

# Illinois State Freight Plan Executive Summary

JUNE 2018



**Illinois serves as one of the nation's premier logistics hubs because of its strategic location and access to multimodal transportation infrastructure.**

<b>15,968</b> Miles of Roadway	<b>10,000</b> Miles of Tracks	<b>1,095</b> Miles of Navigable Inland Waterways	<b>116</b> Airports	<b>1.23</b> Billion Tons Combined Total Freight*	<b>\$2.97</b> Trillion in Freight Value
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Illinois ranked third in truck freight tonnage even though its truck mode share of 54 percent is well below a national average closer to 80 percent due to large volumes of freight also being moved by rail, water, and air. Illinois is the third largest state in the nation for volume of freight, whether measured by tonnage or by value of goods.<sup>1</sup>



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Full plan available at [http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/OP&P/ILFreightPlan\\_FINAL.pdf](http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/OP&P/ILFreightPlan_FINAL.pdf)

<sup>1</sup> Rankings are based on U.S. Department of Transportation Freight Analysis Framework (FAF4) data, excluding volumes by pipeline and unidentified modes.

\*Considering just freight that originates or terminates in the state as of 2014.

# FREIGHT FLOWS

The modal breakdown and directional flow of this freight movement is shown below. The top numbers show tonnage and value for inbound, outbound, and within state flows, while the bottom numbers show the mode share percentages based on these tonnages and values.



**38 percent of all truck vehicle miles traveled (VMT)** in Illinois is caused by shipments that pass through the state.



Freight railway shipments accounted for **37 percent of the total Illinois freight tonnage and 56.7 percent of the total freight value** in Illinois.



**30 percent of all tonnage moved on the Illinois railway system** passes through the state without stopping.



The maritime transportation system carries **8.8 percent of the total freight tonnage** (1.1 percent of the total freight value)

**6.2 percent of total freight value** (accounting for 0.2 percent of freight tonnage) is transported by air.

Trucks and rail are the two most important freight modes in Illinois. Trucks were responsible for transporting 54.1 percent of the total Illinois freight tonnage (36.1 percent of the total freight value). The interstate network handles the bulk of the truck traffic in Illinois, with more than half of the interstate miles carrying truck percentages at 25 percent or greater. The northeastern portion of Illinois is the hub of the nation's railway system and statewide, all seven Class I railroads, as well as 38 other railroads, operate in Illinois.

The maritime transportation system in Illinois carries 8.8 percent of the total freight tonnage (1.1 percent of the total freight value) along its 1,095 miles of navigable waterways. Waterborne freight moves through Illinois predominantly in a north-to-south direction along the Illinois River and canal system, the Kaskaskia River, and the Mississippi and Ohio rivers.

Chicago's O'Hare International Airport is one of the nation's primary air hubs, particularly for international trade, handling 91.2 percent of all the state's inbound air cargo and 87.5 percent of all the state's outbound air cargo.

## Mode and Type of Freight Flow for 2014

Source: WSP Combined Commodity Flow Dataset, Only Truck, Rail, Air, and Water

\*STB: Surface Transportation Board; TS: Transearch; T100: 2014 Bureau of Transportation Statistics T-100 Segment Database (value calculated based on average value per ton figures from FAF)

	Truck - FAF Dis		Rail Intermodal - STB		Rail Carload - STB		Water - TS		Air - T100	
	Tons (M)	Value (B)	Tons (M)	Value (B)	Tons (M)	Value (B)	Tons (M)	Value (B)	Tons (M)	Value (B)
INBOUND	129.1 32.7%	\$296.3 23.7%	48.8 12.3%	\$647.3 51.8%	195.2 49.4%	\$198.1 15.8%	21.2 5.4%	\$10.6 0.8%	1.0 0.3%	\$97.7 7.8%
OUTBOUND	133.8 33.4%	\$415.2 30.8%	56.2 14.0%	\$662.4 49.2%	129.5 32.3%	\$161.9 12.0%	80.0 20.0%	\$19.7 1.5%	0.9 0.2%	\$87.0 6.5%
WITHIN	401.4 92.9%	\$360.8 95.5%	.1 0.0%	\$3.9 1.0%	24.2 5.6%	\$11.1 2.9%	6.6 1.5%	\$1.2 0.3%	— 0.0%	\$0.7 0.2%
<b>TOTALS</b>	<b>664.2</b> 54.1%	<b>\$1,072.3</b> 36.1%	<b>105.1</b> 8.6%	<b>\$1,313.6</b> 44.2%	<b>348.9</b> 28.4%	<b>\$371.2</b> 12.5%	<b>107.8</b> 8.8%	<b>\$31.5</b> 1.1%	<b>1.9</b> 0.2%	<b>\$185.4</b> 6.2%

