

ST. JOSEPH COUNTY RAIL OPPORTUNITY PLAN

May 23, 2017



ST. JOSEPH COUNTY
ESTABLISHED 1830



**SOUTH BEND
REGIONAL
CHAMBER**



ST. JOSEPH COUNTY RAIL OPPORTUNITY PLAN



The Antero Group

Prepared by The Antero Group and Prime Focus
For St. Joseph County Department of Economic Development
and St. Joseph County Chamber of Commerce

May 23, 2017

PROJECT TEAM

St. Joseph County Department of Economic Development

Executive Director: Bill Schalliol
227 W. Jefferson Boulevard
County-City Building, Suite 1140
South Bend, IN 46601
Phone: 574.235.9812
Email: bschalli@co.st-joseph.in.us

South Bend Regional Chamber of Commerce

President & CEO: Jeff Rea
101 N. Michigan St., Suite 300
South Bend, IN 46601
Phone: 574.234.0051
Email: jrea@sbrchamber.com

The Antero Group

Project Manager: Eric Neagu, P.E., LEED AP, AICP
220 West Colfax Avenue, Suite 600
South Bend, Indiana 46601
Phone: 773.403.5137
Email: eneagu@anterogroup.com

Prime Focus LLC

Libby Ogard
918 Fox River Drive
DePere, WI 54115
Phone: 920.217.7222
Email: logard@primefocusllc.com

ACKNOWLEDGEMENTS

The St. Joseph County Economic Development Department commissioned this study in collaboration with the South Bend Regional Chamber of Commerce to identify rail-related opportunities within St. Joseph County. The project team included:

- Mr. Bill Schalliol, Director of Economic Development St. Joseph County
- Mrs. Jessica Clark, P.E. Director of Engineering St. Joseph County
- Mr. Jeff Rea, Executive Director South Bend Regional Chamber of Commerce
- Mr. Eric Neagu, P.E., LEED AP, AICP The Antero Group
- Mr. Kyle Smith, The Antero Group
- Ms. Libby Ogard, Prime Focus

This report is the product of the collaborative efforts supported by numerous individuals and organizations. A Steering Committee of various officials, professionals, and economic development experts provided invaluable insight and support throughout this project. The Committee included the following individuals.

- David Behr, Indiana Economic Development Corporation
- Phil Buckmaster, Town of Walkerton/Walkerton Economic Development Corp.
- Jessica Clark, St. Joseph County
- Mike Daigle, South Bend International Airport
- Steve Ellison, Bradley Company
- James Finan, Michiana Partnership
- Joe Grabill, Berkshire Hathaway HomeServices
- Michael Guzik, Lawson-Fisher Associates
- Jared Huss, Lawson-Fisher Associates
- Dennis Jordan, St. Joseph County Redevelopment Commission
- Alex King, Parsons Brinckerhoff
- Shelly Klug, American Electric Power
- Aaron Kobb, City of South Bend
- Chuck Lehman, Lehman & Lehman
- Larry Magliozzi, St. Joseph County
- Patrick McMahon, former Executive Director of Project Future
- Ken Prince, City of Mishawaka
- Jeff Rea, South Bend Regional Chamber of Commerce
- Mark Robinson, American Electric Power
- Erin Roznik, Michiana Area Council of Governments
- Tom Rueschhoff, Indiana Department of Transportation
- Derek Spier, City of Mishawaka
- James Turnwald, Michiana Area Council of Governments
- Scott Duerkop, JLL
- Dan Vermillion, Town of New Carlisle
- Ken Carter, Town of New Carlisle

TABLE OF CONTENTS

EXECUTIVE SUMMARY	IV
INTRODUCTION	1
Why Rail? Why Now?.....	1
Process.....	2
Participants	2
Report Structure	3
INVENTORY OF ST. JOSEPH TRANSPORTATION ASSETS	4
Class I Railroad Assets in St. Joseph County	6
<i>Norfolk Southern Railroad</i>	7
<i>CSX Railroad</i>	8
<i>CN Railroad</i>	9
Shortline Assets in St. Joseph County.....	9
<i>The Chicago South Shore and South Bend Railroad</i>	10
<i>Elkhart & Western Railroad</i>	11
<i>Chicago Fort Wayne and Eastern Railroad</i>	12
Transload Assets.....	13
South Bend International Airport	14
Highways and Truck Routes	15
ECONOMY AND WORKFORCE	16
Economic Base	16
Workforce Development	20
OPPORTUNITY AREAS	22
New Carlisle.....	23
Walkerton.....	25
Mishawaka.....	27
South Bend Airport Area	29
Southern South Bend.....	31
COUNTYWIDE OPPORTUNITIES AND THREATS	33
Opportunities	33
Threats	33
CAPITALIZING ON OPPORTUNITY: A PLAYBOOK FOR ST. JOSEPH COUNTY	35
Countywide Marketing Plan	35
Opportunity Site Recommendations	36
Master Planning Principles	37
Funding Playbook	38
<i>Planning and Economic Development</i>	39
<i>Transportation</i>	40
CONCLUSION	42

APPENDIX A: GLOSSARY OF TERMS

APPENDIX B: OPPORTUNITY AREA MAP

APPENDIX C: MEETING MINUTES AND PRESENTATION MATERIALS

APPENDIX D: DATA TABLES

APPENDIX E: STATE OF INDIANA RAIL MAP

APPENDIX F: SITE CERTIFICATION INFORMATION

APPENDIX G: SITE SELECTION PROFILES

APPENDIX H: MACOG FREIGHT TRANSPORTATION STUDY

OPPORTUNITY AREA MAPS

Map 1: Overview of Transportation Assets in St. Joseph County	5
Map 2: Overview of Opportunity Areas in St. Joseph County	22
Map 3: New Carlisle Opportunity Area	23
Map 4: Walkerton Opportunity Area	25
Map 5: Mishawaka Opportunity Area	27
Map 6: South Bend Airport Opportunity Area	29
Map 7: Southern South Bend Opportunity Area	31

EXECUTIVE SUMMARY

This report lays the framework for an economic development strategy linked to rail transportation assets in St. Joseph County. It was commissioned by the St. Joseph County Economic Development Department to better understand the potential for rail-served business opportunities. As this report makes clear, the County has a mix of transportation assets, a diverse economic base, and five opportunity areas with available land for rail-served development. While this analysis clearly illustrates the potential for robust job and revenue creation around rail assets in St. Joseph County, implementation will take additional thought and effort. With marketing, site planning, infrastructure investment, and other support, the County can follow this report's blueprint and translate its rail-served opportunities into investment and jobs.

The team examined existing conditions for rail-served sites and development opportunities throughout the County. A series of site tours and meetings were conducted with a Steering Committee comprised of St. Joseph County economic development professionals; Class I and shortline rail operators; other planning and real estate professionals; and the Indiana Department of Transportation (INDOT), the entity responsible for updating the Indiana State Rail Plan. Available data was used to complete the countywide picture of existing rail-users and potential site opportunities. Through this analysis, the team discovered that:

- **The time is now for rail-linked logistics in St. Joseph County.** Nationally, freight rail delivers cost savings and improves private sector competitiveness based on shipment volumes, length of haul, terminal handling costs, and other factors. St. Joseph County can attract companies looking to relocate closer to their markets, particularly on the East Coast, and maximize efficiencies within their supply chains. Additionally, existing businesses could use rail to expand their markets.

“EXCITING TIMES ARE IN ST. JOSEPH COUNTY’S FUTURE.

AS OPPORTUNITIES ALONG THE CSX RAIL CORRIDOR ADVANCE, WE WILL WORK WITH LOCAL ECONOMIC DEVELOPMENT PROFESSIONALS TO HELP PROMOTE RAIL-RELATED DEVELOPMENT WHEREVER POSSIBLE.”

- Adam Hess, CSX

- **The County possesses a robust mix of transportation assets.** Three Class I railroad lines pass through the County: Norfolk Southern (NS), Canadian National (CN), and CSX. Each provides access to a slightly different market, allowing potential users to increase their competitiveness with access to multiple lines. Additionally, the County possesses two short line railroads, the South Shore Freight and Elkhart and Western, as well as an international airport with a Foreign Trade Zone, the Indiana Tollway, and numerous truck routes. This infrastructure positions the County to capitalize on freight efficiencies and translate them into economic development.
- **Multiple manufacturing sector options exist.** Manufacturing and transportation activities represent 25% of the County's current employment base. An analysis of recent job growth and its specialization suggests that food and plastic manufacturing would be good opportunities for future growth. The County could target these sectors and explore linkages with recreational vehicle and auto manufacturers in an economic development strategy.
- **St. Joseph County has many assets.** Abundant and readily available development land exists adjacent to almost all transportation corridors, including each of the Class I rails and the airport. Utilities have ample capacity to support development and are almost always available at potential sites.

The County should focus on five prime opportunity areas for rail-linked development. These areas were initially identified by the Steering Committee and recommended after by the team after evaluating criteria that includes available land, municipal interest, access to rail, utilities, and highways, as well as synergies with other assets. These five areas are:

- **New Carlisle** possesses roughly 5,000 acres of contiguous land and is served by NS, and the Chicago South Shore and South Bend Railroad. It has ready access to highways, the airport, and nearby utilities. The County should focus on this area as a primary target.
- **Walkerton** has both NS and CSX access. The Elkhart and Western shortline has capacity for rail car service, rail-served businesses exist in the area, and there are an additional 200 acres of attractive and developable land.
- **Mishawaka** includes three potential rail-served opportunities, with CN and the Elkhart and Western railroads serving the area. Mishawaka also possesses a solid workforce, ample land, and local synergistic businesses, such as AM General and nearby recreational vehicle manufacturers.
- **South Bend Airport District** could be served by the Chicago South Shore and South Bend Railroad. It includes the County's Foreign Trade Zone. The relocation of the South Shore approach into the Airport opens up a unique opportunity for industrial master planning.
- **Southern South Bend**, which includes portions of South Bend and unincorporated St. Joseph County. CN passes through and NS services several existing businesses. Current activity demonstrates ample opportunity for development.

There are several recommended steps to action to advance each opportunity site through predevelopment and marketing to ultimate development. Specifically, the report recommends that the County:

- **Create A Marketing Plan** that brands it as a rail-friendly community, ensures all opportunity areas are advertised by the railroads and INDOT, and promotes infill sites in all site selection arenas;
- **Pursue Master Planning** for major opportunities in New Carlisle and the South Bend Airport District that identifies needed infrastructure improvements, stormwater management mechanisms, and utility extensions;
- **Secure Funding** for rail improvements and economic development funds through programs managed through the State of Indiana and the federal government.

This report is only the starting point for a multiyear commitment to rail-served development. The world of economic development is dynamic. Political interests, local resources, business attraction initiatives, and market forces can all change over time. With sustained planning and investment in each of these opportunity areas, the County can overcome these cyclical forces and spark job growth over the next decade.

"ST. JOSEPH COUNTY IS BLESSED WITH FIVE RAILROADS AND MANY OTHER TRANSPORTATION ASSETS. THIS REPORT OUTLINES THE ECONOMIC OPPORTUNITY, BUT IT IS ONLY THE BEGINNING. WITH HARD WORK, WE CAN GENERATE ADDITIONAL INVESTMENT AND JOBS AROUND OUR RAIL ASSETS."

*- Bill Schalliol, St. Joseph County
Economic Development Department*

This report came together as INDOT is currently updating the Indiana State Rail Plan. Information has been provided to INDOT for inclusion in that document. The intention is to better integrate County efforts around the rail-linked development into the State Rail Plan. However, the Plan update timeline did not align with the drafting of this report. The County intends to update this report later as the State Rail Plan update advances. As such, we consider this to be a living document that may merit frequent updates.

St. Joseph County can build a robust economy around its many transportation assets. The County's position

east of Chicago's rail nexus, its available land and utility access, and an attractive business climate within the State of Indiana all bode well for future job and revenue creation. However, as indicated in the conclusion, the County should take important steps to proceed. Master planning will allow the private sector to engage quickly and responsibly with the sites. Mature industrial economies have never developed organically. Public sector investment has always helped make them happen. This report anticipates that with public investment these sites could realize significant upside over the next five to ten years.

St. Joseph County can build a robust economy around its rail assets.



Photo: Russell Sekeet, Flickr/Creative Commons

INTRODUCTION

WHY RAIL? WHY NOW?

St. Joseph County is in the middle of a period of economic expansion. A current economic renaissance includes major industrial investments, such as the \$500 million energy center in the New Carlisle area; burgeoning housing and mixed-use development around the University of Notre Dame; and other industrial efforts. While these areas are growing, other opportunities remain to be cultivated and considered. In particular, the wealth of transportation assets across the County have been recognized by officials for possible rail-related development. The initial exploration of these transportation opportunities is summarized in this document.

Ideally positioned on a major eastern railroad thoroughfare, the County has three Class I railroads and two shortline railroads. There is ample available development land adjacent to many of these lines, as well as several existing businesses that currently utilize rail. Historically, the County has been limited in its ability to respond to site selection requests for rail-served sites owing to lack of information on optimal prospective sites. With a better pool of sites, as outlined herein, the County can now better respond to those interested in the area and in the attractive business climate within Indiana more generally.



A CSX train passes through Walkerton.

Photo: Tim_kd5urs, Flickr/Creative Commons

Additionally, national and regional conditions have created an increasingly favorable climate for rail-served development within the County. Some of the benefits include:

Fuel Savings: The Association of American Railroads estimates that a train can move one ton of freight an average of 473 miles on a single gallon of fuel.

Global Competitiveness: Because railroads haul approximately one-third of all U.S. exports from ports to rail terminals and end market, they connect American industry to the worldwide economy.

Affordable Freight Transport: Adjusted for inflation, average U.S. rail rates fell 43 percent from 1981 through 2014. That means that the average rail customer today can ship nearly twice as much freight for about the same price that it paid more than 30 years ago.

Fuel Efficiency: On average, railroads are four times more fuel-efficient than trucks.

Reducing Pollution: When freight is shipped by rail, rather than by trucks, greenhouse gas emissions decrease by an average of 75%.

Highway Congestion: Because a rail can carry the freight of several hundred trucks, rail freight reduces gridlock, the cost of maintaining existing roads, and the pressure to build expensive new highways.

Safety: Recent technologies have made rail transportation safer than ever before. According to the Association of American Railroads, 99.998% of hazardous materials are handled without incident.

Economies of Scale: For bulk commodities, such as scrap, agriculture, salt, aggregates, or steel, the bulk transportation capability of rail shipping reduces the handling and packaging required for smaller shipments. Coal and agricultural products often move in unit trains, 50 to 100 rail cars at a time, which increase transportation efficiency and lower cost.

PROCESS

The team designed a process to understand the rail-related business development resources available to the County for both existing business expansion potential and future development opportunities. A series of meetings and discussions were held to identify the interest of both the communities and the railroads in advancing rail-related development. The team followed the below process:

- **Due Diligence Phase:** This phase examined the situation of the geography adjacent to railroads relative to wetlands, available land, utility access, zoning, and other factors helpful in determining development potential.
- **Existing Users:** The project team mapped existing rail users within St. Joseph County, as well as within a 60-mile radius of the County.
- **Committee Structure:** Recognizing no development can occur without local support, a management committee and a Steering Committee were developed to collect input.
- **Funding Research:** The team researched funding sources for potential future rail development.
- **Railroad Coordination:** The team met with each of the active railroads in the County to gauge interest in supporting development.
- **Opportunity Areas:** Existing and potential opportunity areas were mapped and documented, including the advantages and disadvantages of each. They were not ranked, as the development of a specific site will depend on a variety of dynamic economic and political factors.
- **Playbook:** A brief playbook has been included to give some direction to the County should it wish to advance development of a specific site.

PARTICIPANTS

Production of this study includes a core management team comprised of St. Joseph County's Economic Development Department and the South Bend Regional Chamber of Commerce, as well as a Steering Committee of regional officials, local real estate experts, and economic development professionals. Requests for participation were extended to all corners of the County, with almost all municipalities located along the railroads participating (**Appendix C**). Steering committee meetings were held on:

- December 7, 2016
- January 17, 2017
- March 2, 2017

Additionally, the project team held meetings with the South Bend Regional Airport, the Indiana Department of Transportation, and the various railroads, including CSX, NS, Chicago South Shore and South Bend, and the Elkhart and Western. A meeting with the Canadian National (CN) has not been convened as of this draft.

