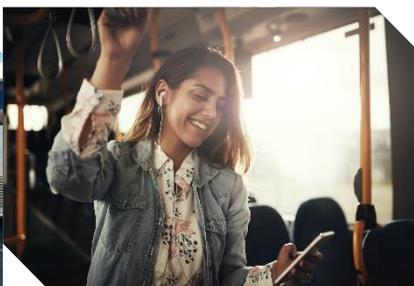




Indiana Intercity Bus Needs Assessment and Service Evaluation 2017



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Department of
Transportation, Office of
Transit

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I. INDIANA INTERCITY BUS NEEDS ASSESSMENT AND SERVICE EVALUATION: 2017

EXECUTIVE SUMMARY

The Indiana Department of Transportation (INDOT) is obligated to spend 15 percent of its Section 5311 apportionment for intercity bus transportation unless it certifies that intercity bus needs are being met. The assessment of intercity bus needs may be made relative to other rural transportation needs in the State. INDOT contracted with RLS & Associates, Inc. (RLS) to assess the State's intercity bus needs, serving as an update to the 2009 Indiana Intercity Bus Study, while also evaluating the routes currently operated with Section 5311(f) funding. INDOT utilizes all of its 15 percent on intercity bus operations and plans to continue this practice. This Study documents that assessment and route evaluation.

Although Greyhound's service in Indiana has declined since the 2009 study, the volume of intercity bus service in the State has increased dramatically over the past nine years. In 2009 there were five carriers operating 12 routes and 13 bus stops serving the State. Today, there are 18 intercity bus routes operated by six carriers, with 48 stops in 46 cities in the State. Indiana is well served from a spatial perspective, with 87 percent of the State's population residing within 25 miles of an intercity bus station/stop.

This increase in service can be attributed to INDOT using its full 15 percent intercity bus apportionment to subsidize routes across the State. In 2009 INDOT expended only \$230,200 on two Section 5311(f) projects with the City of Marion and Johnson County. In 2017, there are eight routes supported with Section 5311(f) funds, three by Barons Bus Lines and five by Miller Transportation.

This Study concluded that the various demographic segments of the State that have the greatest likelihood of using intercity bus services—the minority population, zero vehicle households, and population below poverty—are well served across the State by intercity bus. A similar conclusion was made for the State's major intercity bus trip generators including colleges and universities, correctional institutions, medical facilities, commercial airports, and military bases.

It was determined through a transit propensity analysis that the census tracts in Indiana with the greatest demand for intercity bus service, which are greater than 25 miles from an intercity bus stop, are primarily located in four (4) areas of the State:

- ◆ North/northwest of Lafayette along I-65
- ◆ North of Vincennes along U.S. 41
- ◆ East of Martinsville along I-65
- ◆ East of Paoli and south of IN Hwy. 56

The Study found that most of the Section 5311(f) supported routes are performing well. However, some concern was cited for the Richmond – Gary route, as well as possible service duplication along the Indianapolis – Bloomington corridor.

Input was received from three distinct stakeholder groups. An online survey was made available to the State's intercity bus carriers and public transportation providers. A third survey instrument was developed for general stakeholders including local and regional planners, economic development representatives, local government officials, and colleges and universities. The stakeholder outreach indicated a need for service along the Indianapolis – Columbus – Louisville corridor.

The study concludes that Indiana's intercity bus needs are being substantially met by the intercity bus carriers, with the assistance of INDOT and the Section 5311(f) funding support. However, as a result of the conclusions and observations documented in this Study, several recommendations are offered to maintain and improve the State's intercity bus network, such as continuing the use of the State's Section 5311(f) apportionment to maintain intercity bus service coverage, expanding marketing of the service, and implementing performance measures to evaluate the efficiency and effectiveness of the service.

II. INTRODUCTION

The Indiana Department of Transportation (INDOT), Office of Transit, is responsible for administering the Federal Transit Administration (FTA) funds that are used to support public transportation services across the State. Funding for intercity bus service is provided through the Section 5311(f) program, which is a subsection of the Section 5311 - Formula Grants for Other than Urbanized Areas program. While the Section 5311 program provides funding to support general public transportation service in the rural areas of the State with populations less than 50,000, the Section 5311(f) program is specifically intended to support the development and operation of intercity bus transportation.

The term intercity bus is defined by FTA as, “regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, that has the capacity for transporting baggage carried by passengers, and that makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available.” States are required to spend 15 percent of its annual Section 5311 apportionment to carry out a program to develop and support intercity bus transportation, unless the Governor certifies that the intercity bus service needs of the State are being adequately met. This determination must include consultation with the State’s intercity bus providers.

PURPOSE OF STUDY

The most recent Indiana Intercity Bus Study was prepared in 2008 – 2009 by RLS & Associates, Inc. (RLS). The Study evaluated the status of the intercity bus industry in Indiana, with particular emphasis on assessing the demand for intercity bus service across the State. Federal requirements associated with the receipt of Section 5311(f) funds and the utilization of these funds at the time were evaluated. The study confirmed the need for additional intercity bus service in the State and recommended routes for Section 5311(f) support, several of which are currently in operation. In addition to intercity bus service, the Study also evaluated the utilization of Indiana’s Amtrak service and the possibility of using state funds to support passenger rail service in the future. It should be noted that the State of Indiana spends \$3 million annually in support of the Hoosier State train service.

It is the purpose of this 2017 Intercity Bus Needs Assessment and Service Evaluation, also conducted by RLS, to serve as an update of the previous Study. This 2017 Study assesses the continuing level of demand for intercity bus service across the State, with the emphasis placed on an evaluation of existing intercity bus service, particularly the routes supported with Section 5311(f) funds. Recommendations are provided regarding future Section 5311(f) supported routes and how routes may be altered to increase productivity or address service duplication.

STUDY METHODOLOGY

To accomplish the study’s objectives, the consultant team utilized a detailed methodology that included the following significant tasks:

- ◆ Inventory of Indiana's intercity bus service;
- ◆ Determine changes in the level of intercity bus service since the 2009 Study;
- ◆ Survey of the state's intercity bus carriers, public transportation providers, transportation planning organizations, economic development agencies, colleges and universities, and city/county executives;
- ◆ Determine gaps in intercity bus service across the State and options to meet the service needs;
- ◆ Evaluate routes supported with Section 5311(f) funds and recommend changes as applicable; and
- ◆ Provide conclusions and recommendations to improve the provision of intercity bus service in the State and for the future utilization of the INDOT Section 5311(f) apportionment.

III. INVENTORY OF EXISTING INTERCITY BUS SERVICE

The 2009 Intercity Bus Study found that the following intercity bus carriers operated some level of service in Indiana:

- ◆ Burlington Trailways;
- ◆ Greyhound Lines;
- ◆ Indian Trails;
- ◆ Lakefront Lines; and
- ◆ Megabus (Coach USA).

At the time, Greyhound was the dominant carrier, operating six routes in the State, primarily into and north of Indianapolis. Burlington Trailways operated two routes, while Indian Trails and Lakefront Lines each operated a single route. Megabus provided express bus service from Chicago to Indianapolis, with connecting service to Columbus and Cincinnati.

Below is a description by carrier of the current level of intercity bus service in the State and how the service has changed over the eight-years since the previous study. Table 1, Frequency of Indiana Intercity Bus Service, depicts the level of service provided by the six carriers currently operating in Indiana. Exhibit 1 is a map indicating the various intercity services that are provided across Indiana, while Exhibit 2 is a similar map from 2009.

Table 1: Frequency of Indiana Intercity Bus Service - 2017

Carrier	Route	Daily RTs	5311(f) Status	Indiana Stops
Barons Bus Lines	Liberty – Ft. Wayne	1	Subsidized	Liberty, Richmond, Greenfield, Indianapolis, Marion, Fort Wayne
Barons Bus Lines	Ft. Wayne - Gary	1	Subsidized	Fort Wayne, Ligonier, Goshen, Wakarusa, South Bend, Rolling Prairie, Burns Harbor, Gary
Barons Bus Lines	Richmond - Gary	1	Subsidized	Richmond, Portland, Berne, Decatur, Fort Wayne, New Paris, Nappanee, Wakarusa, La Porte, Michigan City, Burns Harbor, Gary
Burlington Trailways	Indianapolis-Davenport	2	Unsubsidized	Indianapolis
Greyhound Lines	Chicago – Detroit	3	Unsubsidized	Gary, South Bend

Carrier	Route	Daily RTs	5311(f) Status	Indiana Stops
Greyhound Lines	St. Louis – Columbus	4	Unsubsidized	Terre Haute, Indianapolis
Greyhound Lines	Chicago – Cincinnati	5	Unsubsidized	Gary, Lafayette, Indianapolis
Greyhound Lines	St. Louis - Nashville	2	Unsubsidized	Evansville
Indian Trails	Chicago – Benton Harbor	2	Unsubsidized	Gary
Megabus	Chicago – Indianapolis	1	Unsubsidized	Indianapolis
Miller Transportation	Elkhart - Indianapolis	1	Subsidized	Elkhart, South Bend, Plymouth, Rochester, Peru, Kokomo, Indianapolis
Miller Transportation	Louisville - Evansville	1	Subsidized	Corydon, Dale, Owensboro, Evansville
Miller Transportation	Indianapolis - Evansville	1	Subsidized	Indianapolis, Bloomington, Washington, Vincennes, Princeton, Evansville
Miller Transportation	Indianapolis - Muncie	2	Subsidized	Indianapolis, Indianapolis Airport, Pendleton, Anderson, Ball State University, Muncie
Miller Transportation	Richmond - Gary	1	Subsidized	Richmond, Fort Wayne, Warsaw, Gary
Miller Transportation	Indianapolis- Terre Haute	1	Unsubsidized	Indianapolis, Martinsville, Bloomington, Spencer, Terre Haute
Miller Transportation	Chicago - Louisville	1	Unsubsidized	Hammond, Gary, Merrillville, Lafayette, Indianapolis, Bloomington, Paoli, Bedford, Orleans
Miller Transportation	Chicago - Columbus	1	Unsubsidized	Gary, South Bend, Elkhart, Fort Wayne, Richmond