## GEOGRAPHY

In Illinois, Cook County solidly claimed the top spot for the most freight terminating and originating in the state (by both tonnage and value). DuPage, Will and St. Clair counties also ranked among the top four counties for freight origination and termination. A quick glance at the originating tonnage for these four counties indicates that Cook County generated 29.9 percent of all tonnage, with over half (54.3 percent) moving by truck. St. Clair County generated 5.5 percent of all tonnage, with truck accounting for 19.3 percent and notably has a high water mode share at 45.7 percent. Will County generated 5.4 percent of all tonnage, with truck being used for 69.7 percent of tons and nearly all the remainder (25.3 percent) on rail intermodal. DuPage County generated 4.3 percent of all tonnage and depends almost exclusively on truck (93.6 percent).

## TOP EXPORTS

The top ten exports for Illinois are shown below. While coal is ranked second on this list of top exports, more coal entered Illinois through the freight network than was exported. Looking ahead to 2045, coal is expected to see the biggest decline of all commodities (at a rate of 2.6 percent per year) in terms of the total tonnage shipped. Cereal grains, on the other hand, are anticipated to increase at 1.5 percent per year until 2045.

## EXPECTED GROWTH FORECAST

The Federal Highway Administration (FHWA), in partnership with the Bureau of Transportation Statistics, produced what is commonly referred to as the Freight Analysis Framework (FAF). The FAF integrates data from a variety of sources to create a comprehensive picture of freight movement by all modes of transportation. A 2045 forecast for the composite freight flow was developed using 2014 as the base year. The growth rates in this forecast projected changes in the production and consumption of commodities. These growth rates were then applied to the individual commodities that are known to originate or terminate in each of the counties in Illinois and projected out to 2045.

Cook, DuPage, St. Clair, Lake, and Will counties are expected to see the greatest annual growth in terms of freight value and tonnage.

### Most Freight Originating in the State

	OVERALL TONNAGE	TRUCK MOVEMENT	RAIL (Intermodal)	RAIL (Carload)	WATER
Cook County	29.9%	54.3%	17.1%	24.6%	4.0%
St. Clair County	5.5%	19.3%	3.0%	32.1%	45.7%
Will County	5.4%	69.7%	25.3%	1.8%	3.2%
DuPage County	4.3%	93.6%		0.5%	5.9%

### Top 10 Exports for 2014

RANK	DESCRIPTION	KTONS
1	Cereal Grains (includes seed)	4,974
2	Coal	4,642
3	Agricultural Products (excludes animal feed, cereal grains, and forage products)	3,836
4	Animal Feed, Eggs, honey and Other Products of Animal Origin	3,770
5	Fuel Oils (Includes diesel, Bunker C and biodiesel)	3,644
6	Waste and Scrap (excludes agricultural or food)	2,375
7	Other Prepared Foodstuffs, Fats and Oils	1,294
8	Other coal and Petroleum Products (not elsewhere classified)	1,282
9	Machinery	1,090
10	Natural Sand	913

### Highest Growth Counties by Value and Tons (2014-2045)

	ANNUALIZED GROWTH (VALUE) Billions	ANNUALIZED GROWTH (TONS) Millions
Cook	\$838.1	246.0
DuPage	\$152.2	47.0
St. Clair	\$117.3	32.7
Lake	\$94.0	23.2
Will	\$85.2	27.6

# FREIGHT TRENDS AFFECTING THE ILLINOIS MULTIMODAL SYSTEM

The major freight trends affecting Illinois can fit into three major categories: infrastructure, workforce, and emerging trends, with the latter category incorporating technological advances and market changes.



**DETERIORATING INFRASTRUCTURE/  
INFRASTRUCTURE FUNDING**



**WORKFORCE  
TRAINING**



**TECHNOLOGICAL  
ADVANCES**

## INFRASTRUCTURE

Illinois' freight system includes an extensive multimodal network of roadways, rail lines, airports, waterways and ports and some of it has already deteriorated to the point where an improvement is needed now. By 2023, it is anticipated that 35 percent of the state roadway miles and 13 percent of the bridges will need repair. Additionally, substantial investment in rail will be required to accommodate the predicted growth in the freight rail traffic.

