# Illinois State Freight Plan

**Michael Vanderhoof** 

Bureau of Planning Office of Planning and Programming Illinois Department of Transportation

### Background

- Fixing America's Surface Transportation (FAST) Act signed into law on December 4, 2015
- States must have a federally approved Freight Plan by December 4, 2017, to receive Freight Formula Funds provided by the FAST Act

### Freight Formula Funds

FAST Act - Five Year Allocation for Illinois

```
2016 - $41,246,826
```

2017 - \$39,453,486

2018 - \$43,040,166

2019 - \$48,420,187

**2020-** \$53,800,208

\$225,960,873

Avg. \$45M/Year

### **Obligation of Funds**

#### National Highway Freight Network (NHFN)

- Primary Highway Freight System (PHFS)
- Non-PHFS Interstates
- Critical Urban Freight Corridors (CUFCs)
- Critical Rural Freight Corridors (CRFCs)

#### National Highway Freight Network (NHFN) in Illinois

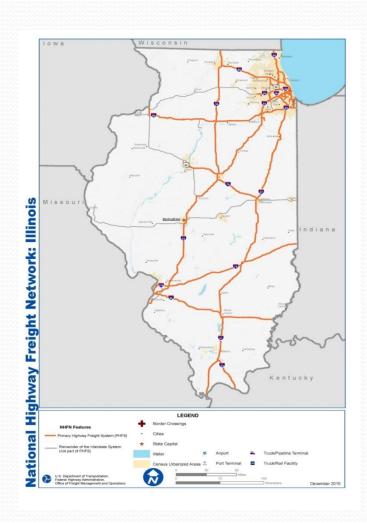
Primary Highway Freight System (PHFS) - 1,685.40 miles

Non-PHFS Interstates – 586.89 mi\*

Critical Urban Freight Corridors - 168.54 miles

Critical Rural Freight Corridors – 337.08 miles

\*Illinois is classified as a High Mileage State - excludes using funds on the Non-PHFS Interstates, unless they are designated as a CUFC or a CRFC