Exhibit 1: Existing Intercity Bus Routes & Stops



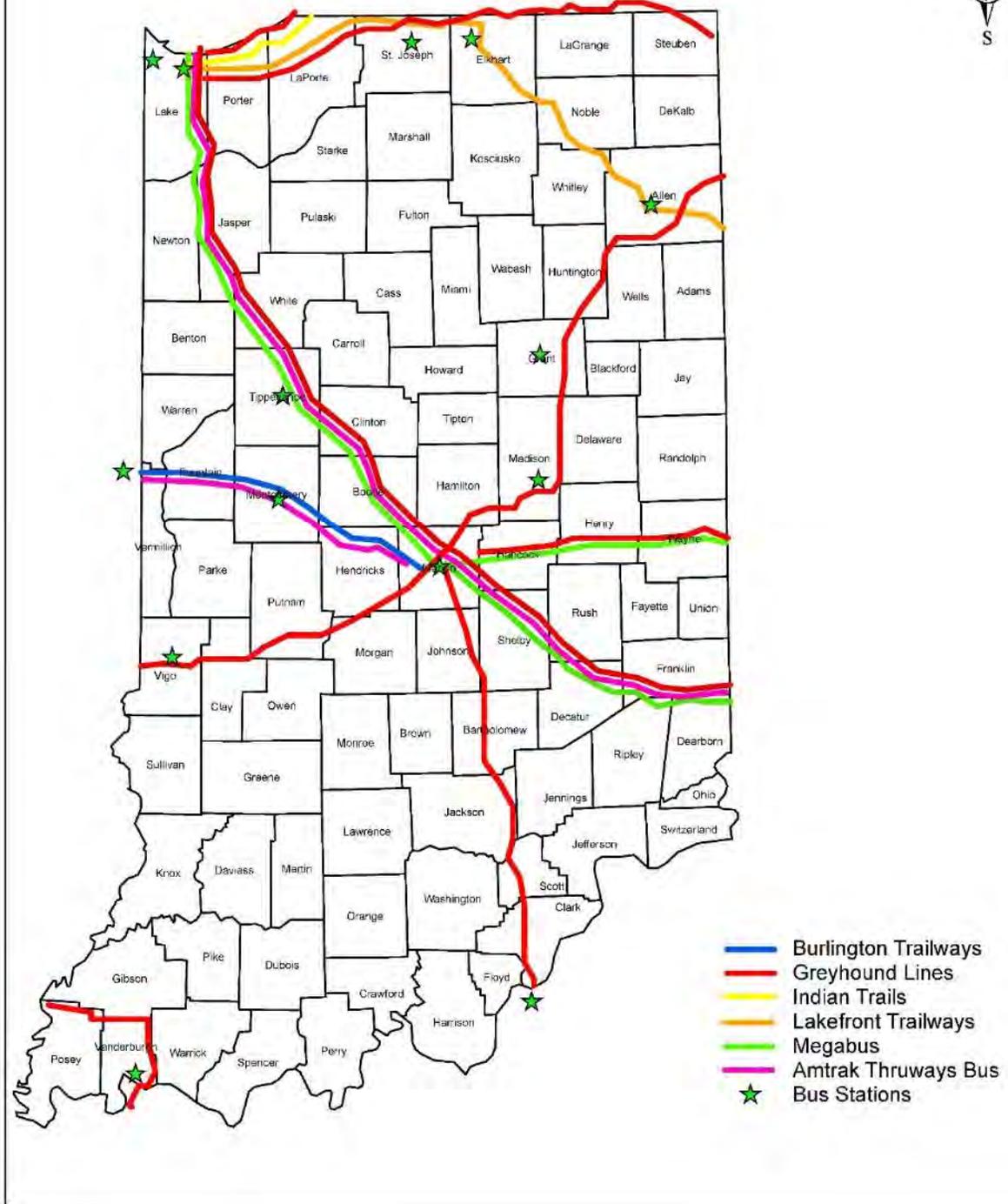
INDOT Intercity Bus Assessment



Legend

- Amtrak Stops
- Intercity Stops
- Shuttle Services
- Amtrak Routes
- Section 5311(f) Funded Routes
- Unsubsidized Routes

Exhibit 2: 2009 Intercity Map



Burlington Trailways

Burlington Trailways continues to operate the same route between Champaign, IL and Indianapolis via I-74 that it operated in 2009 (see Exhibit 3). The service extends to Davenport and Des Moines, IA. There are two daily trips in each direction, with one extending to Denver, CO and the other ending in Davenport.

However, there is no longer a stop in Crawfordsville, resulting in Indianapolis being the only Indiana stop on the route. The 2009 study noted the low ridership in Crawfordsville, which was served by a limited-service station with no handling of tickets, baggage, or express packages. The carrier utilizes the Indianapolis Greyhound Station. Indianapolis continues to have four stops; two in each direction along the route.

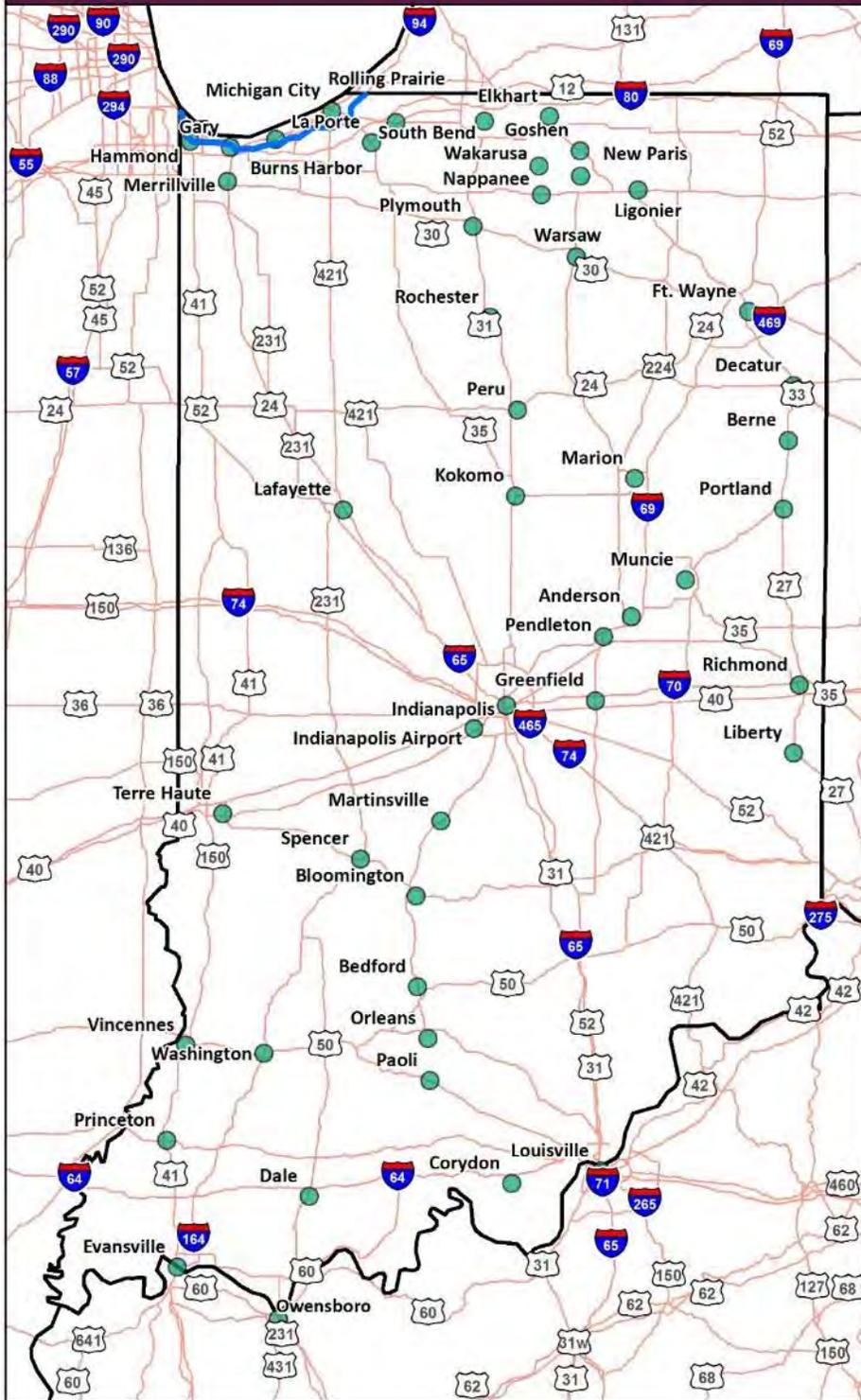
Indian Trails

Indian Trails operates out of Owosso, MI. The company operates primarily in Michigan with very limited Indiana service. The service through Indiana is part of the company's six Chicago, IL to Michigan schedules, with a stop in Gary. The carrier has terminated its stop in Hammond since the 2009 study was completed, however the city is now served by Miller. Indian Trails currently operates along the I-90/I-94 corridor between Chicago and Bay City, MI, including two stops in Gary in each direction (see Exhibit 4).

