

NIRPC Freight Study

final report

prepared for

Northwestern Indiana Regional Planning Commission

prepared by

Cambridge Systematics, Inc.

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date

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1.0 Introduction

1.1 STUDY PURPOSE

The Northwestern Indiana Regional Planning Commission (NIRPC) is developing its first ever Comprehensive Regional Plan, the 2040 CRP, addressing opportunities and challenges in transportation, land use, economic development, the environment and social equity in Lake, Porter and LaPorte counties, Indiana. Recognizing that freight plays a major role in the economy of Northwest Indiana, NIRPC has commissioned this freight study to provide input into the 2040 CRP as well as to function as a stand-alone document. This Freight Study is the first study by NIRPC to focus exclusively on freight mobility within the region.

Several of the goals for the 2040 CRP have direct relevance to improvement of goods movement within the region. Of the 14 goals, several have a strong relationship to freight planning:

- A globally competitive, diversified economy that protects and enhances our natural environment;
- Clean land – including maximizing brownfields returned to productive use;
- Managed growth that protects farmland, environmentally sensitive areas and important ecosystems – including concentrating development around existing infrastructure;
- Increased mobility, accessibility and transportation options for people and freight; and
- Efficient and coordinated local government – including coordination of land use and corridor planning across jurisdictional boundaries.

The agency seeks to gain a baseline understanding of freight movement in the region and develop an approach for integrating freight into the comprehensive planning process. In this way Northwest Indiana can be most successful in taking advantage of the benefits of goods movement, such as economic development, while minimizing community impacts.

1.2 OVERVIEW OF STUDY AREA

Significant heavy industry, particularly steel, has operations in the region and depends on a strong freight infrastructure system. Other key industries such as agriculture and energy are also heavy users of freight transportation. The region's proximity to greater Chicago, the third largest metro area in the U.S. and

the largest freight hub outside the coasts, is also a key contributor to the level of goods movement in the Northwest Indiana region. Serving the freight needs of the region, Northwest Indiana possesses major freight infrastructure in all four modes: air, rail, highway and water.

Four interstate highways (I-80, I-94, I-90, and I-65) traverse the three-county area at the southern tip of Lake Michigan, connecting Northwest Indiana to points east, west and south. These interstate highways and the supporting network of arterial roadways in the region handle high volumes of truck traffic, including the Indiana Toll Road, which permits double and triple trailers and extra-heavy duty truck routes which allows weights of up to 134,000 pounds.

Three of North America's seven Class I rail operators provide service in the region: CSX Transportation, Inc. (CSX), Norfolk Southern (NS), and Canadian National (CN). In addition, short-line and regional carriers serve industrial and agricultural facilities. The recent acquisition of the EJ&E by CN will likely divert some CN traffic from lines heading into Chicago to the EJ&E's 198-mile circumferential line around Chicago from Waukegan, Illinois to Gary, Indiana where the CN mainline intersects it.

Gary airport is one of the five largest airports in Indiana in terms of air cargo, handling more than 180 tons in 2009. The airport authority received FAA approval and has begun preliminary work to extend the airport's main runway to allow it to handle larger aircraft. The region's stakeholders continue to look at ways in which this airport can play a role in Northwest Indiana's economic development.

The Indiana Port Commission (doing business as the Ports of Indiana) operates the Port of Indiana – Burns Harbor on Lake Michigan in Portage, Indiana. This port handles barges traversing the Inland Waterway System via the Illinois Waterway, bulk carriers traveling throughout the Great Lakes, and ocean vessels crossing the Atlantic via the St. Lawrence Seaway. In addition to Indiana's public port system, other port facilities in the region include those at Indiana Harbor, Gary, and Buffington. These ports primarily serve the steel industry of Northwest Indiana, though currently Buffington Harbor is used only for gaming boats.

As the volume of passengers and goods moving across aging infrastructure increases, so does the complexity of transportation planning, policy-setting, and decision-making. Transportation is no longer purely a matter of handling "traffic". Short- and long-term investments and benefits must be weighed, freight and passenger needs balanced, and the pressures of land use, environmental impacts, and economic competitiveness considered.

Many of Northwest Indiana's numerous stakeholders have competing interests, but at the same time they share a common goal: to succeed and to be part of a region that prospers. It is critical to clarify the perspectives of various freight stakeholders in order to develop a regional understanding and vision for freight,

as well as a process for prioritizing public investments consistent with that vision.

NIRPC has identified the need to understand the current and future freight conditions in the region as well as anticipated challenges and opportunities.

1.3 STAKEHOLDER INTERVIEW PROCESS

In developing this Freight Study, freight stakeholders in the region were identified in partnership with NIRPC and the Northwest Indiana Forum. The study team targeted key stakeholders representing rail, water, truck and air modes. In addition, 30 economic development stakeholders were contacted regarding participation in a group interview. In all, more than 50 individuals were contacted, resulting in interviews with 14 stakeholders. Stakeholders are listed in Table 1.1. Interviews were conducted between June 10 and June 25, 2010. As shown in the table, interviewees included developers, modal representatives (rail, air, highway, ports), carriers and economic development entities.

Table 1.1 Stakeholder Interviewees

Organization	Sector
CenterPoint Properties	Developer
Chicago South Shore and South Bend Railroad	Rail
Cressy and Everett Commercial Company	Developer
CSX Corporation	Rail
Gary/Chicago Airport	Air
Indiana Harbor Belt	Rail
Indiana Toll Road	Highway
Michigan City	Economic Development
NIPSCO	Economic Development
Norfolk Southern Corporation	Rail
Northwest Indiana Forum	Economic Development
Northwest Indiana Regional Development Authority	Economic Development
Port of Indiana – Burns Harbor	Water
Schneider Trucking	Truck

Interview results are incorporated throughout the study within the Issues and Opportunities sections by mode as well as in Section 6.3, Next Steps.

2.0 Freight Planning in Northwest Indiana

Various agencies in the Lake, Porter and LaPorte County region and the State of Indiana play a role in freight and economic development planning.

2.1 KEY AGENCIES WITH A ROLE IN FREIGHT PLANNING

NIRPC

Historically freight planning has not been a major area of emphasis for NIRPC given the agency's limited resources. During the 2007-2008 timeframe the agency did convene a freight committee focusing primarily on the issue of grade crossing safety. However, the effort has since been disbanded. Recently, NIRPC has renewed its emphasis on freight by designating a part-time freight contact and undertaking this Freight Study. Economic development is one of the agency's three chartered responsibilities, in addition to transportation and the environment. The movement of goods into and out of the region is closely tied to economic development considerations.

INDOT

The Indiana Department of Transportation (INDOT) established the Office of Freight Mobility in late 2006. While the Office of Freight Mobility staff of one is small given the amount of work Indiana is pursuing, efforts are supported by long-range planning, modeling, and economics offices.

Economic Development Agencies

Several other agencies exist in the region that undertake economic development efforts including promoting Northwest Indiana to businesses and providing support to encourage location and expansion in the three-county region.

Northwest Indiana Forum

The Northwest Indiana Forum is a nonprofit regional economic development organization serving Lake, Porter, LaPorte, and Starke counties. The organization's mission is to enhance economic opportunities in Northwest Indiana by providing services to promote the creation and retention of quality

jobs. Northwest Indiana Forum provides assistance, customized analysis and research, marketing programs, and legislative support to existing and potential businesses.

Regional Development Authority

The Regional Development Authority (RDA) was established by Indiana State statute in 2005. The agency focuses on four core areas: lakeshore development, South Shore commuter rail, regional bus service and the Gary/Chicago International Airport. The agency accepts applications for project proposals and funds projects via a competitive grant process. The agency is focused largely on implementation of projects in the four focus areas. The RDA is funded through various communities in northwest Indiana that make quarterly contributions from casino revenue and an economic development tax. The State of Indiana also contributes to the RDA on a quarterly basis from revenues drawn from the Major Moves legislation. A number of the grants the RDA has awarded since 2006 have been for lakeshore improvement projects including several focused on park improvements.

Ports of Indiana

The Ports of Indiana is a quasi-governmental organization that operates a statewide system of ports, foreign trade zones, and economic development programs under the authority of the Indiana Port Commission, a seven-member bipartisan board appointed by the Governor. Indiana has three water ports, one of which is in the NIRPC region: Burns Harbor in Portage.

For the past seven years, the Ports of Indiana and Purdue University have convened a two-day logistics summit that draws between 400 and 500 leaders from industry, academia, public policy, and government to discuss securing Indiana's place in the supply chain. The Ports of Indiana maintains a web site promoting Indiana logistics (<http://www.indianalogistics.com/>) where it publishes the free annual Indiana Logistics Directory. The directory promotes Indiana's logistics assets, includes feature articles from major carriers and shippers and INDOT's Office of Freight Mobility, lists logistics-oriented freight education programs, and provides a listing of carriers and freight facilities in the State.

2.2 RELEVANT FREIGHT STUDIES

The South Suburban Mayors and Managers Association (SSMMA), composed of local governments in the southern suburbs of the Chicago region, completed the *South Suburban Freight Study* in June 2008. The Study details NIRPC's western neighbor's growing role as a freight hub and the freight transportation inventory, needs, and opportunities within the region, across the state line in Illinois.

The *Illiana Expressway Feasibility Study* was completed by INDOT in July 2009. This *Study* was performed to determine the overall viability of developing, financing, constructing, operating, maintaining and placing into service a new Interstate quality highway to be known as the Illiana Expressway (Illiana). This proposed facility would be approximately 25 to 30 miles in length, connecting I-57 in Illinois with I-65 in Indiana, running through southern Lake County in Indiana and impacting freight traffic flows in the NIRPC region. Subsequent studies have been undertaken including the Illinois DOT *Illiana Economic Opportunities Analysis* and the *Illiana Tolling and Revenue Study*. Both Indiana and Illinois have recently passed legislation and entered into a bistate Memorandum of Understanding to move the Illiana project forward into the next phase of studies as a potential public-private partnership.

The *Indiana Statewide Freight Mobility Plan* and companion *Indiana Rail Plan* were also completed in July 2009. The *Indiana Statewide Freight Mobility Plan* was developed to direct the State of Indiana's future freight policy, provide a framework to guide future decisions regarding freight transportation investments, and ensure the efficient use of resources to support systemwide objectives. The *Indiana Rail Plan* supplements the *Freight Mobility Plan* and addresses how rail freight and passenger mobility impacts the entire transportation system of Indiana. These *Plans* together address many of the freight issues and trends specific to the NIRPC region and the State of Indiana. Following a detailed statewide profile, the *Indiana Statewide Freight Mobility Plan* provides a series of policy, capital, and operations recommendations and an action plan for implementation on a statewide level.

Most recently, the Chicago Metropolitan Agency for Planning (CMAP) completed a *Freight Recommendations Study* in June 2010 to serve as an input into their long range regional *Go To 2040 Plan*. The study included infrastructure, operations, and policy recommendations to improve goods movement in Greater Chicago and address the growing freight congestion and emerging trends within this major American freight hub.

2.3 KEY ISSUES, OPPORTUNITIES AND TRENDS

The NIRPC region's location is distinguished by its proximity to Chicago, the Midwest freight hub and the third largest metropolitan area in the country. The region has a high density of freight infrastructure concentrated south of Lake Michigan, much of which serves through traffic to and from Chicago and traversing the Midwest. Several major developments on the horizon have the potential to shift national and international freight flows and the modal split for goods movement, which could affect the NIRPC region.

Panama Canal Widening

A widened Panama Canal is expected to open in 2014, which will enable larger oceangoing vessels to travel from the Pacific Ocean to the Atlantic Ocean and use East Coast Ports. Currently the Panama Canal can handle “Panamax” ships carrying only about 5,000 twenty-foot equivalent units (TEU), or containers. The widened Canal will enable ships to pass through with significantly larger container loads. The trend is for ship manufacturers to build larger ships, carrying as many as 14,000 TEUs. With the increased capacity of the Panama Canal, the potential exists for shifting a portion of freight volumes away from West Coast ports to Eastern Ports and using landbridges to deliver freight to interior areas of the U.S. While routing ships from the Pacific through the Canal and then shipping freight back via landbridge would take more time than the current delivery to Pacific coasts and transport via train to Chicago, the potential for larger freight flows from East Coast ports to the Midwest exists with increased Panama Canal capacity.

Eastern U.S. Rail Capacity Improvements

The two Class I railroads operating in the Eastern United States are both undertaking significant improvements to develop shorter routes from East Coast Ports to key interior destinations and allow containers to be double-stacked on trains for increased efficiency. The Heartland Corridor will route Norfolk Southern trains from the Norfolk, VA port through Roanoke, VA; Columbus, OH; and Northwest Indiana to Chicago. Construction on the 1,200 mile route began in 2007 and is nearly complete. The CSX National Gateway project will enhance three existing rail corridors that run through Maryland, Virginia, North Carolina, Pennsylvania, Ohio and West Virginia. The National Gateway capacity improvements will extend to a new intermodal yard under development in North Baltimore, Ohio. CSX is relocating its northern headquarters from Chicago to the new North Baltimore intermodal terminal, which is expected to open in 2011.

Fuel Costs

Fuel costs have fluctuated dramatically over recent years. These costs have a significant impact on businesses shipping and receiving materials and finished products, which carefully look at the cost of transportation as a proportion of goods production. For carriers (e.g., trucking and rail operators), fuel costs have a significant impact on profitability. Given the increased fuel efficiency of rail over trucks, rising fuel prices would change the cost differential between modes, which may encourage more shippers to use rail. Additionally, as rail companies have begun shipping more intermodal and higher value freight with greater time sensitivity, rail carriers have developed service options with higher levels of reliability that can be more competitive with truck service.

Climate Change

Increased focus on climate change has resulted in a climate bill currently under consideration by the U.S. Congress. In the future, the potential exists for regulations to reduce greenhouse gas emissions, which could create incentives for shifting cargo to rail or water, which are more fuel efficient and have less environmental impact.

As NIRPC more closely tracks freight trends, the agency can monitor how these factors are affecting freight flows to capitalize on opportunities and mitigate impacts on communities.

3.0 Regional Freight Demand

Two key determinants of freight demand at the regional level are population, employment and business location. The details of how these factors affect freight mobility in Northwest Indiana are discussed below.

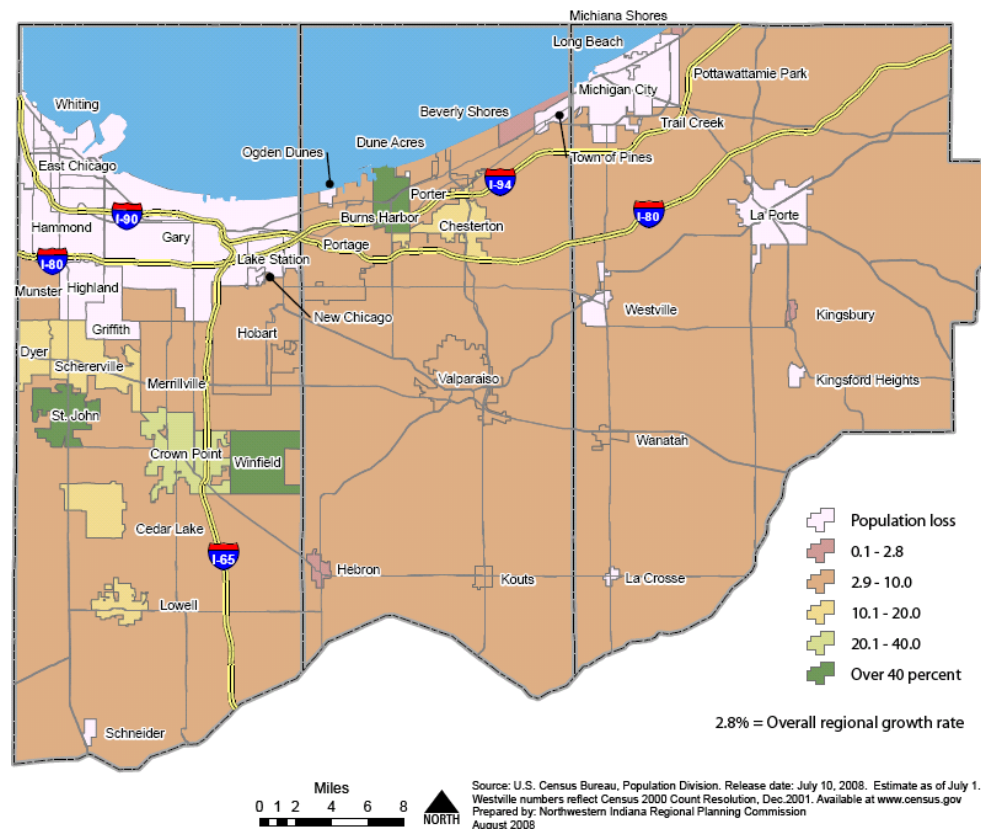
3.1 POPULATION

Population is a key driver of freight growth, as increases in population create more demand for goods and services. Additionally, population growth places increased demands on the transportation system. In particular, when a region grows, the highway system sustains increased demand for both passenger and freight travel, resulting in increased congestion.