REPORT STRUCTURE

Guided by perspectives of the Steering Committee and other stakeholders, the team utilized its own research and expertise to explore the opportunities for rail-linked development in St. Joseph County. This rail study was organized to further understand the following objectives:

- The need and/or interest in freight rail economic development within the County.
- How the County can leverage its freight rail network.
- The end users the County can attract to rail development.
- How St. Joseph County should promote, advertise, and attract freight rail development opportunities.
- What investment programs are available to help fund freight rail development.

The resulting document aims to answer these questions by organizing the perspectives of the County, Steering Committee, and other stakeholders with available research in transportation and economic development. It has four primary components:

- **Existing Conditions**, which includes an inventory of all Class I and shortline railroads, other transportation assets and their inherent advantages and disadvantages, and an examination of the makeup of key industries and the local workforce.
- **Opportunity Areas**, which includes an overview of the 5 opportunity areas, a summary of their strengths and challenges for redevelopment, and a discussion on the opportunities made possible through transportation access, land assembly, business development, and other factors.
- **Opportunities and Threats** to redevelopment that the County must anticipate moving forward, and
- **A Policy Playbook** to translate opportunity to implementation through a series of Countywide and site-specific recommendations to advance rail-served sites and a matrix of grant and financing opportunities to make it happen.

Furthermore, the County is working with INDOT to obtain additional relevant data. However, as of this draft, the timing of the State Rail Plan update and this report did not align. It was decided to draft this report with the understanding that later amendments may be made as additional information from INDOT becomes available.

INVENTORY *of St. Joseph Transportation Assets*

St. Joseph County enjoys a wealth of transportation assets. The County possesses three Class I railroads that connect it with markets in the Eastern United States and Chicago, and regions beyond. It also enjoys shortline service from two providers that can help companies move product on and off these lines and bypass the crowded Chicago market, as well as provide potential access to the Port of Indiana in Burns Harbor. The County possesses an international airport and highway connections for trucks. Taken together, these assets provide market access for potential companies looking for commodity inputs and supply chain connections to many points across the United States. With continuing growth in freight traffic, particularly along the national rail network, the County is positioned to capitalize on them and generate abundant economic development opportunities, resulting in added jobs and revenue.

Across the United States, rail freight traffic is projected to grow as businesses capitalize on its inherent cost efficiencies. According to the U.S. Department of Transportation and the Bureau of Transportation Statistics, freight traffic measured by weight will grow by 40% between 2015 and 2045 (**Figure 1**).¹ Rail traffic by weight will grow by 24% by 2045. Multimodal traffic, which typically includes rail, will grow by 62% by weight.

Though this rise in traffic demonstrates the increasing economic importance of rail, it has come at the cost of severe congestion. Major hubs experience significant delays and capacity constraints. This is particularly true in Chicago, which has served as the nation's largest rail hub for more than 150 years. Rail freight moving through the Chicago market experiences large delays and leaves shippers looking for bypass points to improve delivery times and reduce costs.

MODE	2015	2045	CHANGE
Truck	11,513	16,529	+44%
Pipeline	3,303	4,554	+38%
Rail	1,694	2,094	+24%
Water	835	1,156	+38%
Multiple Modes and Mail	398	646	+62%
No Domestic Mode*	273	297	+9%
Air	7	24	+234%
TOTAL	18,056	25,331	+40%

Figure 1: Weight of Freight by Mode in Millions of Tons
(Source: USDOT, Freight Analysis Framework 2016)

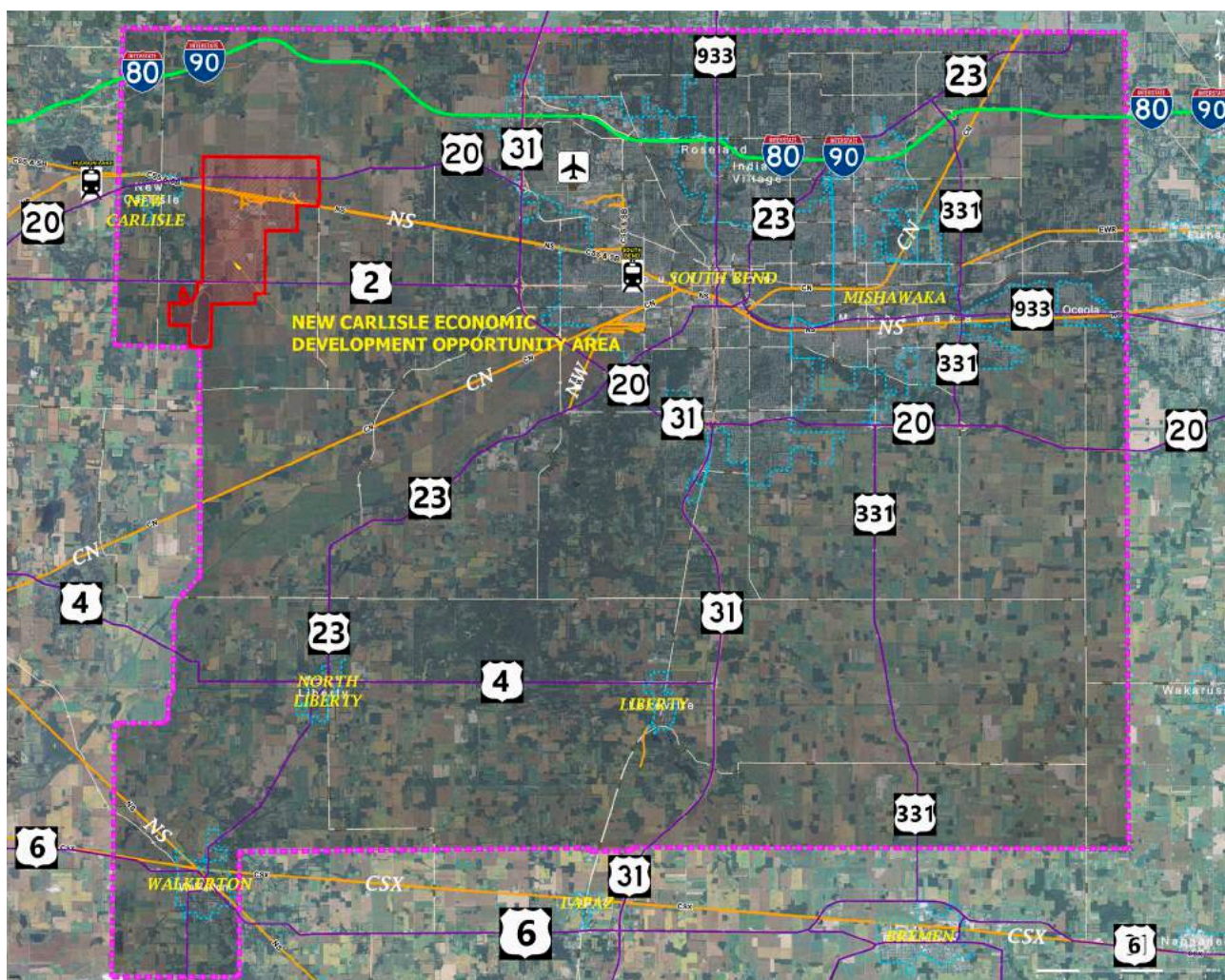
¹ US DEPARTMENT OF TRANSPORTATION, FREIGHT FACTS AND FIGURES 2015. [HTTPS://WWW.RITA.DOT.GOV/BTS/SITES/RITA.DOT.GOV/BTS/FILES/FFF_COMPLETE.PDF](https://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/fff_complete.pdf).

St. Joseph County is optimally located along the national rail network for companies to capitalize on rising traffic and to bypass the congestion in Chicago. The County enjoys excellent access to the Interstate Highway System, Class I Railroads, airports and the Great Lakes. It is close to other Midwestern markets, as demonstrated in **Figure 2**. With added advantages like low cost land, ample utilities, and a solid workforce, the County is well positioned geographically to capitalize on its freight growth potential. Together, these connections help end users access commodities, an industrial supply chain, and end markets using the most time or cost effective mode available to them.

An inventory of the existing rail transportation assets in St. Joseph County is identified on **Map 1**.

SOUTH BEND	MILEAGE TO REGIONAL HUBS
Detroit, MI	220
Grand Rapids, MI	112
Cleveland, OH	262
Columbus, OH	255
Indianapolis, IN	144
Chicago, IL	93
Milwaukee, WI	183

Figure 2: South Bend, IN Mileage to Regional Hubs
(Source: MapQuest)



Map 1: Overview of Transportation Assets in St. Joseph County
(Source: National Transportation Atlas Database, 2015)

CLASS I RAILROAD ASSETS IN ST. JOSEPH COUNTY

Three Class I railroads operate in St. Joseph County and connect shippers and receivers to global markets via Atlantic, Gulf of Mexico, and Pacific ports. The Norfolk Southern and the CSX railroads each operate high-density lanes that pass through St. Joseph County. The CN railroad is an important line with trade connections

to Canada and Mexico. This section includes an overview of the advantages of each rail carrier and a brief discussion of the operations and connections of each provider. A summary of each carrier and its advantages and disadvantages for economic development has also been included below.

NAME	CLASSIFICATION	ADVANTAGE	DISADVANTAGE
Norfolk Southern (NS)	Class I	<ul style="list-style-type: none">Provides connections to Chicago and Eastern SeaboardElkhart Yard allows for convenient integration into national networkHigh volume, high capacity, double stacked corridor	<ul style="list-style-type: none">Heavy mainline traffic, only interested in large new customers
CSX	Class I	<ul style="list-style-type: none">Provides connections to Chicago, Eastern Seaboard, and SoutheastHigh volume, high capacity, double stacked corridor	<ul style="list-style-type: none">Heavy mainline trafficNo interchange with NS/ EWROnly a small segment runs through the Country
Canadian National (CN)	Class I	<ul style="list-style-type: none">Direct connection with Port of HalifaxProvides access to Atlantic, Pacific, and Gulf Coast ports	<ul style="list-style-type: none">Heavy mainline traffic, only interested in large new customers
Chicago South Shore and South Bend (South Shore Freight)	Shortline	<ul style="list-style-type: none">Connection to two Lake Michigan ports and Chicago marketShares ROW with transit service	<ul style="list-style-type: none">South Shore is owned by passenger line, has cantilevers and cannot be double stacked
Elkhart & Western (EWR)	Shortline	<ul style="list-style-type: none">Mishawaka segment connects with Elkhart Yard and the NS networkWalkerton segment has a spur and can allow for bypass of ChicagoUnused capacity is an opportunity for customized rail service	<ul style="list-style-type: none">Mishawaka segment needs western extensionWalkerton segment intersects but does not interchange CSX

A third shortline located outside of the County, the Chicago Ft. Wayne and Eastern, is also described because it provides a bypass around Chicago. Below is a description of each carrier.

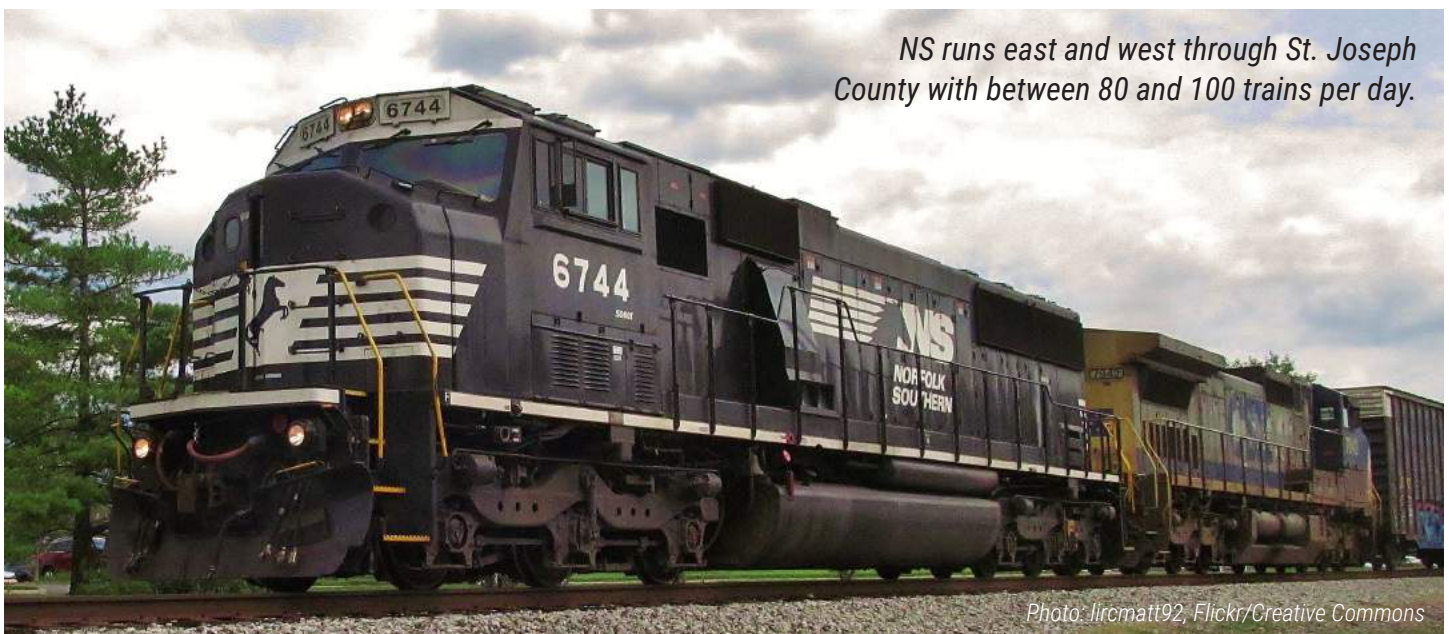
NORFOLK SOUTHERN RAILROAD

The Norfolk Southern Railroad is a Class I railroad that provides rail connections across the eastern United States from the Atlantic Seaboard to Chicago. It runs east and west through the County with between 80 and 100 freight trains and three Amtrak passenger trains per day. This line, known as the Chicago Line, connects Chicago and Cleveland. Within the County, it aligns the CN in South Bend, the Chicago South Shore and South Bend Railroad in New Carlisle, and the Elkhart and Western in Elkhart. This line is double tracked, operates at 50 miles per hour, and is a core lane in the NS intermodal network. This means that it can efficiently carry a high volume of traffic to the markets that NS serves, but it also means that new customers would need to bring a large amount of new traffic to justify a rail spur from this track.

NS also operates one of the largest railroad classification yards in the nation in Elkhart. This yard allows local freight to be integrated into the long trains that travel along the NS national rail network. At this facility, NS adds rail cars to trains moving in all directions. A company in St. Joseph County could add its product to trains at this yard, where trains can then haul them to the rest of the NS network on its high capacity line. A full extent of those connections provided by the NS rail network are at right in **Figure 4**.



Figure 4: Norfolk Southern National Rail Network
(Source: NS)



CSX RAILROAD

The CSX Railroad is a Class I railroad which competes with NS for international and domestic business in the eastern United States. Like NS, it connects a high volume of freight between Chicago and the Atlantic Seaboard through St. Joseph County. CSX passes through the far southwestern section of the County in Walkerton. This corridor, known as the Garrett Subdivision, spans 126 miles between Deshler, OH and Willow Creek, IN, where it then connects to Chicago. CSX is currently constructing a new intermodal terminal just south of Chicago in Crete. Like NS, this is a high capacity corridor with double tracks and able to handle a high volume of trains for intermodal container freight. The full extent of its connections is in **Figure 5**.

Within the County, CSX runs between 70 and 90 trains per day. It has direct service to the Atlantic Seaboard. In Chicago, it connects to the Western and Canadian railroads. However, unlike NS, there are fewer opportunities to add local freight to trains on the CSX line. It does not have an interchange with NS, and there are no rail spurs to and from CSX. Direct access would necessitate the construction of a new interchange or run around track.

CSX SYSTEM MAP



Figure 5: CSX Rail System

(Source: Indiana State Rail Plan, State of Indiana)



The CSX Main Line passes through southwestern St. Joseph County near Walkerton.