IDOT's primary funding sources are the federal government, state motor fuel taxes, and motor vehicle registration fees. Revenues from some of the smaller sources have grown, however, these gains do not offset the overall subsequent decline in the major revenue areas. During these times of diminished funding, IDOT continues to prioritize projects that address roadway maintenance, bridge maintenance, and congestion mitigation and expansion. IDOT also continues to develop a data-driven performance based project prioritization tool to evaluate projects for funding.

In 2017,  
**21 PERCENT**  
of the state roadway system  
and 8 percent of the bridges  
needed repair.

## WORKFORCE TRENDS

A current challenge facing transportation and warehousing workers in Illinois is the aging of the workforce, particularly among truck drivers. To further develop Illinois' workforce, the state began implementing the National Career Cluster Program and the newly launched Illinois Pathways Initiative<sup>2</sup>.

**13%**  
**PORTION OF  
THE WORK FORCE**  
has an education featuring less than  
high school diploma, which restricts  
further opportunities within the industry  
unless additional training is received.

<sup>2</sup> <https://www.illinoisworknet.com/ilpathways/Pages/default.aspx>, accessed 2017.

## EMERGING TRENDS

There are several emerging trends that will shape the freight industry in the future. It is difficult to quantify how these trends will affect the projected freight flow of Illinois, but awareness and tracking of them is key. Highlighted trends include:

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Connected and automated/autonomous vehicles</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Truck platoons</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Rail intermodal developments</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Warehouse location and automation</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Retail home delivery</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Supply chain sourcing</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>3-D printing</b></p>
<p>Technological advances in self-driving trucks could have a profound significance, but implementation still faces many challenges.</p>	<p>Platoons consist of two or more trucks traveling closely behind one another, using automated sensors, and controls to maintain short headway distances between vehicles, which in turn allows the vehicles behind the lead truck to reduce fuel consumption by air drafting.</p>	<p>Containers and trailers on rail flatcars has been a growth market for freight railroads for many years and intermodal rail traffic should continue to grow.</p>	<p>The number of distribution centers has tripled in the past four years and warehouse automation is dramatically increasing and expected to grow even more.</p>	<p>Within last ten years, online shopping has risen from 2.1% in 2004 of the total retail to 6.4% in 2014. The result of this shift in how consumers shop affects the number of trucks on the roadways, including on rural routes and in residential communities.</p>	<p>The outlook for supply chain source is speculative and the outcome makes a difference for freight planning so Illinois planners must observe trends closely to better understand the implications.</p>	<p>The appearance of 3D printing into manufacturing processes and supply chains is relatively new. UPS currently estimates 5-10 percent of manufacturing capacity<sup>3</sup> could move to a 3D platform, although penetration will vary by industry based on the considerations outlined above.</p>

<sup>3</sup> The 5 percent factor is of global manufacturing capacity and is quoted in "3D Printing: The Next Revolution in Industrial Manufacturing", *ibid.*; however, the study's UPS author Derrick Johnson quoted 9-10 percent as an upward bound at a presentation to the Transportation Research Board, 2/10/17.

# ILLINOIS TRUCK BOTTLENECKS

Congestion imposes significant costs on the movement of freight. Bottlenecks are a portion of a roadway network causing a disproportionately high cost in the movement of freight, in terms of both delay and unreliability.

**516.9 miles of roads** (counting both directions of travel) were classified as bottlenecks to freight operations.

**474.2 miles of the 516.9 bottleneck miles** (91.7 percent) are the Chicago metro area.

More than half of the interstate highway miles in Illinois – **55 percent** – have truck proportions of **25 percent or greater**.