From 2000 to 2008, population of the NIRPC region has increased from 741,468 to 766,869¹. Two thirds of population in the three-county area is concentrated in Lake County, with 21 percent in Porter County and 14 percent in LaPorte County. During this time years, population growth has been concentrated in southern Lake County and northern Porter County and population loss has occurred in northern Lake County, as shown in Figure 2.1. By 2040, Lake and Porter Counties are expected to be two of the ten counties in Indiana experiencing the largest increase in residents, each gaining between 16,000 and 36,000 residents². The increased population will increase demand for goods and burden on the freight system.

¹ Source: NIRPC – Bureau of the Census. Population Estimates Program. Population Estimates for July 1, 2008. Released March 19, 2009.

² Indiana Business Research Center, 2007.

Figure 3.1 Population Change 2000-2007

3.2 BUSINESS FACILITIES AND EMPLOYMENT

Another critical driver of freight demand is freight-generating businesses. A key factor for businesses choosing the location for new business facilities is the proximity of transportation infrastructure. Especially for warehouse and distribution centers, highway accessibility is a top consideration. For other types of businesses that may ship products by container or need to transport heavy or bulky commodities, access to rail is a major factor. Those that use rail will also need to consider proximity to intermodal facilities that can offload freight from rail and transfer it to trucks for the last leg of the trip.

In the NIRPC region, over 4,500 businesses can be considered as primary drivers of freight demand. Table 3.1 summarizes the number of businesses within various freight-generating industries along with their estimated employment. Collectively, the public support of these businesses through the provision of freight transportation infrastructure preserves more than 80,000 jobs within the region. Those 80,000 jobs represent approximately 29 percent of all employment in the NIRPC region.

Each of these business types has distinct transportation needs. Agricultural business often has heavy and time-sensitive loads corresponding to harvest cycles. Construction businesses rely on a time-sensitive supply chain that often includes very heavy and oversized construction materials and equipment. Manufacturers use the transportation system to get their products to market and potentially are shipping goods long distances. Mineral extraction involves major freight flows of equipment and raw products. Transportation-based businesses and warehousing include those that operate trucking fleets or logistics services. The utilities industry requires massive movements of raw fuels such as natural gas and coal. Wholesale retail locations may receive multiple deliveries daily of products to be distributed to retail locations.

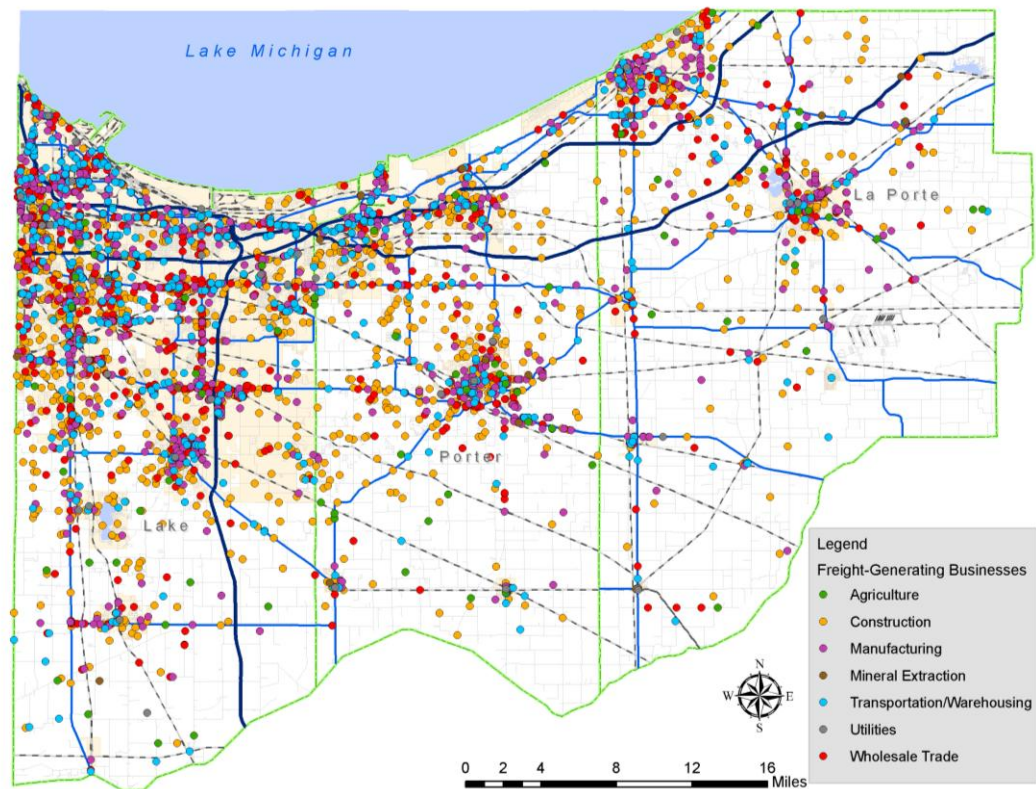
Table 3.1 NIRPC Region Freight-Generating Businesses and Employment

Industry Description	Businesses	Employment
Agriculture	71	299
Construction	1,973	14,675
Manufacturing	753	42,634
Mineral Extraction	19	223
Transportation and Warehousing	659	11,101
Utilities	29	2,465
Wholesale Trade	1,058	8,668

Source: Quarterly Census of Employment and Wages, 2009.

The NIRPC region has major clusters of freight-generating businesses along major highways as shown in Figure 3.2. There are also clusters around larger urban areas in the northwestern portion of the region such as East Chicago and Gary as well as around Michigan City, Valparaiso, Crown Point, and La Porte.

Figure 3.2 Freight-Generating Business Locations



Source: Quarterly Census of Employment and Wages, 2009.

3.3 KEY ISSUES AND OPPORTUNITIES

Population and employment increases will not only increase demand for goods and services but will also result in additional demand on the transportation system for personal travel, exacerbating congestion levels. As Northwest Indiana grows, communities will need to work together to determine the best locations for residential and business development to take advantage of the transportation system and also to ensure mobility and quality of life is maintained.

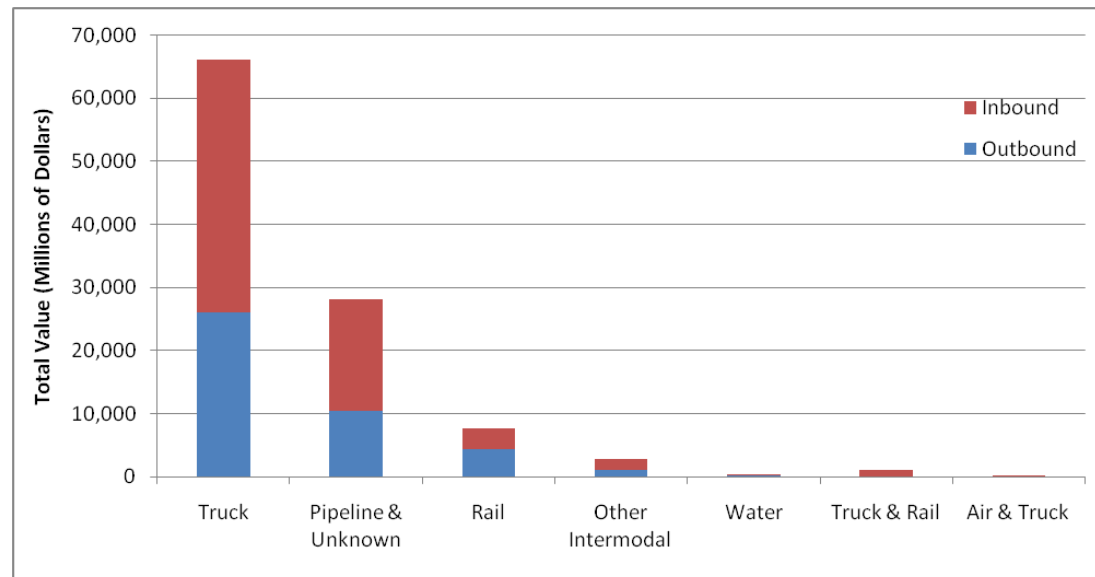
4.0 Freight Patterns

The Freight Analysis Framework, version 2 (FAF2), a detailed origin-destination database developed by the Federal Highway Administration, is a useful source for growth rate forecasts for commodity flows across all modes to and from Northwest Indiana. The database estimates growth in five-year increments from 2010 to 2035 from a base year of 2002. The database contains forecasts for commodity flows by weight and by value. Section 4.1 depicts the NIRPC region's current and future freight flows by weight for each flow type and mode of transportation. Section 4.2 provides a more detailed analysis of commodity flows by weight and value, while Section 4.3 highlights key trading partners of the NIRPC region.

4.1 MODAL SPLIT

Freight is brought into and out of the NIRPC region using a variety of modes. As shown in Figure 4.1, trucking is the dominant mode, with over 60 percent of both inbound and outbound freight by value moving by truck. Pipelines, predominantly carrying natural gas, crude oil, and gasoline, make up about a quarter of shipments by value³. The remaining goods are shipped by rail, water, and intermodal transportation (truck and rail, air and truck, and other intermodal).

Figure 4.1 Mode of Travel for Inbound and Outbound Freight, by Value, 2008

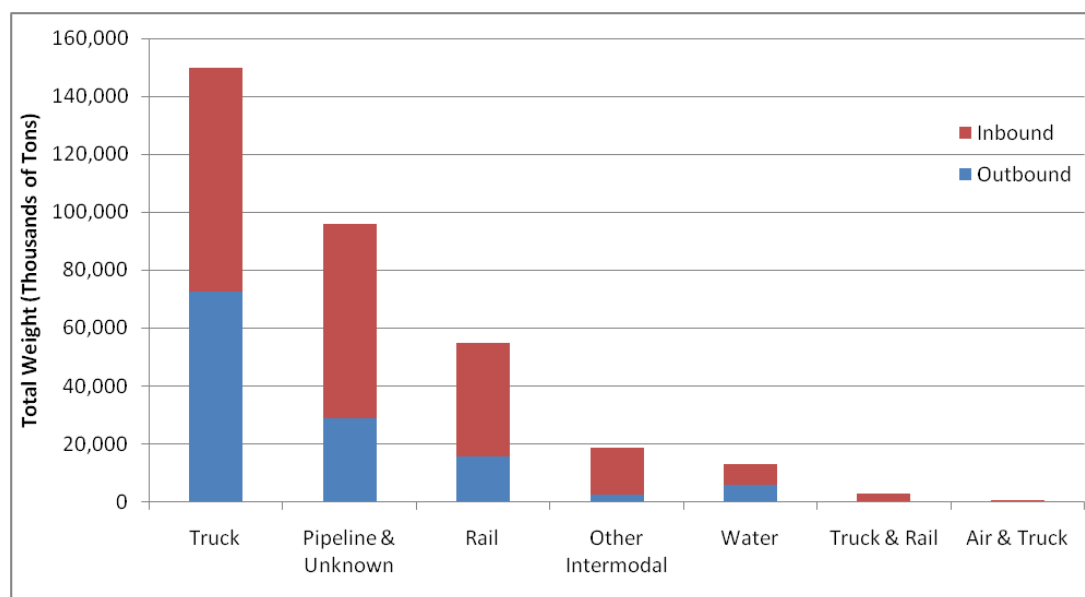


Source: FAF2 Provisional Annual Commodity Origin-Destination Data, 2008.

³ Natural gas, crude oil, and gasoline make up about 90 percent of the “Pipeline & Other” category.

The distribution of modes by weight is somewhat more balanced, as shown in Figure 4.2. Less than half of the freight by weight is moving by truck, while rail carries 16 percent. Pipelines move 29 percent of the freight flow by weight. Taking advantage of access to Lake Michigan and inland waterways, 4 percent of freight is moved over water.

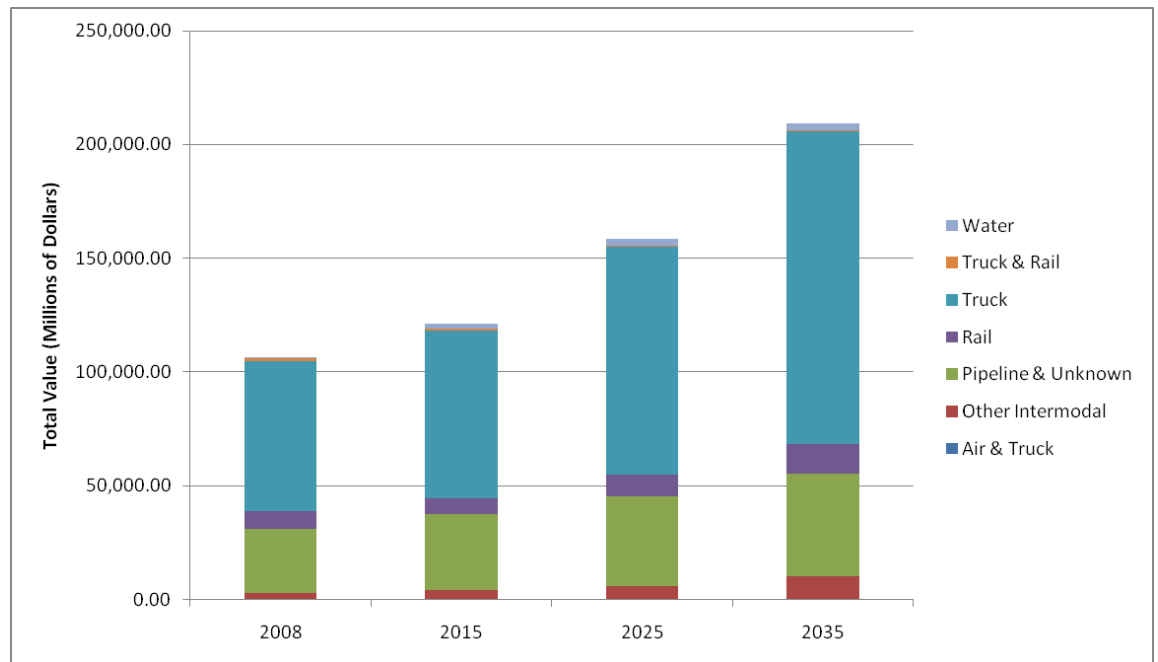
Figure 4.2 Mode of Travel for Inbound and Outbound Freight, by Weight, 2008



Source: FAF2 Provisional Annual Commodity Origin-Destination Data, 2008.

Figure 4.3 shows projected growth in freight movements in the NIRPC region from 2008 through 2035. The total value of combined inbound and outbound shipments is expected to nearly double during that time. The truck share of freight movements is projected to grow from about 62 percent in 2008 to 66 percent in 2035.

Figure 4.3 Projected Growth in Freight Movements, by Value and Mode, 2008-2035

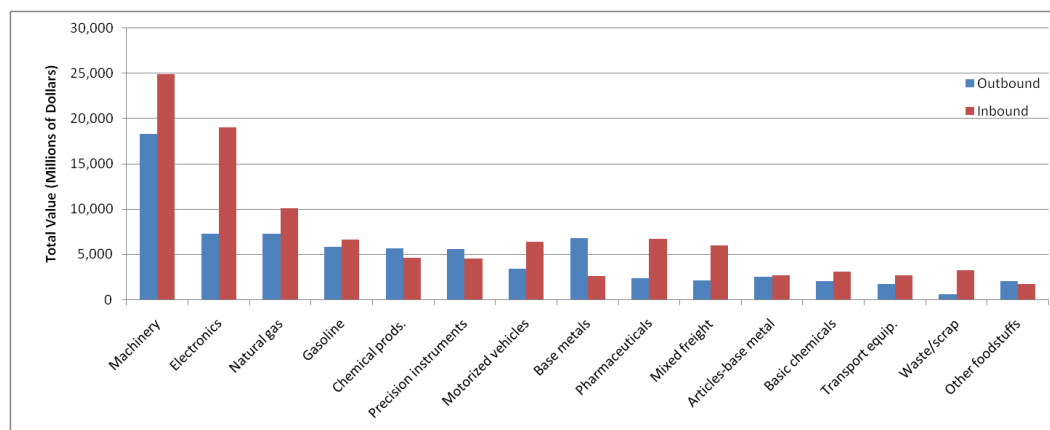


Source: U.S. DOT, Freight Analysis Framework 2.2.

4.2 COMMODITIES

The top 15 commodities by value entering or leaving the region in 2008 are shown in Figure 4.4. These volumes include transport by all modes, and for both domestic and international trading partners. The highest percentage of commodities by value is machinery and electronics, followed by two energy-related commodities, gasoline and natural gas⁴.

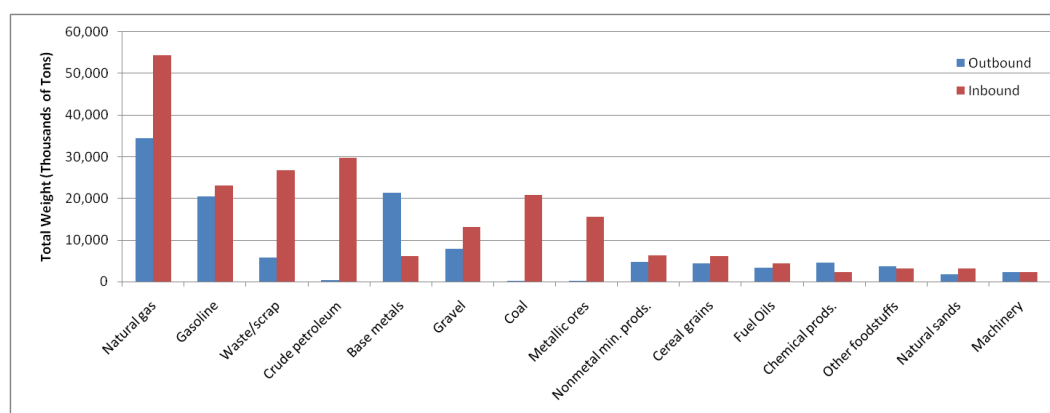
⁴ Natural gas refers to the FAF dataset category "Coal-not elsewhere classified," which is primarily natural gas, selected coal products, and products of petroleum refining, excluding gasoline, aviation fuel, and fuel oil.

Figure 4.4 Top 15 Inbound and Outbound Commodities, by Value

Source: FAF2 Provisional Annual Commodity Origin-Destination Data, 2008.

Top inbound and outbound commodities by weight show a different side of the freight flows in the region. Figure 4.5 shows that one-third of the top 15 commodities by weight are energy-related, including natural gas, gasoline, crude oil, coal, and fuel oils. Several other heavy materials, including base metals, metallic ores, non-metal mineral products, gravel, natural sands, and chemical products are among the biggest commodities being transported into and out of the region. Machinery, which was the largest commodity when measured by value, only appears fifteenth on the list as measured by weight.

Overall the region is a net importer of goods. The 2008 value of imports into the NIRPC region was \$64,101, of which 97 percent came from domestic origins and 3 percent from international origins. The value of exports from the region was \$42,034 million, of which 96 percent was destined for domestic destinations and 4 percent was exports.

Figure 4.5 Top 15 Inbound and Outbound Commodities, by Weight

Source: FAF2 Provisional Annual Commodity Origin-Destination Data, 2008.

4.3 TRADING PARTNERS

The NIRPC region imports and exports freight both from around the country and the world. As shown in Figures 4.6 and 4.7, the region's primary trading partners in 2008 are in Midwest states, especially within Indiana and neighboring Illinois. Michigan, Ohio, Wisconsin, and Louisiana are also significant trading partners, each with more than \$2 billion coming into and out of the NIRPC region. The top goods being shipped to these states from Northwest Indiana are:

- Indiana: gasoline, natural gas, machinery;
- Illinois: machinery, base metals;
- Michigan: natural gas, base metals;
- Ohio: base metals, machinery, natural gas; and
- Wisconsin: machinery, base metals.

The top commodities being shipped from these states to the NIRPC region are:

- Indiana: gasoline, natural gas, machinery, motorized vehicles/parts;
- Illinois: machinery, natural gas, waste/scrap, mixed freight, transport equipment;
- Michigan: natural gas, machinery, motorized vehicles /parts;
- Ohio: machinery , motorized vehicles/parts;
- Wisconsin: machinery, mixed freight, motorized vehicles/parts; and
- Louisiana: crude petroleum.

Mexico is the region's top international trading partner. The top commodities are exports of motorized vehicles/parts from Northwest Indiana to Mexico and imports of crude petroleum from Mexico. Other important international trading partners include Canada and Latin America.

Figure 4.6 NIRPC Region Trading Partners by Value

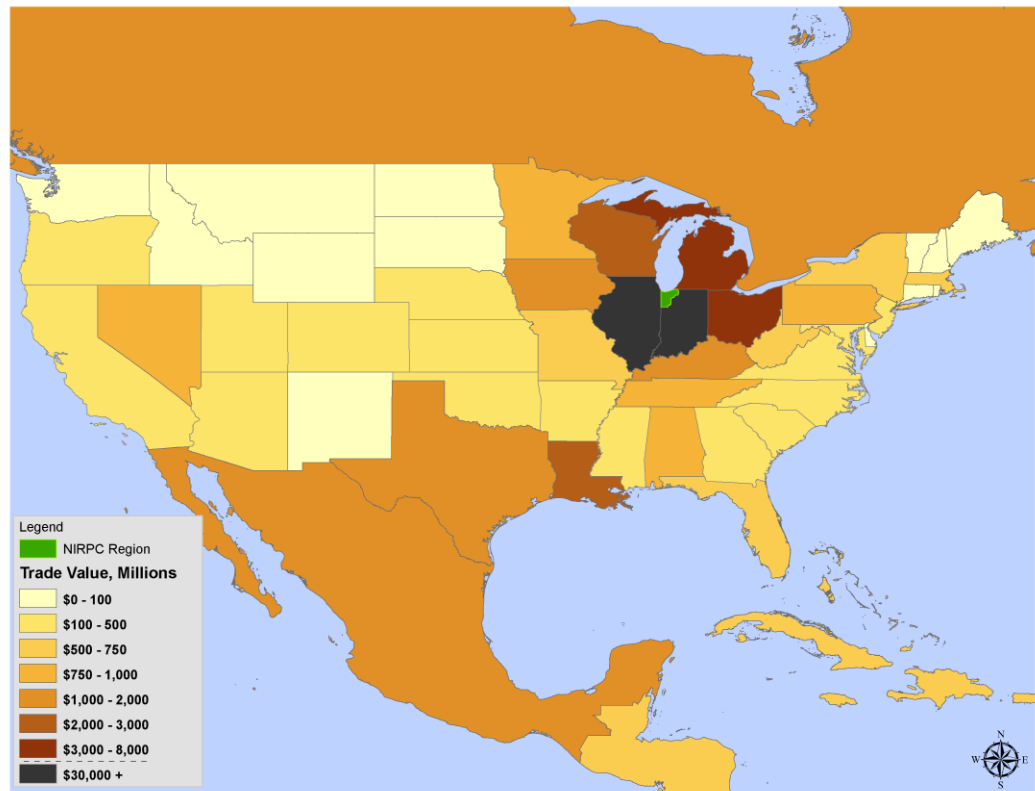
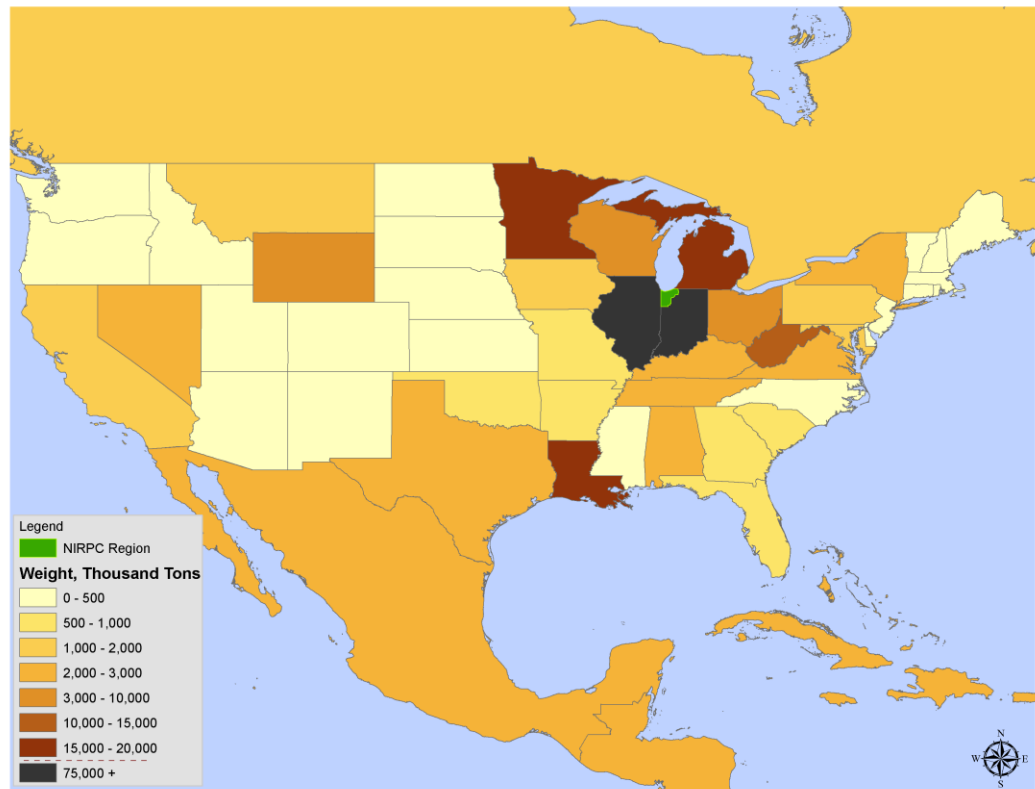


Figure 4.7 NIRPC Region Trading Partners by Weight



5.0 Profiles of Freight Modes

5.1 HIGHWAY GOODS MOVEMENT

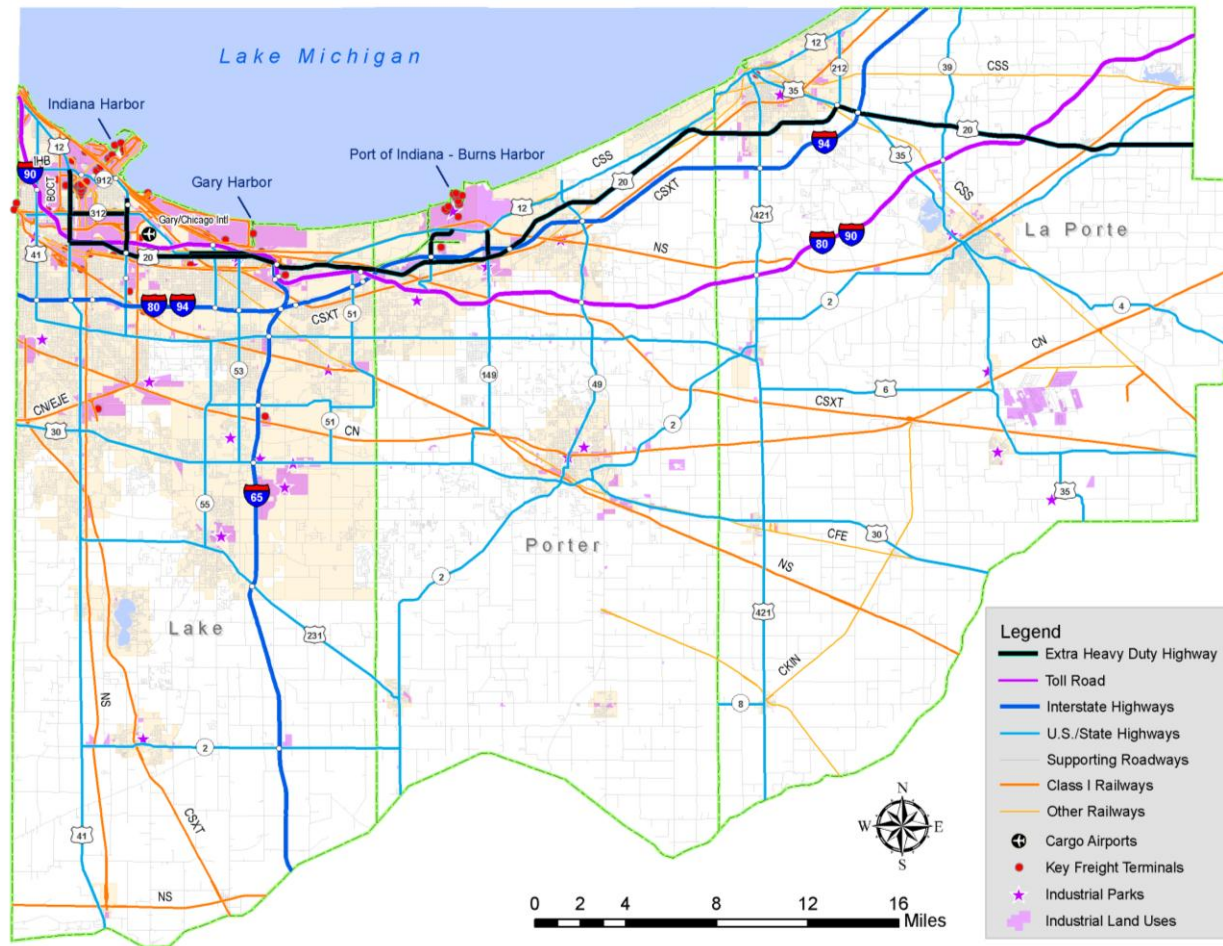
Highways have a major role in providing support for goods movement to the NIRPC region's businesses and residents. In addition to supporting truck movements (which account for more than 60 percent of the NIRPC region's freight movements by value), the highway network plays an important role in connecting all major modes of transportation, providing linkages to freight terminals such as the Port of Indiana at Burns Harbor, Gary Airport, and rail yards such as Kirk and Gibson Yards. Figure 5.1 shows the major freight infrastructure assets of the NIRPC region, highlighting the highway mode.

Northwest Indiana's Interstate Highway system offers two major parallel east-west highways, the Indiana Toll Road (ITR), which carries the designation I-90 from the Illinois state line to Lake Station, then I-80/90 to the Ohio State Line and the Borman Expressway, which carries the designation I-80/94 to Lake Station, continuing eastward as I-94 through northern Porter and La Porte Counties to the Michigan state line. These roads serve as major freight corridors linking West Coast, Midwest, and East Coast markets.

Indiana does not have designated statewide truck routes. However, based on Indiana statutes, the truck freight network is composed of Interstate highways, U.S. highways, state routes, and other principal arterials, subject to the dimensions authorized and to local restrictions. Among the potential restrictions on these routes for commercial vehicles are the State's posted bridges, which have designated weight and vertical clearance limits.

In 2006 legislation was passed introducing a new funding source for more than 400 construction and major preservation highway projects programmed by INDOT for 2006 through 2015, known as the Major Moves program. The legislation resulted in an agreement to lease the Indiana Toll Road (ITR), I-90, to a private concessionaire for a term of 75 years, an arrangement worth more than \$3.8 billion to the State. The Major Moves program includes additional funding categories for local jurisdictions in all counties throughout the State as well as special funds for counties in which the ITR is located.

Figure 5.1 Northwest Indiana Freight Facilities



Source: National Transportation Atlas Database (2009), NIRPC Land Use Database, Indiana Department of Transportation.

Truck and passenger volumes are estimated using the travel demand model from the recent *Illiana Expressway Feasibility Study*, which included inputs from the NIRPC model, the CMAP model, and FAF. This model was linked and validated to observed auto and traffic volumes to ensure existing traffic patterns were reflected. The model used FAF estimates for future year “external” long distance truck trips, which may slightly inflate volumes of truck traffic and congestion on the eastern portions of the ITR and I-94, and the southern portion of I-65. FAF data has not been adjusted to account for the economic downturn. The model was validated using observed traffic volumes at multiple locations along the Illinois/Indiana border and along the Lake/Porter County border, or “screenlines”. The variation between the model volumes and traffic counts was less than five percent at both the screenline locations⁵.

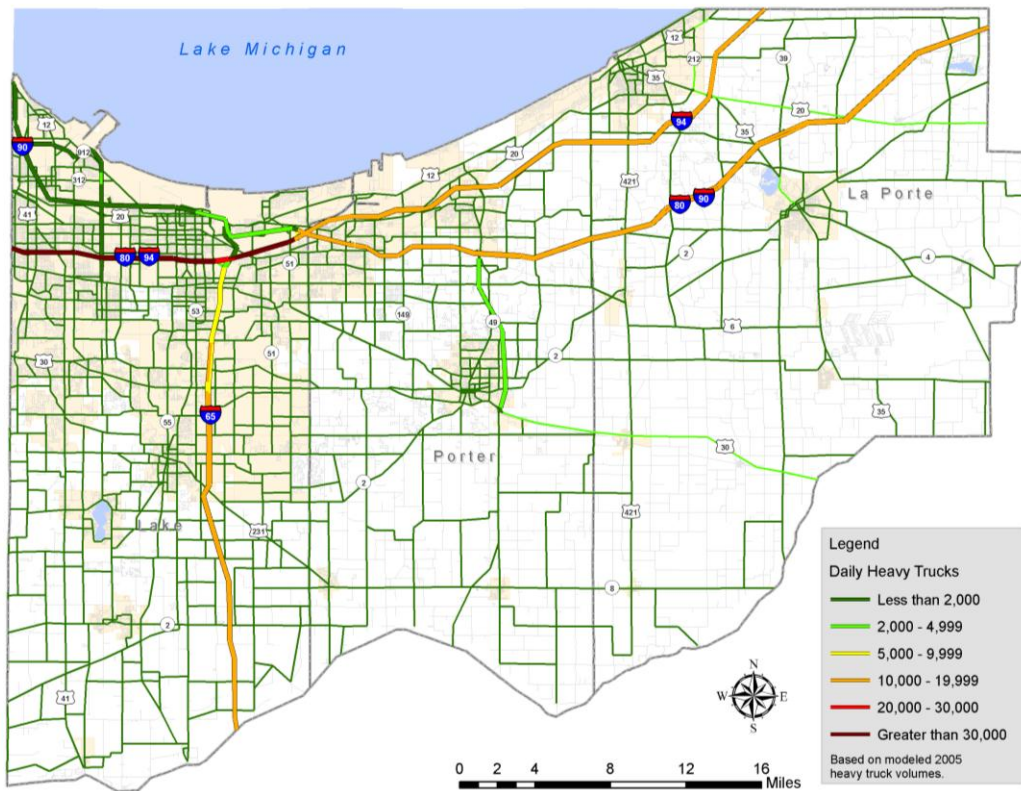
Figure 5.2 shows approximate daily heavy truck volumes on major roadways in the NIRPC region. Truck traffic rises on the ITR where it merges with I-80, reaching volumes of greater than 15,000 per day. This represents a significant portion of all traffic (greater than 40 percent to the east of IN 49) as shown in Figure 5.3 due to the lower volumes of recurring commuter traffic, which occurs closer to the metropolitan regions of Lake County. On the Borman Expressway, some of the highest truck volumes in the U.S. are found, topping 35,000 per day at the highest points. On I-94 west of Lake Station, truck volumes remain high ranging from 10,000-20,000 per day.