Photo: lircmatt92, Flickr/Creative Commons

CN RAILROAD

The Canadian National Railway is the only Class I railroad that connects to ports along the Atlantic, Pacific and Gulf Coasts. CN's intermodal corridor connecting the Port of Halifax to Chicago runs through St. Joseph County, including industrial corridors within the Cities of Mishawaka and South Bend. Canadian Pacific Railway has operating rights over 197 miles of track in Indiana, primarily on the CN. In Gary, CN operates a classification facility that allows it to add rail cars and accommodate longer trains on this section of the network.

In the southern part of the City of South Bend, several industrial users operate along rail sidings that connect with the CN main line. One of these, K.A.K., is a contract transload facility that provides custom warehousing services. Other users include a scrap recycler and a steel manufacturer.

SHORTLINE ASSETS IN ST. JOSEPH COUNTY

St. Joseph County also enjoys service from two shortline railroads, which are smaller operators that can provide last mile connections for rail cars between the Class I trunk lines and rail-served sites. Nationally, many short lines were divested from Class I railroads due to low freight volumes and few possess real estate assets for new development. However, the sites they serve benefit from their access to one or more Class I railroads. Entrepreneurs have revitalized many of these lines with state support and offer exceptional customer service. In recent years, shortlines have outpaced Class I railroads in growth, in large part due to the decline of coal shipments. Shortlines can provide resiliency and redundant access to the national network in times of disruptions caused by floods, landslides, bridge washouts, derailments, and other natural disasters.

CN's intermodal corridor that connects the Port of Halifax to Chicago runs through St. Joseph County.



Photo: Martin Cathrae, Flickr/Creative Commons

THE CHICAGO SOUTH SHORE AND SOUTH BEND RAILROAD

The Chicago South Shore and South Bend Railroad (South Shore Freight) provides high-density freight and passenger services over a 182-mile corridor between the City of South Bend and the Chicago region. It serves Northwest Indiana's industrial corridor and the Illinois International Port in Chicago. It also connects with all Class I railroads in Chicago (**Figure 6**). With 600 rail cars handling 50,000 carloads of freight annually, users in St. Joseph County can utilize this shortline to move car loads to each of these railroads.

While the Chicago South Shore & South Bend shares track with the South Shore passenger train service, the two are not owned by the same entity. On the one hand, this creates the opportunity for transit access to any new rail-linked development. On the other hand, the condition of the line is not necessarily optimal for freight. The Chicago South Shore & South Bend cannot double stack trains due to the catenary system used to run the South Shore commuter line. Capital upgrades to the track must consider both functions. However, a proposal to reroute passenger service into South Bend Airport could open real estate for new industrial development, and the existing access and current location within the County could create partnership opportunities.



The Chicago South Shore & South Bend shares service with the passenger South Shore Line but the two are owned by separate entities.

Photo: vxla, Flickr/Creative Commons



Figure 6: Chicago South Shore & South Bend Rail Map
(Source: Chicago South Shore & South Bend Railroad)

ELKHART & WESTERN RAILROAD

The Elkhart & Western Railroad is a wholly-owned subsidiary of Pioneer Railcorp. The railroad's principal commodities are auto frames, cement, lumber, tomato paste, plastic, and aggregates. Is it comprised of two short track segments, each of which provide the opportunity to connect small rail carloads with the national rail network. These two segments are:

The Mishawaka Segment: This line is owned by Elkhart & Western and connects Mishawaka to the NS classification yard in Elkhart, where rail cars can then be added to larger trains and shipped to all points of the NS network (**Figure 7**). It has six customers in Elkhart. Because the line has the capacity and space to serve a 20 to 25-car train per day, there is opportunity to grow service if development occurred in incorporated or unincorporated Mishawaka. Currently, the western end of the property is being used to store cars, but the line could be extended west with a capital upgrade.

The Walkerton Segment: This 23-mile segment is owned by NS but is operated by Elkhart & Western from Argos to Walkerton, and then transitions to another line where it terminates near Rochester, Indiana (**Figure 8**). The line serves one customer, Optima Minerals, with one or two cars per week, but it is capable of five day per week service. Significantly, Elkhart & Western also connects to the Chicago Fort Wayne and Eastern (CFE) railroad, described below, which has access to the Chicago terminal switching district and can allow for a bypass of this congested area. Although the segment intersects with CSX in Walkerton, there is no interchange to provide access to this line.



Photo: David Wilson, Flickr/Creative Commons

The Elkhart and Western shortline connects sites to the NS yard, where railcars can be added to larger trains and shipped throughout the NS network.

Elkhart & Western Railroad Co. (EWR)

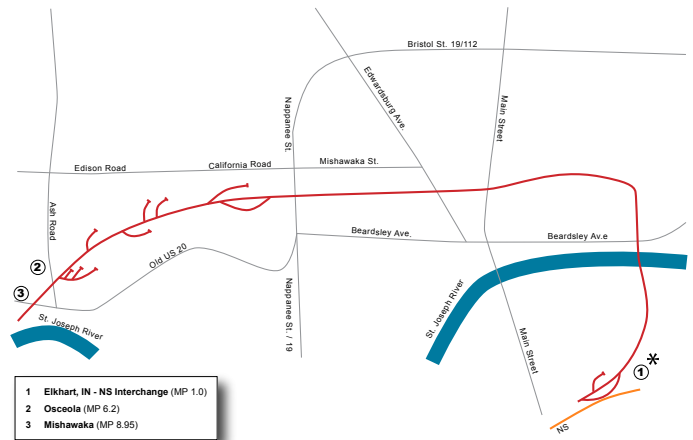


Figure 7: Elkhart & Western Mishawaka Segment
(Source: <http://pioneer-railcorp.com/>)

Elkhart & Western Railway Co. (EWR)

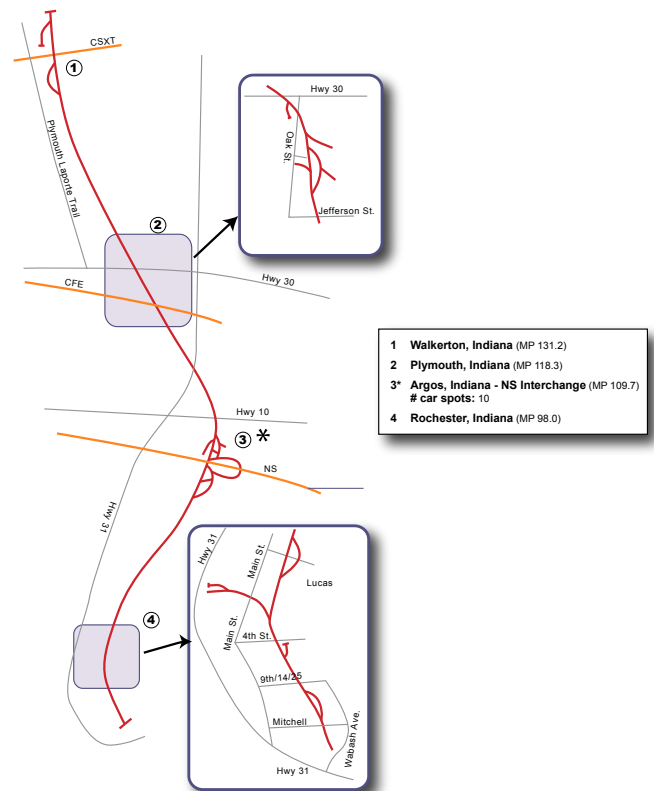


Figure 8: Elkhart & Western Railroad – Walkerton Segment
(Source: <http://pioneer-railcorp.com/>)

CHICAGO FORT WAYNE AND EASTERN RAILROAD

While this 281-mile railroad is located south of St. Joseph County, it intersects with the Walkerton Segment of the EWR and can help freight originating or arriving in the County bypass heavy traffic in Chicago. It interchanges with the Elkhart & Western Railroad just south of US-30 in Plymouth. From there,

this carrier interchanges with numerous Class I and regional railroads in 18 separate locations and provides many options to effectively bypass the congested rail corridors around Chicago (Figure 9). Its principal commodities include chemicals, farm products, fertilizers, paper, and steel.



Figure 9: Chicago Fort Wayne and Eastern Railroad
(Source: Genesee & Wyoming, Inc.)

TRANSLOAD ASSETS

The County and its neighbors also possess several transload facilities that help businesses connect to these railroads and access the markets they serve. Transload facilities provide rail access to businesses that lack their own connection to the system. A full definition is available in the Glossary of Terms in **Appendix A**. These facilities may be operated by a rail carrier and open to the public. Alternatively, they may be independently owned and have access to multiple railroads. Most transload facilities are operated by a service provider, however, some are small “do it yourself” facilities that allow truckers to pull up and move product from their trucks to parked rail cars. Transloads are typically purpose built and commodity focused. Many types of logistics services are available at transload sites, including covered storage, tank cleaning, refrigerated services, inventory management, and product customization. Transloads allow shippers

the ability to cost effectively ship significant quantities of product to a forward market position and to contract for the delivery of quantities below a carload in size in under 24 hours.

According to the National Transportation Atlas Database, three private rail-to-truck facilities operate in St. Joseph County.² K.A.K. transloads shipments from NS and CN traffic and warehouses them for contract customers. It is located on a rail spur served by CN in southern South Bend. Two other facilities, Omnisource and Emery Worldwide, handle rail scrap and air-freight but do not provide transload services. In nearby Elkhart, a warehousing facility operated by Days Distribution provides contract warehousing and transportation services. Several additional facilities exist in the nearby Gary and Kalamazoo markets and may be options for County users (**Figure 10**).

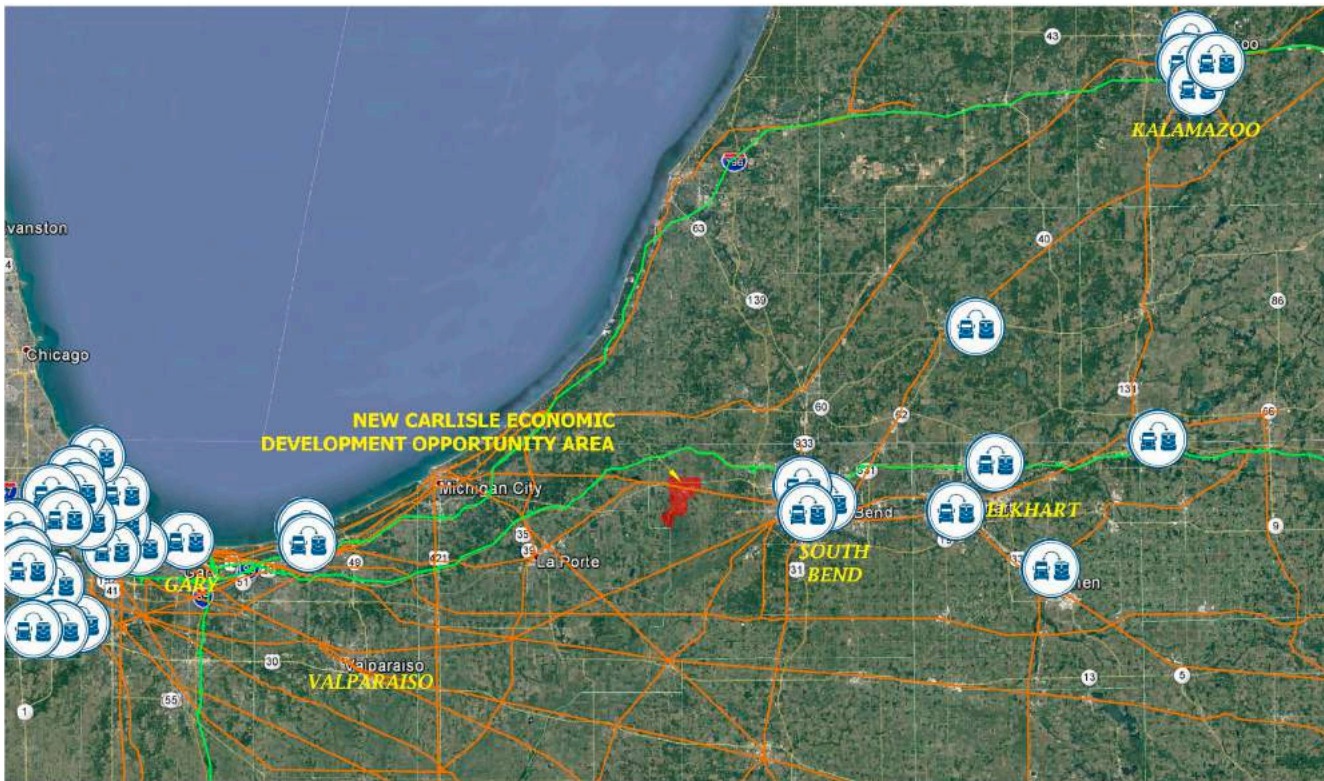


Figure 10: Chicago Fort Wayne and Eastern Railroad
(Source: Genesee & Wyoming, Inc.)

2 U.S. DEPARTMENT OF TRANSPORTATION, NATIONAL TRANSPORTATION ATLAS DATABASE, 2015.
[HTTPS://WWW.RITA.DOT.GOV/BTS/SITES/RITA.DOT.GOV/BTS/FILES/PUBLICATIONS/NATIONAL_TRANSPORTATION_ATLAS_DATABASE/2015/INDEX.HTML](https://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_atlas_database/2015/index.html).

SOUTH BEND INTERNATIONAL AIRPORT

South Bend International Airport provides an additional connection for the County. In addition to its passenger service, the airport handles just over 100 million pounds of air-freight by landed weight, much of which is high value commodities such as cell phones. However, the airport handles fewer outbound shipments, which limits its utility as a cargo servicer. An increase in outbound shipments would balance this load. The airport has good access to US-31, the Indiana Tollway, and the New Carlisle opportunity area, so this outbound freight capacity could be an opportunity for growth. The airport also controls roughly 800 acres of land that could be redeveloped.

Furthermore, the Airport Authority administrates Foreign Trade Zone #125 (FTZ), which can provide economic development benefits for designated sites. Located near international ports of entry, FTZs operate outside of the jurisdiction of Customs territory. When goods arrive in an FTZ, the importer does not pay duties until the product leaves the site. A manufacturer located in an FTZ can reduce the taxes it pays on components originating from international destinations. Because FTZs essentially operate as a free trade zone, they are attractive locations for manufacturers with supply chains that touch several countries. The Airport can designate sites in the County as part of the FTZ and this may be attractive to some end users.

South Bend International Airport handles just over 100 million pounds of freight per year.



Photo: Friscocali, Flickr/Creative Commons

HIGHWAYS AND TRUCK ROUTES

St. Joseph County sits along the Indiana Tollway, one of the primary east-west trucking corridors in the United States. The tollway connects South Bend to Chicago in the west and Cleveland, Pittsburgh, and the East Coast to the east. Because it connects major population centers and manufacturing supply chains, it is one of the most critical links in the Interstate Highway System for freight. However, there are just three interchanges in St. Joseph County and no new exits planned. Easy truck access to and from these three interchanges will be critical to consider in any new development.

Federal and state highways provide additional trucking links to markets in all four directions (**Figure 11**). US 20 provides an untolled alternative that runs parallel to the Indiana Tollway and is used heavily by oversize overweight permitted cargo. US 31 connects South Bend with Indianapolis to the south and has been targeted for capacity improvements and grade separations. US 31 also connects the County to southwest Michigan and I-94. However, US 31 is a limiting factor for north-south truckers handling packaged goods because of higher insurance costs on rural and non-grade separated corridors.

St. Joseph County also has a network of locally and state maintained truck routes that connect industrial areas to the national network. Many of these routes serve existing industrial parks and opportunities near NS and CN right of way and the airport area. US 31 provides trucks with logical connections between the Indiana Tollway, the international airport, and other industrial areas across the County. State Route 2 provides another eastward connection out of South Bend and sees a moderate volume of roughly 16,000 trucks per day, but it is not equipped for overweight trucks.³ Fewer truck routes exist on the eastern side of South Bend and around Mishawaka.