Lakefront Trailways

Lakefront Trailways is now a subsidiary of Coach USA, also the owner of Megabus. At the time of the 2009 study, Lakefront operated scheduled intercity bus service between Chicago and Akron, OH, including one stop in each direction in Gary, South Bend, Elkhart, and Fort Wayne. Currently Lakefront has no intercity bus routes that serve Indiana. However, these municipalities are served by other carriers, particularly the Section 5311(f) supported routes operated by Barons and Miller.

Exhibit 4: Indian Trails Route



INDOT Intercity Bus Assessment



Legend

- Indian Trails
- Intercity Stops

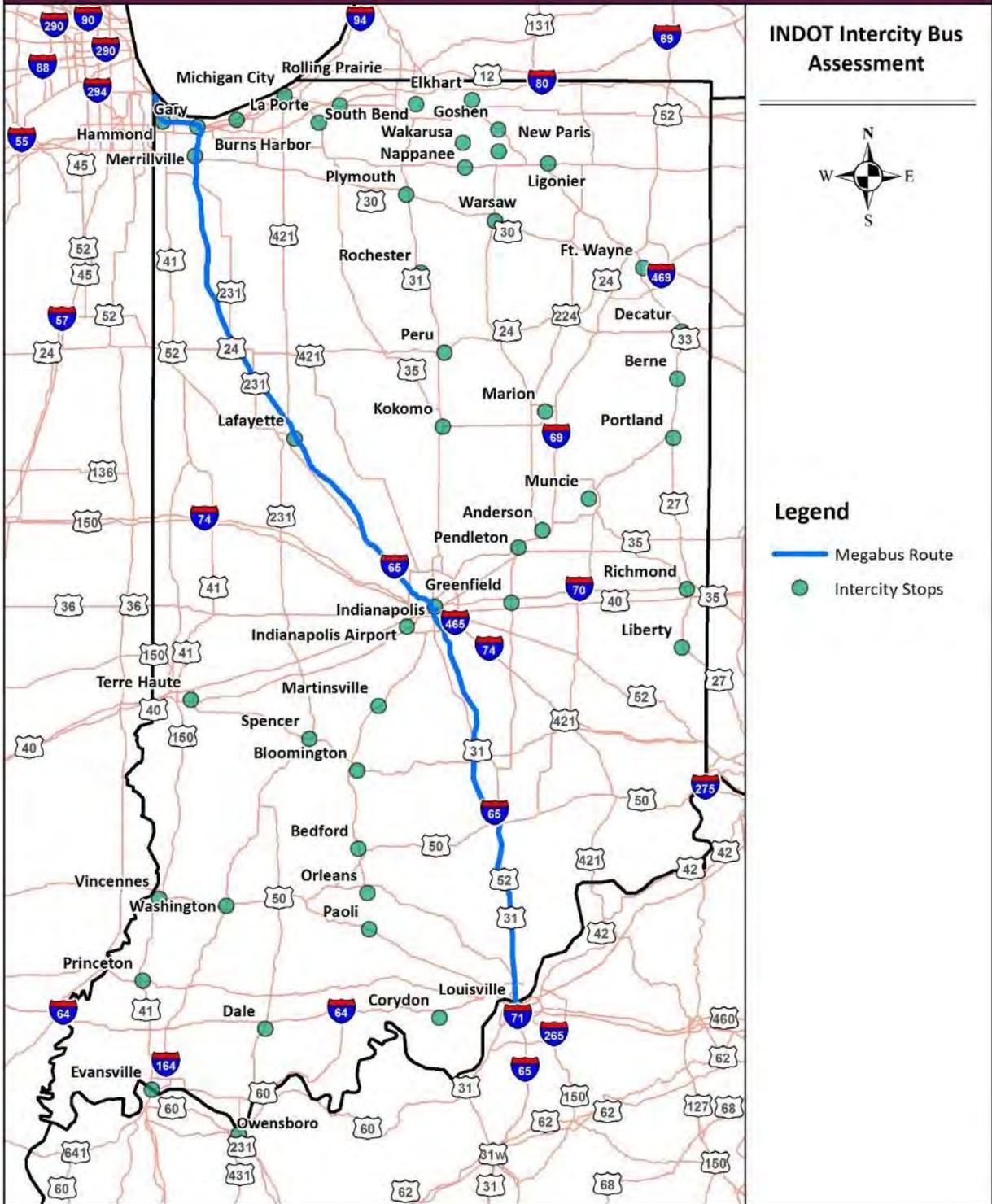
Megabus

Megabus was the first non-traditional “curbside” intercity bus carrier to provide low cost express service in the United States. Megabus, a subsidiary of Coach USA and based in Chicago, introduced service to the mid-west in 2006, including service to and from Indianapolis. Since 2010 Megabus has focused on transitioning from a traditional spoke-and-hub system, to a point-to-point network of express routes with buses making minimal stops, typically in larger cities, in route to their destination. The term “curbside” is used because these non-traditional carriers board and alight passengers on street corners rather than utilizing typical intercity bus terminals.

These non-traditional carriers primarily provide express service to the more populated cities in the State, normally at a lower fare. They do not interline with any other companies, and often do not interline with their own schedules. Therefore, this service does not meet the FTA definition of intercity bus service, but is included in this study since it is a transport option.

At the time of the previous intercity bus study, Megabus served Indianapolis along the I-65/I-74 corridor between Chicago and Cincinnati/Columbus, OH, including five schedules. While Megabus currently serves only Indianapolis in the State, service is available to Atlanta, GA, Chattanooga, TN, Chicago, Cincinnati, Louisville, KY and Nashville, TN. There are six schedules available daily to and from Indianapolis, Chicago, and Cincinnati, but only two daily schedules from Indianapolis to the other cities (see Exhibit 5).

Exhibit 5: Megabus Route



Greyhound Lines, Inc.

Today Greyhound Lines, Inc. operates 123 routes serving over 2,700 destinations across the United States.¹ This represents an increase of approximately 400 destinations across the country since the 2009 study. However, this increase in destinations served is not reflected in Indiana. In 2009 Greyhound served the following cities in the State: Anderson, Elkhart, Evansville, Fort Wayne, Gary, Hammond, Indianapolis, Lafayette, South Bend and Terre Haute. Today the carrier operates four routes through Indiana serving only the cities of Evansville, Gary, Indianapolis, Lafayette, South Bend and Terre Haute (see Exhibit 6).

In small to mid-size cities Greyhound buses stop at either locations operated by an agent (like a convenience store or another business) or at a curbside stop. At most agent operated locations, the staff can also sell tickets. Greyhound buses also stop at stations belonging to partner bus companies. At most of these locations, representatives are able to sell tickets for Greyhound routes.

It should be noted that Greyhound has made the corporate decision to no longer publish in Russell's Guide. The carrier's schedule tables can be found on the North America Bus Table (NABT) at the following link: <https://nabtguide.com/> and at [Greyhound's website](#).

Barons Bus Lines

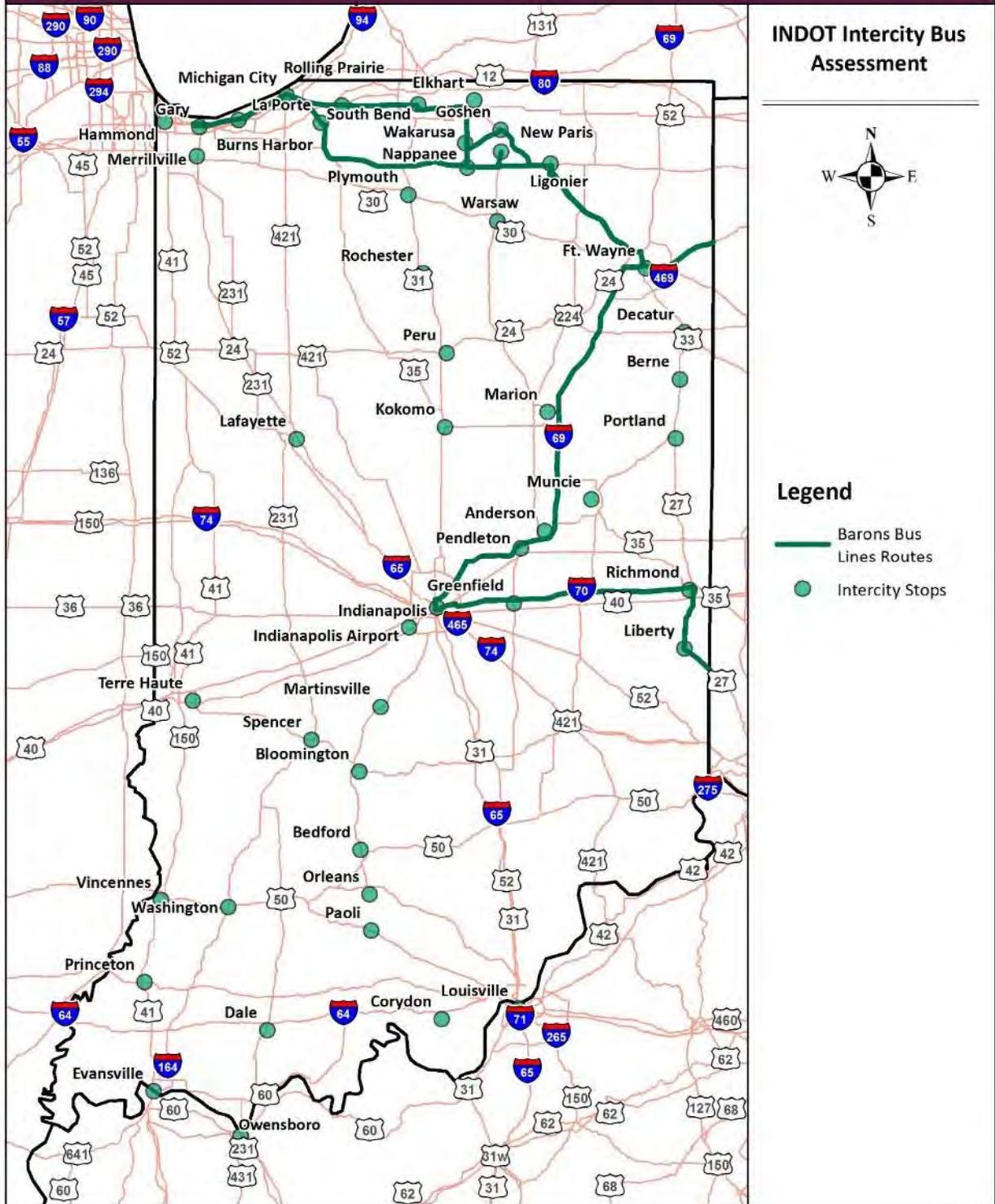
Barons operates the following Indiana routes that are addressed below in the Existing Section 5311(f) Supported Service subsection of Section V of this Study (see also Exhibit 7).

- ◆ Liberty - Fort Wayne via Richmond, Indianapolis and Marion
- ◆ Fort Wayne – Gary via Goshen, South Bend and Burns Harbor
- ◆ Richmond, IN to Gary via Berne, Fort Wayne, Nappanee and Michigan City

Barons does not operate any routes in Indiana that are not supported with FTA funds.

¹ Wikipedia

Exhibit 7: Barons Bus Lines Routes



Miller Transportation

Miller operates the following routes that are addressed below in the Existing Section 5311(f) Supported Service subsection of Section V of this Study (see also Exhibit 8).

- ◆ Indianapolis - Elkhart via Kokomo, Peru, Rochester, Plymouth and South Bend
- ◆ Indianapolis – Evansville via Bloomington, Washington, Vincennes and Princeton
- ◆ Indianapolis – Muncie via Indianapolis International Airport, Pendleton, Anderson and Ball State University
- ◆ Louisville, KY – Evansville via Corydon, Dale and Owensboro
- ◆ Richmond – Gary via Fort Wayne and Warsaw

Miller also operates the routes noted below that are not supported with FTA funds.

- ◆ Indianapolis – Terre Haute via Martinsville, Bloomington and Spencer
- ◆ Chicago, IL – Louisville, KY via Hammond, Lafayette, Indianapolis and Bedford
- ◆ Chicago – Columbus, OH via South Bend, Fort Wayne and Richmond

Note that Barons and Miller are addressed in more detail in Section V. *INDOT Section 5311(f) Program.*

Amtrak Thruway Connections

Amtrak has five (5) trains that travel through Indiana; Capitol Limited, Cardinal, Hoosier State, Lake Shore Limited, and Wolverine. Table 2 depicts the Indiana Amtrak stations/stops and the train(s) that serve each city with varying frequencies. These are the same Amtrak stations/stops that operated at the time of the 2009 Study.

Thruway Motorcoach is Amtrak's system of Amtrak-owned intercity coaches, locally contracted transit buses, through-ticketed local bus routes, and taxi services that are utilized to connect Amtrak train stations to areas not served by its railroads. Contracting the service with Greyhound is the most commonly used option across the country.

There are two Amtrak Thruway Bus routes in Indiana (see Exhibit 9). One route operates as a through-ticketed Greyhound route between Chicago and Louisville with connections to Amtrak stations/stops in Dyer, Rensselaer, Lafayette, and Indianapolis. The second route operates as a through-ticketed Burlington Trailways route between Davenport, IA and Indianapolis, with a stop in Crawfordsville. Amtrak and Amtrak Thruway Motorcoach services are illustrated in Exhibit 10 which is a map of Amtrak's Midwest Train and Thruway Service. This map provides a visual of how Amtrak's Indiana service is integrated into the remainder of its Midwest service.

Barons has direct connections with Amtrak in West Virginia and has contemplated connecting with their Indiana routes, but Amtrak's limited schedule times have not allowed this connection to happen. Barons operates out of the Greyhound/Amtrak terminal in Indianapolis, South Bend (airport), Toledo, OH, and Ann Arbor, MI, while in Chicago Barons utilizes the Greyhound station that

is only one-half mile from the Amtrak terminal. The adjustment of schedules by either Barons or Amtrak could result in these Indiana connections becoming a reality.

Miller has direct connections with Amtrak throughout Michigan including Detroit and operate out of the Amtrak Station in Port Huron. The carrier has indicated that they are working with Amtrak to operate service between Niles and South Bend and will possibly be entering a partnership with Greyhound and Amtrak to operate service in the Amtrak station in Lafayette and Elkhart. Miller noted that it serves as a thruway carrier between Louisville-Chicago as an alternative when Greyhound's vehicle is at capacity.

Table 2: Indiana Amtrak Service

Amtrak Stations/Stops	Service Trains
Connersville	Cardinal
Crawfordsville	Cardinal, Hoosier State
Dyer	Cardinal, Hoosier State
Elkhart	Capital Limited, Lake Shore Limited
Hammond	Wolverine
Indianapolis	Cardinal, Hoosier State
Lafayette	Cardinal, Hoosier State
Michigan City	Wolverine
Rensselaer	Cardinal, Hoosier State
South Bend	Capitol Limited, Lake Shore Limited
Waterloo	Capital Limited, Lake Shore Limited

https://en.wikipedia.org/wiki/Amtrak_Thruway_Motorcoach

Exhibit 8: Miller Transportation Routes

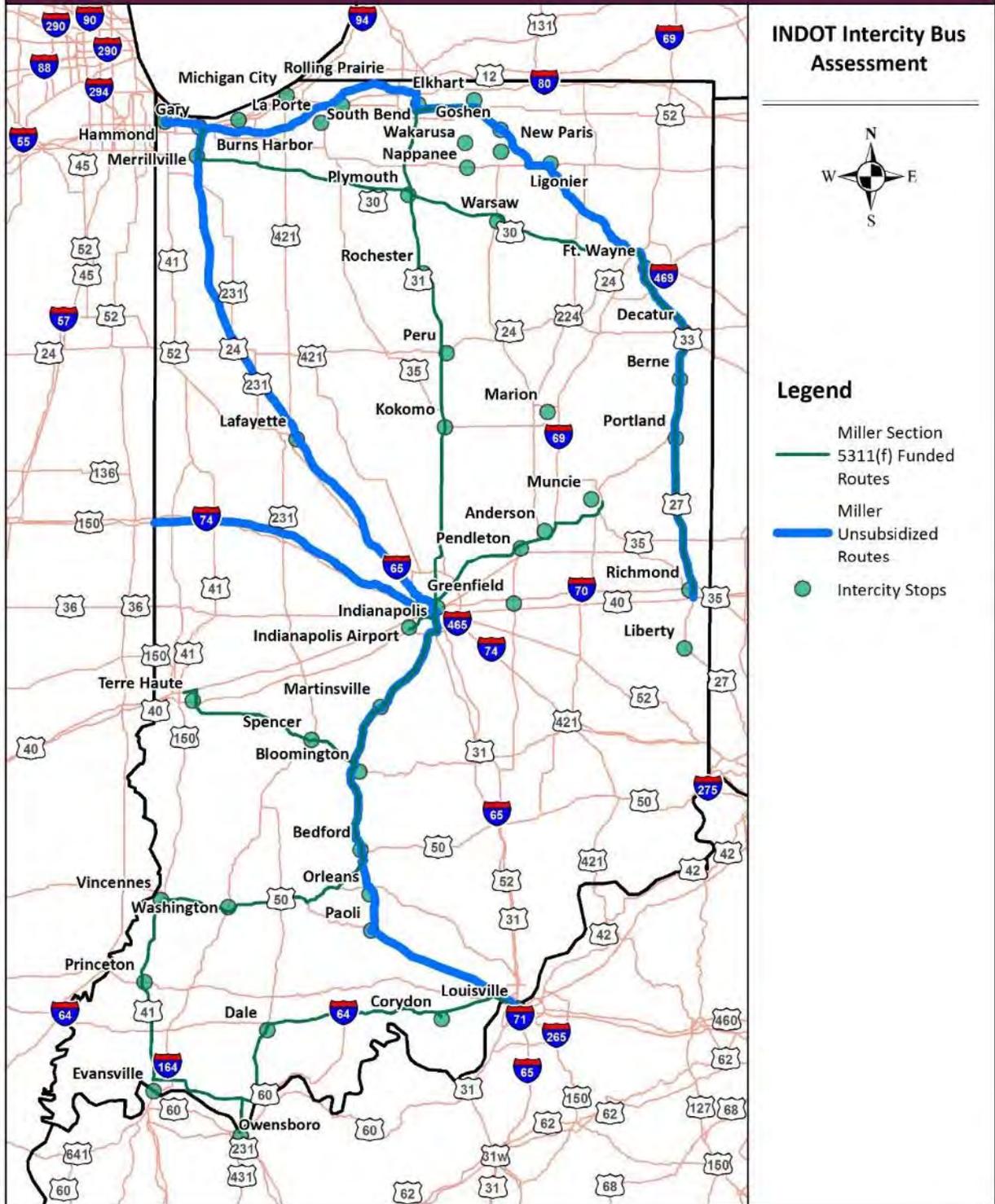


Exhibit 9: Amtrak Thruway Bus Routes

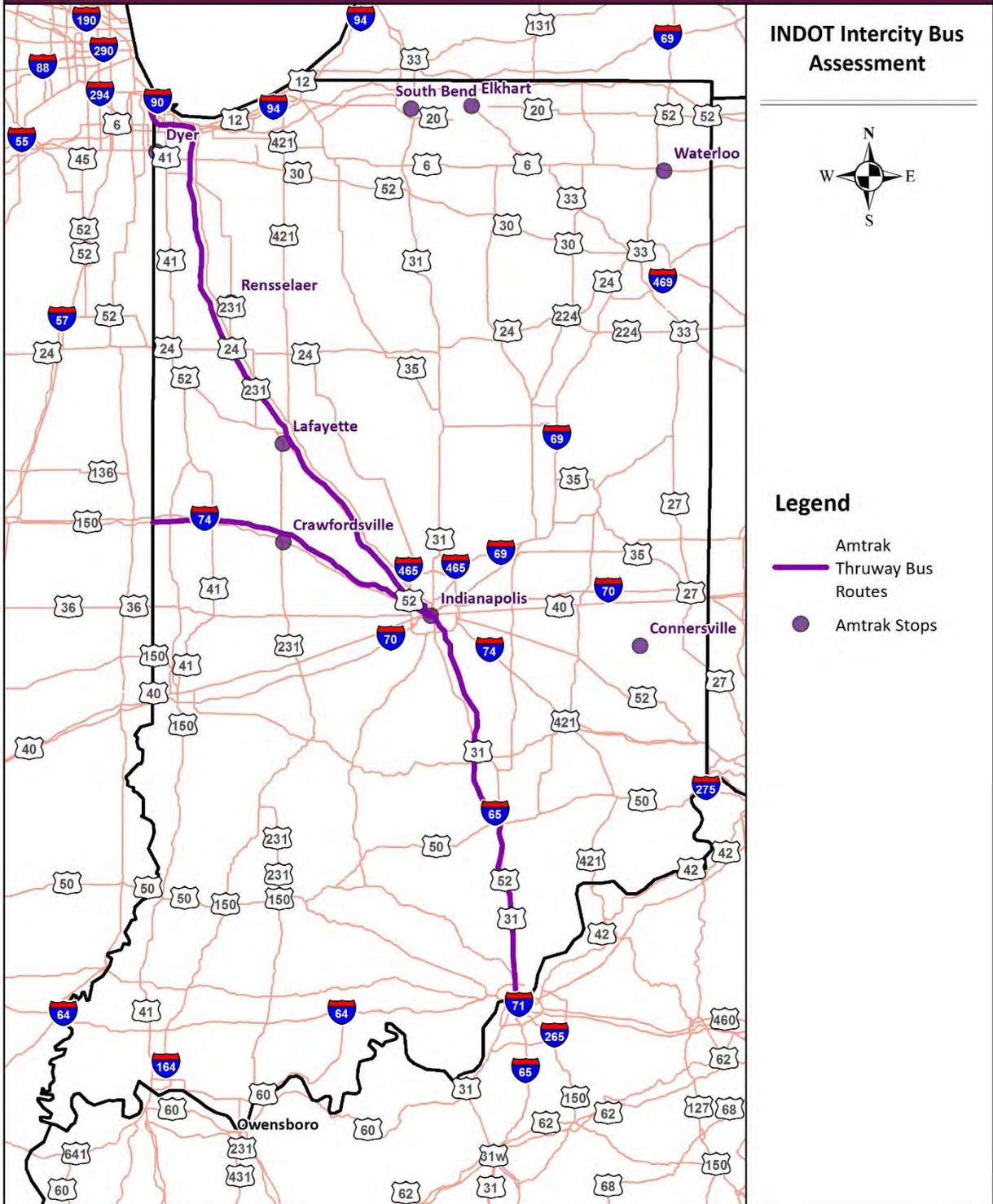
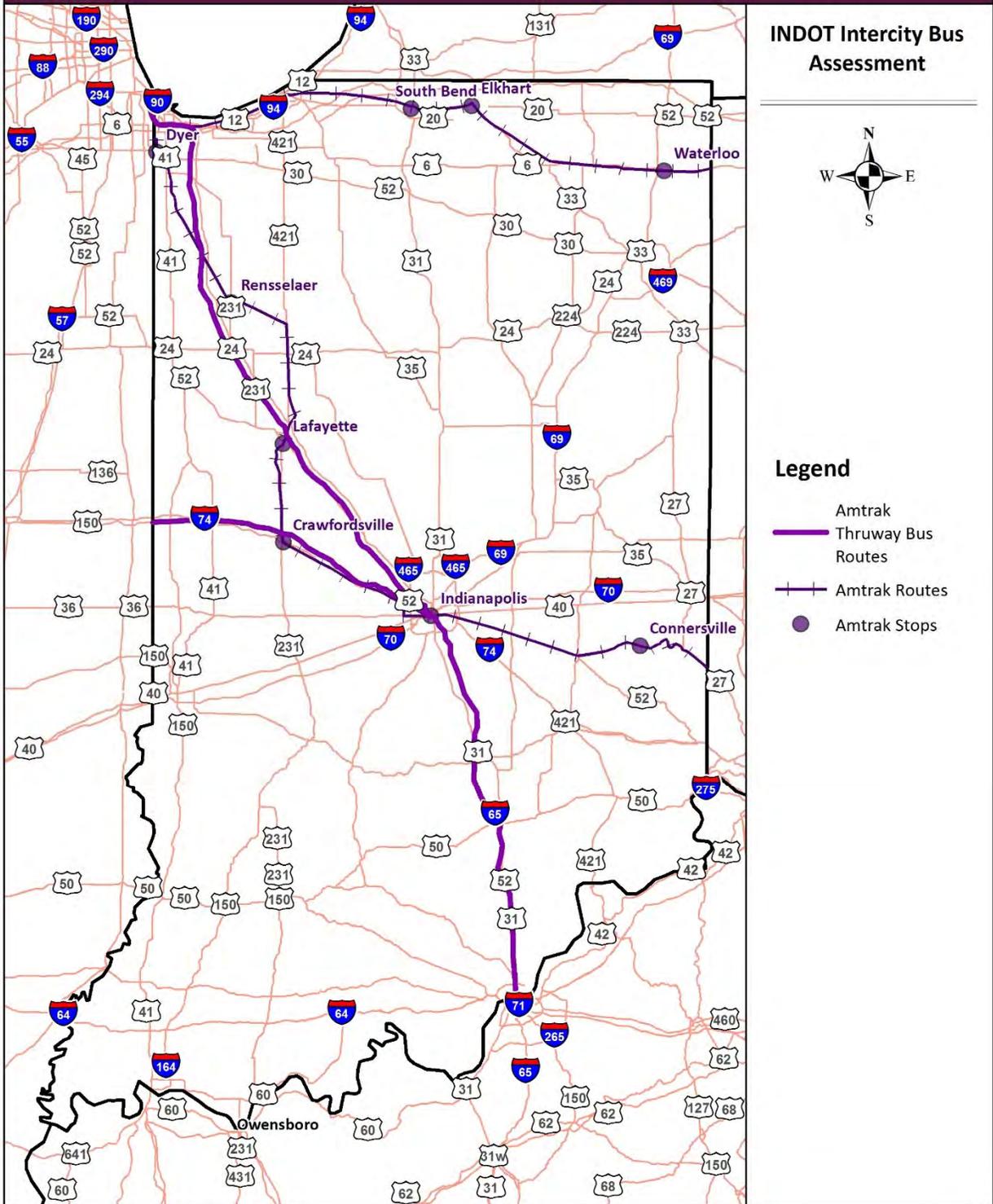


Exhibit 10: Amtrak Thruway Bus Routes & Rail Lines



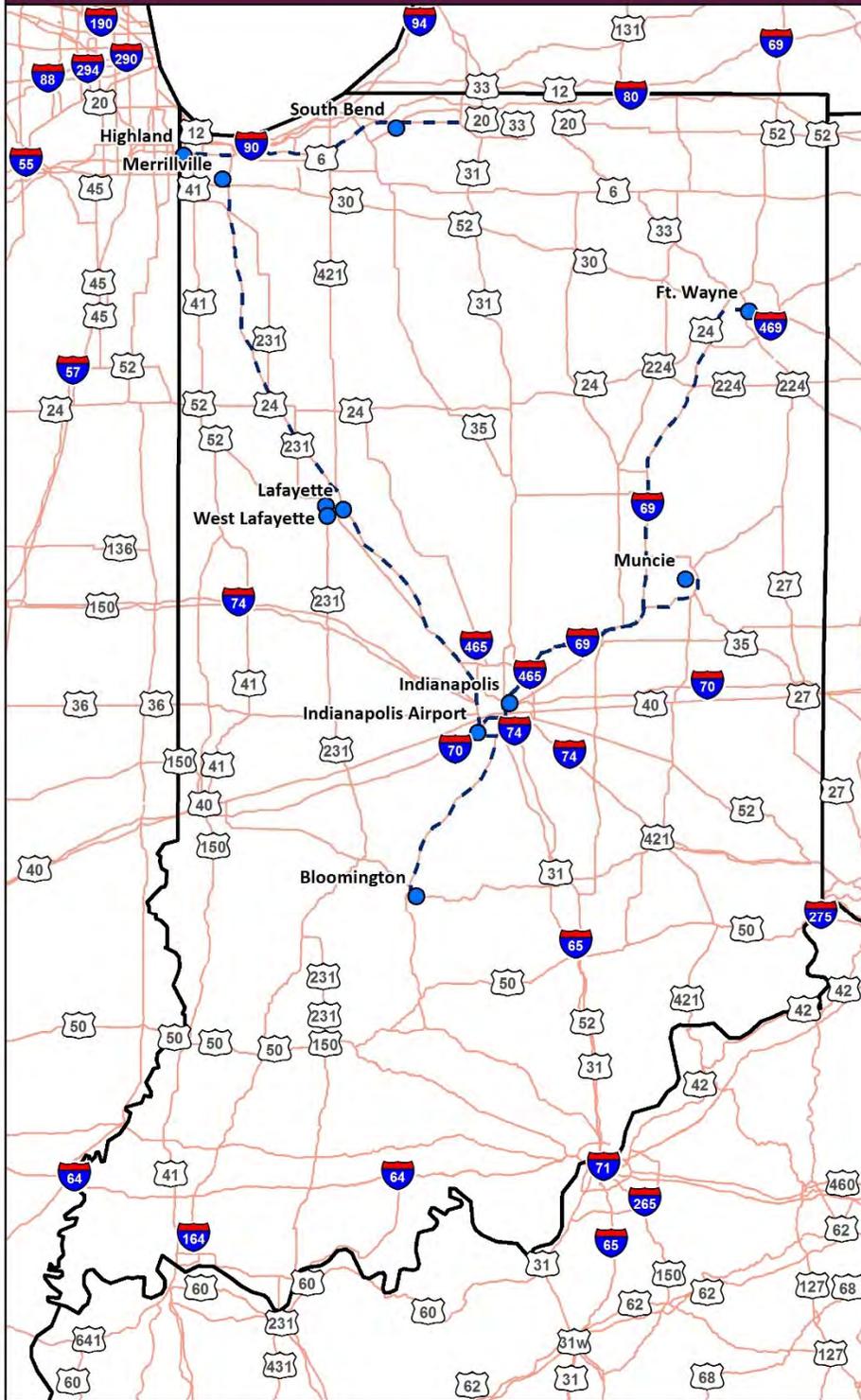
Shuttle Services

In Indiana's urban areas there are numerous private operators that provide shuttle services between cities, airports and universities. Often these operators are providing service to and from rural areas of the State. These shuttles provide a valuable transportation option in many communities, serving as a supplement to the available intercity bus service in an area. Shuttles typically use smaller vehicles than traditional intercity bus service, such as vans or minibuses, and fares tend to be higher. In many situations, such as those found at the State's colleges and universities, shuttles provide service to airports at a schedule that may be more appealing to students than that offered by the intercity bus carriers. Below is an inventory of privately operated shuttle services operating in Indiana.² The shuttle services, including routes and stops, are depicted in Exhibit 11.

- ◆ Go Express Travel - service in both directions between Bloomington and Indianapolis airport and between Bloomington and Chicago-land.
- ◆ Lafayette Limo, Inc. - runs between Lafayette, West Lafayette, and Purdue and the Indianapolis International Airport
- ◆ Hoosier Shuttle – between Fort Wayne, downtown Indianapolis and Indianapolis International Airport
- ◆ Coach USA – route from Chicago O'Hare to Chicago Midway – Crestwood – Highland – South Bend Airport – South Bend (Notre Dame)
- ◆ Star of America Shuttle Service – Bloomington to Indianapolis Airport
- ◆ Reindeer Shuttle (**utilizing Miller buses**) - from Purdue to O'Hare, and Indianapolis Airport
- ◆ Ball State University Airport Shuttle – Ball State (Muncie () to Indianapolis Airport
- ◆ EAC Shuttle – from Purdue and University of Illinois at Urbana–Champaign (UIUC) to O'Hare
- ◆ Catch-A-Ride Transportation Service – From Indiana University to Chicago-land and Northern Indiana areas (Schaumburg, IL, Oakbrook, IL, Northbrook, IL and Merrillville, IN)

²Wikipedia

Exhibit 11: Shuttle Routes & Stops



INDOT Intercity Bus Assessment



Legend

- Shuttle Stops
- - - Shuttle Services

IV. FTA INTERCITY BUS PROGRAM - SECTION 5311(F)

The FTA Section 5311(f) Intercity Bus Program, a subsection of the Section 5311 Nonurbanized Area Rural Program, is the primary Federal program for supporting intercity bus services. Section 5311 funds are apportioned to the states based on the nonurbanized population in each state. Section 5311(f) requires that 15 percent of a state's annual Section 5311 apportionment be used to support intercity bus service unless the governor certifies, following consultation with affected intercity bus providers, that all rural intercity bus needs have been adequately met. The statutory provision for the Governor's certification implies that a statewide assessment of current intercity bus service and existing needs has been conducted. The legislative history indicates that the assessment of intercity bus needs may be made "relative to other rural needs in the state." Further, a state utilizing the Governor's certification must demonstrate that the assessment of intercity bus needs was performed no more than four years prior to the date of the certification. This Intercity Bus Needs Assessment and Service Evaluation will meet this requirement.

States are allowed to submit a partial certification if less than 15 percent is needed to provide intercity bus service. All unexpended Section 5311(f) funds revert to the Section 5311 program to support other rural transit projects.

It is also important to note that the Section 5311 program allows states to use the costs of unsubsidized intercity bus service provided by private operators as in-kind match for the costs associated with connecting rural intercity bus feeder service, such as that operated by Barons and Miller. INDOT utilizes this provision as an incentive for intercity bus carriers to provide service in the State.

V. INDOT SECTION 5311(F) PROGRAM

Consistent with the recommendations of the 2009 Indiana ICB Study, INDOT spends all of its annual Section 5311(f) apportionment—over \$2.4 million—on intercity bus service. The funds are used entirely to defray operating costs, with no funds marked for capital expenditures. INDOT contracts with Barons Bus Lines, Miller Transportation, Inc., and the City of Marion for the provision of the Section 5311(f) supported service. These three subrecipients have responded to INDOT’s solicitation of intercity bus applications and have subsequently submitted applications that meet FTA and INDOT requirements.

Note that in 2009 INDOT funded two intercity bus projects with Section 5311(f) funds. The City of Marion was funded to operate a user-side subsidy ICB service. This service, as noted below, is still being supported with Section 5311(f) funds. The second project provided funds to Johnson County for Johnson County Access to link with IndyGo at the Greenwood Park Mall in Indianapolis. It was later determined that this service did not provide direct connections to intercity bus routes and funding for the service was suspended. These projects accounted for \$230,200 in Section 5311(f) support in 2009.

EXISTING SECTION 5311(F) SUPPORTED SERVICE

The following information describes the Section 5311(f) funded services that are currently operated in Indiana. An evaluation of the efficiency and effectiveness of these services is included later in the Study.

Barons Bus Lines

Barons currently operates three (3) intercity routes with Section 5311(f) assistance, providing daily transportation service to 21 locations within Indiana. The routes include:

- ◆ Liberty - Fort Wayne via Richmond, Indianapolis and Marion
- ◆ Fort Wayne – Gary via Goshen, South Bend and Burns Harbor
- ◆ Richmond, IN to Gary via Berne, Fort Wayne, Nappanee and Michigan City

The routes provide service to 17 rural locations in the State plus 4 urban areas, covering over 590,000 annual miles. A total of 101 meaningful connections are provided to the ICB network. The Section 5311(f) supported service provides an estimated 51,000 annual trips. Barons accounts for service to over 40 percent of Indiana’s intercity bus stop locations.

Barons has made no significant stop or schedule changes for these routes over the past three years. This Study used 2016 data since that was the last year of complete data availability. Any reference to Barons data is for 2016 operations.

Liberty to Fort Wayne

This route offers daily service to Liberty, Richmond, Greenfield, Indianapolis, Marion, and Fort Wayne. The route extends to Cincinnati and Detroit to allow for enhanced connectivity to the intercity bus network. The connections offer significantly reduced travel times, creating better customer experience for passengers. The route offers a total of 35 meaningful connections to the intercity bus network and provides approximately 24,000 passenger trips per year. Ridership on this route increased over the past year due to enhanced connections to Greyhound and local transit agencies and Greyhound discontinuing service between Detroit-Fort Wayne-Indianapolis.

Fort Wayne to Gary

This route offers daily service to Fort Wayne, Ligonier, Goshen, Wakarusa, South Bend, Rolling Prairie, Burns Harbor, and Gary. The route extends beyond the Indiana border to Columbus, OH and Chicago, IL to provide the opportunity for riders to travel well beyond the Barons operating area. The route offers a total of 34 meaningful connections to the intercity bus network. Approximately 13,500 passengers utilize this route annually.

Richmond to Gary

This route offers daily service to Richmond, Portland, Berne, Decatur, Fort Wayne, New Paris, Nappanee, Wakarusa, La Porte, Michigan City, Burns Harbor, and Gary. The route extends to Columbus and Chicago to allow for enhanced connectivity to the intercity bus network. The route provides 32 meaningful connections to the intercity bus network to increase ridership and revenue, thus creating a more sustainable product for Indiana's intercity bus program. Annual ridership on this route is approximately 14,200 passengers.

All vehicles assigned to the Section 5311(f) supported service are 2015 models or newer and are equipped with seatbelts, ADA accessibility equipment, WIFI, power outlets, electronic driver logs, GPS tracking, and video recording equipment. Barons offers interlining services with Greyhound and operates out of Greyhound facilities in Indianapolis, South Bend, Gary, and Fort Wayne. The Saucon GPS tracking and E-logging system allows Barons to monitor the buses at all times. The system is able to provide an alert to any malfunctions in the vehicle, including loss of tire air pressure, and enables messages to be sent to the driver.

Ridership has continued to grow for Barons' Indiana operations in an effort to produce more operating revenue, which results in making the Section 5311(f) supported service more sustainable. Barons has continued its efforts to improve travel time and decrease the number of needed transfers, which also impacts route sustainability. As can be seen in Table 3, ridership has continued to increase, which is attributable to improved marketing and improved connectivity to the intercity bus network and local transportation services. Barons primarily uses ridership and on-time performance to measure the success of its intercity bus service.

Table 3: Barons Ridership by Route

Route	2014	2015	2016
Fort Wayne to Gary	13,032	13,109	14,299
Liberty to Fort Wayne	20,830	22,164	23,237
Richmond to Gary	11,452	12,678	13,386
Total	45,314	47,951	50,922

The review of Barons vehicle maintenance plan indicated that the carrier has a high standard of preventive maintenance for its fleet, closely following the OEM maintenance requirements. Barons passes roadside inspections at the rate of 99.4 percent. The company has an out of service rate of 0.0 percent for the May 2014 – May 2016 period, directly attributable to its vigorous vehicle inspection program.

With the exception of warranty work, most vehicle maintenance is performed at facilities in Cleveland, Columbus, and Cincinnati, OH, respectively. Barons also works with the Greyhound maintenance department in Indianapolis when minor repairs are needed.

The intercity bus carrier currently offers over 100 “meaningful connections” to the intercity bus network on its three subsidized routes. A meaningful connection is any connection which is made within 2.5 hours of a bus arrival and the following bus departure.

Barons policy is to connect with as many local transit systems as possible. Connections are currently available with:

- ◆ Citilink (Fort Wayne)
- ◆ Franklin County Public Transportation
- ◆ Go Express (Bloomington/Indianapolis)
- ◆ INDYGO(Indianapolis)
- ◆ Marion Transit (City of Marion)
- ◆ Roseview Transit (Richmond)
- ◆ Union County Transit

Barons works closely with local transit agencies to identify good potential ticketing agent locations. Barons currently has ticketing agents in Marion, Goshen, Burns Harbor, Richmond, Fort Wayne, South Bend, Gary, and Indiana polis. The carrier plans to enhance its interlining ticketing with local transit agencies.

Passengers can purchase Barons Bus tickets in the following ways:

- ◆ Over the internet
- ◆ Over the Phone
- ◆ From a Barons Bus ticketing agent
- ◆ Paying cash to the driver

- ◆ Purchasing direct thru any 7-Eleven Store
- ◆ From any ticketing agent across the country
- ◆ Different Online Vendors (example Bus Bud and Wanderu)
- ◆ Kiosks (in near future)

All Barons ticketing agents have access to the Greyhound MAX ticketing system or Transcor, allowing them access to the nationwide bus network. The Transcor Ticketing Solution is used for online ticket sales.

Barons ticket pricing is based on a mileage based pricing index as shown in Table 4. There are discounts for advance purchases, groups, students, families, seniors, military personnel, and veterans. For example, a ticket from Indianapolis to Ft Wayne would be \$25, while a ticket from Indianapolis to Marion is \$20. It should be noted that interlining fares are dependent on Greyhound’s website pricing (<https://www.greyhound.com/>).

Table 4: Barons Mileage-Based Pricing Index

Mileage	Cost Per One-Way Ticket
0-50	\$10
51-75	\$15
76-100	\$20
101-150	\$25
150 and over	\$30

**Table 5: Barons Bus Quarterly Operating Data Report, Dated January 11, 2017
2016 Year End Totals**

DATA ITEM	ANNUAL TOTAL
Passenger Boardings	50,922
Total Vehicle Miles	590,873
Total Revenue Miles	549,296
Revenue Vehicle Hours	13,314
Gallons of Fuel Used	94,539
Number of Road Calls	1
Passenger Revenue	\$822,470
Total Operating Expense	\$2,861,616
Net Operating Expense	\$2,039,146

In 2016 Barons transported nearly 51,000 passengers, while generating over \$820,000 in revenue and incurring over \$2.86 million in expenses over its three subsidized routes (Table 5). This resulted in \$1,019,573 in operating assistance and a like amount of in-kind match, for a total of \$2,039,146 in Section 5311(f) funding through INDOT. The total subsidy per passenger for 2016 was \$40.04.

For 2017, Barons estimates the Section 5311(f) supported service will produce approximately 51,000 riders, resulting in \$787,500 in passenger revenue. The carrier also estimates that \$2,500 will be derived from package express, for a revenue total of \$790,000.

It was determined that Barons has acquired proper FMCSA operating authority, including a FMCSA number and a DOT number. The carrier is also a member of the National Bus Traffic Association (NBTA) which makes all their routes and schedules available online.

Miller Transportation DBA Hoosier Ride

Miller Transportation currently operates the following five (5) routes in Indiana under the Section 5311(f) program:

- ◆ Indianapolis - Elkhart via Kokomo, Peru, Rochester, Plymouth and South Bend
- ◆ Indianapolis – Evansville via Bloomington, Washington, Vincennes and Princeton
- ◆ Indianapolis – Muncie via Indianapolis International Airport, Pendleton, Anderson and Muncie Ball State
- ◆ Louisville, KY – Evansville via Corydon, Dale and Owensboro
- ◆ Richmond – Gary via Fort Wayne and Warsaw

Indianapolis to Elkhart

This route offers daily service to Indianapolis, Kokomo, Peru, Rochester, Plymouth, South Bend and Elkhart. The route, consuming 166 one-way miles in Indiana, provides for approximately 85 possible connections (round trip) to the country's intercity bus network. The route provides approximately 9,600 passenger trips per year.

Indianapolis to Evansville

Daily service is provided on this route that operates from Indianapolis to Evansville with additional stops in Bloomington, Washington, Vincennes and Princeton. The service operates along a route of 156 miles through Indiana, providing 48 connections to destinations across the country. Approximately 12,500 passengers are transported on this route annually.

Indianapolis to Muncie

This daily route serves Indianapolis, Indianapolis International Airport, Pendleton, Anderson, Ball State University and Muncie. The route operates along 193 one-way miles in central Indiana and offers over 140 connections at stops along the route. Annual ridership on the route total about 6,500 passengers.

Louisville to Evansville

This southern Indiana route serves Corydon, Dale and Evansville with 156 one-way miles in Indiana. A total of 50 connections are available along the route. The route provides approximately 6,500 passenger trips per year.

Richmond to Gary

This route, with a length of 132 miles, serves Richmond, Fort Wayne, Warsaw and Gary. There are approximately 100 connections available along the route to the intercity bus network. The route produces about 8,600 annual riders.

For 2018, Miller plans to combine the Indianapolis-Terre Haute and Indianapolis-Evansville routes and will operate via Martinsville, Bloomington, Spencer, Terre Haute, Vincennes, Oakland and Evansville Airport. The Indianapolis - Muncie route will become an Indianapolis - Fort Wayne route operating via Indianapolis International Airport, Pendleton, Anderson and Ball State University in Muncie. The carrier will continue the Indianapolis - Elkhart, Louisville-Evansville via Corydon, Dale and Owensboro, and Richmond - Gary routes as currently operated.

These routes currently provide service to 26 rural locations in the State plus 4 urban areas, covering nearly 632,000 annual miles. The Section 5311(f) supported service will provide an estimated 41,000 annual trips in 2017. Table 6 indicates the ridership on the five subsidized Miller routes for the past three years. Miller has noted that the decline in ridership from 2015 to 2016 can be attributed to the decrease in gas prices and schedule changes. The carrier accounts for service to over 48 percent of Indiana’s intercity bus stop locations.

Table 6: Miller Ridership by Route

Route	2014	2015	2016
Indianapolis - Elkhart	9,602	10,658	9,630
Indianapolis - Evansville	8,773	13,517	12,489
Indianapolis - Muncie	5,702	7,533	6,480
Louisville - Evansville	8,997	10,928	6,449
Richmond - Gary	N/A	5,618	8,592
TOTAL	33,074*	48,254	43,640

*Richmond - Gary route not operated by Miller in 2014.

The carrier has provided intercity bus service supported with Section 5311(f) funds since 2010. The service area is extensive, covering most of the State of Indiana. The majority of Miller’s routes originate from Indianapolis and serve some of the State’s most populous areas while serving outlying rural areas in an effort to connect rural residents with the broader intercity network. The Hoosier Ride service extends as far north as South Bend, as far south as Evansville, and as far east as Richmond.

In 2012 Lakefront Lines was acquired by Coach USA, which was at the time a significant competitor to Greyhound Lines. Subsequently, Greyhound cancelled all bus terminal licenses agreements with Coach USA, which ultimately resulted in termination of intercity bus service between Columbus, OH

and Chicago, IL. Miller began operating both routes between Columbus and Chicago without subsidy throughout 2013.

In 2015 Miller provided 1,345,390 miles of scheduled intercity bus service in Indiana, representing approximately 68 percent of the total scheduled intercity bus service operated by Miller. It should be noted that in Indianapolis, Miller stops at both the downtown Union Station and at the Indianapolis International Airport. Miller is the only carrier that stops at the airport.

Miller Transportation, Inc. is the parent company of Miller Transportation Bus Service, Inc., the largest carrier in Indianapolis since purchasing Southeastern Trailways in 2008. While Miller Transportation maintains its corporate office and maintenance facility in Louisville, KY, Miller Transportation Bus Service, Inc., has its corporate office and maintenance facility in Indianapolis.

Miller conducts all of its vehicle maintenance and inspections in house at either its Indianapolis or Louisville facility. The carrier has detailed written Standard Operating Procedures for preventative maintenance. Miller adheres to a strict preventive maintenance schedule of dally inspections and mileage-based inspections to ensure that each vehicle is operating as safely and efficient as possible. All maintenance activities are tracked and recorded, including preventive maintenance as well as periodic vehicle inspections. The carrier offers a maintenance program which meets and exceeds all manufacturer specifications and those of FMCSA as well.

The carrier has interstate authority from the FMCSA and has its FMCSA number and DOT number posted on all vehicles. Miller also has intrastate authority from the Indiana Department of Revenue.

Miller is a member of the NBTA and has its schedules posted in the Russell's Official National Motorcoach Guide, including the Indiana service funded under Section 5311(f). It should be noted that company representatives have indicated that Miller will begin to migrate away from Russell's Guide and utilize North American Bus Timetables (NABT) to illustrate its routes and schedules. This is consistent with Greyhound's decision to no longer publish its schedules in Russell's Guide after 2017.

The carrier has interlining ticketing agreements with Greyhound and over 50 additional carriers. Hoosier Ride has 33 depots/agencies/stops in Indiana which allows passengers to travel nationwide within a seamless system.

Miller has a marketing plan that utilizes the website www.hoosieride.com for the public to obtain information regarding Indiana service and to remotely purchase and print boarding passes. The website provides links to existing information sites and materials wherever possible. The name of Hoosier Ride for its Indiana service allows Miller to promote the service with a recognizable brand.

The Hoosier Ride website contains the following information:

- ◆ Daily schedule
- ◆ Rates and ticket types

- ◆ Travel planning page describing stops, how to make reservations, how to access service, and instructions for passengers with special mobility needs
- ◆ Service map to allow users to easily identify their origin and destination
- ◆ Schedules and transfer points for connecting intercity bus services
- ◆ On-line booking page that allows users to purchase tickets by credit card

Miller has a service map and informational brochure that are distributed to the public through the following outlets:

- ◆ All Indiana public transit agencies
- ◆ Greyhound Lines
- ◆ Local travel agencies
- ◆ Amtrak
- ◆ Local colleges/universities
- ◆ Other general public transportation providers

The carrier also uses a promotional fare to encourage ridership during off-peak periods. This typically means a 30 to 50 percent discount on tickets sold during the slowest travel months. Current ticket sales locations in Indiana are in Anderson, Bloomington, Kokomo, Princeton, Richmond, Terre Haute and Warsaw.

As noted in Table 7, Miller provided over 43,600 passenger trips in 2016, while generating more than \$960,000 in passenger revenue and incurring over \$2.4 million in expenses on its five subsidized routes. This resulted in an operating deficit of \$1,464,145. However, the subsidy paid to Miller was limited to \$1,329,077 as called for in the approved Section 5311(f) budget. The net cost of service was \$36.91 per passenger, but due to the budget limitation, the actual subsidy was \$32.77 per passenger.

Miller utilizes the mileage-based interlining fare structure depicted in Table 8. Ridership on the carrier's Section 5311(f) supported service has continued to increase. Miller primarily utilizes ridership, revenue, and on-time performance to monitor its intercity bus routes.

Table 9: Frequency of Indiana Intercity Bus Service includes all routes operated by intercity bus carriers in Indiana in 2017, both subsidized and unsubsidized. Note the Table indicates that in 2017 Miller operated the Richmond – Gary route as subsidized. In 2016 the Richmond – Gary route was operated as unsubsidized, while Indianapolis-Terre Haute was operated in subsidized status. Five Miller routes were operated as subsidized in 2016 and 2017.

**Table 7: Miller Transportation Quarterly Operating Data Report, January 31, 2017,
2016 Year End Totals**

DATA ITEM	ANNUAL TOTAL
Passenger Boardings	40,561
Total Vehicle Miles	631,920
Total Revenue Miles	602,640
Revenue Vehicle Hours	15,006
Gallons of Fuel Used	126,385
Number of Road Calls	8
Passenger Revenue	\$937,150
Total Operating Expense	\$2,401,295
Net Operating Expense	\$1,464,145

Table 8: Miller Interlining Mileage-Based Fare Structure

Mileage	Cost Per One-Way Ticket
0-10	\$12
11-20	\$13
21-30	\$15
31 - 40	\$17
41 - 50	\$19
51 - 60	\$22
61 - 70	\$25
71 - 80	\$27
81 - 90	\$31
91 - 100	\$35

City of Marion Transit System

The City of Marion initiated the intercity bus user-side subsidy for residents of Grant County in 1995. The service was initially operated in conjunction with Greyhound, but most recently Barons has become associated with the service. This user-side subsidy program offers fare rebates for up to 50 percent of the actual cost of intercity fares for trips that either initiate or terminate at the Marion stop. The City has contracted with Tran Services Corporation (TSC) to administer the intercity fare rebate program since its inception.

Feeder service to the Barons intercity stop at Marion's SR18/I-69 interchange is provided by the Marion Transit System (MTS) via MTS' Central Marion/Ivy Tech route on weekdays. Barons serves a 24-hour convenience mart located at the SR18/I-69 interchange twice daily (Doc's BP/Amoco). Barons has a reciprocal agreement with Greyhound whereby passengers of Barons and Greyhound may transfer between each other's routes and services. Marion and Grant County residents are

served twice daily by Barons' northbound and southbound routes between Indianapolis to Fort Wayne. Outpatients of Marion's Veterans Administration Hospital as well as students, elderly and low-income individuals use the intercity bus service.

The City of Marion's ICB Fare Rebate (User-Side Subsidy) Program is available to all residents of Grant County and is subsidized by the City of Marion through General Fund appropriations to the Intercity Fare Rebate Program (25% matching funds) as well as 10 percent local matching funds for the City's corresponding modest Intercity Rebate Program Administrative/Marketing contractual agreement with TSC. TSC has been the City of Marion's contractual transit-related grants administrator since 1980 and has administered the Marion Intercity Fare Rebate Program for its duration. To date, over 95 percent of all User-Side Subsidy recipients have been residents of the City of Marion.

TSC has established a separate bank account solely for this program through which all FTA/PMTF/local matching funds payments and disbursements flow, including payments to TSC by the City of Marion and payments of all user side-subsidy (fare rebate) disbursements. This separate bank account is exclusive to the City of Marion's intercity user side-subsidy and program administration.

The intercity fare rebate claim form (user side-subsidy) is available for download on Barons' Marion stopover point website link. Below are the requirements for fare rebate claimants to receive the 50% user side-subsidy:

- ◆ Maximum rebate/side-subsidy is 50% of intercity fare paid (rounded to nearest whole dollar).
- ◆ Claimants must be adults; rebates for minors are paid to adult claimants who accompany minor(s).
- ◆ Must have a mailing address located in Grant County.
- ◆ Passenger receipt issued by intercity carrier must accompany claim form to verify amount expended in advance by passenger or purchaser on passenger's behalf.
- ◆ Claimants for tickets purchased on behalf of a non-related person must provide a written explanation of circumstances/reasons for such rebate claims. Such occurs in cases where individuals or social service agencies located in Grant County purchase intercity tickets for indigent persons lacking the resources to pay for such intercity fares.

TSC's administrative activities/responsibilities include:

- ◆ Receipt, audit and payment of acceptable fare rebate claims; non-acceptable claims rejected;
- ◆ Monthly reconciliation of bank statements; and
- ◆ Preparation of quarterly reports to INDOT-Office of Transit for the approval and submittal by the City of Marion to INDOT-Office of Transit.

At the end of each fiscal year, TSC compiles and submits all FY original documents of TSC's intercity program accounting records to the Marion City Controller's Office for subsequent audit by the State Board of Accounts and retention by the City Controller.

The City of Marion receives approximately \$8,000 annually in Section 5311(f) funds as reimbursement for the user-side subsidies and \$9,600 for TSC's marketing and administrative services. About 100-120 passengers are transported annually through the User-Side Subsidy program. This results in approximately \$146 subsidy per passenger at the higher ridership level. While this is a relatively high subsidy per passenger, the amount of expended Section 5311(f) funds is minimal to provide this transportation option for the citizens of Marion.

INDIANA INTERCITY BUS SERVICE FREQUENCY

Table 9: Frequency of Indiana Intercity Bus Service

Carrier	Route	Daily RTs	5311(f) Status	Indiana Stops
Barons Bus Lines	Liberty – Ft. Wayne	1	Subsidized	Liberty, Richmond, Greenfield, Indianapolis, Marion, Fort Wayne
Barons Bus Lines	Ft. Wayne - Gary	1	Subsidized	Fort Wayne, Ligonier, Goshen, Wakarusa, South Bend, Rolling Prairie, Burns Harbor, Gary
Barons Bus Lines	Richmond - Gary	1	Subsidized	Richmond, Portland, Berne, Decatur, Fort Wayne, New Paris, Nappanee, Wakarusa, La Porte, Michigan City, Burns Harbor, Gary
Burlington Trailways	Indianapolis-Davenport	2	Unsubsidized	Indianapolis
Greyhound Lines	Chicago – Detroit	3	Unsubsidized	Gary, South Bend
Greyhound Lines	St. Louis – Columbus	4	Unsubsidized	Terre Haute, Indianapolis
Greyhound Lines	Chicago – Cincinnati	5	Unsubsidized	Gary, Lafayette, Indianapolis
Greyhound Lines	St. Louis - Nashville	2	Unsubsidized	Evansville
Indian Trails	Chicago – Benton Harbor	2	Unsubsidized	Gary
Megabus	Chicago – Indianapolis	1	Unsubsidized	Indianapolis
Miller Transportation	Elkhart - Indianapolis	1	Subsidized	Elkhart, South Bend, Plymouth, Rochester, Peru, Kokomo, Indianapolis
Miller Transportation	Louisville - Evansville	1	Subsidized	Corydon, Dale, Owensboro, Evansville

Carrier	Route	Daily RTs	5311(f) Status	Indiana Stops
Miller Transportation	Indianapolis - Evansville	1	Subsidized	Indianapolis, Bloomington, Washington, Vincennes, Princeton, Evansville
Miller Transportation	Indianapolis - Muncie	2	Subsidized	Indianapolis, Indianapolis Airport, Pendleton, Anderson, Muncie Ball State, Muncie
Miller Transportation	Richmond - Gary	1	Subsidized	Richmond, Fort Wayne, Warsaw, Gary
Miller Transportation	Indianapolis- Terre Haute	1	Unsubsidized	Indianapolis, Martinsville, Bloomington, Spencer, Terre Haute
Miller Transportation	Chicago - Louisville	1	Unsubsidized	Hammond, Gary, Merrillville, