

**Twenty First Century
Advanced Logistics in Indiana
General Overview**

Ruslan Tymofyeyev, MBA Student
Dr. Bruce Strom Professor

© Copyright 2004

Purpose

This white paper is for educational purposes only. All the information included in this paper came from www.in.gov; therefore, is the property of the Indiana Government Agencies and can be used for educational and research studies only. All the data that appears in this paper is carefully referenced to its primary sources at www.in.gov.

The purpose of this paper is to provide some highlight to the field of Advanced Logistics in the state of Indiana by giving some general overview on this topic and presenting some figures relevant to this field.

Introduction and Economic Overview

Indiana is bordered on the north by Lake Michigan and the state of Michigan, on the south by the Ohio River and the Commonwealth of Kentucky, on the east by the state of Ohio and on the west by the state of Illinois. The "Crossroads of America," Indiana is centrally situated within the Great Lakes region and is within a day's drive of nearly two-thirds of the United States' population. In addition to an extensive network of highways and railroads, the state has strong air service for both passengers and freight and access to the Great Lakes and the St. Lawrence Seaway, as well as the Ohio and Mississippi rivers. (www.in.gov)

Highways. Five interstate routes converge on Indianapolis. The Indiana Department of Transportation manages a network of more than 11,000 miles (17,600 km) of federal and state highways. The state is an important location for truck terminals and warehouse centers. This is reflected in the density of truck traffic in the state. Indiana highways carry the sixth highest concentration of truck traffic and the highest for any urban or Eastern state. (www.in.gov)

Railroads. Indiana is served by at least 37 freight railroads according to the Rail Section of the Indiana Department of Transportation. The state rail network moves raw materials and finished goods to and from hundreds of Indiana customers and is part of the interstate rail system between northeast and western states and between the city of Chicago and the southeastern states. The State has approximately 4,255 miles of railroad track. Ninety of Indiana's ninety-two counties have direct rail service. (www.in.gov)

Aviation. The state has 114 public-use landing facilities. Of these, six are primary airports, six are reliever airports, 94 are general aviation airports, two are ultra-light flight parks, four are seaplane bases and two are heliports. The primary airports include one medium-hub, one small-hub airport and four non-hub airports. The world's leading air cargo and package services operate major facilities in Indiana, including Federal Express and Kitty Hawk.

Ports and Waterways. The Great Lakes/St. Lawrence Seaway and the Ohio River provide conduits for bulk commodities and general cargo movement of agricultural and manufacturing products. In 1970, the State opened Indiana's International Port, on Lake Michigan to accommodate international and Great Lakes traffic. In 1979, the State opened Southwind Maritime Centre, along the Ohio River, near Mount Vernon in southwest Indiana. In 1984, the State opened Clark Maritime Centre along the Ohio River, near Jeffersonville, in south central Indiana. (www.in.gov)

Public Transportation. Indiana's 44 public transit systems include fixed route and demand response bus systems, including one commuter rail system (between South Bend and Chicago). The State's public transit systems carried over 31.5 million passengers in 2000, an increase of four percent from 1999. Transit system vehicles traveled 32.1 million miles in 2000, an increase of 3.5 percent from 1999. Total fare revenue collected in 2000 was \$31.7 million. The statewide fare box recovery percentage (which illustrates the extent to which total operating expenses are covered by fare-paying passengers) was 27 percent in 2000. The State Public Mass Transportation Fund, which receives .76 percent of total state sales and use taxes, accounted for \$28.4 million, or 24.0 percent, of total public transit operating revenues in 2000. (www.in.gov)

Preview

This white paper provides general overview on the field of advanced logistics in the state of Indiana by discussing operations of the Indiana Airports, Sea Ports, Highways, and Railroads.

Airlines

Indianapolis International Airport is a modern, user-friendly facility just 12 minutes from the city center. Service is provided by 18 airlines including nonstop and direct flights to more than 100 destinations. It is managed by BAA, the world's foremost and most expert airport management firm, which also operates London Heathrow, the busiest international airport in the world. The BAA Web page has more details on Indianapolis International.