Altogether, the County enjoys a strong mix of transportation assets that it can activate in future rail-linked development. It is located near the populous but congested Chicago market, one of America's freight hubs. Future development should seek to capitalize on the many resources within the County, while allowing businesses and their shippers to circumnavigate the Chicago rail market. If developed appropriately, the opportunity sites and adjacent assets will increase in value as freight traffic grows.

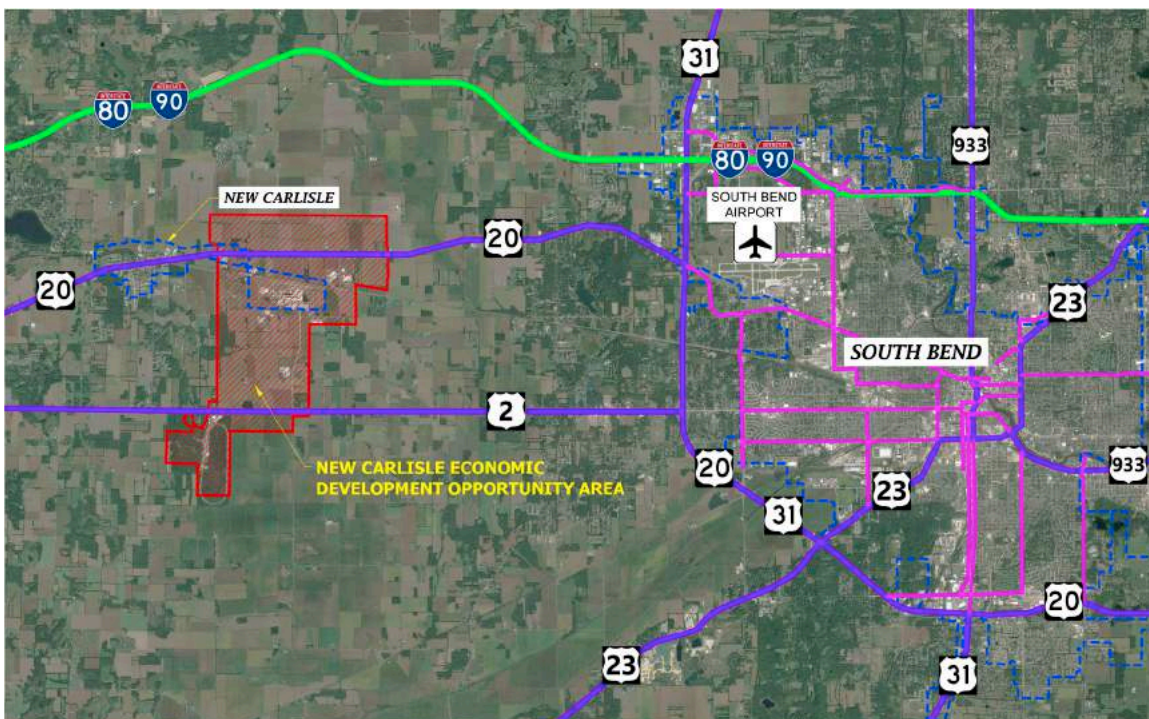


Figure 11:
Truck Routes in
St. Joseph County

3 INDIANA DEPARTMENT OF TRANSPORTATION AVERAGE DAILY TRAFFIC COUNTS. [HTTPS://ENTAPPS.INDOT.IN.GOV/TRAFFICCOUNTS/](https://entapps.indot.in.gov/trafficcounts/).

ECONOMY AND WORKFORCE

To advance rail-served opportunities, the County must build on its strengths and opportunities within its economy and its workforce. This section outlines the current state of economic strength in the County, including the relevant performance of key industries and a comparison to the rest of the nation. It also explores industries that might be expanded in tandem with development at rail-served sites. Finally, this section outlines the workforce strengths in the County and their relationship to new development.

Generally, the rail industry is seeking new opportunities across the country. With the decline of coal, railroads are experiencing added capacity for new business on many of their lines. Along some corridors, coal accounts for as much as a 30% loss. This reinforces the idea that cultivating new business in underserved geographies, like St. Joseph County, may be appealing. Production activities like food and metal manufacturing may find additional opportunities for expansion with the rail access available in the County.

ECONOMIC BASE

The County has a base of manufacturing activities that could be a catalyst for rail-served activities. It also has a smaller base of logistics and warehousing activity. This section identifies the strongest areas of economic growth in supportive industries between 2010 and 2014, as the United States emerged from the Great Recession. It focuses on three sectors of the economy linked to freight transportation: manufacturers of goods, transportation businesses, and wholesalers of products.

Manufacturing and transportation jobs comprised 25% of the Countywide total in 2014. These sectors have grown since 2010 (**Figure 12**).⁴ Over those 5 years, St. Joseph County added jobs at a rate of 5.7% and posted stronger growth rates in the manufacturing and transportation sectors of 8.2% and 6.0%. However, it lost several hundred wholesaling jobs, at a drop of 5.4%.

Compared to the rest of the United States, the County has posted stronger job gains in manufacturing and weaker gains in transportation and distribution. Between 2010 and 2015 manufacturing jobs grew by 8% in the County compared to only 5% nationally. However, in the transportation sector, job growth has been slower compared to national rates (6% in the County to 10% nationally). This is also true in wholesaling (with a -5% decrease to a 7% national increase).

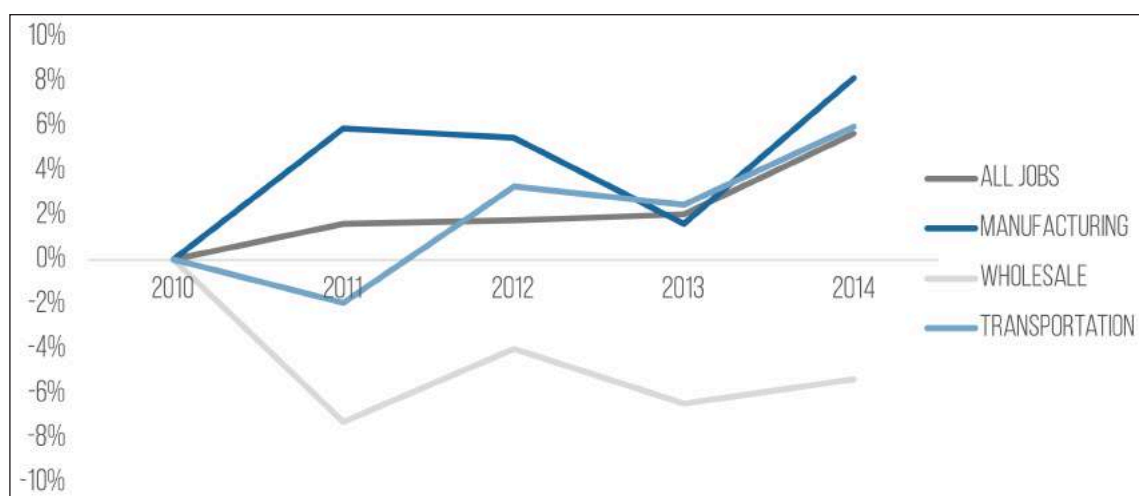


Figure 12: Job Growth in Selected Sectors in St. Joseph County, 2010 – 2014
(Source: U.S. Census Bureau, County Business Patterns)

4 U.S. CENSUS BUREAU, COUNTY BUSINESS PATTERNS, 2000 – 2014. [HTTPS://WWW.CENSUS.GOV/PROGRAMS-SURVEYS/CBP.HTML](https://www.census.gov/programs-surveys/cbp.html).

In addition to overall job growth and loss, it is important to examine the Countywide manufacturing base and prioritize clusters of sectors for potential end users. As this report was under development, the Industry Growth Committee of the Regional Development Authority initiated a study of four focus clusters for industrial

growth. Our analysis compliments that study and finds that the Countywide economic base is stronger within several manufacturing sectors and trucking, but weaker in warehousing and wholesaling. **Figure 13** identifies the Location Quotient for several major subsectors in this area of the St. Joseph County economy.⁵

SECTOR	NAICS SUBSECTOR	LOCATION QUOTIENT	JOBS IN 2014	JOB GROWTH, 2010-14	% JOB GROWTH, 2010-14	NAT'L JOB GROWTH, 2010-14
Manufacturing	Food manufacturing	0.64	887	176	25%	0%
	Paper manufacturing	1.21	411	5	1%	-4%
	Printing and related support activities	0.90	398	-151	-28%	-8%
	Chemical manufacturing	0.71	-	-	-	-
	Plastics and rubber products manufacturing	3.03	2,116	475	29%	8%
	Nonmetallic mineral product manufacturing	0.71	245	4	2%	4%
	Primary metal manufacturing	3.44	1,309	471	56%	12%
	Fabricated metal product manufacturing	2.39	3,287	429	15%	12%
	Machinery manufacturing	1.06	1,084	224	26%	14%
	Computer and electronic product manufacturing	0.53	416	205	97%	-7%
	Transportation equipment manufacturing	1.74	2,385	-496	-17%	18%
	Furniture and related product manufacturing	0.28	94	-10	-10%	2%
	Miscellaneous manufacturing	1.30	677	-34	-5%	-3%
Wholesale	Merchant wholesalers, durable goods	1.01	3,308	-424	-11%	8%
	Merchant wholesalers, nondurable goods	0.72	1,598	36	2%	6%
Transportation	Truck transportation	1.48	1,985	257	15%	10%
	Support activities for transportation	0.82	519	338	187%	12%
	Couriers and messengers	0.87	455	45	11%	5%
	Warehousing and storage	0.52	380	-498	-57%	16%

Figure 13: Job growth and Location Quotient in manufacturing and transportation in St. Joseph County
(Source: U.S. Census Bureau, County Business Patterns, 2010 - 2014)

⁵ LOCATION QUOTIENT IS MEASURED AS THE SHARE OF AN INDUSTRY'S SHARE OF EMPLOYMENT IN A SECTOR AGAINST ALL EMPLOYMENT IN A GEOGRAPHY, DIVIDED BY THAT INDUSTRY'S SHARE OF EMPLOYMENT IN A SECTOR AGAINST ALL EMPLOYMENT IN THE NATION. IT MEASURES THE EXTENT TO WHICH A GEOGRAPHY IS MORE SPECIALIZED IN THAT ECONOMIC ACTIVITY THAN THE REST OF THE UNITED STATES.

If the Location Quotient is above 1, St. Joseph County is more specialized in that industry than the rest of the country. If it is below 1, the County is less specialized. This analysis finds that the County is better positioned in some sectors than in others:

- **Primary and Fabricated Metal Manufacturing** (LQs: 2.39 and 3.44) have a strong hold in the Countywide economic base and have also added hundreds of jobs in recent years. Additionally, the current draft of the RDA study has identified Metalworking Technology as a key target cluster. This opportunity may reflect the County's multimodal access to Great Lakes shipping and the Midwestern supply chain. However, these sectors have posted large job losses statewide since 2001.⁶ International competition and a strong dollar have set this sector back nationally in recent years.
- **Paper Manufacturing** (LQ: 1.21) is part of the Countywide economic base. Though it is not growing locally, the sector has stayed resilient as employment has declined nationally. The RDA study has identified Paper and Packaging as a potential focus area for industrial development.
- **Plastics Manufacturing** (LQ: 3.03) also plays a significant role in the Countywide manufacturing base and added nearly 500 jobs post-recession. As with metal manufacturing, this sector experienced big statewide job losses going back to 2001.
- **Food Manufacturing** (LQ: 0.64) has not played a significant role in the County's economic base compared to the rest of the country. However, the County has added 176 food manufacturing jobs since 2010. Additionally, the state has seen 22% job growth in this area since 2001. With its rail access to commodity crops, the County may be positioned for more growth in this opportunity sector.



Photo: kleuske, Flickr/Creative Commons

- **Trucking** (LQ: 1.48) provides more jobs relative to the rest of the United States. It is also growing faster than the rest of the country. These firms are likely taking advantage of the County's access to numerous markets via the Indiana Tollway and US 31.
- **Chemical Manufacturing** (LQ: 0.71) is also not part of the Countywide economic base, though the sector supported 514 jobs in 2015. However, the RDA has emphasized Downstream Chemical Products as a target cluster and rail carriers supply a number of agricultural and chemical inputs. Data is unavailable for 2010.
- **Warehousing** (LQ: 0.52) is not a large part of the County economy compared to the U.S. While warehousing jobs grew by 16% nationally, the County lost nearly 500 jobs. The RDA Industrial Growth Committee identified Distribution and Electronic Commerce as one of four target clusters.
- **Wholesaling, Couriers, and Support Activities** all have LQs well below 1 and many have either lost jobs or grown slowly in a time of national growth.

6 RACHEL STRANGE, "HOW INDIANA'S MANUFACTURING EMPLOYMENT IS CHANGING". INCONTEXT, MARCH 2017. [HTTP://WWW.INCONTEXT.INDIANA.EDU/2017/MAR-APR/ARTICLE2.ASP](http://www.incontext.indiana.edu/2017/mar-apr/article2.asp).

Taken together, this data suggests that St. Joseph County should target manufacturing sectors reliant on commodities, such as food manufacturing, chemical manufacturing, and metalworking. Countywide rail and transportation assets can offer businesses access to many commodity inputs, including agricultural crops, chemicals, fertilizer, and steel. Shortline railroads can also help users in these manufacturing sectors load product onto individual railcars, add them to trains, and ship them to end markets. Highway access may aid manufacturers shipping their products to their supply chains or to consumers. Finally, the County also possesses an abundant supply of clean water and new energy development to support the production needs at new facilities.

The County is less positioned to pursue a user in warehousing or distribution of consumer goods. While warehousing has boomed with the rise of internet commerce and international supply chains for

retail goods, the County has not grown in this area. Containerized freight traffic passes through the County, but no terminal exists to load these containers onto trucks and process them at warehouses. This may be why job growth in supportive activities has also lagged.

This analysis does not examine the commodity inputs available to these industries via the County rail system. At the time of this draft, INDOT was beginning its update of the state rail plan and acquiring data on commodity freight flows. When that data becomes available, it will quantify the extent to which these industries can access agricultural commodities, metal, fertilizer, and other commodities on County rail.

In summary, St. Joseph County should explore manufacturing opportunities as the centerpiece of any rail-served development. Food manufacturing may be a particularly interesting opportunity.

WORKFORCE DEVELOPMENT

Workforce development has been a major issue throughout the Midwest in recent years. With increasing automation, population outflow, and low unemployment, it has become more critical to identify and train appropriate workers. Luckily, the County has large numbers of workers whose educational attainment matches the needs of manufacturing and logistics businesses. The analysis within this section examines key workforce segments within the County to identify opportunities that align with existing skillsets and needs for additional planning to prepare this sector of the workforce for manufacturing and transportation jobs.

This analysis looks at the percentage of workers with an Associate's degree or less, which has been identified as the educational level that matches industry needs for production, handling, and other kinds of jobs.⁷ St. Joseph County has a higher percentage of workers in this category than the nation and a lower percentage than the State of Indiana (**Figure 14**).⁸ St. Joseph County also has large numbers of workers with a

Master's degree or higher, thanks to the presence of higher educational institutions like Notre Dame. With the support of investments in workforce training and development programs, the County can mobilize both segments of this workforce for a variety of jobs in advanced manufacturing.

St. Joseph County also has a significant percentage of workers employed in manufacturing or transportation jobs, which suggests that residents already possess specialized skills in these industries. Roughly one out of eight County residents worked in either manufacturing, transportation, or distribution in 2013, greater than the rest of the United States and its peer counties but lower than the statewide average (**Figure 15**).⁹ This data suggests that the local workforce is attractive both in its educational attainment and its skill level to prospective industries seeking to locate in similar areas. This could be a competitive edge for the County if promoted appropriately and matched with public investments in further workforce training.