North-south truck freight movement is supported by the I-65 Interstate highway. About 8,000-14,000 trucks rely on this facility every day. I-65’s northern terminus is in Gary at the intersection of U.S. 12 and U.S. 20, slightly north of I-90. The highway continues south to Mobile, Alabama, notably passing several major automobile plants.

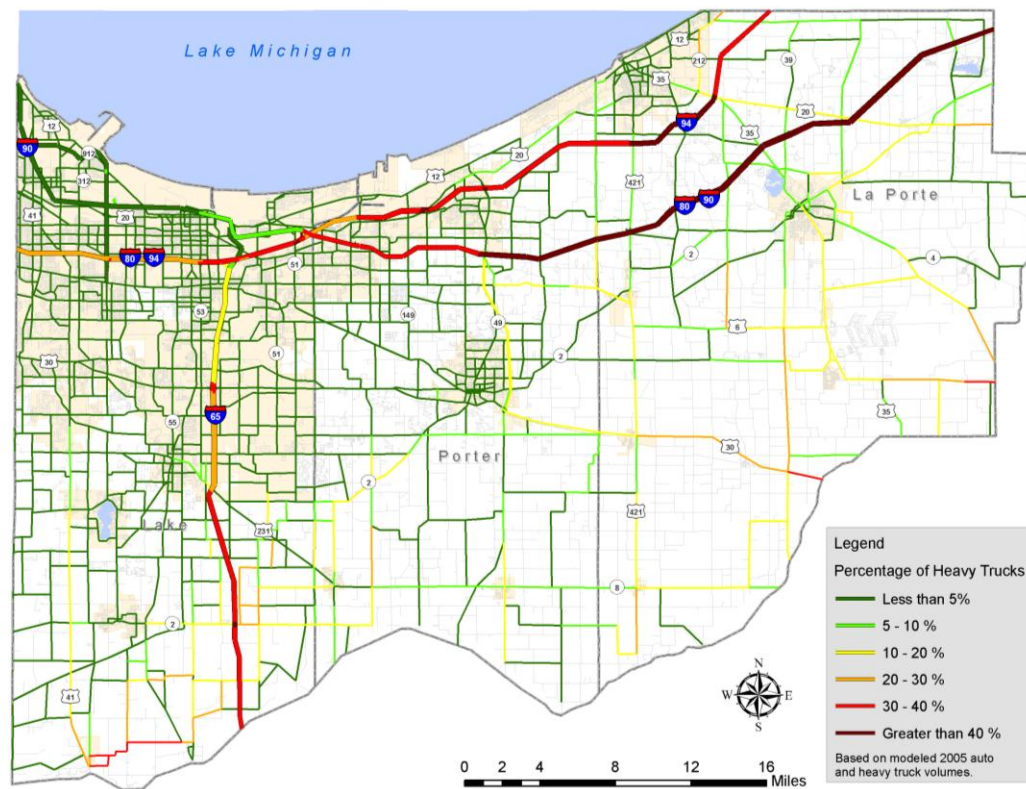
The NIRPC region has a robust network of supporting roadways. Trucks rely on major State and U.S. highways such as U.S. 30, U.S. 41, U.S. 12, U.S. 20, U.S. 6, U.S. 231 and IN 49 for goods movement and critical linkages to freight terminals and business locations.

⁵ Illiana Expressway Feasibility Study.

Figure 5.2 Daily Heavy Truck Volumes



Source: Illiana Expressway Feasibility Study Model.

Figure 5.3 Truck Traffic as a Percentage of all Vehicles

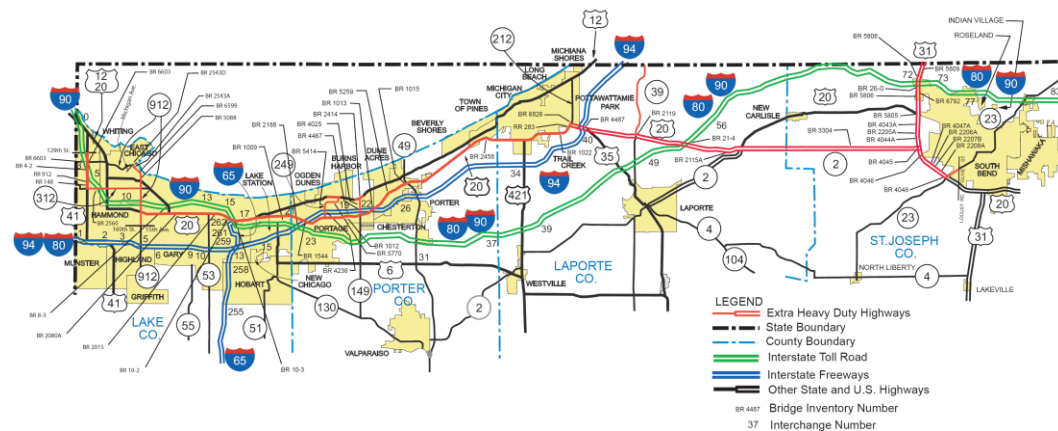
Source: Illiana Expressway Feasibility Study Model.

NIRPC's highway system provides critical connectivity for trucks with neighboring states and within the State of Indiana. The Indiana DOT 2030 Long-Range Transportation Plan identifies numerous corridors connecting the population centers of Indiana that "serve as the freight arteries of the state and are thus vital for economic development" (Figure 5.5). Current and future truck volumes show that the majority of truck freight traffic occurs within these corridors.

Nationally, the number of trucks on roadways has been steadily increasing as the volume of freight increases and because approximately two-thirds of freight moves by truck. National weight standards apply to commercial vehicle operations on the Interstate Highway system of limited access, divided highways that span the nation. Off the Interstate Highway system, states may set their own commercial vehicle weight standards. Longer combination vehicles (LCV) are allowed to operate in states where they were permitted before 1991. Indiana is one of 14 states and 6 state turnpike authorities that permit LCVs on some part of the roadway network. In Indiana, LCVs are permitted only on the Indiana Toll Road, where double combination trucks up to and over 100 feet and triple combination trucks are allowed.

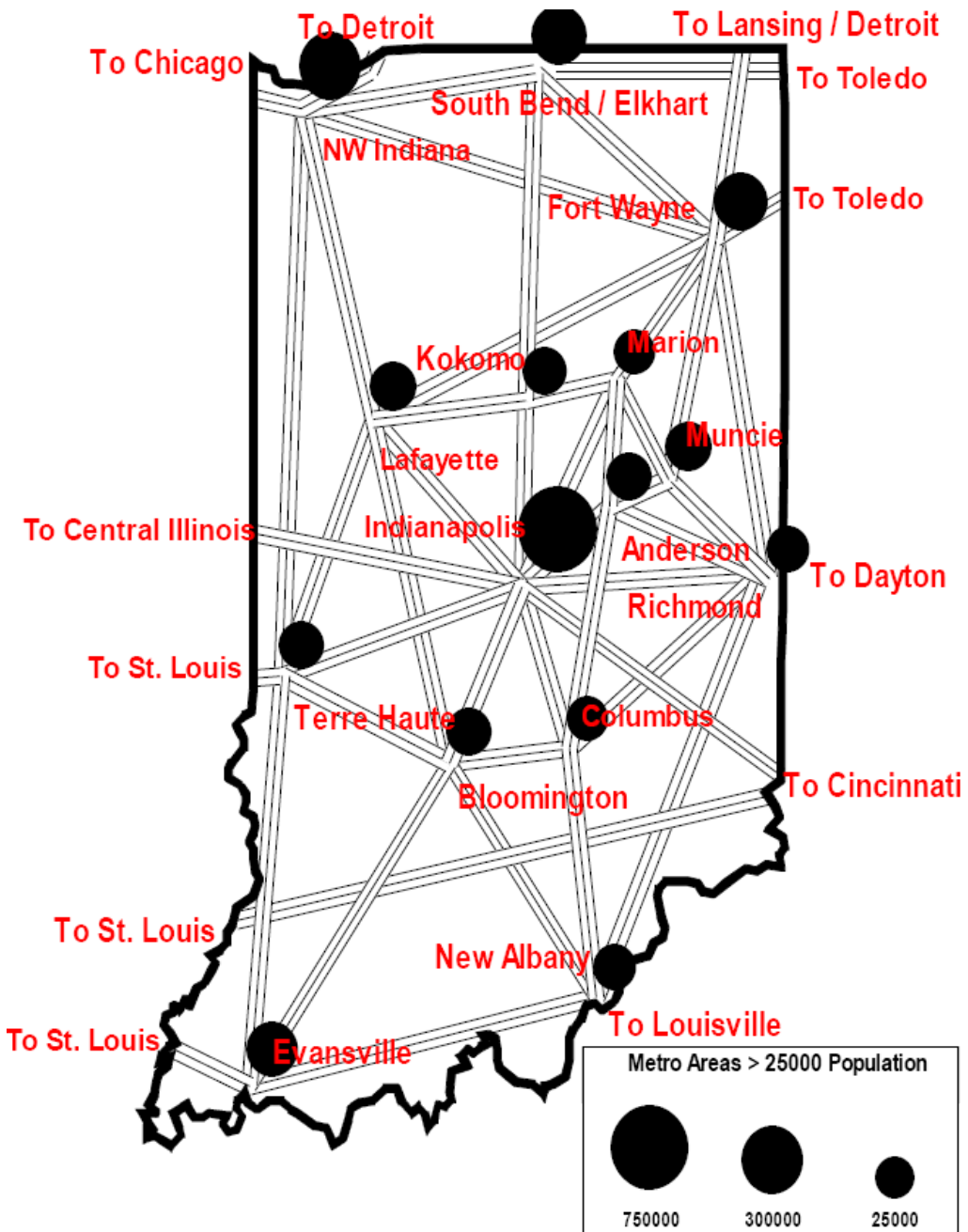
In Indiana, a permit is needed for the movement of a vehicle or a combination of vehicles, including the load, of a size and/or weight that exceeds the maximum legal size, and weight limits as established by state law (IC 9-20-3, IC 9-20-4). On some Indiana roads, weights above 80,000 pounds are permitted. Indiana permits loads of up to 90,000 pounds on the Indiana Toll Road. The State also has designated Extra Heavy Duty Highways (see Figure 5.4) on which loads of up to 134,000 pounds are permitted when a special permit is obtained, per IC-9-20-5. The extra heavy duty highway system in Indiana relies on U.S. 20 as a key backbone. It also includes portions of U.S. 41, IN 312, IN 912, U.S. 12, and IN 249 in the NIRPC region. These higher weight limits were originally created to enable the transport of heavy steel materials on the highway.

Figure 5.4 Indiana Extra Heavy Duty Highways



Source: INDOT.

Figure 5.5 Indiana Critical Corridors



Source: Indiana DOT 2030 Long-Range Transportation Plan.

Highways in the NIRPC region experience serious existing and projected congestion. The modeled Level-of-Service (LOS) for roadways within the region is shown for the years 2005 and 2030 in Figures 5.6 and 5.7 respectively. Both are from NIRPC model runs conducted as part of the recent *Illiana Expressway Feasibility Study* explained earlier.

The LOS classifications displayed are determined using a volume-to-capacity (V/C) ratio, divided into the classes shown in Table 5.1. LOS is an important indicator of costly congestion for truck freight movements, as well as passenger vehicles.

Current congestion levels show unstable flows on the Borman Expressway and on I-65. Congestion is anticipated to increase significantly by the year 2030, when few of the Interstate Highways within the NIRPC region will operate at better than LOS E.

Table 5.1 V/C Relationship to LOS

V/C	LOS	Description
0.0-0.2	A	Free Flow
0.2-0.4	B	Reasonably Free Flow
0.4-0.7	C	Stable Flow
0.7-0.8	D	Approaching Unstable Flow
0.8-1.0	E	Unstable Flow
Greater Than 1.0	F	Forced or Breakdown Flow

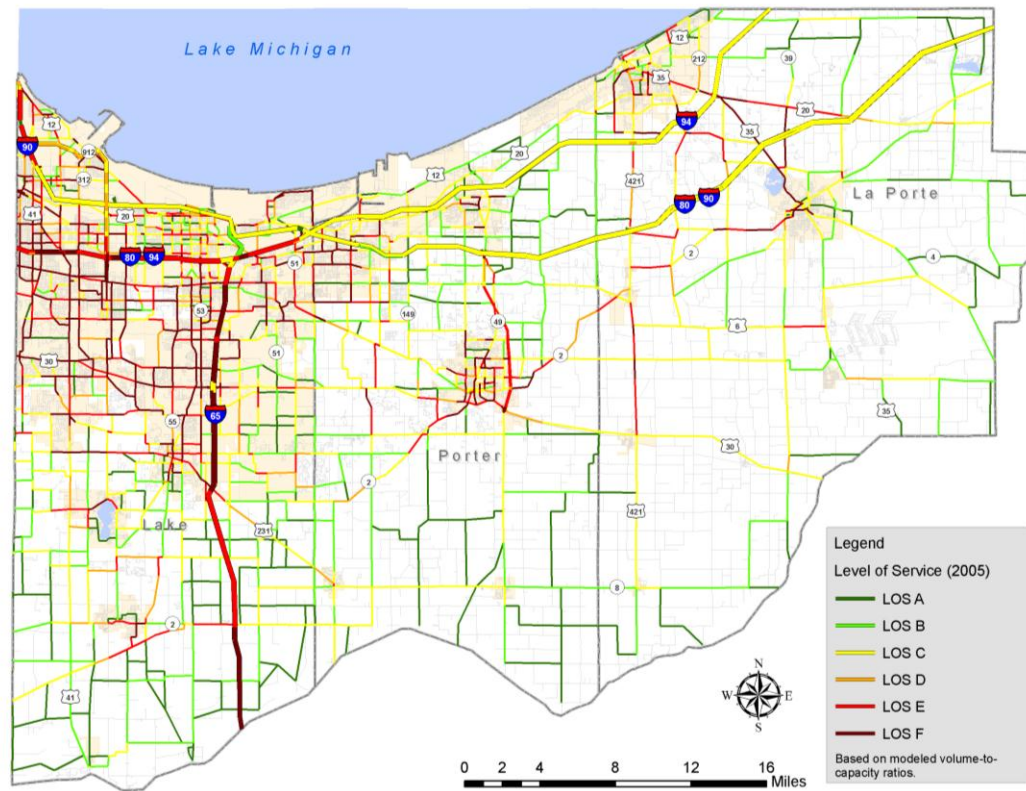
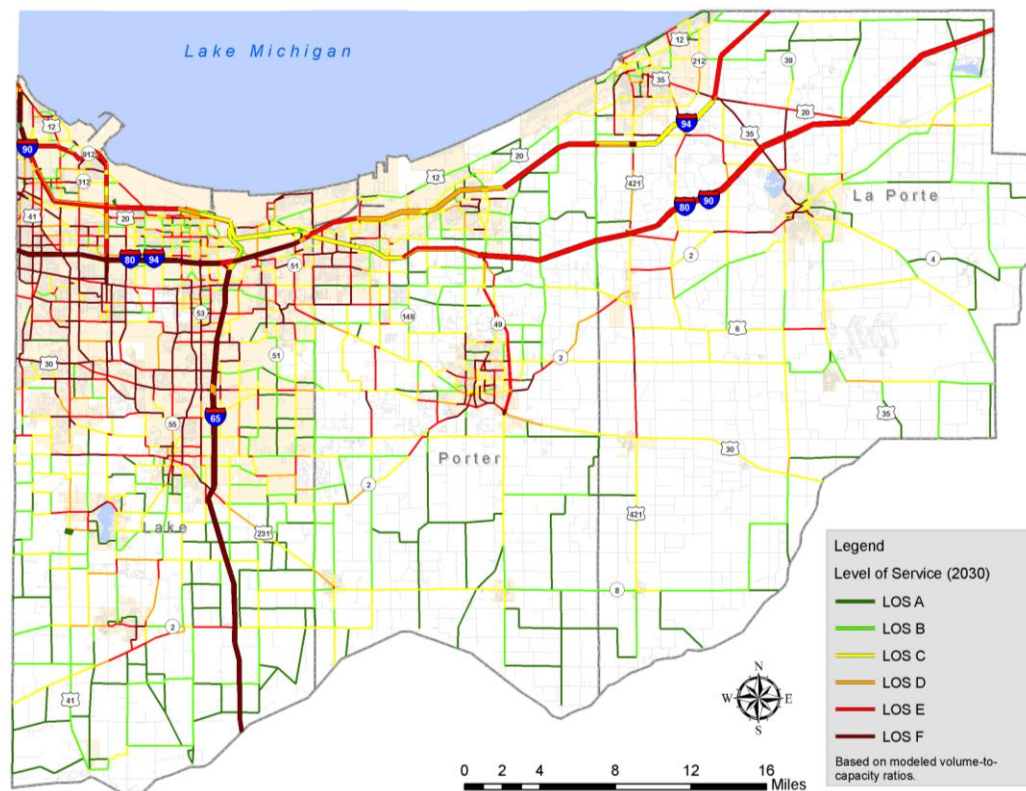
Figure 5.6 Existing Congestion Levels, 2005

Figure 5.7 Future Congestion Levels, 2030

Source: Illiana Expressway Feasibility Study Model.

