity Across All Modes
- Advise IDOT on Establishing Regional Corridors to be a part of National Freight Network

## **L RTP, Freight & State Rail Plan - 2012**

- Long Range Transportation Plan (LRTP)
- Illinois Freight Mobility Plan
- Illinois State Rail Plan
- M-55 Study

You may access these reports by:

[http://www.illinoistransportationplan.org/info\\_center/reports.aspx](http://www.illinoistransportationplan.org/info_center/reports.aspx)

<http://www.dot.il.gov/ilrailplan/Info.html>

<http://www.dot.il.gov/freightcouncil/documents.html>





# Questions?

Kevin Schoeben

Deputy Director

Office of Planning and Programming

Illinois Department of Transportation

2300 South Dirksen Parkway, Rm 300

Springfield, Illinois 62764

217.557.5434

[Kevin.Schoeben@illinois.gov](mailto:Kevin.Schoeben@illinois.gov)