	% WITH ASSOCIATE'S OR LESS	% WITH COLLEGE DEGREE	% WITH PROFESSIONAL DEGREE
St. Joseph County	72%	17%	11%
Allen County, IN	73%	18%	10%
Kalamazoo County, MI	65%	21%	14%
Indiana	76%	15%	9%
United States	70%	19%	11%

Figure 14: Educational Attainment Levels for the Population 25 Years and Older (Source: American Community Survey, 2011-2015)

	PERCENTAGE IN PRODUCTION, TRANSPORTATION, AND MATERIAL MOVING OCCUPATIONS
St. Joseph County	16%
Allen County, IN	18%
Kalamazoo County, MI	11%
Indiana	19%
United States	12%

Figure 15: Workers in Manufacturing and Transportation (Source: American Community Survey, 2011-2015)

7 CENTER FOR NEIGHBORHOOD TECHNOLOGY, FREIGHT TRAIN TO COMMUNITY PROSPERITY: METRICS FOR THE INTEGRATION OF COMMUNITY ECONOMIC DEVELOPMENT AND EFFICIENT FREIGHT MOVEMENT, OCTOBER 2015. [HTTP://WWW.CNT.ORG/SITES/DEFAULT/FILES/PUBLICATIONS/CNT_FREIGHTTRAINTOCOMMUNITYPROSPERITY.PDF](http://www.cnt.org/sites/default/files/publications/CNT_FREIGHTTRAINTOCOMMUNITYPROSPERITY.PDF).

8 UNITED STATES CENSUS, AMERICAN COMMUNITY SURVEY, 2011 - 2015. THIS DATA REFLECTS A ROLLING AVERAGE COLLECTED BETWEEN 2011 AND 2015. BECAUSE OF A MARGIN OF ERROR, THE DATA IN TABLES 13 AND 14 MAY NOT ADD UP TO 100%.

9 UNITED STATES CENSUS, AMERICAN COMMUNITY SURVEY, 2011 - 2015.

Many of these workers live in residential neighborhoods across St. Joseph County, especially in and around South Bend (Figure 16). Neighborhoods in southern and western South Bend have many residents who match well with the manufacturing or transportation industry in their educational background or their professional experience. It will be critical to link any new rail served development with workers in these neighborhoods to maximize the economic impact of new development in the County. For example, transit service to and from western and southern South Bend to new rail-served developments could open job opportunities to more workers. Similarly, job training programs and partnerships can reorient them to new employment opportunities at rail-served businesses and create a pipeline of talent attractive to additional prospective employers.

The County should focus on its economic and workforce strengths as it plans for future rail-served development. Thanks to a strong manufacturing legacy and recent job growth, the County is well positioned in several manufacturing sectors, including metalworking, food manufacturing, and plastics. The County has also done well in the trucking industry, but not as well with companies warehousing, distributing, or wholesaling goods. Thanks to this manufacturing legacy, the County has a large workforce that aligns with the needs of new and growing companies, particularly with the support of workforce training and good public transit. The County matches this with a larger percentage of highly educated workers than elsewhere in Indiana. These factors matter when the County considers who to attract and how to align transit and workforce investments with economic development. No decision occurs in a vacuum. Future development choices should build on these strengths.

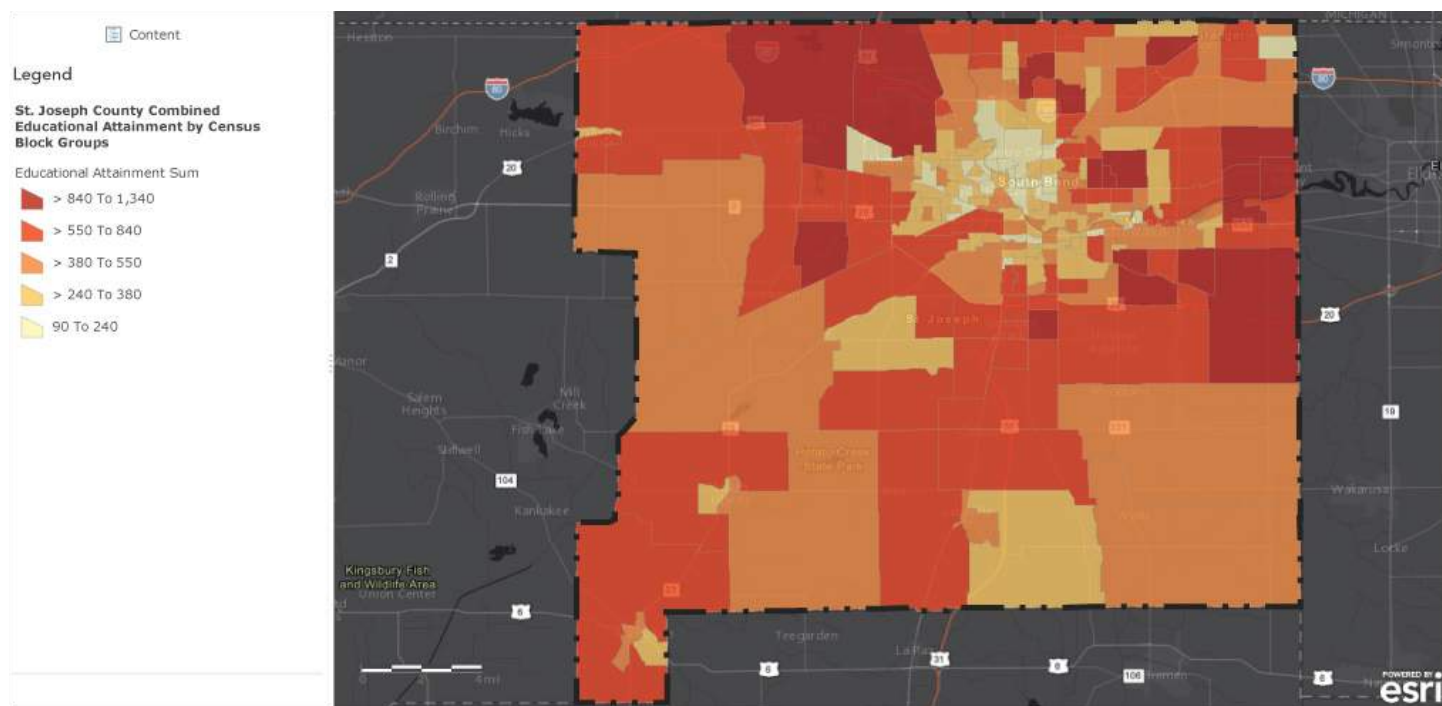
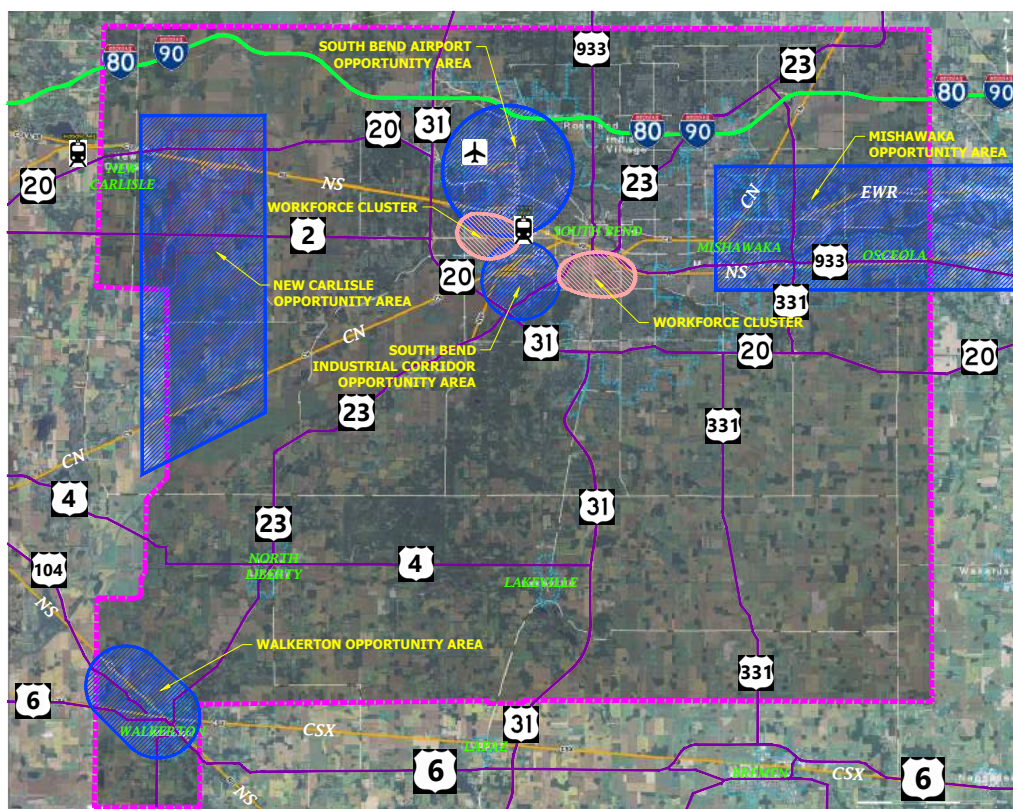


Figure 16: Workforce Concentrations within St. Joseph County
(Source: American Community Survey, 2011 – 2015)

OPPORTUNITY AREAS



Map 2: Overview of Opportunity Areas in St. Joseph County

This section identifies the prime locations within St. Joseph County for rail-served development that builds on its transportation assets and economic base. Through a rigorous analysis of available land and workforce access, as well as through discussions with the adjacent railroads and local officials, several focus areas have been identified. These Opportunity Areas (see **Map 2**) should guide future development efforts and investment decisions. However, this report does not prioritize them, as the development of each area will depend on a variety of factors.

Each Opportunity Area will advance at its own pace, will follow a different strategy, and will face a unique set of challenges. The success of any given area will depend on the investment of resources and promotional strategies the County selects. The analysis of rail-served properties will focus on the below Opportunity Areas:

- **New Carlisle.** This area includes utilities, roughly 5,000 acres of available land, and ready access to Class I rail, shortline rail, and the Indiana Tollway. It is also positioned with economic incentives and TIF generating assets.

- **Walkerton.** This area is served by two Class I railroads, NS and CSX, as well as the Elkhart Western Rail.
- **Mishawaka.** This area has a complex of a large and smaller sites with rail access. The EWR can provide short line access to the classification yard in Elkhart.
- **The South Bend Airport Area.** This area contains numerous active sites within an FTZ and significant developable land. It has access to shortline rail as well as the New Carlisle area.
- **Southern South Bend.** This area has NS/CN access and an existing transloader. Several hundred contiguous acres exist.

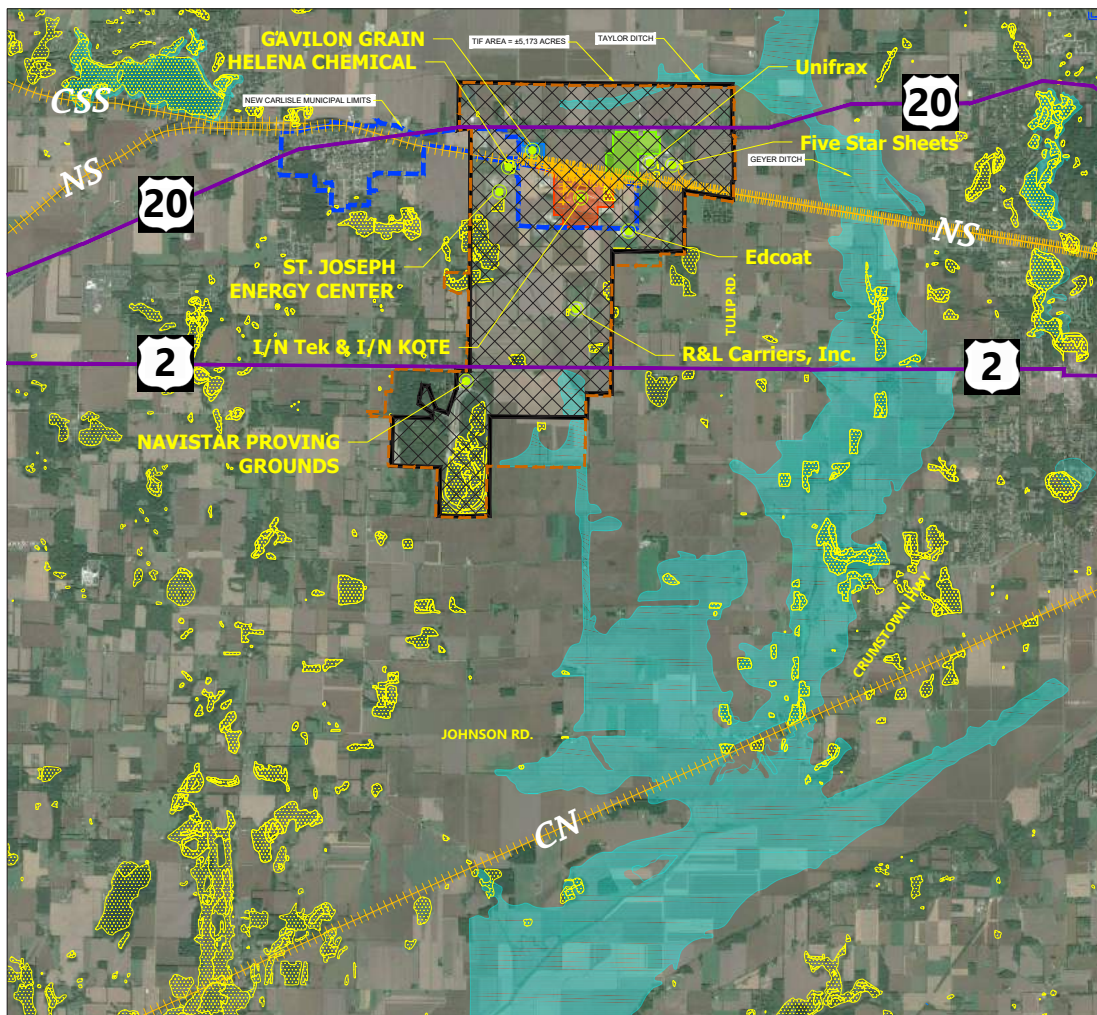
Each of the above sites is explored in more detail below, which discusses specific site factors, strengths, and drawbacks for each. Each profile includes a map that is available in higher resolution in **Appendix B**. It is worth noting that some of these sites have been advertised by the railroads or the State's economic development entities. The profiles based on those promotions are available in **Appendix G**.

NEW CARLISLE

The New Carlisle opportunity area is located west of South Bend. Approximately 5,000 acres in size, it has been identified by St. Joseph County as an opportunity area for almost 30 years. It was established in 1987 as a response to the development of I/N Tek facilities, expanded in 1997, and renewed again in 2008. Borders expanded during each iteration. If developed and master planned appropriately this could be an elite national site. The NS and South Shore Freight Railroad have both expressed a keen interest in seeing this site grow and develop.

While not fully assembled, the site is within a Tax Increment Financing district that can underwrite

predevelopment expenses and infrastructure needs. The exact boundaries and sunset dates of the TIF reflect multiple iterations of expansion and the earliest sunset will occur in 2027. An expansion area and second allocation area contain many of the parcels with the highest development potential and are not set to expire until 2041. The site has few soil or wetland concerns. The soil is permeable, particularly around US 20 and the South Shore right-of-way, and allows for infiltration techniques that address storm water. Pockets of wetlands exist in the southern and northern ends of the TIF.



Map 3: New Carlisle Opportunity Area

STRENGTHS

- Largely contiguous, easy to assemble, and able to accommodate unit trains
- Direct access to NS and South Shore Freight
- Good access to numerous roadway assets, especially connections to US-20 and the Indiana Tollway
- Located within a TIF district with a long sunset date
- Access to local and Northwest Indiana workforce
- Commuter transit available with South Shore Railroad
- Few geographic, environmental, or other obstacles to development
- Close to airport
- Foreign Trade Zone designation readily available
- Opportunity to develop the site to present multiple development scenarios for potential tenants

CHALLENGES

- Land assemblage has yet to be completed
- Need to expand utility network
- Internal truck circulation
- Resolve minimal wetland concerns
- Stormwater management in some areas
- Requires buffer area to mitigate impacts to nearby New Carlisle downtown
- Uncontrolled access to Highway 2
- US 31 is a limiting factor due to possible insurance premiums for truckers carrying packaged goods. Also, while US 31 is configured to operate as an interstate highway in many areas, other areas function more like a typical state highway with intersections and drives that inhibit thru-traffic

TRANSPORTATION ASSETS

The New Carlisle opportunity area is served by the NS and the South Shore Freight, which carries a high density of rail traffic and runs through the northern half of the opportunity area. It connects local train traffic to the national network via the classification yard in Elkhart. The configuration and continuity of the site would support industrial development for a user interested in a substantial loop track, as well as other configurations.