Key Issues and Opportunities

Issues

Traffic congestion is clearly a major issue in Northwest Indiana. A number of stakeholders commented on congestion, particularly on the Borman Expressway, noting that this roadway cannot be expanded further. In particular, it was noted that customers considering locating logistics facilities comment on I-80/94 congestion and see it as a barrier to a Northwest Indiana location. Other stakeholders fear that widespread awareness of congestion in Northwest Indiana deters businesses that rely on just-in-time deliveries. In addition “lake effect” snow, which shuts down the roadway a few times each winter, is a concern for logistics businesses in terms of reliability.

Stakeholders noted several infrastructure-oriented issues. Heavy truck routing needs to be revisited as the current route on U.S. 20 stops before the Illinois line, forcing trucks to exit in a residential area in Hammond. To accommodate growth and mitigate community impacts, improvements such as deceleration lanes and frontage roads are needed in some locations. For example on U.S. 30, industrial

and residential development is occurring. The residential communities often petition for traffic lights and this results in slowing down freight movement on a key east-west thoroughfare. It is important to designate corridors in which freight will be targeted and other corridors where residential development is more appropriate.

On U.S. 20 to Michigan City, the density of trucks is very high, suggesting that trucks may be bypassing the weigh station between Chesterton and Michigan City on I-94. This segment is not access controlled and the high truck volumes may present a safety issue.

The bridge portion of Cline Avenue (S.R. 912) between U.S. 41 (Calumet Avenue) and Michigan Avenue in East Chicago over the Sanitary and Ship Canal was shut down by INDOT in December 2009 due to severe deterioration of the structure. The north-south roadway intersects I-90/94 and the Indiana Toll Road, passes the Gary/Chicago International Airport and turns west, serving the steel mill and connecting again with the Toll Road. In April 2010 INDOT announced that the 70-foot-high bridge will be torn down. Instead of rebuilding it, INDOT plans to rehabilitate the other roads in the area. This will reduce connectivity for trucks, particularly given that S.R. 912 between the steel mill and I-80/94 is an Extra Heavy Duty Highway. The area will revert to traffic patterns of 30 years ago, before the bridge was built. Stakeholders would be interested in transportation modeling or simulation to understand better the impacts of the loss of the bridge to traffic flow in the area.

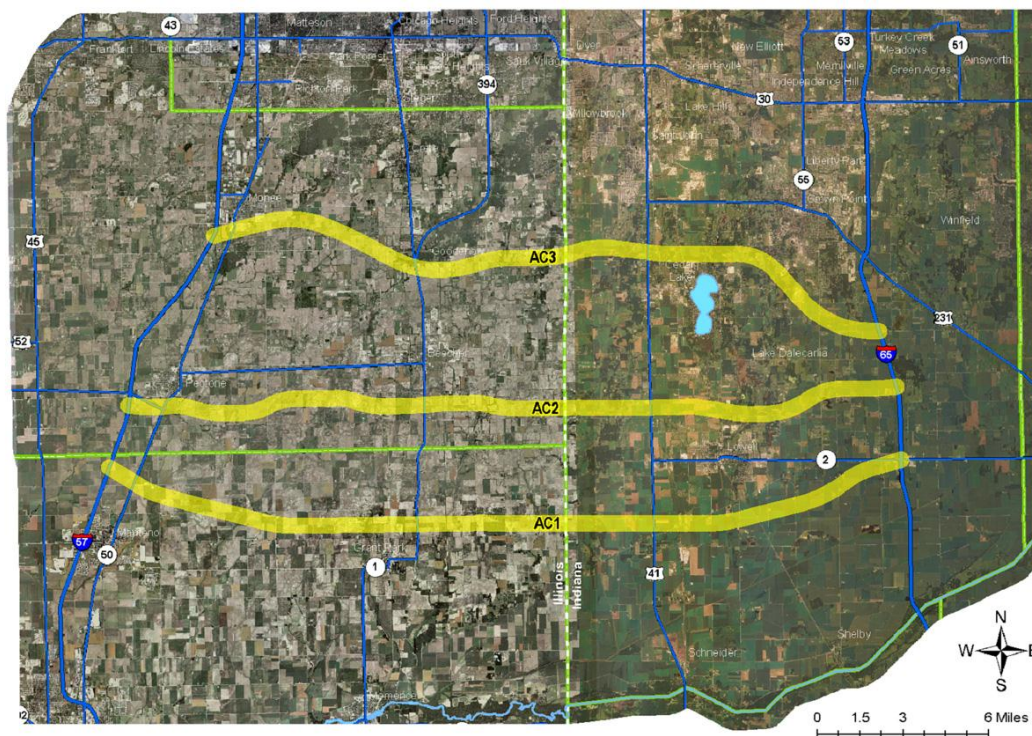
In the City of Gary many businesses are located on 15th Avenue between Cline and Colfax. The road is in very poor condition and the City has reached out to businesses including Schneider Trucking to contribute to paying for roadway improvements.

Opportunities

The region is distinguished by extraordinary transportation access, given the concentration of assets south of the Lake. The Illiana Expressway is proposed as an East-West Route from I-57 (or I-55) to I-65, with three conceptual alignments under consideration, as shown in Figure 5.8. Stakeholders note that this location would be far enough south from Lake Michigan that it might be less affected by snow. Many stakeholders interviewed for this study and the Illiana feasibility study are in favor of Illiana because it would be expected to provide congestion relief, particularly for trucks, as well as a new opportunity for proactive planning for freight and industry in the region. However, if truckers find they have to go too far south to avoid congestion in greater Chicago, they might not use the alternative. Some stakeholders indicated a desire for the Illiana to continue east past I-65 and connect to I-94.

Stakeholders also noted a need to increase the role of public transit in transportation planning in the region, as transit can remove vehicles from the transportation system to reduce congestion.

Figure 5.8 Illiana Expressway – Alternative Alignment Corridors



Source: Illiana Expressway Feasibility Study, July 2009.

5.2 RAILWAY AND INTERMODAL GOODS MOVEMENT

Profile

NIRPC is considered part of the Greater Chicago area, and Chicago is the nation's rail hub where six of North America's seven Class I railroads converge. Three of North America's seven Class I rail operators provide service within the Northwest Indiana region: CSX Transportation, Inc. (CSXT), Norfolk Southern (NS), and Canadian National (CN). In addition, several short-line and regional carriers operate in Northwest Indiana. According to the Association of American Railroads (AAR), in 2005, the State's rail network included 4,165 route miles (excluding trackage rights), with 88 percent of those being operated by Class I companies. The dominant operators are CSXT and NS, which operate 76 percent of all Indiana route miles.

Eight major east-west rail corridors cross Indiana, four radiating from Chicago, and four radiating from St. Louis. These represent some of the most heavily

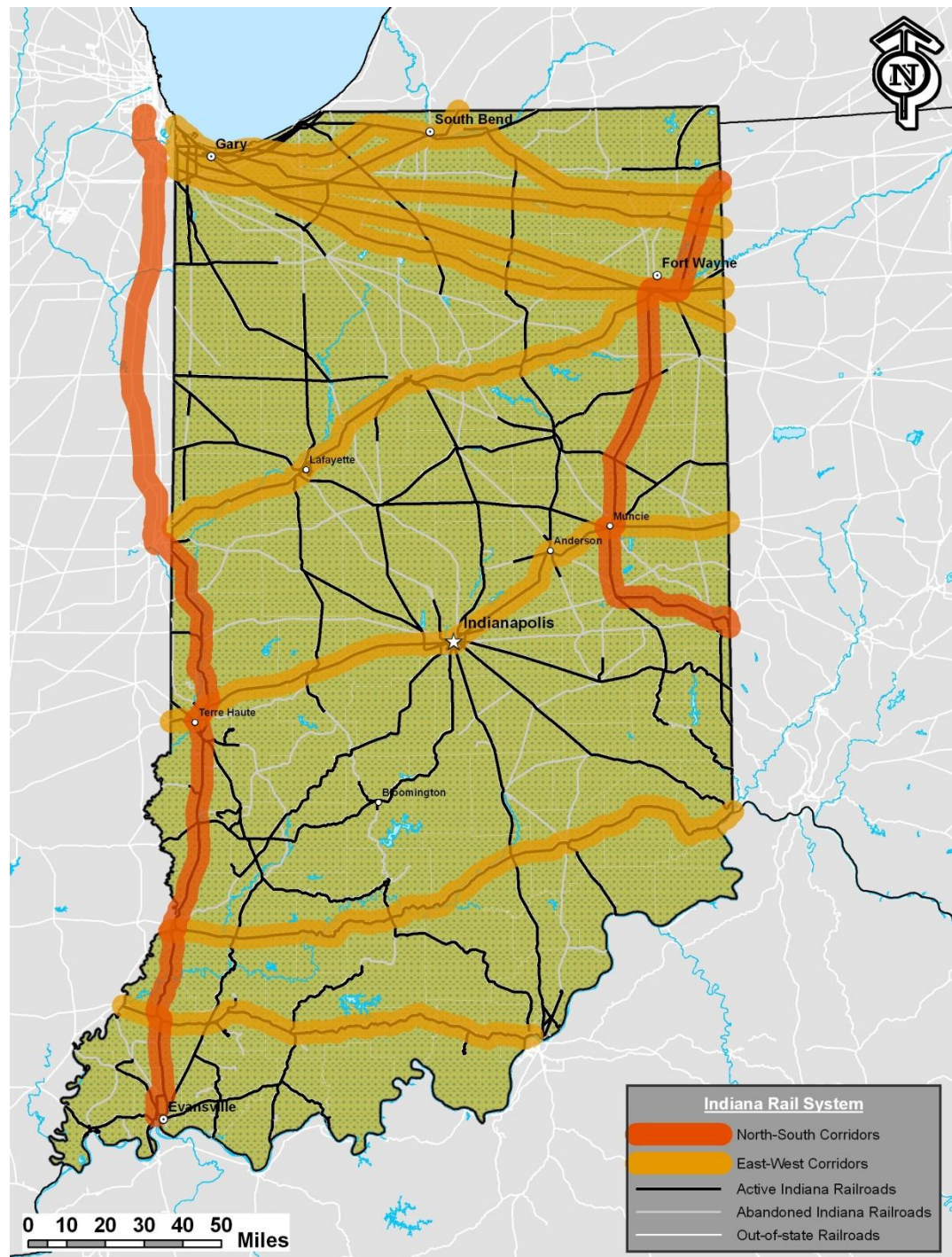
traveled rail corridors in the nation, particularly the CSXT, NS, and CN lines out of Chicago, all of which traverse Northwest Indiana. Only two major north-south lines traverse Indiana, one operated by CSXT that follows the Illinois border, and one operated by NS that follows the Ohio border. Of these 10 major rail corridors, the only one that passes through Indianapolis is the CSX east-west line between St. Louis and the east coast. Figure 5.9 shows current active and abandoned rail lines in Indiana.

All three of Indiana's Class I railroads operate in the NIRPC region (see Figure 5.10). The heaviest freight rail activity occurs on the CSXT (Garrett subdivision, running through the NIRPC region from Willow Creek to the La Porte-St. Joseph county line) and NS (Chicago Line subdivision, running from Chicago along Lake Michigan through La Porte to the La Porte-St. Joseph County line), followed by the CN (South Bend subdivision, running from the Lake-Porter county line through Valparaiso to the La Porte-St. Joseph county line) and NS (Chicago District subdivision, running from Chicago through Hammond and Valparaiso to the La Porte-Starke county line). Figure 5.10 shows rail activity for the NIRPC region. Activity is based on FRA-reported 2007 million gross ton-miles and displayed in a range from those with no data (typically short line railroads) to the highest levels of activity (shown in red). Most rail traffic is passing through the state, traveling between the East coast markets and Chicago's rail and intermodal yards.

On January 31, 2009, CN completed its acquisition of the EJ&E, a 198-mile circumferential line around Chicago from Waukegan, Illinois to Gary. The EJ&E connects with all the major railroads entering Chicago, serving steel mills, petrochemical customers, and distribution centers, and handling a range of commodities including bulk raw materials and finished products. Coal is also moved to utility plants in Illinois and Indiana via the EJ&E.

This acquisition is expected to result in substantial changes in rail traffic patterns in the NIRPC region and neighboring Illinois, with some EJ&E segments experiencing a significant increase in trains while certain existing CN segments would see a reduction. According to documents distributed at the Surface Transportation Board's January 2008 EIS scoping meetings, the volumes on the rail segment from Chicago Heights, Illinois to Griffith, Indiana were expected to increase from 10 to 34 trains per day; from 8 to 29 trains per day between Griffith and Van Loon; from 10 to 30 per day between Van Loon and Cavanaugh; and between Cavanaugh and Gary from 12 to 32 per day. According to CN, while traffic volumes overall remain down due to general economic conditions, CN has rerouted a limited number of its trains over the line so far.

Figure 5.9 Active and Abandoned Rail Lines in Indiana



Source: Indiana DOT, 2005. Obtained from Indiana Geological Survey, *A GIS Atlas for Indiana*, http://129.79.145.7/arcims/statewide_mxd/download.html.

As of June 2010, CN has completed voluntary mitigation agreements (VMA) with 22 out of 33 communities along the line in Illinois and Indiana. CN announced reaching a voluntary mitigation agreement with Gary, Indiana in April 2009. In an April 13, 2009 press release CN stated “with the Gary VMA we have agreements with all of the principal Northwestern Indiana communities that will see increased train traffic as a result of the EJ&E acquisition.”⁶ Under the agreement with Gary, CN will provide funding for quiet zones, noise mitigation, emergency response training and economic development.

While there are no intermodal yards in the area where shipping containers are transferred from railcars to truck, several major railyards exist as shown in Table 5.2. This is not an exhaustive list of all yards in the region but the primary yards by the major rail operators.

Table 5.2 Major Regional Rail Facilities

Railyard	City	Owner
Kirk Yard	Gary	CN
Gibson Yard	Hammond	IHB
Michigan Avenue Yard	East Chicago	IHB
Burns Harbor Yard	Portage	NS
East Chicago Yard	East Chicago	CSX

Source: Stakeholder Interviews, Chicago Operating Rules Association Chicago District Terminal Map.

Passenger Rail

Rail passenger service in Indiana is provided by Amtrak and the Northern Indiana Commuter Transportation District (NICTD). Amtrak provides intercity passenger rail and connecting bus service as part of its national network. NICTD operates commuter trains between South Bend and downtown Chicago, with stops in Michigan City, Gary, East Chicago, and other communities.

NICTD

NICTD operates commuter service over the Chicago South Shore & South Bend Rail Line between Chicago and South Bend, Indiana, as shown in Figure 5.12. On Weekdays NICTD operates 21 westbound and 22 eastbound trains between South Bend and Millennium Station in Chicago, and 10 westbound and 11 eastbound trains on Saturdays, Sundays, and holidays. The Chicago South Shore and South Bend Railroad also operates freight service over the same line as the NICTD service between Chicago and South Bend. From Michigan City to Kingsbury where no passenger travel occurs, the South Shore owns the railway

⁶ <http://www.cn.ca/en/media-news-milestone-transaction-mitigation-20090413.htm>.

as well as spurs into industry locations. While issues with passenger and freight conflict were not reported, the potential for conflict exists particularly as volumes of passenger and/or freight service increase.

NICTD plans to develop two new services, extending the South Shore Line from Munster to Lowell and Valparaiso, which is known as the West Lake Corridor Expansion.

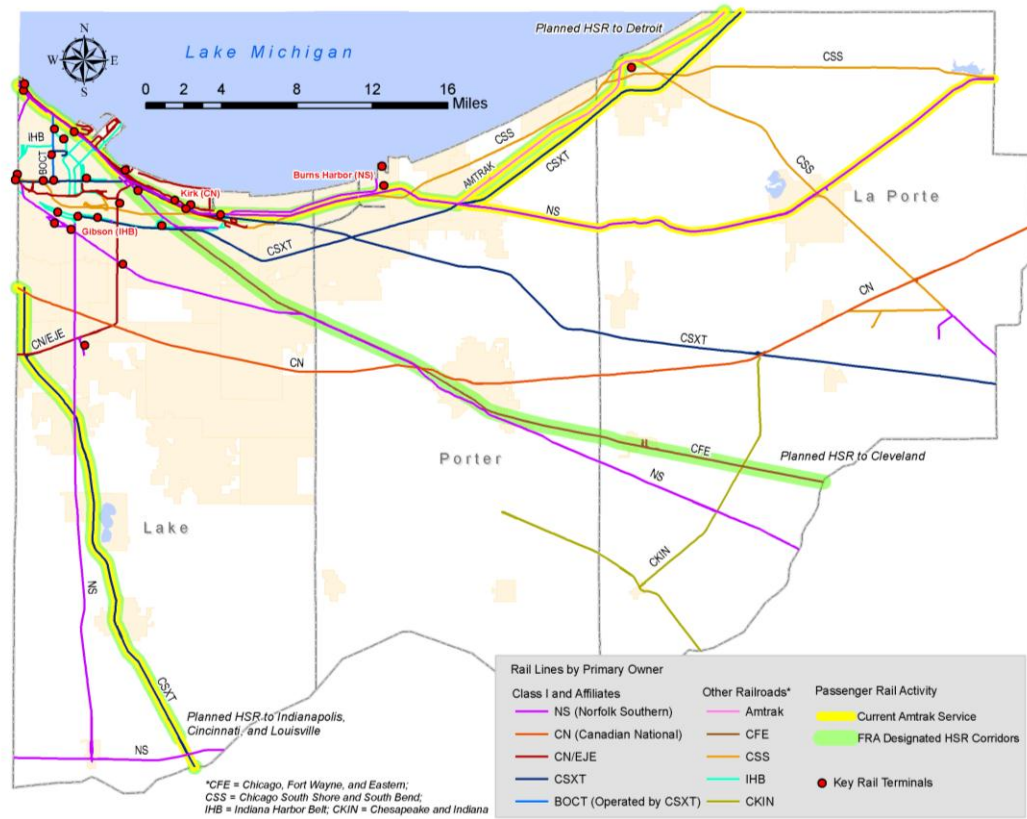
Amtrak

Amtrak operates seven routes in Indiana, all of which pass through the NIRPC region. The routes and service frequencies are shown in Table 5.3. Figure 5.10 shows the Amtrak routes as well as which routes were designated as Federal Railroad Administration (FRA) high speed rail corridors. In 2010 \$71 million in ARRA high-speed rail funds was awarded for freight projects on the Indiana Gateway Corridor between Porter, Indiana and the Indiana/Illinois State Line where 14 Amtrak trains and 87 NS trains operate daily and severe rail congestion occurs. Seven of the projects are on the NS line and one is on the Amtrak Michigan line.