## Freight Plan Elements

#### General Overview

#### **Trends**

- Infrastructure
- Workforce
- Emerging

#### **Bottlenecks**

- Reliability
- Delay
- 95<sup>th</sup> Percentile

# Freight Data Analysis

### Modal Breakdown (2014)

#### Tons (M)

<ul><li>Truck</li></ul>	664.2
	~~~~~~~~~ <del>~</del> ~~~~~

- Rail Intermodal 105.1
- Rail Carload 348.9
- Water 107.8
- Air 1.9

#### Value (B)

<ul><li>Truck</li></ul>	\$1,072.3

- Rail Intermodal \$1,313.6
- Rail Carload \$ 371.2
- Water \$ 31.5
- Air \$ 185.4

Grand Total

1,227.9

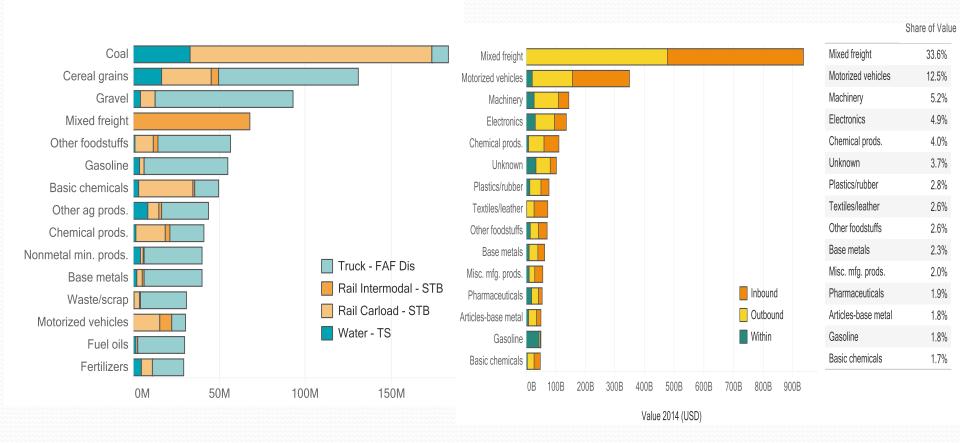
Grand Total \$2,974.0 (= 2.97 Trillion with a "T")

# Modal Share Comparison (2014)

Tons		Value	
<ul><li>Truck</li></ul>	54.1%	• Truck	36.1%
<ul> <li>Rail Intermodal</li> </ul>	8.6%	<ul><li>Rail Intermodal</li></ul>	44.2%
<ul> <li>Rail Carload</li> </ul>	28.4%	<ul><li>Rail Carload</li></ul>	12.5%
<ul><li>Water</li></ul>	8.8%	<ul><li>Water</li></ul>	1.1%
• Air	0.2%	• Air	6.2%
<b>Grand Total</b>	100%	<b>Grand Total</b>	100%

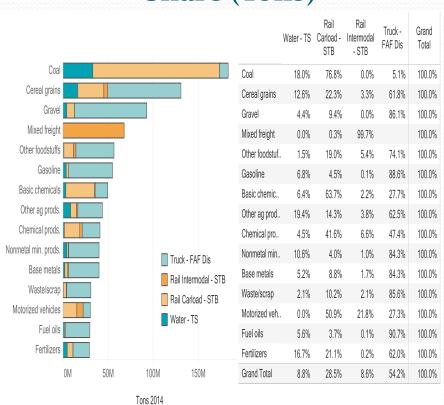
### Commodities Breakdown (2014)

Top 15 Commodities (Tons) Top 15 Commodities (Value)

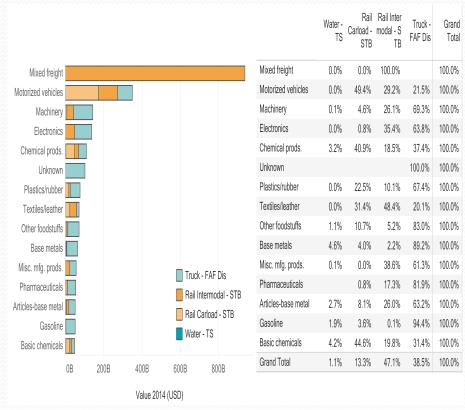


### Commodities Mode Share (2014)

#### Top 15 Commodities Mode Share (Tons)



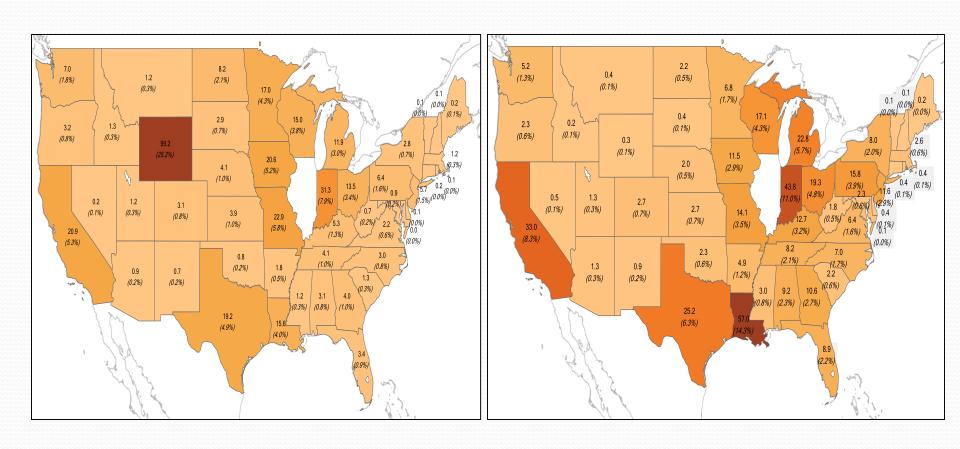