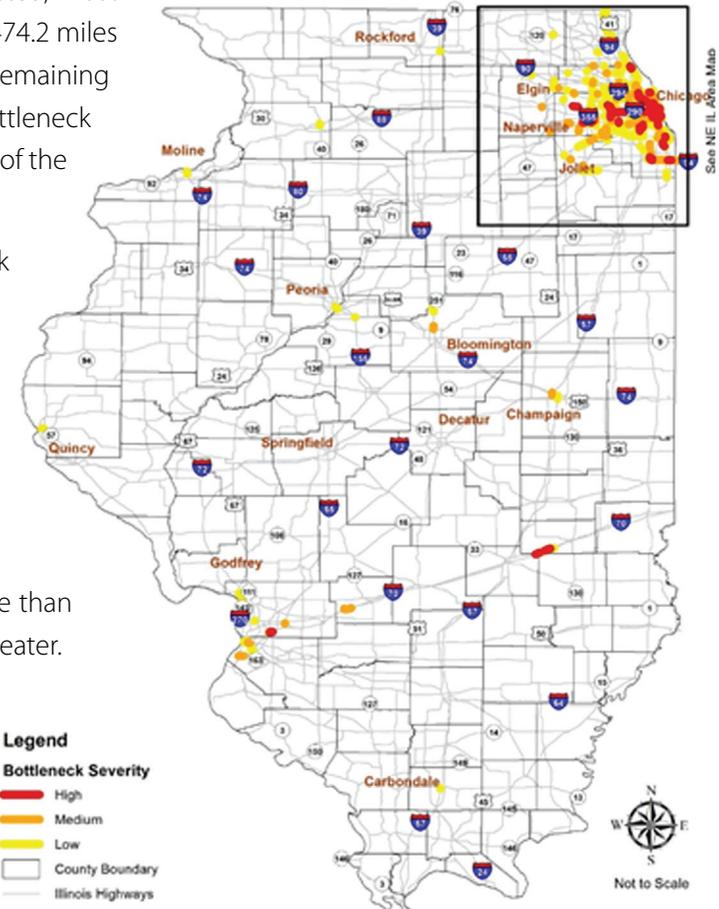
Highway freight bottlenecks in the state were identified by selecting the roadways performing the worst in terms of truck delay or unreliability. As might be expected, most bottleneck locations are in and around the Chicago metropolitan area. Specifically, 474.2 miles of the 516.9 bottleneck miles (91.7 percent) are in the Chicago metro area. The remaining 42.7 miles of bottlenecks are outside of this region, representing 8.3 percent of the bottleneck miles identified. In many cases, delay and unreliability in these locations was similar to some of the worst performing roads in the metropolitan Chicago region.

Bottlenecks induced by truck freight were examined by identifying all bottlenecks in Illinois (truck and passenger), coupled with defining the intensity of freight near those bottlenecks through examination of high truck percentages on Illinois routes, and by looking at major truck generators like intermodal facilities. The analysis found that the transportation network in Illinois accommodates a very high volume of trucks, but truck freight is not conclusively the main cause of all bottlenecks throughout the state.

## CORE FREIGHT NETWORK

Interstates where trucks are a quarter or a third of the volume are everywhere in the state. In fact, more than half of the interstate highway miles in Illinois – 55 percent – have truck proportions of 25 percent or greater. This contrasts with other roadways in the state, which reach 25 percent trucks on just four percent of their total miles. Twelve interstate highways along with associated bypasses can be considered as the core roadway freight network for the State of Illinois. These 12 interstate highways are: I-24, I-39, I-55, I-57, I-64, I-70, I-72, I-74, I-80, I-88, I-90, and I-94.

**Truck Bottleneck Locations by Severity**  
(see Freight Plan for enlarged images)



See NE IL Area Map

# FREIGHT STRATEGIES

The proposed freight strategies fall broadly into three categories: **Institutional Strategies, Network Development Strategies, and Economic Development Strategies.**

## INSTITUTIONAL STRATEGIES

### INSTITUTIONAL STRATEGIES

Two institutional strategies are being undertaken as part of this plan. The first is the mainstreaming of freight considerations in project evaluations. The second is a competitive grant program model for project selection.

#### *Mainstreaming*

Mainstreaming refers to the fact that freight activity exists virtually everywhere in the roadway network, as well as in all modes of the transportation system and that freight factors should be explicitly incorporated into routine project analysis, rather than viewing freight as a side issue, or as a subject relegated to special studies. Given that significant freight volumes are widespread in Illinois, this is an important strategy to adopt.

A direct expression of this strategy is the inclusion of freight elements in IDOT's new Performance Based Project Selection tool for project prioritization. Among the elements that can be addressed with this project prioritization tool are freight volumes, proximity to prominent industries, and responses to freight bottlenecks. The application of the freight project prioritization tool is still in the development phase, but as mentioned above, its implementation will contribute to the mainstreaming of freight into the evaluation of priority projects.

## NETWORK DEVELOPMENT STRATEGIES

### *Competitive Grant Program Model for Freight Investment Plan*

A competitive grant program model was developed and used in 2018 to select projects for the freight investment plan required by the Fixing America's Surface Transportation (FAST) Act. The freight investment plan identifies how freight formula funds allocated in the National Highway Freight Program (NHFP) will be used. The competitive grant program allowed stakeholders to submit projects based on a defined set of criteria.