Table 5.3 Amtrak Routes in Indiana

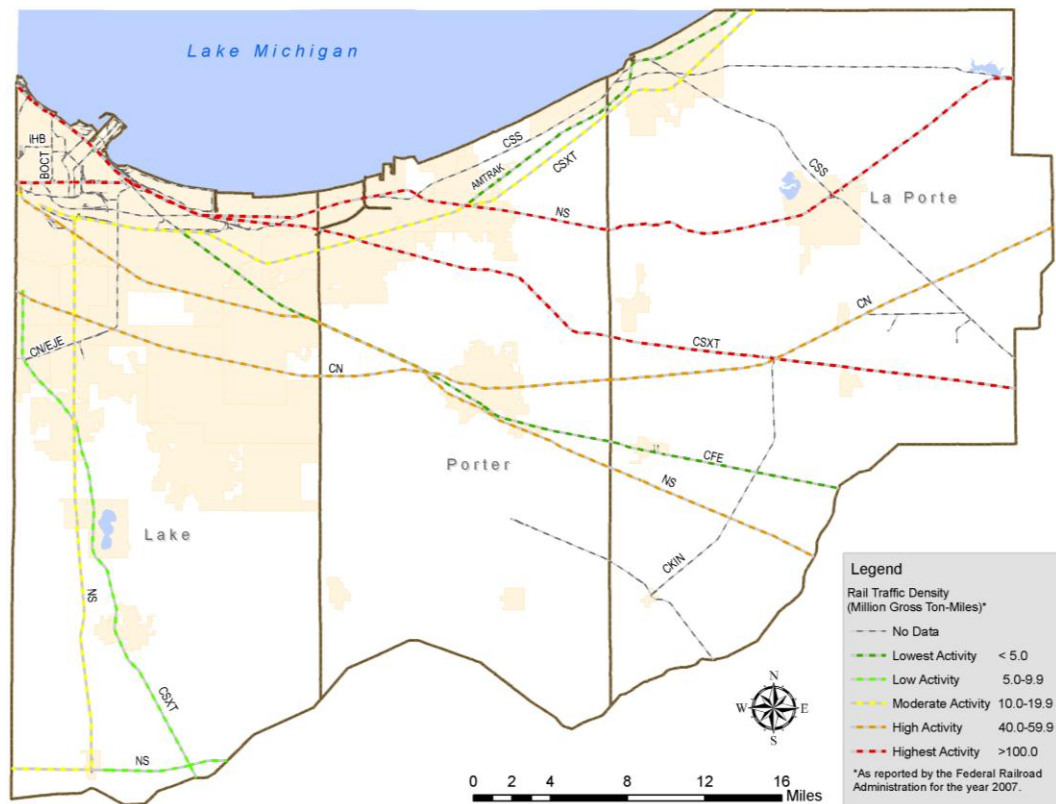
Route	Service Between	Indiana Stops	Service Frequency (Trains per Week)
Blue Water	Chicago Union Station – Port Huron, Michigan	Hammond, Michigan City	14
Capitol Limited	Chicago Union Station – Washington Union Station	Hammond South Bend, Elkhart, Waterloo,	14
Cardinal	Chicago Union Station – New York Penn Station	Dyer, Rensselaer, Lafayette, Crawfordsville, Indianapolis, Connersville	6
Hoosier State	Chicago Union Station – Indianapolis	Dyer, Rensselaer, Lafayette, Crawfordsville, Indianapolis	8
Lake Shore Limited	Chicago Union Station – New York Penn Station	South Bend, Elkhart, Waterloo	14
Pere Marquette	Chicago Union Station – Grand Rapids, Michigan	Hammond, Michigan City	14
Wolverine	Chicago Union Station – Pontiac, Michigan	Hammond, Michigan City	42

Figure 5.10 Freight and Intercity Passenger Routes



Source: NTAD, FRA.

Figure 5.11 Rail Line Activity Levels



Source: INDOT.

Figure 5.12 Northern Indiana Commuter Transportation District

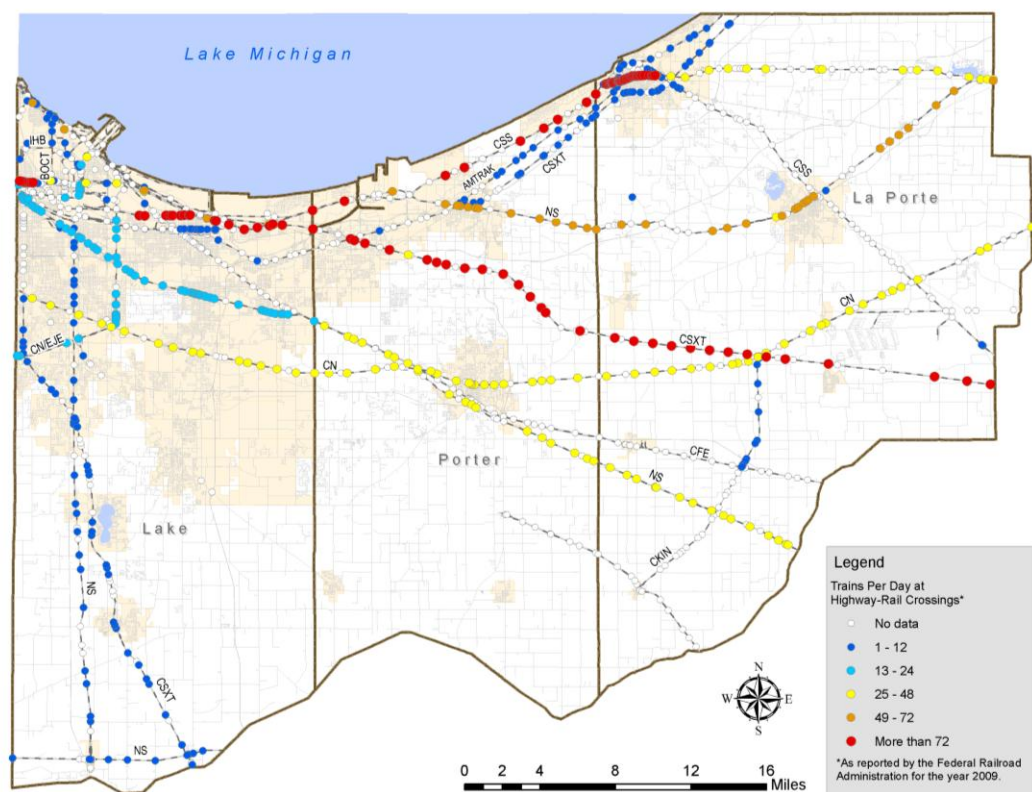


Source: Federal Railroad Administration, Amtrak, NTAD.

Rail activity can be gauged by trains per day, which is an important indicator of healthy railway economic activity. The NIRPC region has a large number of active rail lines with high levels of activity, reflecting a well-used rail network.

Highway-rail grade crossings are also a highly visible element of the freight system and often generate some conflict with local residents and municipalities due to the traffic delays they can cause and safety concerns. Figure 5.13 shows the number of trains (passenger and freight) that pass highway-rail grade crossings in a day, ranging from zero to more than 80. The CSXT (Garrett subdivision) shows the highest train per day counts.

Figure 5.13 Trains Per Day at Highway-Rail Grade Crossings



Source: FRA, 2009.

Freight Rail Funding Sources

Industrial Rail Service Fund

The Industrial Rail Service Fund (IRSF) was initiated in 1982 and is administered by INDOT's Rail Office. It provides grants or low-interest loans to Class II and III railroads and port authorities to purchase or rehabilitate property to be used for rail transportation and to rehabilitate railroad infrastructure. IRSF funding

has generally focused on rehabilitation projects to upgrade the condition of Indiana's Class III railroads.

The IRSF is funded with .033 percent of the state sales tax. The maximum grant award amount is \$350,000. However, grant awards to port authorities may not exceed 20 percent of gross sales and tax use receipts deposited in the previous fiscal year. In FY 2008, individual grant awards to port authorities were limited to \$184,000 out of a total of \$1.3 million available in the IRSF. Railroads and port authorities are limited to grants of no more than 75 percent of total project cost. To support economic growth initiatives, \$200,000 per year is available to the Indiana Economic Development Corporation for rail infrastructure projects to help attract job-creating business development.

Railroad Grade Crossing Fund

The Railroad Grade Crossing Fund (RRGCF) administered by INDOT's Rail Office provides resources for railroad crossing safety improvements to local jurisdictions, counties, and Class II and III railroads. The RRGCF is divided into two programs: the Crossing Closure Program and the Other Safety Improvements Program. The Crossing Closure Program is funded by the Indiana Motor Vehicle Highway Fund, which receives funds from motor vehicle registration fees, licenses, driver's and chauffeur's license fees, gasoline taxes, automobile transfer fees, certificate of title fees, weight taxes or excise taxes and all other similar taxes, duties or excises on motor vehicles, trailers, motor vehicle fuel, or motor vehicle owners or operators.⁷ The Crossing Closure Program is designed to compensate communities that close a crossing, which is deemed by the Federal Railroad Administration (FRA) to be the most effective safety treatment. A total of \$300,000 per fiscal year is available in the Crossing Closure Program. Awards ranging from \$15,000 to \$55,000 are made based on the predicted accident rate at a crossing. The Other Highway Safety Improvements Program is funded at \$700,000 per year with a maximum grant of \$50,000. Grants are awarded based on the community and county population, volume of rail traffic, and project type.

Key Trends, Issues and Opportunities

Trends

Rail service is becoming more competitive in terms of service and efficiency. As the railroads compete against each other they are beginning to attract some freight from other modes. Railroads are seeking to expand their market to include customers not directly located on a rail line by making the final connection by truck.

⁷ I.C. 8-14-1.

CSXT has a major new facility under development in Northwest Ohio. This facility will serve all traffic from the East or Southeast to the Midwest and divert some traffic from Chicago. The facility will take traffic from locations such as the Port of Savannah or the Port of New York/New Jersey and will build dedicated trains to Chicago that can be handed off to the western rail carriers, Union Pacific and BNSF, resulting in what is known in the industry as “block swap” (grouping containers or cars to go to a single destination).

Residential development adjacent to rail and preservation of industrial land with rail access was noted as a national issue, and is certainly an issue in Northwest Indiana. Once residential development is in place adjacent to active freight tracks, residents often begin to object to freight traffic, which was already operational for years before the housing was developed. This can result in challenges to increasing freight operations.

Issues

Rail operators indicated no current major operational issues in Northwest Indiana. The most significant rail issues in the region are those in Chicago, which are being addressed by the Chicago Region Environmental and Transportation Efficiency Program (CREATE), a public-private partnership including the Chicago DOT, Illinois DOT, Metra, Amtrak and the Association of American Railroads to implement 71 freight and passenger improvements in Chicago. The economic downturn has significantly reduced rail traffic in the past two years. As the economy continues to strengthen and rail frequencies increase, rail congestion and conflict is likely to increase. In Northwest Indiana the greatest need may be to identify and prioritize locations for highway-rail grade crossing separations.

Opportunities

CSXT is guiding potential users to the Kingsbury Industrial Park to act as an eastern alternative to the Chicago congestion. A major logistics company indicated the preference to locate a food distribution facility east of Chicago because by locating approximately 50 miles east of Chicago they could reach more customers in one day’s truck drive than they could west of Chicago. This facility is being developed to move trainloads of food products for distribution in Chicago and east of Chicago. Most of the produce will come from South America via Jacksonville, Florida. Some will come from Washington State by a Western railroad. The Kingsbury facility will not have a classification yard to build trains. It will bring in trainload and less than trainload quantities to customers. The project will break ground this fall with traffic to start moving in the second quarter of 2011. It is possible to make the Kingsbury location into an intermodal terminal, but CSX feels that would probably be done not as a CSX-owned terminal, on a smaller scale with private ownership and serving one to two trains per day.

Some stakeholders indicated that an opportunity exists to develop a major intermodal yard in Northwest Indiana on the scale of the intermodal yards recently built west of Chicago serving the western railroads. However, stakeholders in the rail industry noted that intermodal yards are built based on customer demand. Given Northwest Indiana's proximity to Chicago and the density of intermodal operations there, some stakeholders feel that it would be inefficient and costly to remove containers from a train just 30 miles from Chicago and truck them the rest of the way to Chicago over congested highways when they could travel all the way to Chicago on rail. Others noted that the conditions for an intermodal facility serving western railroads are quite different from those serving eastern railroads. Western railroads travel long distances with few stops from the West Coast to Chicago. Eastern railroads travel shorter distances from the Eastern Ports and the rail network is more complex east of the Mississippi. Additionally, given the major intermodal facilities already operating - NS Rickenbacker in Columbus, OH - and under development - CSXT North Baltimore, OH - Northwest Indiana could be "caught in the middle," too close to the large facilities that already exist or are under development.

An opportunity in Northwest Indiana could be development of a vehicle mixing center. An auto manufacturer with a mix of foreign and domestic auto production could aggregate the vehicles and distribute them from Northwest Indiana. Eighty percent of finished vehicles travel by rail in the U.S. The location would be desirable due the density of rail networks and excellent highway access.

Significant opportunity exists with heavy industry in Northwest Indiana. If rail continues to gain market share, the opportunities to capture a number of intermodal movements, other than container and truck on a flatcar, will become more important. A large segment of the rail market consists of hauling heavy products in large quantities to a facility where they are split up for final delivery. For example, plastic pellets may be hauled in a railcar and the contents of the railcar divided up into smaller bags of pellets at the transloading facility to be distributed by truck to the end users of the plastic.

The west end of the IHB's Gibson Yard in Hammond has potential for development. INDOT reengineered the bridge in the area so it would be supportive of potential future industrial development. While there is proximity to I-80/I-94, congestion could be an issue for truck access. The east end of the yard, however, is protected dune and swale that cannot be developed.

In FY 2010, approximately \$1.8 million in funding from the Industrial Rail Service Fund was available, a relatively low amount given the amount of rail infrastructure in Indiana. The state received \$5 million in grant applications in FY10. The amount of funding available per year could be increased to support additional freight rail improvements to attract and support businesses that use rail.

5.3 MARITIME GOODS MOVEMENT

Profile

The NIRPC region has several Lake Michigan ports reachable from points throughout the Great Lakes, Atlantic Ocean, and Inland Waterway System.

The Indiana Port Commission (doing business as the Ports of Indiana) operates Burns Harbor, one of the organization's three public marine ports. Burns Harbor is located on Lake Michigan in Portage, Indiana. The largest commodities processed at this port are steel, iron, and grain. The facility also handles substantial volumes of chemicals, fertilizers, limestone, coal, and heavy lift cargo. This port handles barges traversing the Inland Waterway System via the Illinois Waterway, bulk carriers traveling throughout the Great Lakes, and ocean vessels crossing the Atlantic via the St. Lawrence Seaway. The port facility has 30 on-site tenants and covers approximately 600 acres. It is directly served by two railroads, NS and Indiana Harbor Belt (IHB). All Class I railroads can access the port via the IHB, which is a switching railroad. Indiana SR 249 connects the port directly to I-94, less than a mile away. The port has been very successful at attracting tenants and has leased most of its land to industrial tenants. The port functions almost like an industrial complex given that most of its tenants do not use rail. Of the 10 million annual tons handled at the port, eighty percent is shipped by truck or rail and 20 percent by water. The waterborne freight movement is about one third international, one third from the Great Lakes, and one third through the inland waterway system (Calumet River -Illinois River - Mississippi River).