#### Top 15 Commodities Mode Share (Value)



## State Freight Flows (Tons)

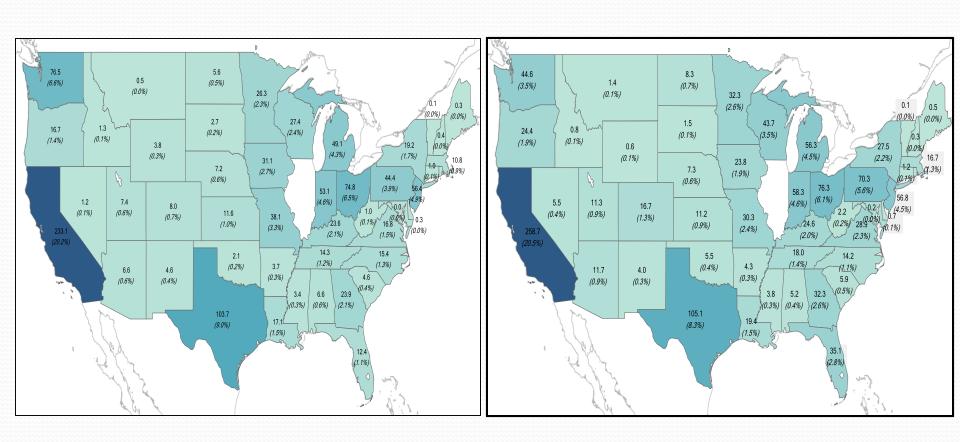
Millions of Tons Inbound

**Millions of Tons Outbound** 

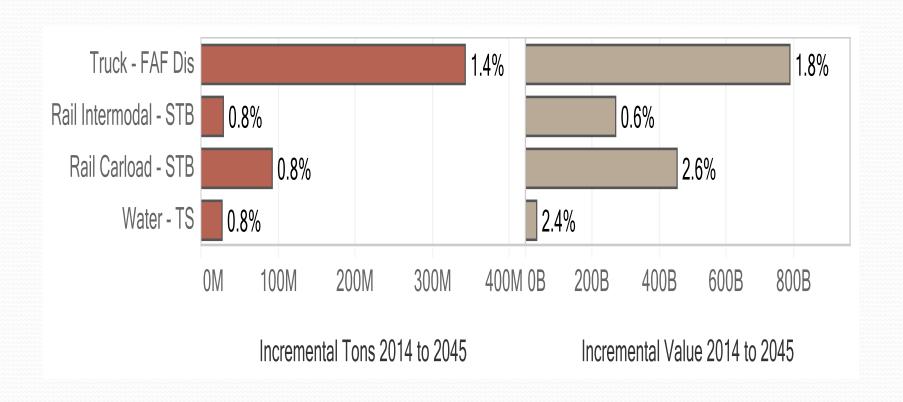


# State Freight Flows (Value)

Billions of Dollars Inbound Billions of Dollars Outbound



# 2014 to 2045 Projected Annual Growth Rates



### 2014 to 2045 Projected Growth

#### **Tons**

- 40% Total Increase to
   1.72Billion tons
- 340M of 490M additional tons projected to be Truck
- Equates to 70% Truck
   Increase

#### Value

56% Total Increase \$4.34T

- \$792B of \$1.55T are projected to be moved by Truck
- Equates to 51% Truck
   Increase

# Truck Pass-Through Analysis in Vehicle Miles Traveled (VMT)

Grand Total Trucks, Illinois	-Based & Through
Year	Truck VMT
2014	27,824,439
2045	50,498,350
All Trucks Nationally that T	ravel Through Illinois
Year	Truck VMT
2014	10,484,718
2045	21,947,399
Percentage Through	
2014	38%
2045	43%

### **Coordinated Planning Process**

Freight Plan is being developed in conjunction with the 2017 Long Range Transportation Plan (LRTP)

Individual components of the LRTP include:

- Freight Plan
- Rail Plan
- Asset Management Plan

#### **Trends**

#### Infrastructure

Roadway/Bridges – Backlog increasing

Rail - \$17.5 B in long term needs

Ports/Waterways – 8<sup>th</sup> in US in waterborne transport