The opportunity area is also served by US-20, which allows oversize overweight permitting east of LaPorte and parallels the Indiana Tollway. The southern section of the opportunity area is served by State Route 2, which experiences an annual average daily traffic count (AADT) of 16,000 vehicles per day and would require a signalized intersection if the opportunity area were to be developed. SR 2 is not designated for overweight trucks. Both routes are about 10 miles from the nearest tollway exit.

ECONOMIC ASSETS

Several employers within the opportunity area could be potential suppliers for new businesses. Most notably, the area is home to I/N Tek, the region's fourth largest employer in production and transportation industries. A sheet steel manufacturer, I/N Tek employs over 500 workers on site. The area is also home to Unifrax, which employs 142 in chemical manufacturing; Robert Bosch, LLC, which employs 50 manufacturing hand tools; and Edcoat, which employs 49 manufacturing protective coatings.

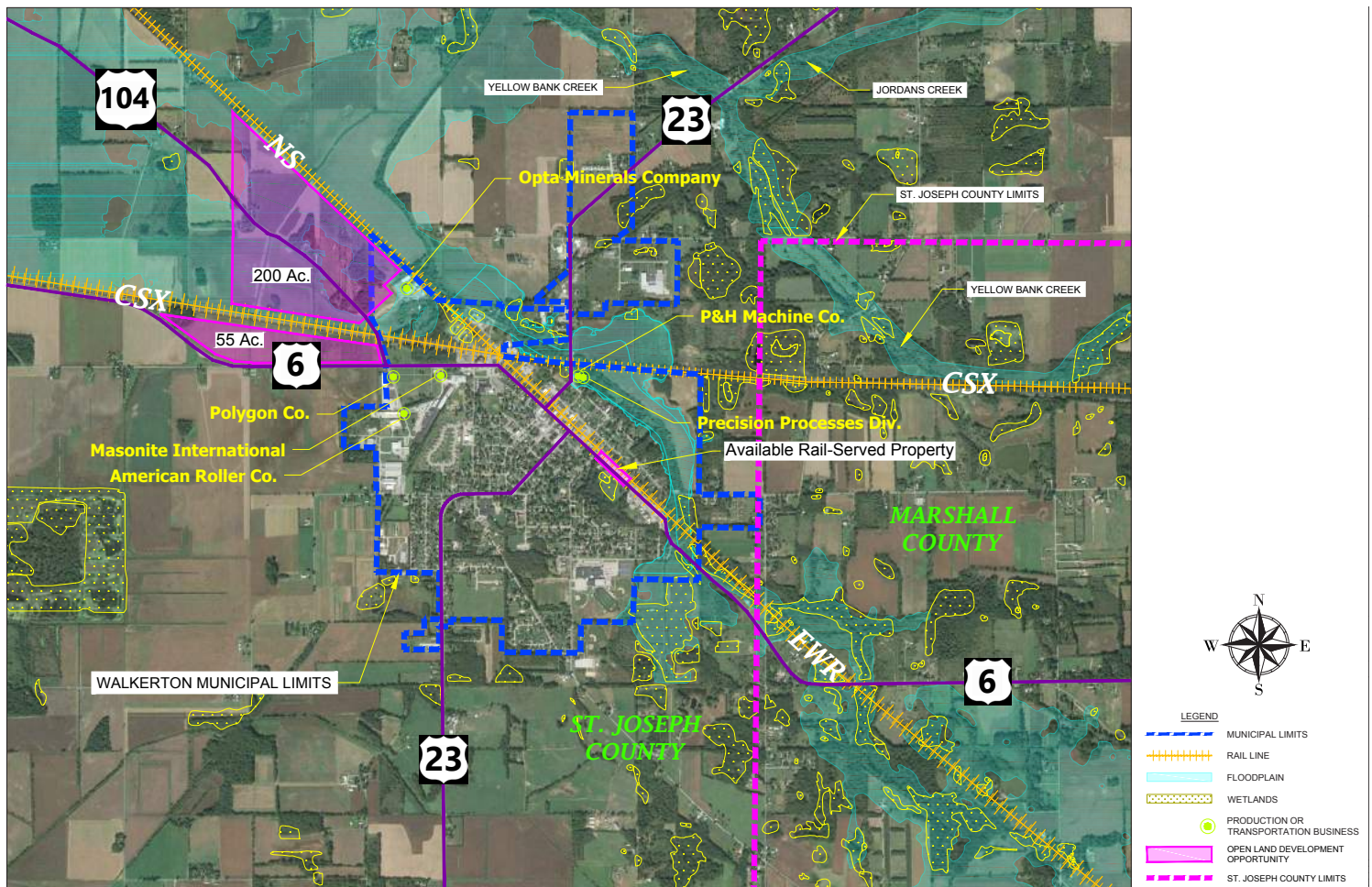
Additionally, US 20 and State Route 2 directly connect end users in the New Carlisle site to additional firms throughout the western half of the City of South Bend. US 20 runs east to the area around the airport, which has many transportation and production businesses. State Route 2 connects the site to southwestern South Bend. Because the site is also served by the South Shore Freight, it offers a unique opportunity to provide direct transit access to a new facility.

WALKERTON

Walkerton is just southeast of the intersection between the CSX and NS right-of-way, the latter of which is operated by the Elkhart and Western Railroad. To the northwest of this section is 200 acres of developable land. To the south of CSX but north of US 6 is another site that would be developable if zoned for industrial use. This site would allow for the westward expansion of an existing industrial development. Finally, a rail-

served property with a building for covered storage is available along a spur just to the southwest of downtown Walkerton at 1015 Roosevelt Road.

However, the northwestern opportunity is located within a floodplain. It may be possible to raise the site or implement flood mitigation measures. Soil conditions do not prevent development at any location.



Map 4: Walkerton Opportunity Area

STRENGTHS

- Located at intersection of CSX and NS alignment (operated by the Elkhart and Western Railroad)
- Two hundred acres of available farmland for development
- Possibility of development served by two Class I carriers
- Northwest site could access both NS/EWR and CSX through an interchange track
- Local economic activity could support a small transload facility
- EWR has unused capacity for additional railcar service
- EJW provides bypass to Chicago congestion via Chicago Fort Wayne and Eastern

CHALLENGES

- Floodplain conditions require additional interventions for stormwater
- Construction of NS/CSX interchange would be expensive and may affect historic downtown
- Spur from CSX may require a cost prohibitive capital investment
- Greater distance from Indiana Tollway
- Workforce may be more constrained in this area

TRANSPORTATION ASSETS

The Walkerton area is unique because of the intersection of CSX and NS rights-of-way, the latter of which is operated by the Elkhart Western Railroad. EWR currently serves Optima Minerals for one rail car a month, but has the capacity to provide service for five days every week. End users in this area could benefit from one or both services. However, they do not interchange and a grade separation is needed for this intersection. An interchange track at the northwest site could allow for physical access to both NS and CSX. CSX is a heavily trafficked line and may need to reinforce its track for a mile in each direction to allow for a spur.

Though well served by rail, Walkerton is roughly 23 miles from the Indiana Tollway via Route 23 and US 31 through South Bend. It is roughly 22 miles or a 30-minute drive to reach the tollway via an alternative route via US 6 and US 35 through LaPorte.

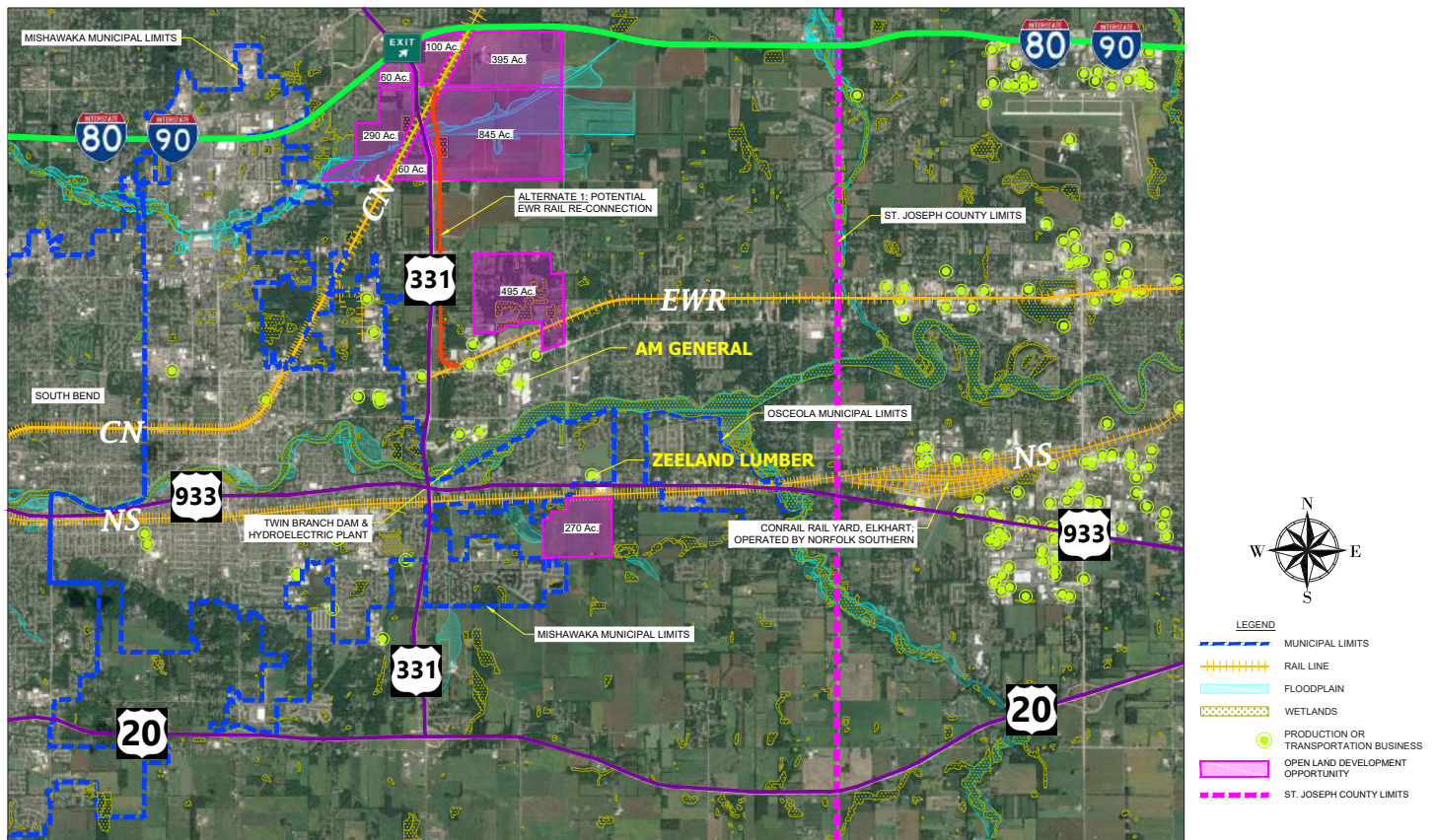
ECONOMIC DEVELOPMENT ASSETS

Walkerton contains a few complimentary firms, including a plastics manufacturer, a minerals company, a window and door manufacturer, and a machine shop, which might benefit from a small transload facility in the area. Optima Minerals takes advantage of EWR service. Though small, the Walkerton local workforce may be well matched with the skills needed at a production or manufacturing facility.

MISHAWAKA

Over 1,500 acres of rail-served land are available in three clusters in incorporated and unincorporated areas of Mishawaka. To the north, 847 acres of land sits near the intersection of Capital Avenue and the Indiana Tollway. To the east, another 270 acres of land sits to the south of NS trackage. A third site of approximately 450 acres sits along the Elkhart and Western Railroad, which connects to NS Elkhart Yard.

Soil and wetland conditions do not pose a barrier to development in these areas. The northern opportunity parcels have very permeable soils but with some areas of wetlands. The wetlands could be utilized as stormwater management areas. The southern opportunity off the Norfolk Southern line is moderately permeable with no wetlands identified.



Map 5: Mishawaka Opportunity Area

STRENGTHS

- Three different opportunity sites with hundreds of acres each
- Served by NS, CN and the EWR rights-of-way
- EWR can provide railcar service
- Synergies with nearby industries
- Favorable site conditions

CHALLENGES

- Capital improvement needed for truck connections to southern opportunity area
- EWR track extension would require a modest capital investment
- Proximity to NS rail yard in Elkhart may constrain opportunities
- Limited service capacity, maximum 25 cars per day is serviceable
- Utility access in some areas

TRANSPORTATION ASSETS

The northern opportunity parcel is located along CN trackage, which enters the County from Michigan and continues to the southeast. The southern opportunity area is served by NS trackage just east of the Elkhart classification yard, where local freight can be integrated into the national network. The central opportunity area is along the Elkhart and Western right-of-way, though track would need to be re-laid in any redevelopment. No users in St. Joseph County currently use this line, but it could provide up to 25 rail cars of service per day.

Road access varies. The northern opportunity site is directly served by US 331, which connects to the local truck route network, as well as the Indiana Tollway. The southern opportunity site is close to US 933, but has limited access due to the rural nature of the roads and would require an extension of Bittersweet Road over the tracks to open it to development.

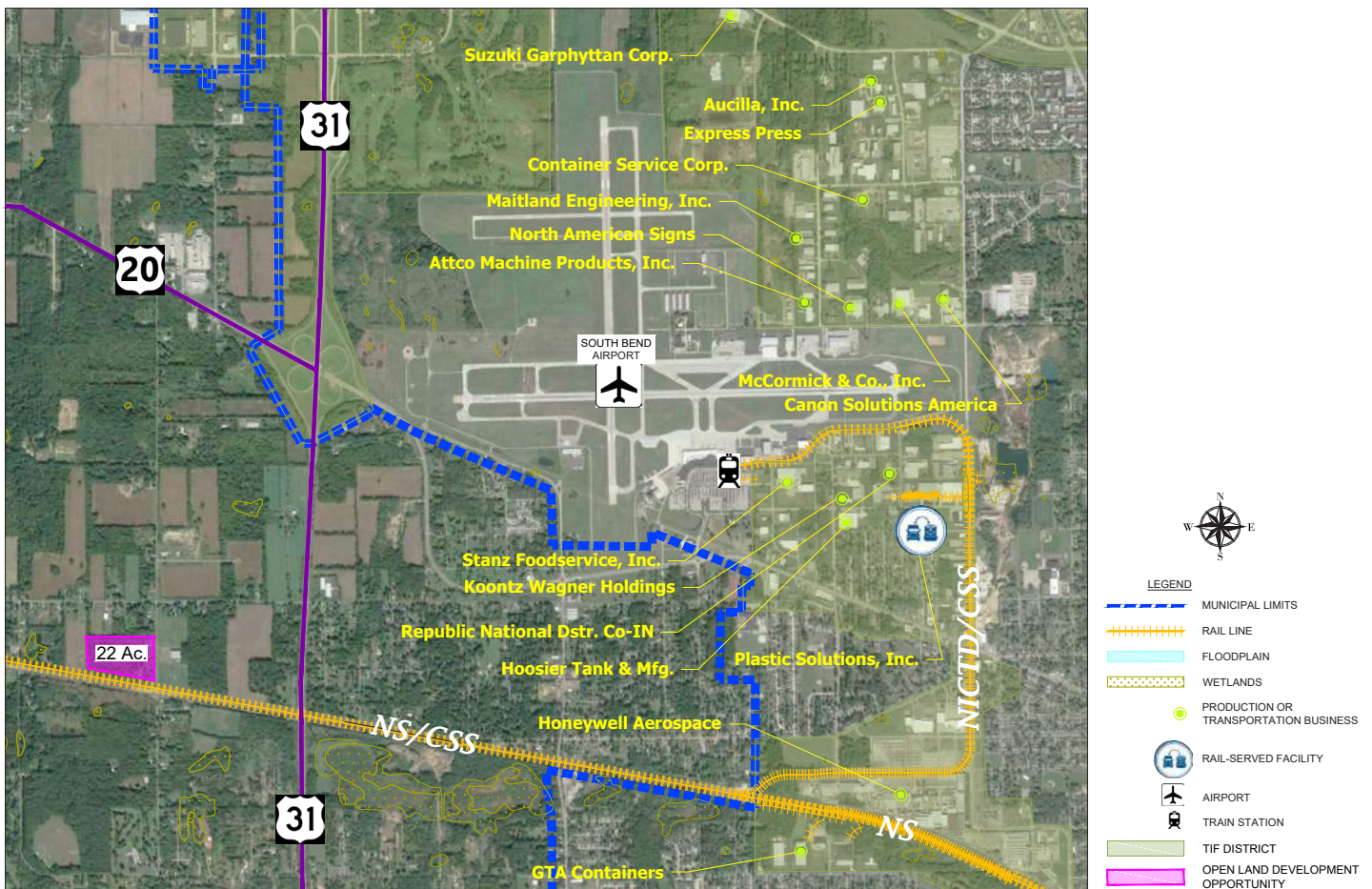
ECONOMIC DEVELOPMENT

Mishawaka includes the AM General facility, the County's second largest manufacturing facility after Honeywell. This district also includes other manufacturers in plastics and metals. The proximity to the robust recreational vehicle industry creates potential supply chain linkages.