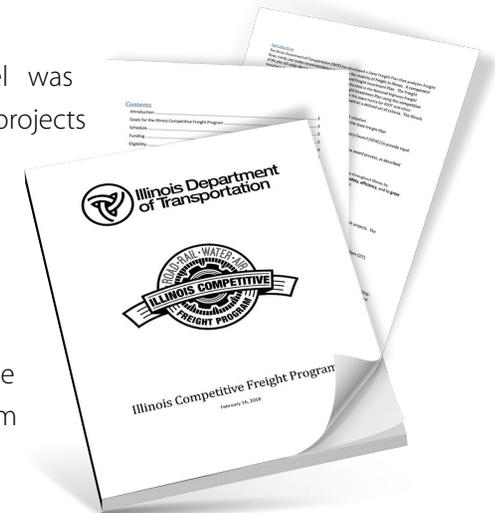
## ECONOMIC DEVELOPMENT STRATEGIES

### NETWORK DEVELOPMENT STRATEGIES

Five network development strategies will help the Illinois freight system adapt to performance requirements and growth.

These strategies are:

- » Establish district and corridor programs
- » Assure supply chain fluidity
- » Continue multimodal programs
- » Cultivate public-private partnerships
- » Provide truck parking



### *District and Corridor Programs*

IDOT should identify districts and corridors for granular analysis of freight movements and conditions, where systematic investment in capacity and operations is likely to improve performance for important industry and/or mitigate the negative effects of freight carriage. This can be accomplished by working with IDOT's nine geographic districts, MPOs, county departments of transportation, neighboring states, the Mid-America Freight Coalition, and the Illinois State Freight Advisory Council (ISFAC), to identify corridors to be targeted for improvement using data-driven processes.

### *Supply Chain Fluidity*

Freight performance in supply chains is measured end-to-end. This means that the performance of long distance freight movement on interstate corridors combined with the performance of pick-up, delivery, and transfer carriage on first and last mile routes is the metric that matters to supply chain competitiveness. To help better understand this process, IDOT should

participate in the FHWA Freight Fluidity Monitoring Program when a pilot is established in northeastern Illinois. In addition, as first and last mile routes are often located on local roads, IDOT should continue to support the Truck Access Route Program (TARP).

### *Multimodal Programs*

This plan supports multimodal distribution to take advantage of the many modal assets available to freight shippers throughout the state. Multimodal programs not only support Illinois' strength as a multimodal freight hub, but also help to relieve congestion on state highways by encouraging use of alternate modes whenever possible.

**Rail:** Support and funding for the Chicago Region Environmental and Transportation Efficiency (CREATE) Program should continue and could be enhanced through a variety of means, including improvements on short and long distance access roads to facilities, and through support to new and/or downstate facilities that can offer capacity relief and shorter, less costly transport distances for some

shippers. IDOT should also continue to support the Rail Freight Loan Program which provides assistance to communities, railroads, and shippers to preserve and improve rail freight service in Illinois.

**Waterways:** IDOT should continue to work with its agency partners to seek funding for waterway system capital needs. One method to accomplish this is to aggressively pursue United States Maritime Administration (MARAD) Marine Highway grants, particularly, since three marine highways (M-35, M-55, and M-70) have been designated in Illinois.

**Air:** Pick-up and delivery routes for key air cargo facilities such as Chicago O'Hare International Airport and Rockford's Chicago Rockford International Airport should be monitored for performance and improved for more efficient operation. Signal prioritization, introduced on access roads at sensitive times of day for flight connections, is an example of an operational enhancement that could be coordinated with local agencies for the benefit of region-wide service.



### *Public-Private Partnerships*

Freight performance is the joint product of public and private management and investment, meaning that both sectors contribute substantially to the result. Partnership for performance is a central purpose of the ISFAC, which can also offer a venue where partnerships for investment may begin. Private capital can be available where project timelines are not prolonged, revenue streams are apparent, and risks are appropriately shared. IDOT has relevant public-private partnership experience through the CREATE Program and the Houbolt Road Bridge project and should build on this with formal efforts to cultivate relationships and identify opportunities as a public sponsor and/or a public partner where the benefits of market access and improved performance can be monetized.

### *Truck Parking*

The safe and productive operation of trucks on our nation's highways depends on the ability of drivers to have reliable access to truck parking locations without sacrificing hours of work. Drivers nationwide will be required to use electronic log books as of January 2018 - a practice many of the larger truck fleets already follow. Electronic reporting brings greater accuracy and better safety enforcement, however, it also can bring about lost work time if parking is not available when needed. The "Jason's Law" provisions of federal MAP-21 legislation require states to ensure the adequacy of commercial motor vehicle parking capacity. IDOT is currently conducting a rest area study to help evaluate existing facilities and additional truck parking needs.

### **ECONOMIC DEVELOPMENT STRATEGIES**

Four economic development strategies will help Illinois sustain the freight driven economic engine that generates and distributes essential goods to the state, region, country, and world. These strategies are: job training, freight-driven development, efficient distribution, and technology pilots.

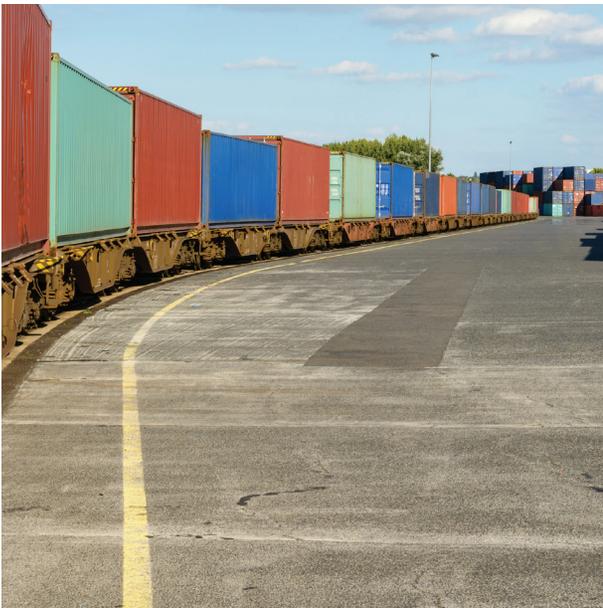
#### *Job Training*

Access to skilled labor is a prominent need for industries that manufacture and distribute goods. Promoting practical and economical ways for labor pools to reach workplaces is an important role for IDOT. While it is not directly a freight-related responsibility, it contributes to the supply of goods to Illinois and complements efforts to attract and preserve jobs through freight transportation. Job training is not typically a transportation function, but support for programs that include job training considerations can continue to provide benefits.



## Freight-Driven Development

Logistics centers that have grown up around rail intermodal terminals in Northeastern Illinois are testaments to the power of high-grade freight transportation to draw industry and catalyze growth. As new intermodal service lanes – including shorter distance services – are introduced at terminals, they meet a greater variety of needs and appeal to more businesses. The general strategy at work in this is freight-driven or cargo-oriented development, which harnesses a portfolio of modal and logistics services for job creation and industrial competitiveness, and connects it further to housing and skills. This general strategy can be applied to the development of new greenfield sites and the redevelopment of existing infill sites. IDOT can pursue cargo-oriented development opportunistically, supporting sensible new developments and redevelopments as they arise, or proactively, working in concert with transportation and economic development agencies around the state.



## Efficient Distribution

The rise of automated warehouses brings more freight generation per acre and makes distribution centers viable in locations closer to markets. This is an important dynamic for Illinois because it affects the national and regional distribution for which the state is a hub, as well as the local patterns of supply. New development and redevelopment, which may include reuse of brownfield sites, will need to occur simply to keep Illinois building stock competitive with other states. IDOT should track and plan for higher freight volumes on existing infrastructure caused by higher freight density. IDOT should also recognize that stakeholder expectations for speed and reliability may be tied to same day and next day delivery requirements. Understanding the service radius for distribution centers will allow IDOT to track how urban and rural areas are being served by conventional retail and home delivery, and determine which routes are significant. The possible use of warehouses as staging points for drone delivery will also be useful to track, to determine the demand on air space and the way these facilities may function.



## Technology Pilots

The first of these is *safety programs* to capitalize on the ability of sensors to automatically correct for conditions, hazards, and the proximity of other vehicles in the operating environment. IDOT should explore options to design and test such a piloting program, with likely candidates being locations with high volume intermodal terminals and low capacity roads.

A second focus area that could be combined with the first is *traffic signal prioritization*, which can improve reliability and throughput around facilities with fixed schedules (such as train and aircraft departures) or high service requirements (such as assembly plants).

The third focus area is *truck platooning*. This could emerge in short distance shuttle operations, but the push from industry – truck lines, shippers, and truck manufacturers – will most likely be for long distance travel on interstate highways. The best strategy is most likely a cooperative one with neighboring states, partly because coordinated policy makes for more efficient operations, and partly to allow resources and knowledge to be pooled in addressing an issue common to states in the region.



# GOALS AND PERFORMANCE MEASURES

IDOT established six strategic goals for freight that align as closely as possible with the national freight goals while addressing the individual needs of the state of Illinois. From these strategic goals specific and measurable performance measures have been identified.



Freight performance measures can be incorporated into IDOT's new Performance Based Project Selection tool that will be used to prioritize projects. This new project selection tool evaluates potential capacity projects based on traffic operations/congestion, safety, economic development, accessibility/multimodalism, and livability/environmental impacts.

## Strategic Goals, Objectives, Strategies, and Performance Measures

STRATEGIC GOAL	OBJECTIVE	STRATEGY	PERFORMANCE MEASURE
IMPROVE SAFETY	Minimize roadway incidents involving freight vehicles	Provide safety alerts to drivers through IDOT in Motion	Number of fatalities/injuries involving freight vehicles
	Ensure IDOT's Intelligent Transportation System (ITS) has adequate safety notification protocols	Evaluate ITS procedures for the delivery of safety messages and explore other innovative ITS uses to improve safety	Completion of ITS architecture plan update
IMPROVE EFFICIENCY	Establish performance measure to evaluate efficiency of freight movement	Establish procedures to use the National Performance Management Research Data Set (NPMRDS) to calculate performance	Truck Travel Time Reliability (TTTR) Index performance measure using NPMRDS traffic data
	Update IDOT's Illinois Transportation Automated Permits (ITAP) truck permitting process	Secure funding to proceed with an update of the ITAP system	Completion of upgrade (Phase 3) to the ITAP platform
GROW THE ECONOMY	Secure stable dedicated state funding source for freight projects	Establish a funding source that can be used on freight projects that provide economic benefits to the state and local economies	Dollar amount of funds secured with regional breakdown of projects
	Improve international competitiveness of Illinois	Support freight projects that enhance access to global markets	Volume and value of commodities shipped to foreign markets
PRESERVE EXISTING INFRASTRUCTURE	Perform routine maintenance to control deterioration of roadways and lessen number of critical repairs	Monitor pavement condition to identify roadways maintenance needs	Pavement Condition Rating Survey (CRS) assessments
	Reduce stress on roadway system by supporting multimodal alternatives for freight shipments	Explore scenarios where modal connections can be improved to facilitate shipments by rail, water, and air	Modal breakdown of shipping volumes
EXPAND INFRASTRUCTURE STRATEGICALLY	Optimize the limited funds that are available for new construction projects	Utilize a performance-based project prioritization tool to evaluate projects	Evaluation criteria which determines the return on investment of each project
SUPPORT MULTIMODAL DISTRIBUTION	Ensure design policies encourage innovation and design flexibility to support multi-modal transportation goals	Update design policies and provide training related to freight-friendly design elements (e.g. Diverging Diamond Interchanges)	Number of design policy updates issued, together with training seminars/presentations given
	Enhance coordination of multimodal planning with Illinois Metropolitan Planning Organizations (MPOs), local jurisdictions, and adjoining states	Engage with MPOs, local jurisdictions, and adjoining states on corridor planning that includes and encourages the use of all modes of transportation	Level of planning engagement with other entities, including joint projects and studies
	Encourage mode shifting to lessen environmental impacts	Reduce vehicle emissions from freight vehicles by promoting more environmentally friendly modes, such as rail, water, and air	Volume of greenhouse gas emissions

# FREIGHT INVESTMENT PLAN AND PRIORITY PROJECTS

The FAST Act provided a five-year allocation of National Highway Freight Program (NHFP) formula funds to each state, for the fiscal years 2016 through 2020. For the State of Illinois, the allocated amount of these freight formula funds is shown to the right.

## National Highway Freight Program Formula Funds for Illinois

TOTAL **\$225,960,873**

2016	2017	2018	2019	2020
\$41,246,826	\$39,453,486	\$43,040,166	\$48,420,187	\$53,800,208



The FAST Act requires states adopt a fiscally-constrained Freight Investment Plan showing how their freight formula funds will be used. The eligible uses for these funds is wide ranging and covers many types of projects. However, the funds can only be used on the National Highway Freight Network (NHFN), which in Illinois includes the following:

In addition to the PHFS, a state may designate 75 miles of highways or 10 percent of the PHFS mileage in the state, whichever is greater, as Critical Urban Freight Corridors (CUFCs). In Illinois that means that 168.54 miles can be designated as CUFCs.



- Primary Highway Freight System (PHFS) Routes
- PHFS Intermodal Connectors

Under the FAST Act, a state may also designate a maximum of 150 miles of highways, or 20 percent of the PHFS mileage in the state, whichever is greater, as Critical Rural Freight Corridors (CRFCs). In Illinois that means that 337.08 miles can be designated as CRFCs. IDOT is finalizing its list of CUFCs and CRFCs, which will be posted on IDOT’s website.

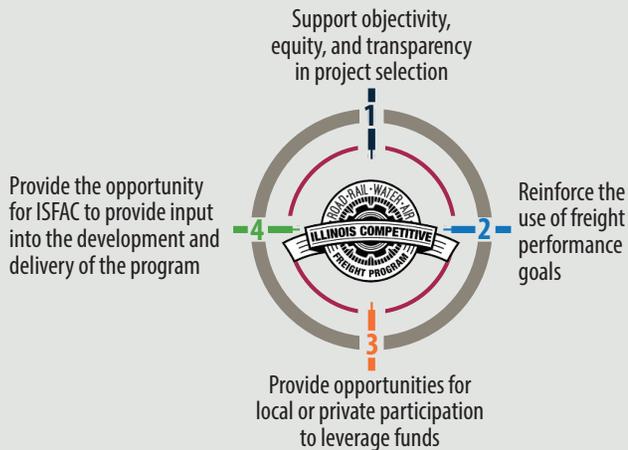
The FAST Act also provides that 10 percent per fiscal year of a state’s freight formula funds can be used for multimodal freight projects. These include projects within the boundaries of public or private freight rail or water facilities, including ports, in order to provide surface transportation infrastructure necessary to facilitate direct intermodal interchange, transfer, and access into or out of the facility. Considering the size of Illinois’ extensive multimodal network and the amount of freight that originates, terminates, or passes through Illinois, from a funding perspective, a 10 percent allocation from the freight formula funds does not adequately address the multimodal freight needs of the state.

## ALLOCATION OF FREIGHT FORMULA FUNDS

In September 2017, a competitive freight grant program was endorsed by ISFAC to determine how the freight formula funds would be allocated.

The competitive freight program allowed stakeholders throughout Illinois to submit freight projects that were evaluated and ranked based on a transparent set of criteria, with four primary goals as shown below.

### Primary Goals of the Competitive Freight Program



As provided in the FAST Act, this program also allowed a maximum of 10 percent of the available funds to be used for multimodal freight projects.

IDOT made the assumption that federal funding for freight projects will continue beyond the 2016-2020 time period provided for in the FAST Act. Therefore, the competitive freight program provides the following annual funding levels:

2018	2019	2020	2021	2022
\$43,040,166	\$48,420,187	53,800,208*	\$45,000,000**	\$45,000,000**

\*Subject to rescission

\*\*Approximate annual average of FAST Act funding)

The Illinois Competitive Freight Program sought to improve freight mobility throughout Illinois by implementing the goals of the Freight Plan, to improve safety, efficiency, and to grow the economy. The program focused on achieving the following outcomes:

- » Bottleneck Reduction
- » Improving Commercial Motor Vehicle (CMV) related safety
- » Improve intermodal accessibility to/from freight corridors – “last mile”
- » Technology deployment

These project categories and criteria were presented to ISFAC for input. Stakeholder outreach for the competitive freight program was also launched in January 2018. Applications were accepted through early April 2018. Notice of awards were announced June 5, 2018 and the selected projects were included in the Freight Investment Plan chapter of the Freight Plan.

## FREIGHT GRANT FUNDS UNDER THE FAST ACT

In addition to freight formula funding allocations described above, the FAST Act also established the Nationally Significant Freight and Highway Projects (NSFHP) program which introduced a competitive grant program for freight projects. The competitive grant program was originally

titled the Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies (FASTLANE) program. This grant program was established to provide assistance for nationally or regionally significant freight and highway projects and allocated a total of \$4.5 billion in funding over a five-year period (fiscal years 2016-2020). Following the 2017 change in presidential administration, the U.S. Department of Transportation announced on June 29, 2017 that the FASTLANE Grant program was being modified and was also being rebranded as the Infrastructure for Rebuilding America (INFRA) Grant Program. The INFRA Grant Program retained a good deal of the guidelines established under the FASTLANE Grant Program but places greater emphasis on leveraging the funds being made available under the program with non-federal investments from state, local, and private sources.

The most recent round of INFRA applications were due November 2, 2017. IDOT, in cooperation with its CREATE partners, submitted an application requesting \$160 million for a network of projects identified as the 75<sup>th</sup> Street Corridor Improvement Project (75<sup>th</sup> Street CIP) and Argo Connections (CREATE Project B9). 75<sup>th</sup> Street is the primary east-west route through the Chicago area and the only one with the physical potential to add significant capacity. The Argo project will also add capacity needed to feed additional traffic to the east-west corridor. In June 2018, IDOT and its partners were awarded \$132 million from INFRA for the above projects.