- In addition to Burns Harbor, two major privately owned Lake Michigan ports operate in the NIRPC region: Indiana Harbor in East Chicago and Gary Harbor. These ports primarily serve the steel industry of Northwest Indiana. At Gary Harbor, Arcelor Mittal and U.S. Steel have large facilities. It is in close proximity to the ITR and is served by the former EJ&E Railroad (acquired by CN).
- The Indiana Harbor and Ship Canal in East Chicago connects the Grand Calumet River to Lake Michigan. It has 4.7 miles of Federal Channel combined within the Indiana Harbor Canal, the Calumet River Branch, and the Lake George Branch and was the 42nd largest U.S. port in tonnage in 2007. The U.S. Army Corps of Engineers (USACE) estimated the Port supports nearly 3,400 jobs and generates \$174 million in direct revenue annually.⁸ It houses Arcelor Mittal's Indiana Harbor facility, the largest steelmaking complex in North America. It is served by the former EJ&E Railroad (acquired by CN) and the IHB Railroad. The Indiana extra heavy duty

⁸ <http://www.lre.usace.army.mil/ETSpubs/HFS/Indiana%20Harbor.pdf>.

highway system connects to the Harbor through IN 912 (Cline Avenue), linking the region with major east-west roadways including U.S. 20, the ITR, and the Borman Expressway.

- Buffington Harbor is a port worthy of note, but is currently the site of City of Gary redevelopment efforts which will reduce its role as a freight terminal. The City is working to transform this former steel industry port into a mixed use entertainment and residential neighborhood. Currently the gaming boats Majestic Star and Majestic Star II (formerly Trump Casino) are operating at the site. The port has been owned and operated by various major steel and cement companies, most recently Lehigh Cement Corporation, throughout its long history.

2007 Statistics for Indiana Harbor, Gary Harbor, and Burns Harbor are shown in Table 5.4. Iron ore continues as the primary commodity traversing Lake Michigan to Northwest Indiana.

Table 5.4 Statistics for Key Northwest Indiana Ports

Port	Shipped (thousand tons)	Received (thousand tons)	Total (thousand tons)	Value (\$ in millions)	Top Commodity
Indiana Harbor	1,275	13,668	14,957	\$1,175	Iron Ore
Gary Harbor	388	7,610	7,998	\$614	Iron Ore
Burns Harbor	421	3,423	3,844	\$703	Iron Ore

Source: USACE.

Key Trends, Issues and Opportunities

Trends

Water is the least polluting mode of freight transportation but it is also the slowest. Water and rail compete from the East Coast ports. As freight rail increases efficiency, particularly on the East Coast with the NS and CSX initiatives to enable double-stacking of containers on trains, water will become less competitive compared to rail.

Issues

The width of the St. Lawrence Seaway limits the size of ships that can enter the Great Lakes. Goods transported to East Coast ports need to be transloaded to smaller vessels that can traverse the Seaway. Given that the Seaway is operating at just 60 percent of capacity it is unlikely that future investment would be warranted for widening.

The Jones Act, which requires that all shipments from a U.S. port to another U.S. port be on a U.S. flagged vessel, hampers flexibility of operations. An international vessel cannot deliver between U.S. ports.

Opportunities

While the system works well, the region should consider how to shift more freight to the water mode to reduce congestion. One barge can remove up to 60 trucks from the highway. For example, Arcelor Mittal operates many trucks between Indiana Harbor and Burns Harbor, but potentially these trips could be served by water. In addition, stakeholders expressed interest in developing short-sea shipping opportunities on the Great Lakes. Key harbors such as Milwaukee, WI and Muskegon, MI could potentially be served by regular lake barge service. However to initiate such service, it would likely need to be subsidized, at least initially, to develop the market. Additionally it would be difficult to offer freight rates competitive with trucking. As increased attention is paid to climate change and policy development, incentives could be built in for shipping freight by less polluting modes such as water. Some type of incentive that makes water more financially competitive will be critical to effecting any significant mode shift to water.

5.4 AIR CARGO MOVEMENT

Profile

Air cargo activity in the NIRPC region is limited primarily to the Gary/Chicago International Airport. The Gary/Chicago International Airport is a publicly-owned public-use airport which is owned and operated by the Gary/Chicago International Airport Authority (GCIAA). It is a primarily commercial service airport with two runways of 7,000 feet and 3,603 feet in length. The airport covers 802 acres within the City of Gary in close proximity to the Indiana Harbor and the ITR. There is an expansion program in progress to extend the primary runway to 8,900 feet and develop an intermodal terminal which would include both high speed and commuter rail service. The South Shore commuter rail line currently serves the Airport with a station about one mile south of the terminal.

The Gary/Chicago International Airport handled about 180 tons of air cargo in 2009. This value reflected a rebound from very low numbers in 2008 (78 tons), but still represents a small scale of operations. By comparison, Chicago O'Hare Airport handled 1.24 million tons in 2009. Gary/Chicago serviced about 3,250 passengers in 2009.⁹ The airport serves charter passenger flights but has no regularly scheduled passenger service. Through a 1995 compact between the cities of Chicago and Gary, the Chicago/Gary Regional Airport Authority supports capital improvement projects at Gary Airport through the deployment of up to 1.5 percent of passenger facility charges (PFCs) collected at O'Hare and Midway Airports.

⁹ http://www.transtats.bts.gov/Fields.asp?Table_ID=292.

The airport authority received FAA approval and has begun preliminary work to extend the airport's main runway. This would allow it to handle larger aircraft, but would require the relocation of power lines and a large fuel tank, as well as the adjacent CN/EJ&E railroad tracks. Planned improvements at the airport and those underway are designed to strengthen Gary's position as a viable regional airport offering regularly scheduled passenger service and increased freight activity.

O'Hare International Airport plays a critical role in handling Northwest Indiana's air cargo needs. Given O'Hare's substantial freight traffic, and the airport's relative proximity to Northwest Indiana (about 1/3 the distance of Indianapolis International Airport), O'Hare plays a significant role in providing air freight capacity to Indiana shippers and manufacturers. One estimate indicates that half of all overseas air freight shipments that originate in Indiana are loaded onto planes and shipped overseas at O'Hare.¹⁰

Key Issues and Opportunities

Issues

The recent strategic plan developed for Gary/Chicago Airport assessed freight as an area of very low opportunity given competition from O'Hare and the lack of potential for passenger flights, which carry belly cargo. Therefore the airport is not marketing for air cargo business, and opportunities for air cargo are very limited in the region. Additionally, roadway access to Gary/Chicago Airport is very convoluted and a barrier to the Airport's success. INDOT has been asked to review alternatives for highway access while they are demolishing the Cline Avenue Bridge in Gary.

Opportunities

The airport plans to target primarily charter passenger operations for growth in terms of air operations. The strategic plan includes a truck-oriented regional consolidation and distribution facility that is independent of air cargo. While land exists around the airport to do this, currently it is owned by the City of Gary and private business. Additionally road access connecting such a facility to the major highways would need improvement.

Land around Porter County Municipal Airport in Valparaiso is being marketed for temperature controlled warehousing, such as pharmaceuticals. Some stakeholders feel that because development plans around the airport have consensus the potential is greater here for freight-oriented development than at Gary Airport.

¹⁰ Indiana export data (value and weight) are from the U.S. Census Bureau and tabulated by WISERTrade, Holyoke Community College.

5.5 LAND USE

Profile

Industrial development is the principal driver of freight demand in a region, followed by commercial development. The NIRPC region has concentrations of industrial land uses on Lake Michigan and near the three major ports. In addition, the I-94, U.S. 41, and U.S. 30 corridors all show some concentrations of industrial and commercial land uses. Outside of East Chicago, Gary, and Burns Harbor, industrial land use is relatively scattered rather than concentrated along transportation corridors. Much of the NIRPC region is rural and covered with low density housing, farmland, and conserved green space land uses. Agricultural land uses account for approximately 50 percent of the region.

Significant industrial development opportunities exist in the NIRPC region. There are approximately 40 industrial parks which cover close to 10,000 acres.¹¹ About 5 percent of the region or close to 70 square miles are currently in industrial land uses according to the NIRPC land use dataset. Vacant or unclassified land covers approximately six percent of the region or about 88 square miles. A recent review of the Chicago regional market for industrial properties found that Northwest Indiana (an area defined to include much of Lake County) possessed over 20 million square feet of industrial property with a 14 percent vacancy rate and a highly competitive rent price of \$3.09 per square foot.¹²

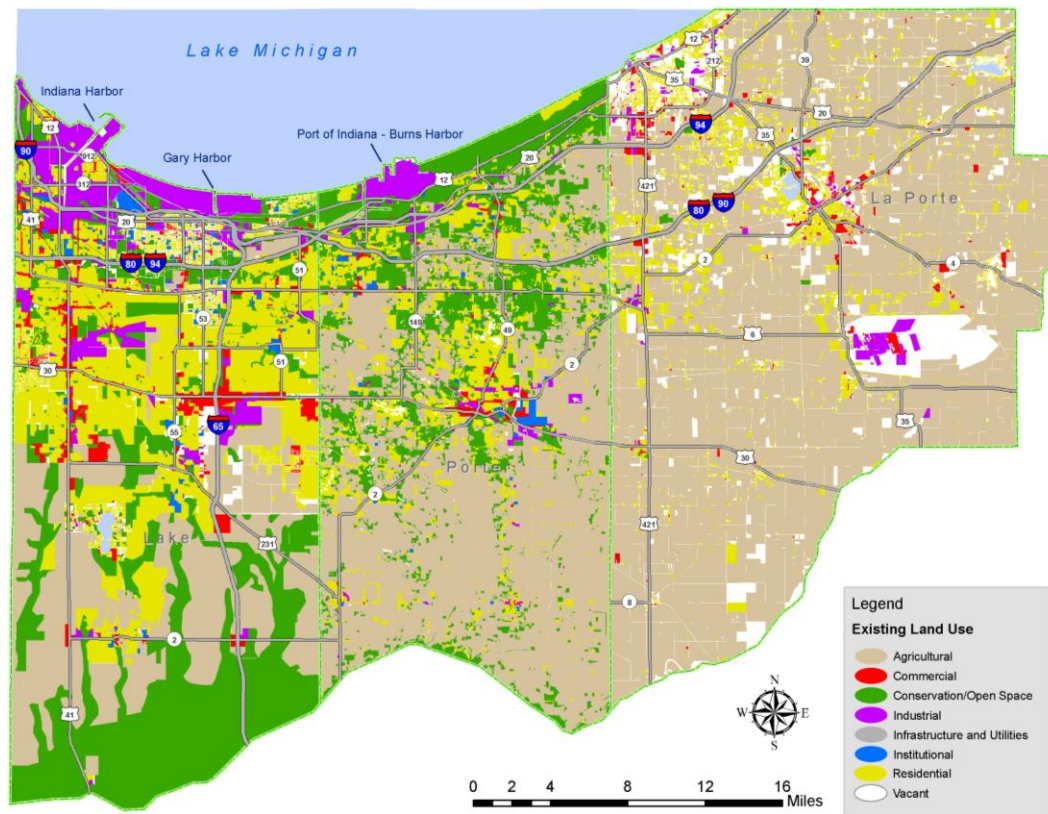
While projected future land use, shown in Figure 5.13, is generally consistent with current land use, there are a few developments that may greatly influence future freight demand. In some cases industrial land uses are anticipated to contract. For example, portions of the U.S. 41 corridor through Schererville are anticipated to shift from industrial to commercial land uses.

Significant new industrial developments are projected, however. Industrial land use is anticipated to increase in the area surrounding Michigan City. Two very large industrial sites are anticipated to expand. On the eastern edge of Valparaiso in the center of Porter County, close to 5,000 acres may be placed into industrial land use. This site would be adjacent to the NS Chicago District line. East of Kingsbury in La Porte County on U.S. 35, close to 15,000 acres is anticipated to be placed into industrial use as the ICS Logistics Park. This is currently the site of the 6,000 acre Kingsbury Industrial Park. This property would be served by CSXT with the potential for other rail connections.

¹¹ Indiana Department of Transportation.

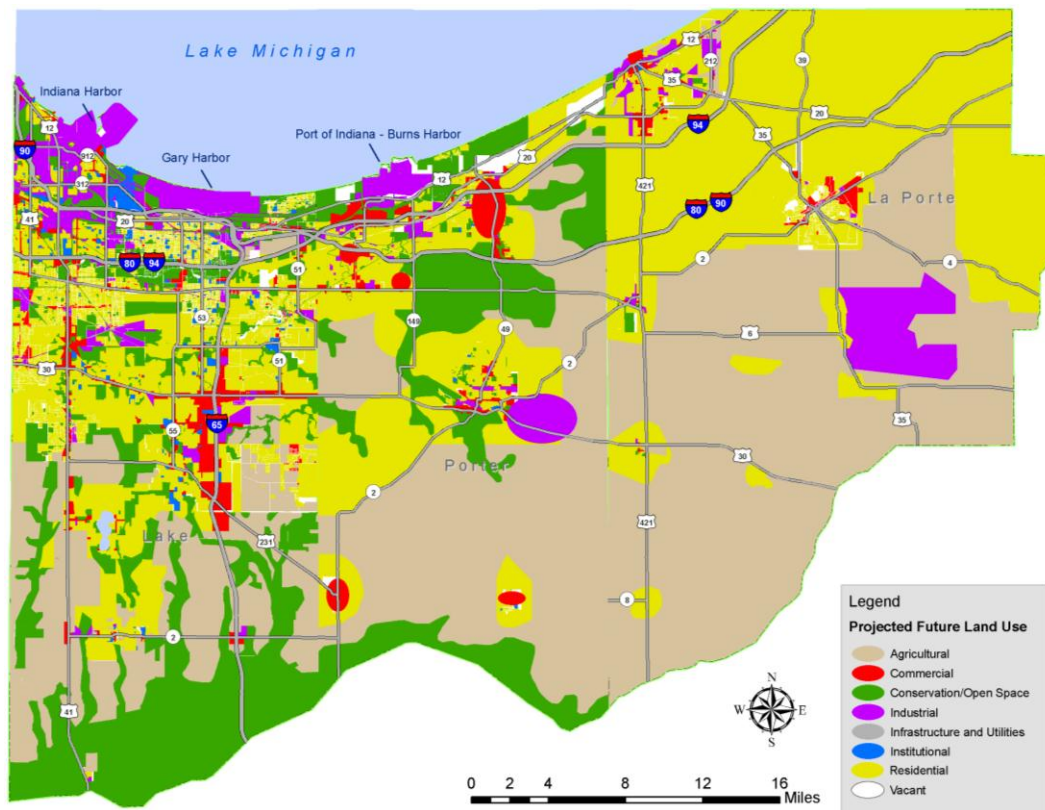
¹² Grub&Ellis Industrial Market Snapshot Chicago Fourth Quarter 2009.

Figure 5.14 Existing Land Use



Source: NIRPC Land Use Dataset.

Figure 5.15 Projected Land Use



Source: NIRPC Land Use Dataset.

Key Issues and Trends

Issues

Parcels for industrial use are fragmented throughout the region. Stakeholders noted that the inability for businesses to assemble significant size parcels of land, particularly in Lake County, is a barrier to additional freight-oriented development. No strategic plan for industrial development, such as designation of industrial corridors, exists in the region

Many rail lines are clustered close to Lake Michigan, which is also an asset for regional tourism. Two railways traverse the Indiana Dunes National Lakeshore, which means that a significant amount of land adjacent to rail is not available for industrial development and presents a conflict with development of the area for increased tourism.

Residents often view freight as an obstacle and inconvenience. A better understanding of how freight contributes to the regional economy and offers potential for regional development is needed. Additionally, if proactive land use planning occurs, freight impacts to quality of life can be better managed.

Opportunities

Stakeholders noted that industrial development is good business for communities, providing a greater tax base than residential development. With Environmental Protection Agency (EPA) regulations, manufacturing produces less pollution than it did historically.

Some developable parcels of land exist adjacent to rail lines, which the region could work to preserve and market to industry. While not a comprehensive list, developable land was identified in the following locations,:

- In East Chicago where truck access to rail is available;
- Along the NS Fort Wayne rail line, southeast of Valparaiso to Hobart;
- On the IHB rail line in Whiting; the region should encourage industry to come in and rebuild abandoned oil refineries and steel mills;
- Along the CN rail line between Valparaiso and Merrillville where a significant amount of farmland currently exists;
- Along the CSX Porter Branch rail line in Burns Harbor and Chesterton;
- Along I-94 from Chesterton to Portage; and
- With the removal of the Cline Avenue Bridge, land along the canal could be redeveloped.

5.6 OTHER ISSUES AND OPPORTUNITIES

Additional issues and opportunities, such as those related to labor, economic development, and interagency collaboration are discussed in this section.

Issues

One of the most significant issues in Northwest Indiana is developing cohesion among the region's 41 cities and towns. Local leaders struggle to coalesce around a shared vision of how to handle the region's common assets. Because of the local taxing structure, little incentive exists for mayors and city councils to think beyond their own boundaries. While the RDA was set up as a structure to pool funding for several large projects to benefit the region, the agency has recently faced challenges from participating entities; Porter County has established a legal challenge to the organization.

Stakeholders noted that while freight and transportation infrastructure is available, the region does not have a strategic plan, which has resulted in haphazard development and ultimately congestion and negative impacts to quality of life. Quality of life is a huge issue for site selectors. For example, certain businesses have considered moving to the region to take advantage of the lower cost of business, but ultimately decided not to relocate due to quality of life

considerations. If the region seeks to attract freight-oriented businesses, infrastructure is an important consideration, but a high quality of life for the workforce is also a major factor.