Air – High Value - 4.2% State GDP

#### **Workforce Trends**

Back to 2007 employment levels

Good wage growth

48% related to Truck Transportation

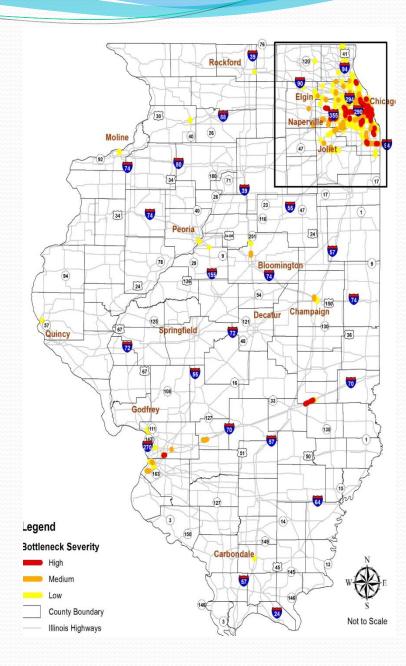
#### **Trends**

#### **Emerging**

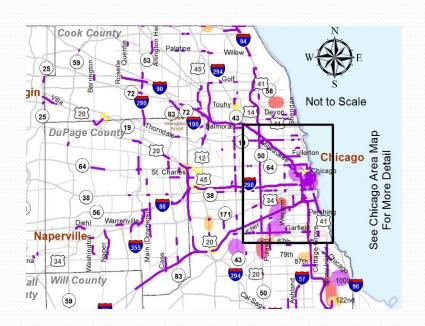
Connected and Autonomous Vehicles
Truck Platooning
Intermodal rail – Growth market
Warehouse Location and Automation
Retail Home Delivery
Supply Chain
3D Printing

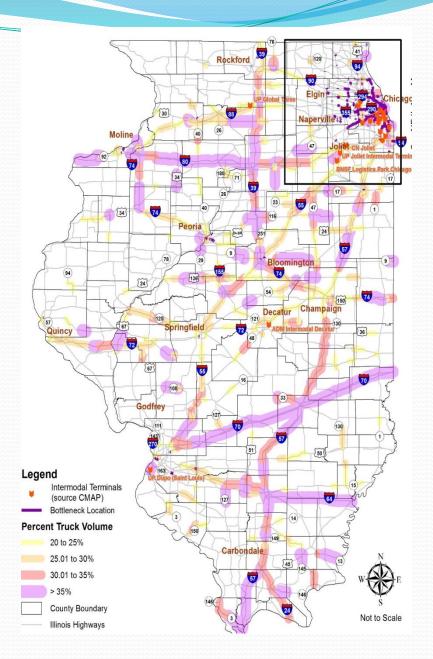
### **Bottlenecks**





### **Bottlenecks**





### Freight Plan Elements

#### Strategies

- Institutional
- Network development
- Economic Development Strategies

#### Goals and Performance Measures

- National, State and Long Range Goals
- Improve Safety
- Improve Efficiency
- Grow the Economy
- Preserve Existing Infrastructure
- Expand Infrastructure Strategically
- Support Multi-Modal Distribution

### Freight Investment Plan

#### Competitive Program Under Development

- \$45M/Year Average
- No more than 10%/Year for Intermodal or Rail projects
- Anticipate launch 1<sup>st</sup> half of 2018

#### Goals:

- Bottleneck Reduction
- Freight Related Safety
- Intermodal Connections
- Technology Deployment

### Freight Plan feedback

http://www.idot.illinois.gov/home/freight\_plan\_feedback

Send comments to:

michael.vanderhoof@illinois.gov james.durako@illinois.gov