SOUTH BEND AIRPORT AREA

This area is an industrial, residential, and transportation district anchored by South Bend International Airport, roughly 4 miles west of downtown South Bend. Industrial parks along Bendix Drive to the northeast and northwest contain a multitude of end users. Honeywell Aerospace, the largest manufacturing employer in South Bend, is in the southern part of this area. It anchors the Foreign Trade Zone.

Currently, the area is mostly built out with potential infill sites but no large parcel. A 22-acre site sits along NS and the South Shore in the western part of this area. However, the airport owns an additional 800 acres of land and the relocation of the South Shore alignment in and out of the airport area (see below) may open up additional development opportunities. This area is not located within a floodplain and soil conditions pose no impediment to redevelopment.



Map 6: South Bend Airport Opportunity Area

STRENGTHS

- Airport administers a Foreign Trade Zone and can designate additional sites
- NS/South Shore Freight provide direct rail access to Lake Michigan via Burns Harbor
- Unused capacity for outbound air cargo
- Airport owns 800 acres of land
- Reconfiguration of South Shore approach into airport may open opportunities for redevelopment
- Complimentary workforce lives in nearby neighborhoods
- Transpo, South Shore Line, and Amtrak provide transit service

CHALLENGES

- Needs a cohesive master plan strategy to link rail and air freight opportunities
- Capacity constraints on South Shore Freight due to accommodation of passenger service
- Users may need to support air cargo use, which would constrain the user pool

TRANSPORTATION ASSETS

The district is anchored by South Bend International Airport, where shipping costs just a fraction of Chicago's O'Hare International Airport. A significant volume of freight enters the airport, but the low level of outbound shipments represents an opportunity for additional growth. The airport is connected to the Indiana Tollway via an exit with US 31 as well as an untolled route on US 20. The St. Joseph County Airport Authority is the administrator of Foreign Trade Zone #125.

This district also contains several rail assets. NS/South Shore Freight skirts the southern section of the opportunity area and could connect it to Burns Harbor and the Ports of Indiana, which are expanding and looking for addition satellite rail served properties. However, the South Shore has height restrictions due to catenaries along the line and segments have not been upgraded to 286,000 pound standards. Passenger service takes precedence over freight on this line.

A proposal exists to move the South Shore approach into South Bend Airport. This proposal would separate the "S" alignment from the NS right-of-way, allow for easier and faster South Shore passenger access to and from the airport, and eliminate conflicts between transit and freight. The separation could potentially free up additional land for redevelopment.

The road network in and around the airport provides excellent truck access to other areas in the County and to the Indiana Tollway. US 31 has an interchange with the tollway and then continues south towards Indianapolis. US 20 is an untolled east-west alternative to the tollway.

ECONOMIC DEVELOPMENT ASSETS

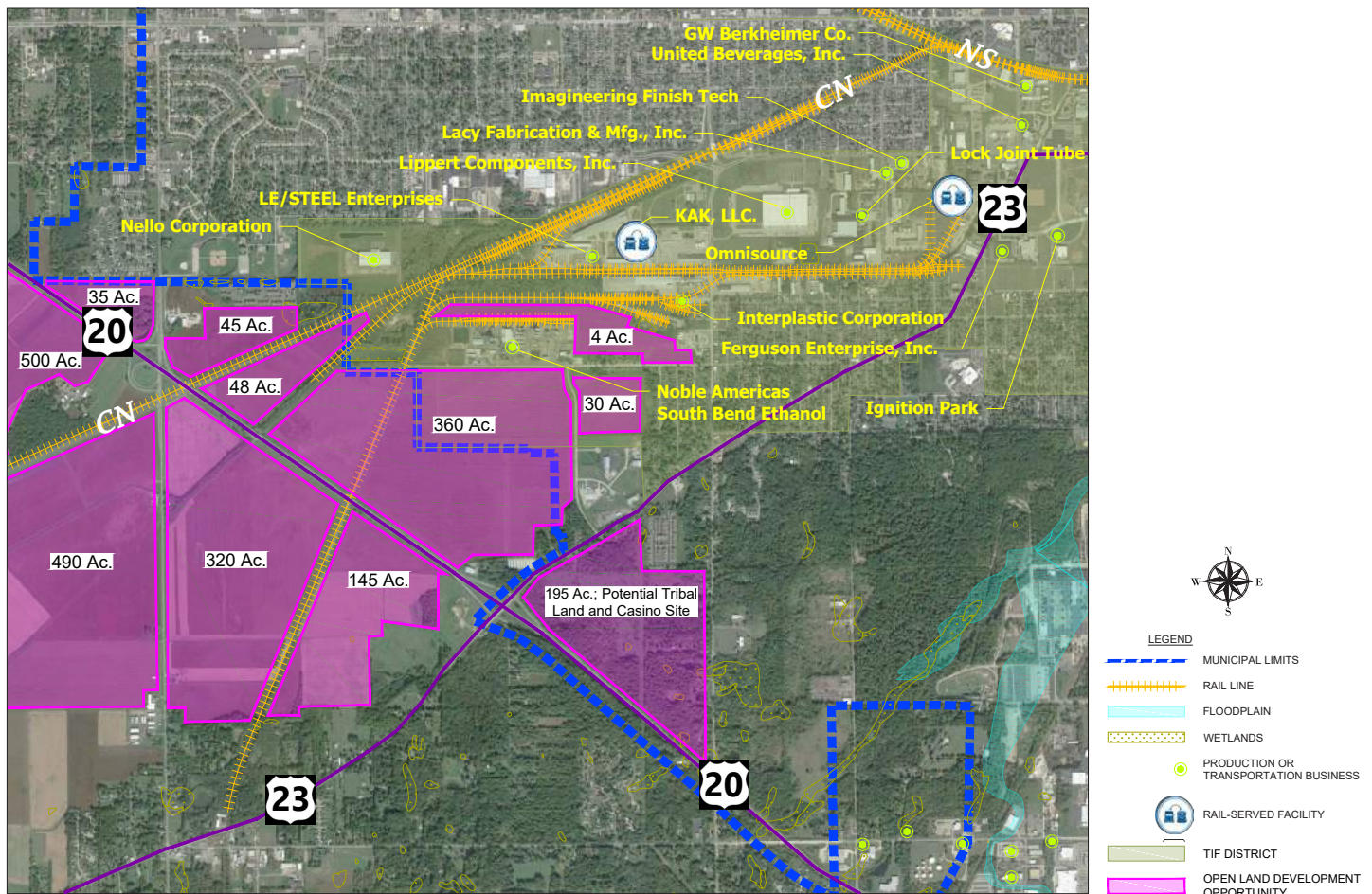
The area includes Honeywell, the largest production facility in South Bend, which is south of the airport between the NS and South Shore rights-of-way. Around 1,000 employees work at this facility.

The area also surrounds neighborhoods with large numbers of residents that work in the transportation or production fields. Three bus routes, Amtrak Service, and the South Shore all provide transit access to sites within the district.

SOUTHERN SOUTH BEND

This industrial district is southwest of downtown South Bend. Its easternmost section includes Ignition Park. Its westernmost section includes additional manufacturers and two transloaders. The area has many active

uses. To the southwest sits just under 2,000 acres of additional developable land. This area is located within the South Bend Foreign Trade Zone. The area is not within a floodplain, though high water tables may present an issue for some foundation needs.



Map 7: Southern South Bend Opportunity Area

STRENGTHS

- Located within the Foreign Trade Zone
- Access to NS and CN rights-of-way
- NS access may be available for smaller single car rail projects
- Ample land available to the southwest
- Contract warehousing and transloading available through K.A.K.
- Existing businesses present synergistic opportunities
- Excellent access to nearby workforce
- Separated from but within commuting distance of residential neighborhoods

CHALLENGES

- Soil conditions and high water table may be a limiting factor
- Configuration of some available land limits development
- Land is in both South Bend and unincorporated areas
- Wabash Railroad and Norfolk and Western spur is defunct
- Utility connections require extension

TRANSPORTATION ASSETS

The southwestern industrial area is located south of the split between CN and NS near the center of the city of South Bend. A long rail spur branches from the CN alignment and runs east-west with numerous users along it. Several large employers and users are located along the spur. A third alignment, apparently, a legacy of the Wabash Railroad and Norfolk and Western, is located within the southern part of the opportunity area near the developable land. It has been defunct since 2000 or 2001.

The opportunity area is served by truck routes. US 933 directly connects the area to the Indiana Tollway via a 15-minute drive through downtown South Bend. US 23, which runs southwest-northeast through the city connects the area to both US 20/31 and to towns to the southwest. BUS 31 and Michigan Street provide a direct route into Indianapolis.

Finally, K.A.K. is a contract transload facility available for the warehousing and packaging of goods. Its facility utilizes 20-foot doors along the CN/NS rail siding and provides 25 truck dock doors to allow clients to utilize both modes of transportation.

ECONOMIC DEVELOPMENT ASSETS

The area is very close to neighborhoods in southeastern and western South Bend, where some complementary workforce resources reside. In both cases, this proximity likely reflects the longtime industrial heritage of the area.

As this report makes clear, abundant opportunity exists for rail-served development at several locations within St. Joseph County. Additionally, productive dialogue during the Steering Committee meetings confirms support for such development among the County's economic development professionals. However, all opportunities come with internal and external threats that must be understood as these professionals pursue economic development. This section attempts to capture many of the opportunities and threats identified throughout the planning process. Railroad development reacts to national and even international forces, so a deliberate pace and a clear understanding of objectives can help the County capitalize on its opportunities while mitigating the threats.

OPPORTUNITIES

St. Joseph County's multiple opportunities stem from its transportation infrastructure and its location near the congested Chicago market. These key considerations merit further exploration and are listed below:

- **Large Rail-Served Parcels.** There are multiple large tracts ranging from hundreds to thousands of acres. For example, the large parcel in New Carlisle is an ideal site because of its size, proximity to rail, and gentle topography. It could accommodate a full unit train loop track, which means that a user could receive an entire trainload of product with just one movement. would not require multiple train movements to handle a trainload of product. These large sites are hard to find and typically are sought after by large multi-national firms.
- **Access to Multiple Class I Carriers.** With access to NS, CSX and CN, many service options are available to move freight to key eastern and gulf ports in the U.S. Via CN shippers can access Canada and Pacific Coast ports and onward to Asia.
- **Access to Multiple Shortlines.** Thanks to their Class I connections and their better customer service, shortline railroads are work horses in regional development. Though the Class I railroads

are busy corridors of commerce, their heavy traffic makes it cost prohibitive to directly add access to these lines. But access can be added along one of the County's shortlines, which can add freight to the national network via the classification terminal in Elkhart. As a result, these shortlines represent the County's best opportunity to add local rail access to the national network.

- **Multiple Transportation Modes.** The County possesses air, highway, and rail near one another and is uniquely situated to integrate all three modes around industrial and logistics development. All three assets should be factored into future economic development decision-making.
- **Existing Freight Users.** St. Joseph County already possesses a base of manufacturing, warehousing, and distribution firms located near the NS and CN rights-of-way and/or South Bend International Airport. In some cases, these businesses may be able to expand on larger rail-served sites. In other cases, outside companies may be attracted to locate nearby because of supply chain synergies.
- **Target Markets Readily Available.** St. Joseph County is highly specialized in plastic product manufacturing and has been experiencing stronger-than-average growth in this sector of the economy in the last five years. Additionally, food manufacturing has been growing quickly from a relatively small economic base. In each case, there could be an opportunity for economic expansion with the commodity connections that NS provides.
- **Education and Workforce.** The County's educational institutions can be encouraged to cultivate training programs to link workers with existing and future businesses.

THREATS

Below are highlighted some of the primary threats to factor into development opportunities. In some instances, these obstacles should be directly addressed

to advance projects. In other cases, they will be important to monitor as projects unfold.

- **Class I Rail Traffic.** The Class I railroads that pass through the region are high speed, high density, double track corridors. Spur tracks that connect these high-density corridors to adjacent property can be very expensive to access due to the required communication and signal technology. Additionally, Class I railroads must balance the prospect of new business against the network service impacts created because of moving trains on and off congested mainline corridors. To encourage servicing these lines, the County should only consider large-scale uses.
- **Nearby Competition.** Ongoing threats exist from other rail-served communities and rail service providers if they possess lower barriers to development, such as zoning and taxes, and if connecting infrastructure is subsidized through local programs. Utility costs, land costs, buildable sites, and a local workforce also impact the development of rail-served logistics sites. The County can mitigate this by providing certainty in energy and other utility rates.
- **Capital Costs.** Every redevelopment must balance public and private reinvestment. The public sector increasingly supports the initial investment through various incentive programs and planning initiative to attract business. However, if these predevelopment steps are not executed strategically, the aggregated costs can become prohibitive.
- **Workforce Capacity.** The State of Indiana, like the Midwest, has seen slow population growth. In recent years, the State has also seen low unemployment. Together, these factors point to workforce capacity as a major threat to attracting large businesses. Branding and quality of life will go far to overcome this perception and attract businesses.
- **Political Will.** Large rail developments happen on a scale of years, rather than weeks or months. There must be sufficient political will to advance these projects. A clear plan and communication strategy can help manage public concerns that frequently pressure elected and appointed officials.

With a strong policy and planning vision, St. Joseph County can take advantage of its many assets while overcoming the threats posed by local and national factors. The next section of this report proposes a policy playbook tailored to the opportunities and threats within the County.

CAPITALIZING ON OPPORTUNITY

A PLAYBOOK FOR ST. JOSEPH COUNTY

St. Joseph County enjoys several opportunities for redevelopment that take advantage of its rail assets. However, the redevelopment process is complex and lengthy. It requires a sustained pipeline of public interventions that can include land assembly and environmental assessment, infrastructure investment, workforce development, and marketing to attract private investors. Similarly, partnerships with rail carriers and the State of Indiana can help extend service to sites for potential end users. Finally, the County must be prepared when a site selector comes seeking a very specific kind of opportunity.

The following policy recommendations and funding table represent a step-by-step approach and a multiyear commitment to move rail-served parcels through the predevelopment pipeline. It is split into two sections. First, it recommends Countywide policies to prepare all opportunities for redevelopment. Second, it recommends specific interventions in each opportunity area matched to their strengths and their weaknesses. Finally, it recommends principles for a future master planning process that provides the infrastructure to capture each opportunity while minimizing impacts on surrounding neighborhoods and the environment of the County. St. Joseph County should follow this step-by-step playbook for a master plan to develop each of the opportunity areas over the next ten years.

COUNTYWIDE MARKETING PLAN

Led by its Department of Economic Development, St. Joseph County should pursue the following marketing plan to advance the opportunities identified in this report towards redevelopment. The County enjoys advantages in its transportation assets, economic base, and geographic entities. Numerous entities can help promote these advantages and available sites within the County. Railroad websites and the INDOT rail plan can both elevate opportunities to potential site selectors. To best market its opportunity areas, the County should:

Brand St. Joseph County as a rail friendly place to do business. The County should work with brokers and other economic development agencies to option properties to preserve key sites for rail development. To the extent possible, the County and municipalities should zone all properties adjacent to rail as industrial, if not already designated as such.