<http://www.indianapolisairport.com/pages/baa.html>

<http://www.indianapolisairport.com/>

Indianapolis is served by 13 major passenger airlines, which schedule about 200 daily departures:

Air Canada
American Air
American trans Air
America West
Comair Link

Continental
Delta
Northwest
Skyway
Southwest

Frontier
United Airlines
US Airways
Western Pacific

Scheduled jet service is also available from Fort Wayne and South Bend. Frequent commuter service is available from Evansville.

<http://www.evairport.com/>

<http://www.fwairport.com/>

<http://www.sbnair.com/>

Air Cargo

The world's leading air cargo and package services operate in Indiana. Each day about 50 airfreight departures operate from Indianapolis International.

<http://www.amerijet.com/>

<http://www.emeryworld.com/eww/emeryweb/>

<http://www.fedex.com/>

<http://www.gac-cargo.com/>

<http://www.khcargo.com/>

<http://www.frontierairlines.com/programs/cargo.asp>

<http://www.aacargo.com/>

Indiana has five major airports with at least one runway measuring 7,100 feet or greater and capable of handling all types of the largest cargo-carrying aircraft: Evansville Regional, Fort Wayne International, Terre Haute International, Indianapolis International and Michiana Regional Transportation Center (South Bend). The state also has 10 additional airports with runways at least 5,500 feet and Instrument Landing Systems (ILS) capable of providing regular commercial freight service. These airports are regionally located throughout the state, offering easy access to all locations in Indiana. There are also 20 other airports with at least one 4,300-foot runway for handling smaller commercial aircraft. Most of these airports have some type of instrument landing system, and several employ ILS.

Indiana is home to over 690 aviation-landing facilities. While the majority of these are airports, Indiana has heliports, ultra-light flight parks and seaplane bases within the state. There are 113 public-use facilities and 578 private-use. All public-use facilities receive an annual inspection for compliance with minimum safety standards Eighty-Two (82) Indiana public airports have paved runways and 23 have turf runways. Indiana also has 37 paved runways over 5,000 feet, a total of 51,306,885 square feet of paved runway serving Indiana citizens and businesses and providing over \$4.2 billion in annual economic impact for our communities.

The following link provides the list of Indiana Public-Use airports
<http://www.in.gov/dot/modetrans/airports/aerials.html>

Harbors And Shipping

The Ports of Indiana operate a three-port system serving the world's most productive industrial and agricultural region through a combination of strategic location, intermodal connections and specialized facilities. The state's three public ports are: Clark Maritime Center (Jeffersonville) on the Ohio River, Southwind Maritime Center (Mount Vernon) on the Ohio River and Burns Harbor (Portage) on Lake Michigan.

Indiana's International Port/Burns Harbor at Portage is located on Lake Michigan just 18 miles east of Chicago. This is the only deep-water port built specifically for St. Lawrence Seaway traffic. The International Port also has a "RORO" (roll on-roll off) berth and a special cargo heavy-lift berth that adds further support to shippers. The Port of Indiana on Lake Michigan, east of Chicago, is an international seaport handling some 6 million tons of domestic bulk and general cargo annually. Located at Burns Harbor, The Port of Indiana is convenient to the Chicagoland region, but without the congestion of competing facilities. (www.in.gov)

This three-port system offers economical twelve-month access to 40 percent of the U.S. population across 22 states.

Maritime commerce is key to Indiana's economy. That's why the [Indiana Port Commission](#) received a grant of \$8 million in 1997 for improvements to the state's public ports.

For more information on the ports of Indiana visit the following link:
www.portsofindiana.com

Highways And Trucking

Indiana's Interstate highway network permits access within a single day to more than half the United States population.

More than forty major motor freight carriers serve Indiana, providing customers with a wide range of services at competitive rates.

Overnight trucking routes serve Chicago, Detroit, Cincinnati, Louisville, Toledo, Cleveland, Milwaukee, Minneapolis, St. Louis and Pittsburgh, among many destinations.

The [Indiana Department of Transportation](#) has maps and additional information regarding state highways.

Indiana's interstate system is relatively uncongested. Only eight percent of the state's interstates are taxed to 90 percent of their capacity. Other states are slower going:

IN	IL	KY	MI	NY	OH	PA	US
8%	37%	24%	19%	22%	33%	12%	23%

Source: U.S. Department of Transportation,
Federal Highway Administration

Quality Highways

Indiana's infrastructure system is the backbone of the state's economy. In the late 1980s, the Indiana Department of Transportation (INDOT) spent money provided through the Accelerated Construction Effort (ACE) program to produce record construction seasons. The newest initiative, Crossroads 2000, will provide about \$560 million in new funding for INDOT to build added capacity projects. Crossroads 2000 means completion of the Hoosier Heartland corridor between Logansport and Fort Wayne, a substantial interchange modification on the Borman Expressway at Cline Avenue in Northwest Indiana, and congestion relief on I-65 in Clark County in Southern Indiana.

Indiana has also become an early leader in the innovative National Quality Initiative (NQI) program. NQI stresses a partnership approach between the public and private sectors to build projects more quickly and to more exact standards. INDOT has been so successful in this effort that it won the 1997 NQI Achievement Award for its I-65 reconstruction project in Indianapolis. The department and its private partners rebuilt I-65 in 30 percent less time than a traditional project and in the process saved motorists \$2.2 million in delay costs. (www.in.gov)

The following link provides more details on Indiana Highways: [Indiana Department of Transportation](#)

Indiana Rail Links

Indiana has 4,255 railroad route miles, of which 91 percent are operated by Class I railroads, principally CSX Transportation, Inc. (CSXT) and Norfolk Southern (NS). The remaining miles are operated by 37 regional, local and switching and terminal railroads. CSXT operates 1,929 miles and Norfolk Southern operates 1,569 miles. Other Class I railroads in Indiana are the Canadian National and the Soo Line, a Canadian Pacific Railway subsidiary, as well as Amtrak, which owns 18 miles of line in Indiana, part of its Michigan line service. (www.in.gov)

In 1999, approximately 100.1 million tons of rail freight was originated and/or terminated in Indiana. Nearly two-thirds of this traffic consisted of coal and primary metal products. Other major commodity groups include farm products, scrap metal and chemicals. Approximately 65 percent of rail freight moving in Indiana is bridge traffic—that is, interstate freight traffic that neither originates nor terminates in the state.

Short line railroads in Indiana are a vital element of the state's rail network, serving 62 counties, 15 of which are served only by short lines. Indiana short lines in 1999 handled nearly 350,000 carloads of various commodities, mostly in conjunction with the large Class I freight railroads. (www.in.gov)

Some of Indiana's primary rail carriers are:

CSX Transportation, operates a major intermodal terminal on the Ohio River in Evansville, plus "TransFlo" facilities in East Chicago, Crawfordsville, Evansville, Lafayette and Milford. CSX Regional Industrial Development Office is located in Indianapolis. (www.in.gov)

Indiana Railroad Company, Indiana based, full service regional railroad, which connects with the four Class I carriers serving the area (CSXT, CN/IC, CP and NS). Offers freight hauling and transloading services in Indianapolis and points south and west through Bloomington, Indiana to Newton, Illinois.

Chicago South Shore and South Bend Railroad, also Indiana-based rail carrier servicing the industrial corridor between Chicago and South Bend. Connects with all Class I railroads and directly serves Great Lakes port.

Louisville and Indiana Railroad, another Indiana-based rail carrier serving the I-65 corridor between Indianapolis and Louisville. Connects with CP, CSX and NS and directly serves Ohio River port.

Norfolk Southern, offers motor carrier fleet services and mobile repair facilities in Fort Wayne, with Norfolk Southern Regional Industrial Development Office located in Indianapolis. (www.in.gov)

Passenger Rail Service In Indiana

The Indiana Department of Transportation is currently involved in planning for future passenger rail service in the state. Existing services and operations are now controlled by Amtrak and the Northern Indiana Commuter Transportation District (NICTD). And for those interested in a bit of nostalgia, there are several 'tourist trains' in the state. For more information about their individual schedules, please contact the operator directly. INDOT has no jurisdiction with regards to tourist trains.

AMTRAK

Intercity passenger rail service in Indiana is presently provided by Amtrak. Service of varying frequencies include stops at Hammond, Whiting, South Bend, Elkhart, Nappanee, Lafayette, Crawfordsville, Connersville, Dyer, Rensselaer, Waterloo, Elkhart, Indianapolis, Jeffersonville and Michigan City.

High Speed Rail Initiative

INDOT is one of nine member states in the Midwest Regional Rail Initiative, an ongoing effort to develop and expand access to an improved passenger rail system in the Midwest. If developed, this system would provide high-speed rail service (80-110 mph) with shorter travel times, increased frequency of service, accessibility and reliability. Other participating states are Illinois, Iowa, Michigan, Minnesota, Missouri, Ohio, Nebraska and Wisconsin.

Regional and national discussions on rail transportation have resulted in the designation of three high-speed rail routes through Indiana;

1. Chicago to Cleveland
2. Chicago to Detroit
3. Chicago through Indianapolis to Cincinnati and also to Louisville

Conclusion

The state of Indiana is often called “the crossroads of America.” It is evident that logistics plays a very important role in the business life of the state. There are all kinds of passenger and cargo transportation networks in Indiana. Among them are airports and heliports, seaports, railroads, and an advanced network of highways.

Currently, the field of logistics in Indiana goes through a lot of technological advancement and promotional development. Logistics is among the fields covered by the “Energize Indiana” development plan, which has its scope on creating larger job force within the state. Therefore, further advancement on the field of logistics within the state is one of the key features to successful business operations in Indiana.

Comments

Evansville, Ind. – on July 16, 2004 Indiana Department of Transportation (INDOT) Commissioner J. Bryan Nicol announced that a \$12 million dollar improvement project on the Lloyd Expressway has been completed. All lane restrictions at the Green River Road interchange have been lifted. Permanent pavement markings have been placed and traffic control barrels have been set aside. (Press Release)

“This is welcome news for motorists and businesses in this part of Evansville,” said Commissioner Nicol. “Our first priority is always to get motorists safely and efficiently to their destinations. The completion of this project will also dramatically improve traffic flow in a busy commercial and retail area.” (Press Release)

The project began in February of 2003 to widen the on and off ramps at the Green River Road interchange and build twin post tensioned bridges on the Lloyd Expressway. The contract called for work to be completed by mid-July. Despite utility delays, the project continued to stay on schedule and mainline construction work was completed at the beginning of the month. (Press Release)

Prior to this construction work, traffic delays at this interchange were common. The capacity of the roadway has been doubled as a result of this construction. A reconfiguration of the ramp system will allow for more efficient movement of traffic. INDOT engineers will continue to perform a final inspection which will require various, minor restrictions. The work began February 15, 2003 and took approximately 517 days to complete. (Press Release)

References

(Economic Overview, <http://www.in.gov/doc/compare/Transportation.html>)

(Indiana Airlines, <http://www.in.gov/doc/compare/WorldAirlines.html>)

(Indiana Ports, <http://www.in.gov/doc/compare/WorldHarbor.html>)

(Indiana Highways, <http://www.in.gov/doc/compare/WorldHighways.html>)

(Indiana Rail Links, <http://www.in.gov/doc/compare/WorldRailways.html>)

(Indiana Passenger Rail, <http://www.in.gov/dot/modetrans/train/page8.html>)

(High Speed Rail, http://www.in.gov/dot/modetrans/train/high_speed.html)

(Press Release, http://www.in.gov/dot/div/communications/INDOT_News_Highlight.pdf)