Some stakeholders feel the potential for freight oriented development is lower in Lake County because it is too close to Chicago. On the other hand, there is an advantage to a location that is in close proximity to a large population center, but with lower tax rates.. Stakeholders reported that certain communities in the region have been presented with freight-oriented development opportunities but rejected them. Some communities do not feel freight oriented employment is desirable and seek only white collar office employment. In addition, some communities have developable land but do not have a cohesive plan for the land. Therefore they have rejected industrial development opportunities because they do not have a clear plan of where they want industry to locate. Stakeholders expressed concern that if interested companies are rejected repeatedly for industrial development opportunities, this will give the region a reputation of being unfriendly to business.

Opportunities

Northwest Indiana's key benefits are lower costs than Illinois and the generally business friendly environment that has been promoted throughout the State. The inventory tax, which previously was a significant barrier to logistics business location in the State, has been abolished.

Economic development professionals in the region have identified a need to conduct a study to identify corridors of opportunity for freight and logistics development, which can then be proactively marketed. However, first it will be critical to secure buy-in from communities within such corridors to establish that they are receptive to freight oriented development.

Development of a comprehensive regional strategy and agreement on the areas with greatest potential will be helpful to avoid issues such as communities marketing land for logistics development when transportation access is poor. In these cases, if freight development locates where infrastructure cannot support the needs, it would necessitate costly transportation upgrades or could result in negative community impacts. Scattered marketing efforts are occurring presently in the region. It is critical to identify the best opportunities in the region and for a wide range of stakeholders to support a cohesive strategy, potentially around one or more logistics corridors. Corridors with potential identified by stakeholders include the I-65 corridor. Additionally, key land around rail infrastructure should be targeted and preserved. For example the location where NS and CN cross in Valparaiso might have had strong potential for freight development but is now occupied by high-end residential development. The areas with greatest potential should be identified and preserved. The Center for Neighborhood Technology has developed the

approach for developing Cargo Oriented Development that may provide guidance for Northwest Indiana as it seeks to define freight-oriented corridors.¹³

Most site selectors starting to look for a Midwestern site begin with Chicago. From there some real estate brokers consider Northwest Indiana as a lower cost alternative. However Illinois-based realtors do not have reciprocity in Indiana, which means that they must find an Indiana-based broker and share commissions with that broker. If Illinois brokers were allowed to sell real estate and receive a full commission in Indiana, more would likely consider presenting options in Northwest Indiana to clients.

While stakeholders feel the current workforce is not sufficiently prepared for employment generated by potential freight-oriented development, the region has the resources to provide training. Many educational resources exist in the NIRPC region including Ivy Tech, Purdue University Calumet, Purdue University North Central, etc.

¹³ <http://www.ilsmartgrid.org/repository/TOD-COD.GettingSmart.110107.pdf>

6.0 Recommendations

6.1 INTEGRATION OF FREIGHT INTO THE COMPREHENSIVE PLANNING PROCESS

NIRPC wishes to integrate freight more fully into its 2040 long-range planning process as well as to develop a process for integrating freight into project prioritization and selection via the transportation improvement plan (TIP).

According to the NCHRP Report 594 *Guidebook for Integrating Freight into Transportation Planning and Project Selection Processes*, seven key elements are recommended for integration of freight planning and programming. These elements, which were developed based on interviews with freight planning practitioners, are:

1. Establish freight point of contact/technical lead;
2. Understand the statewide/regional freight system;
3. Link freight planning activities and the transportation planning and programming process;
4. Collect freight data and conduct freight data needs assessment
5. Conduct effective outreach;
6. Take advantage of training and education opportunities; and
7. Engage in advocacy efforts.

NIRPC has just begun to undertake freight planning and take steps toward integrating freight into its broader planning process. In the past year, NIRPC has designated a staff person to take on part-time freight planning responsibilities and serve as the external point of contact on freight issues. The initiation of this Freight Study will provide a baseline understanding of the freight system. As part of this study and future efforts, the MPO will begin to gather a body of freight data on which it can build and determine what other data is needed. While economic development outreach occurs in the region, direct outreach between NIRPC and private companies that are shipping and carrying freight does not generally occur. This is an opportunity for the future. Future opportunities are discussed in greater detail in Section 6.3 on Next Steps.

Issues and Opportunities

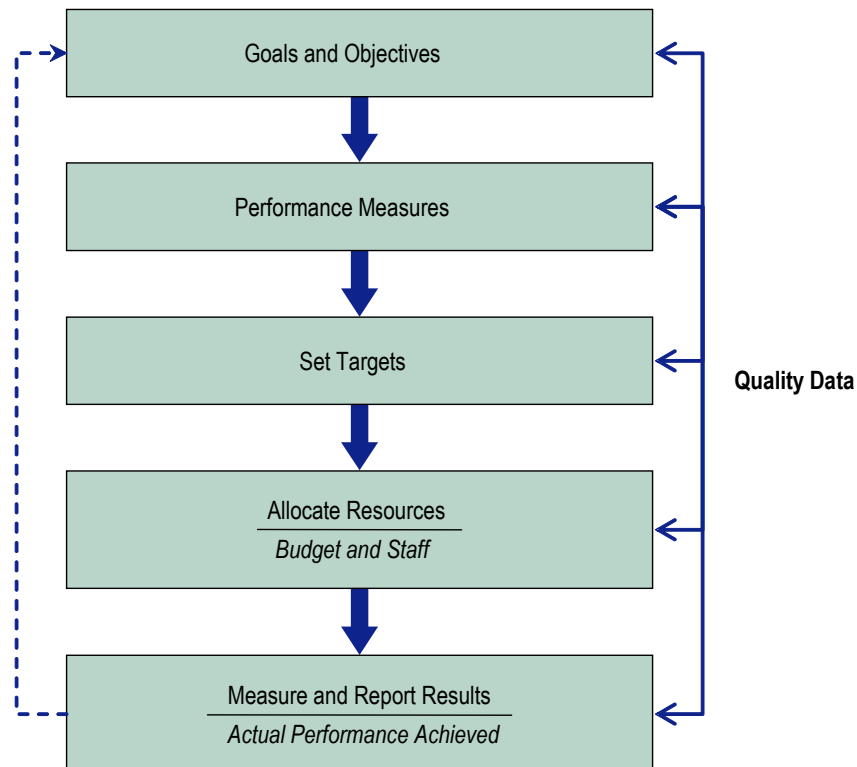
Stakeholders encouraged NIRPC to develop a truly comprehensive transportation plan, and the 2040 CRP is moving in that direction. Additionally it was recommended that transportation be more fully integrated with economic

development. One of the major areas of focus for the region in terms of economic development is logistics; therefore a strong connection is needed. Finally, a desire for more emphasis on transit in transportation planning was noted.

Freight Performance Measures

As shown in Figure 6.1, performance measurement is a process of determining regional goals, determining how these goals will be defined and progress measured, identifying targets, measuring results via quality data and feeding that information into the process again. Measurement of freight performance will follow this same process and will overlap and complement other performance measurement efforts, particularly those related to transportation and economic development. NIRPC has defined 14 goals for the CRP 2040.

Figure 6.1 Performance Measurement Process



Source: Cambridge Systematics, Inc.

A set of potential performance measures and identification of which 2040 CRP goals each measure is aligned with are presented in Table 6.1. Potential data sources are listed for each performance measure, although additional research is required to confirm data availability. NCHRP Report 594 *Guidebook for Integrating Freight into Transportation Planning and Project Selection Processes* also

serves as a resource including a comprehensive listing of national freight data sources. Additional guidance from the National Cooperative Freight Research Program (NCFRP) is under development, with NCFRP 03: *Performance Measures for Freight Transportation* expected to be published in late 2010.

Table 6.1 Potential Freight Performance Measures for Use in Northwest Indiana

Performance Measure	2040 CRP Goal Area	Source
Gross Regional Product	Globally competitive, diversified economy	Bureau of Economic Analysis
Value of goods exported annually vs. value of goods imported	Globally competitive diversified economy	International Trade Administration, U.S.. Department of Commerce
Vehicle-hours of delay for at-grade crossings	Increased mobility, accessibility and transportation options for people and freight	INDOT, if available
Fatal crashes involving heavy trucks	Safe and secure transportation system	Fatality Analysis Reporting System
Vehicle classification by time of day; % trucks off-peak	Increased mobility, accessibility and transportation options for people and freight	INDOT, if available
Condition rating for NHS intermodal connectors	Adequate transportation funding and efficient use of resources	INDOT, if available
Average speeds on freight significant highways	Increased mobility, accessibility and transportation options for people and freight	American Transportation Research Institute
Average peak and off-peak travel time for trucks in freight significant corridors	Increased mobility, accessibility and transportation options for people and freight	Detector data, if available
Domestic Waterborne Commerce of the United States	Increased mobility, accessibility and transportation options for people and freight; Globally competitive, diverse economy	U.S.. Maritime Administration
Number of congested hours on freight significant highways	Increased mobility, accessibility and transportation options for people and freight	Operations data, if available

6.2 CONSIDERATION OF FREIGHT IN PROJECT SELECTION CRITERIA FOR TRANSPORTATION IMPROVEMENT PROGRAM

The NCHRP Report 594 *Guidebook for Integrating Freight into Transportation Planning and Project Selection Processes* provides guidance on integrating freight into the traditional programming process. Most of the processes used by Metropolitan Planning Organizations (MPOs) were developed to evaluate and prioritize highway improvements. This is one reason freight improvement projects, particularly non-highway projects, have a difficult time successfully proceeding through the planning and programming process. NIRPC may find that projects in the current Transportation Improvement Program (TIP) or under consideration for a future TIP do have significant freight benefits, particularly if they are highway improvement projects on routes with significant volumes of truck traffic.

NIRPC could consider adding a freight section to its TIP to specifically highlight projects with freight benefits. Quantifying benefits of freight-oriented projects can be difficult and most MPOs lack the analytical tools to clearly define projects' freight benefits but it is important to define benefits as possible. Steps to improve freight project consideration in the TIP include:

1. Modify project evaluation criteria to encourage brownfield development so that projects receive extra consideration or "points." This will further help ensure that freight transportation investments are consistent with land use policies;
2. Ensure freight stakeholders are represented on the project evaluation committee. Private sector participation in the transportation planning process will be particularly helpful in helping the committee recognize the value of freight projects;
3. Develop criteria that reflect potential goods movement and economic benefits of freight projects. For example, this could involve giving extra "points" in the project prioritization process to:
 - Highway improvement projects on facilities with a high percentage of trucks;
 - Freight projects forecasted to reduce truck volumes, such as improvements to freight rail or water;
 - Projects forecasted to improve peak-period travel time reliability on high-use truck roadways;
 - Projects that support redevelopment of brownfield sites;
 - Projects in a designated freight corridor; and

- Projects forecasted to create employment, and particularly those creating jobs accessible via transit.
4. Identify expected economic impacts of projects in terms of the elements of the economy that might have significant stakeholder benefit. It is important to identify the stakeholders that might receive benefits and then describe the economic benefits they would receive such as:
 - Benefits to regional and national freight network capacity;
 - Economic competitiveness, growth, productivity, and trade;
 - Benefits to specific regions, modes or industries; and
 - Allocation of costs and benefits among affected parties, to assess equitable funding.
 5. Evaluate benefits to the transportation network (e.g., highway and rail) as possible including benefits to key facilities or potential chokepoints such as ports, terminals, and bridges. This could include estimating the cost implications of mode/facility choices, potentially through the Intermodal Transportation and Inventory Cost Model (ITIC), a freight mode choice model from FHWA's Office of Freight Management and the Federal Railroad Administration;
 6. Evaluate more specific economic impacts such as cost reduction, improvements to productivity, and employment creation. Benefits might be calculated via an economic impact model; and
 7. Use decision support methods to identify the positive and negative impacts of a project using benefit/cost analysis, cost effectiveness analysis or multiple criteria analysis to consider a wide range of qualitative and quantitative effects.

6.3 NEXT STEPS

A number of ideas for next steps were generated through the study and stakeholder input. Opportunities are presented in the categories identified in the NCHRP Report 594 *Guidebook for Integrating Freight into Transportation Planning and Project Selection Processes*.

Technical Lead

1. Maintain the designated freight lead role and build awareness of this function with external audiences to "put a face on freight" so stakeholders know who the point of contact at NIRPC is regarding freight issues.
2. Develop relationships with private sector freight operators in the region. Help them understand the transportation planning process and gather information from them on trends, needs and opportunities.

Understand the State and Regional Freight System

1. Identify potential corridors along freight rail lines and highways to be designated as industrial corridors to preserve land for potential commercial development and provide a buffer to residential land uses. If possible, identification of a corridor or corridors for Cargo-Oriented Development should be integrated into the CRP 2040. Identification of such areas should be done in partnership with rail representatives in the region.
2. Conduct a market study to assess the amount of freight-oriented development the region can expect to attract and support.
3. Conduct a study to identify and prioritize highway-rail grade crossing separations. Stakeholders have indicated that this may be the primary need relative to rail in the region.

Freight Data Needs Assessment and Data Collection

1. Review potential freight performance measures listed in Table 6.1. Research data availability for measures and investigate additional measures through discussions with:
 - Traffic management center – operations data;
 - INDOT; and
 - Private sector freight stakeholders.
2. Begin to collect key freight data on a regular basis and to evaluate trends over time.

Link Planning and Programming

1. Reevaluate the transportation programming process and make modifications to boost consideration for freight, drawing on the concepts discussed in Section 6.2

Outreach

1. Conduct periodic freight workshops to gather input and insight from freight practitioners in the region. While NIRPC might not have the resources to manage an ongoing freight committee with frequent meetings and it could be challenging to sustain interest among industry representatives, periodic meetings focused around targeted efforts are reasonable. Several stakeholders indicated interest in working with NIRPC on regional freight planning efforts and understanding what types of data and information NIRPC could offer industry. Topics could include:
 - Briefings of freight practitioners on planned public infrastructure projects in the region and the status of construction. For example, Schneider

Trucking based in Gary expressed a desire to understand planned construction schedules on Interstates; and

- Development of a regional economic development/ freight strategy.
2. Evaluate real-time communication methods to the freight community about roadway congestion and other issues and consider development of improved methods. INDOT does provide real-time ITS data on traffic flows in Northwest Indiana on its website but NIRPC could work with INDOT on potential freight-oriented communications to freight operators in the region such as e-mail blasts on incidents on key freight routes and construction updates.
 3. Conduct training with trucking companies on information resources to help truckers use traffic and transportation data and plan trips at off-peak periods. Schneider trains 500-700 truckers annually at its Gary facility; trucking companies could be provided information on how to access information on traffic conditions and options for the most efficient highway travel through Northwest Indiana.

Training and Education

1. Continue to gain technical knowledge on freight through participation in educational opportunities such as the free “Talking Freight” webinar series offered by the FHWA Office of Freight Management and Operations.
2. Attend state and regional freight meetings such as the annual State logistics summit.

Advocacy

1. Communicate to transportation stakeholders the importance of goods movement to the region. Reach out to NIRPC leadership, staff, and associated agencies to communicate the role of freight to the region and how freight will be considered in future transportation and economic development planning.
2. Develop a common regional freight vision for the region, including identification of key freight corridors. Once such a vision is established and consensus achieved, the region can proactively market its assets and be more confident that communities will be receptive to opportunities.
3. Reach out to freight stakeholders to help NIRPC identify the benefits of potential freight transportation projects and communicate these benefits to stakeholders.

Funding

1. Consider use of Economic Development District (EDD) revenues toward freight infrastructure improvements. A three-county EDD was recently established as a nonprofit organization in the region. The EDD is funded by

the Federal Department of Commerce with a local match. Logistics is one of the target industry clusters.

2. Work with the state to explore the potential of increasing funding in the State's Industrial Rail Service Fund. Additionally, consider establishing a process within the NIRPC region to identify and prioritize the most significant rail improvement needs in the region and coordinate the application process with rail carriers to ensure applications for the most significant needs are submitted, particularly those benefitting multiple carriers.
3. Explore Use of Economic Development Foundation (EDF) revenue to support freight investment. For example Starke County's EDF revenue is being used to acquire land and fund rail sidings and other freight infrastructure. Such funds can be used for purposes beyond marketing.
4. Explore public-private partnerships (PPP) to fund freight-oriented improvements. While enabling legislation would be required for any significant new agreements, a precedent for PPP exists in Indiana with the lease of the Indiana Toll Road.
5. Consider use of impact fees for freight oriented development to fund transportation improvements associated with the development and freight operations.

Other Key Issues

1. Consider increasing private sector representation in NIRPC's governance and committee structures. Currently as a council of governments all representatives on the board are members of the public sector. While there is some public representation on its committees, the agency could increase its contact with private industry. To better understand and respond to the needs of business in terms of economic development and increasing freight-oriented business in the region, a private sector perspective would be very valuable.
2. Advocate for alignment of policies among the Economic Development Authority, Department of Rural Affairs and Department of Transportation. There is a need to ensure consistency among processes and policies for developing infrastructure to benefit private development. Currently the lack of consistency is negatively impacting implementation of projects to benefit private industry.
3. Work with the State EDA on its review of policies for obtaining state funding for infrastructure. Currently the EDA will not grant state funding for infrastructure unless a development project is in place. At the same time, local officials feel they cannot secure projects without infrastructure improvements. The EDA recognizes that this is an issue.