Work with railroad carriers and industrial brokers to certify all sites as shovel ready. After site control is secured (i.e. optioned), the County should work with industrial development professionals to certify the rail sites for future development. Each railroad has a protocol for certification.

Advertise all sites on railroad websites and on County EDC websites. Each railroad has an industrial development department. The County should work to provide each railroad with a site profile, maps, photos, and descriptions for promotion. The County website should list its available rail sites under transportation resources.

Add sites to the INDOT State Rail Plan. As noted earlier, this update is currently under development and did not fully align with the draft of this report. However, as the INDOT Rail Plan comes together, it should include and prioritize all sites and rail projects to raise their visibility to site selectors. INDOT should also recommend that US 31 be upgraded to interstate status.

Contact existing users for expansion needs.

St. Joseph County has an established network of manufacturing, logistics, and supportive companies. These companies should be contacted for their expansion needs.



Photo: Kevin Kelley, Flickr/Creative Commons

OPPORTUNITY SITE RECOMMENDATIONS

The County should also pursue site-specific strategies tailored to the strengths and challenges in each opportunity area. In some cases, a master planning process will be required to consider the complex needs of a future user. For example, a master plan for the large New Carlisle site will identify locations for a rail

spur or loop, industrial land uses, utility considerations, and so on. In other cases, opportunity sites may need infrastructure access or a promotional strategy to attract smaller users. The following recommendations are matched to the strengths and challenges identified at each site.

New Carlisle	<ul style="list-style-type: none"> • Pursue Master Plan for the TIF area • Extend FTZ Designation to the TIF area • Develop Market Presence and Brand and promote in all site selection arenas • Establish Operations Strategy to identify the mode that best positions the site to engage with prospective tenants. This could include operations as an independent development entity, a partnership through Indiana's Port Authority; or the recruitment of a large national logistics development team • Identify Funding Mechanisms for needed infrastructure improvements • Manage Cost Variability for utility and other infrastructure costs for an extended period. Cost structures for utilities such as natural gas and electricity, for example, may be established for extended 5- or 10-year periods
Walkerton	<ul style="list-style-type: none"> • Promote Sites and Buildings in all available site selection arenas • Implement Flood Mitigation Measures to allow for redevelopment of the northwest site • Connect EWR and CSX With Potential End Users to provide rail car service and connections
Mishawaka	<ul style="list-style-type: none"> • Promote Sites in all available site selection arenas • Identify Funding Mechanisms for infrastructure improvements to make sites attractive for redevelopment • Extend EWR Right-of-Way to the west to provide direct rail car service to the central opportunity parcel • Extend Bittersweet Road south over the NS tracks to open the southern opportunity parcel
South Bend Airport Area	<ul style="list-style-type: none"> • Extend FTZ Designation for available parcel and, when applicable, future development sites • Identify Funding Mechanisms through the state, airport authority programs, and elsewhere to relocate the approach of the South Shore into the area and free land for redevelopment • Pursue Master Plan for rail and air-linked opportunities made possible through the relocated alignment • Promote Sites in all available site selection arenas
Southern South Bend	<ul style="list-style-type: none"> • Pursue Master Plan for vacant properties • Extend Utilities to unserved areas • Implement Stormwater Management Mechanisms to mitigate water table barriers on site • Promote Sites in all available site selection arenas

MASTER PLANNING PRINCIPLES

Finally, St. Joseph County should be prepared to bring major opportunities through a master planning process that recommends site-specific infrastructure improvements and land use planning. The following principles should be first applied during the master planning process to maximize the potential of each opportunity site for a future rail-served development. In some cases, these principles help minimize the impact created by new development and its externalities on surrounding neighborhoods in the County. Every master plan should:

Promote flexible uses. Strategies should allow for variable uses that can attract several types of users. Wherever possible synergistic opportunities should be cultivated and thought through.

Develop a clear operations strategy. For larger sites, the County should think through the many operations strategies available to them. From shortline operators, to Ports of Indiana, to private sector developers the operations alternatives are many. Different sites may require unique strategies based on the opportunities and conditions.

Cultivate site-specific branding. Attracting and retaining users requires support of the public sector. A branding strategy that promotes sites will give economic development professionals the tools they need to promote sites. This should include promotional materials, websites, and a consistent message at critical site selection events.

Mitigate infrastructure and construction concerns. Infrastructure and other site conditions may present real challenges. As the site planning is pursued, some major elements should, at a minimum, be planned such that possible users can understand how utilities and stormwater might be dealt with should they select a site. In some cases, actual construction improvements may be worth pursuing, as well.

Promote sustainable environmental design practices in project development. St. Joseph County should require the use of LEED certified building practices, hybrid electric switching locomotives, recycling of oil

and waste products, installation of energy-efficient high-pressure sodium vapor lamps with fully shielded lamps that comply with International Dark-Sky Association guidelines. Where necessary, the County should require water conserving landscaping and sound berms.

Require that projects with public funding include a shipper match to ensure commitment. The County should use public money to incentivize private sector investment. The County should also set and monitor traffic volume and local employment commitments for the life of the loan or assistance.

Provide overnight truck parking. Carriers delivering to any new development will need sufficient overnight parking. Land must be set aside for this purpose.

Design highway geometry to accommodate trucks around new facilities. Highway geometry for turning lanes and road shoulders should accommodate deliveries. A buffer area should be installed to avoid truck congestion on public highways.

A Master Plan includes land use planning and infrastructure considerations.



FUNDING PLAYBOOK

Funding various plans and projects can be a challenge for both large and small projects. While it is possible for railroads and other private sector entities to develop sites, most larger parcels require some level of public investment to advance them. Where possible the County should rigorously pursue grant funding through foundations and other public agencies. Working with consultants and grant writers who are familiar with various project funding resources will help to expedite this process. Maintaining an on-going database of the grants and opportunities being pursued is critical, as these resources can be recycled into future opportunities. In all cases, the County should anticipate some costs, whether as a local match for a grant or as the primary project funding source.

There is an increasing trend to marry public and private funding sources for larger projects in Public Private Partnerships. This can be done through various financing arrangements that range from highly complex, to relatively straightforward lending practices. For projects benefiting specific developments, or higher cost projects, this is an option that may be considered.

Below is a list of funding opportunities that can be connected to rail-related projects. In some cases, matching funds will be required. Having a concise strategy that integrates these resources will help to mitigate costs outlays for various projects. The key to this success is thinking through projects and having a strong understanding of the potential for success.

Planning and Economic Development

GRANT NAME	ORGANIZATION	ELIGIBILITY	DOLLAR AMOUNT	FUNDING	DESCRIPTION
EDA Planning Program and Local Technical Assistance	U.S. Economic Development Administration	Governments, nonprofits, private institutions of higher education	Max. \$300,000	Rolling	Assists in the development of economic development plans and studies
Brownfields Area-Wide Planning Grant	U.S. Environmental Protection Agency	Units of government	Varies	Annual	Grant to develop an area-wide plan to assess, cleanup, and reuse brownfields
Community Development Block Grants	St. Joseph County, Cities of South Bend, Mishawaka	Varies on community HCD plan	Varies on community HCD plan	Annual	Can fund acquisition of property, utilities, planning, other costs; must benefit low/mod income neighborhoods or populations
Business & Industry Loan Guarantees in Indiana	USDA Rural Development Grant	Businesses, Non-profits, Cooperatives, Public bodies, and Individuals	80% for loans of \$5 million or less; 70% for loans between \$5 and \$10 million; 60% for loans exceeding \$10 million; and up to \$25 million maximum	Annual	Bolsters the existing private credit structure for rural businesses through loan guarantees and allows private lenders to extend additional credit
Indiana Economic Development Corp. Industrial Development Grant Fund	Indiana Economic Development Corporation (IEDC)	Local Governments	Varies	Annual	Provides financial support for infrastructure improvements for job and capital creating investment. This fund requires a local or industry match

Transportation

GRANT NAME	ORGANIZATION	ELIGIBILITY	DOLLAR AMOUNT	FUNDING	DESCRIPTION
Transportation Infrastructure Finance and Innovation Act (TIFIA)	U.S. Federal Highway Administration	Public or private entities	Low interest loan for 33% for projects \$15 million or more	Rolling	Low interest loans for highway, transit, freight, and transit-oriented development facilities
Private Activity Bonds	U.S. Federal Highway Administration	Public agency, DOT	Varies from \$25,000 to \$2M+; must be expended on project in 5 years	Rolling	Bonds can fund surface transportation improvements, including surface rail-truck transfer ports
Surface Transportation Program	Michiana Area Council of Governments	Municipality, transit agency	Various; Covers 80% of project cost	Annual (cycle just passed)	Funds surface transportation improvements that include road, pedestrian, highway, bridge, and transit
Congestion Mitigation and Air Quality Program	Michiana Area Council of Governments	Municipality, transit agency	Various; Covers 80% of project cost	Annual (cycle just passed)	Funds projects that enhance air quality and diminish transportation congestion. Funds intermodal if emissions reduction can be demonstrated
Transportation Investment Generating Economic Recovery (TIGER)	US DOT	State, local, and tribal governments, including transit agencies, port authorities, and MPOs.	Varies by program	As authorized by Congress	Invests in critical road, rail, transit and port projects across the nation
Fast Lane Grants	US DOT	States, MPOs, and local governments, transportation agencies, and multijurisdictional applicants.	\$850 million for FY 2017	Annual	Provides Federal financial assistance to freight and highway projects of national or regional significance

Transportation (continued)

GRANT NAME	ORGANIZATION	ELIGIBILITY	DOLLAR AMOUNT	FUNDING	DESCRIPTION
Railroad Rehabilitation & Improvement Financing (RRIF)	Federal Railroad Administration	Railroads, state and local governments, Railroad JV's and Shippers constructing new rail	Covers up to 100% of the project cost, repayable over 35 years.	Rolling	Provides direct federal loans and loan guarantees to finance the development of rail infrastructure
Indiana Industrial Rail Service Fund	State of Indiana	Class II and III railroads	\$1.5- \$1.7 million	Annual	Grant and/or loan funding for the rehabilitation of railroad infrastructure or railroad construction. Funding cannot exceed 75 percent of the total cost of the project, but the match may include other public funds.
Indiana Railroad Grade Crossing Fund	State of Indiana	Local public agencies	\$15,000 -\$55,000	Annually	Funds safety improvement grants, which include warning signs, pavement marking, overhead street lights, surface improvements, vegetation management, and signal lighting upgrades

These steps will not occur overnight. Master planning takes time. The process of securing the financial resources outlined above can be lengthy. Land assembly and negotiation can also be protracted over multiple development cycles and the economic context can quickly change. As noted earlier, it will take political and stakeholder will, as well as patience, to carry redevelopment from the vision outlined in this report through the predevelopment process and then finally to investment.

CONCLUSION

This report outlines a strategy for St. Joseph County to pursue these opportunities and capture rail-served development at all scales and sizes. Redevelopment is a multiyear process and will not happen immediately. The County must continually work with railroads, economic development professionals, and site selectors to brand its properties. Individual opportunity areas require specific strategies to fund and build the infrastructure needed for redevelopment. This report aims to be a guidebook to help the County through this process and capitalize on its many opportunities for new growth.

The opportunities for rail-linked development vary in their size and scale. In New Carlisle, for example, the opportunity site could support a large master planned development with a major manufacturer and infrastructure to pull traffic from the main line. Around the airport, the relocation of the South Shore right-of-way could open an additional opportunity for rail-served development. Smaller sites in Walkerton,

Mishawaka, and the City of South Bend are also very important and could attract individual users interested in shortline service.

The time is now for rail-linked development in St. Joseph County. Because of the inherent economic and environmental efficiencies of rail, freight volumes are projected to increase over the next 30 years. The County enjoys service from three Class I railroads. It possesses two shortlines that can add product to the national rail network and have considerable capacity for additional service. Its proximity to the clogged Chicago interchange system can attract businesses looking for relief and increased efficiency of shipments. Good trucking and air cargo infrastructure provide additional shipping options. Several industries in the County manufacturing base, such as food and plastics production, have already posted steady growth and could benefit from added connection to these freight assets.

APPENDIX A

Glossary of Terms

This glossary of terms is provided to help understand railroad and economic development terms used in the development of rail-served sites.

TERM	DEFINITION
Alignment	Refers to both horizontal and vertical layouts to describe the line uniformity (straightness) of the rails.
Brownfield	A commercial or industrial site that has real or perceived contamination.
Bulk Commodities	Raw materials that are transported without packaging.
Car Set Out	When a defective car is "set out" or removed from the train for mechanical repairs.
Certified Site	A site that has been reviewed and verified ready for industrial development.
Class I Railroad	A railroad company with an annual revenue exceeding \$453 million.
Cross-Overs	A track that allows a train to cross over from one track to another.
Drayage	The trucking portion of an intermodal movement.
Eminent Domain	The authority to "take" property at a fair price and relocate tenants.
Grade	The ratio of rise and fall of the grade line to its length.
HazMat	A term referring to hazardous material that can corrode, explode, ignite or create noxious fumes.
Industrial Park	A non-residential area that is zoned for business activities, which may or may not include rail access.
Intermodal	A transportation movement that includes two different modes in conveying goods.
Ladder Track	A main track that connects successive body tracks in a railroad yard.
Last Mile	A logistics term that refers to the movement of goods between the final distribution node to the end user.
Lead Track	A primary track in a switching yard to which other sorting tracks connect.
Local Train	A train that picks up and delivers railcars from a switching yard to the customer.
Mainline	The railroad track or tracks which allow road trains to move.
Manifest Train	Train made up of mixed rail cars (boxcars, tank cars, flat cars, etc.)
NIMBY	A term used to refer to local opposition to a development project.
Passing Track	A track that allows a train to pass another train, or move without being on the mainline.
Power	Another term for locomotive.
Road Train	A train that moves between stations on the railroad.
Run-Through	"Point to Point Train Service" / A train that is not scheduled to add or reduce rail cars en route.
Shortline Railroad	A railroad with revenue less than \$453 million per year.
Shovel Ready	An industrial site that has been certified through IEDA ready for quick development.
Shuttle Train	A group of 50-55 rail cars, which are loaded at a single location and are going to the same destination.
Siding	A track section parallel but separate from a main line.
Spur Track	A short, dead-end section of track used to access a facility.
Sustainable	Development that does not destroy or deplete the location's natural resources
Switch	A railroad configuration that allows railroad rolling stock to move from one track to another.
Switching	The process of moving a rail car from one location or train to another location.
Trackage Rights	The purchase, for a fee, of the right for one railroad to run on tracks owned by another.
Train	A locomotive with or without cars.
Transload	The transfer of product from one mode of transportation to another mode of transportation.
Turnout	A railroad switch and a frog with closure rails, which allows rolling stock to be diverted from one track to the other.
Yard Track	A track within a rail yard used to receive cars for classification.
Unit Train	A grouping of 100 to 110 rail cars, which are all loaded at the same place and move to a single destination.

Source: Prime Focus LLC

APPENDIX B

Opportunity Area Map

These full sized, high resolution maps include all opportunity areas and assets identified in the production of this report.

APPENDIX C

Meeting Minutes & Presentation Materials

This appendix includes the meeting minutes and presentation materials from three Steering Committee meetings. It has been included as an electronic attachment.

APPENDIX D

Data Tables

A spreadsheet that contains tables for all data used in this report has been attached as a separate Microsoft Excel document.

APPENDIX E

State of Indiana Rail Map

This map visualizes all Class I and shortline railroads in Indiana. It has been included as an electronic attachment.

APPENDIX F *Site Certification Information*

These documents outline the site certification process for CSX SiteSelect and the State of Indiana. It has been attached as a separate electronic file.

APPENDIX G

Site Selection Profiles

This appendix includes previous site selection profiles advertised by the railroads. It has been attached as an electronic file.

The MACOG Freight Transportation Study: An Analysis of Freight Capacity and Movement in Northern Indiana was developed by the Michiana Area Council of Governments in 2004 and provided invaluable insight in the development of this report. It has been included as an electronic attachment.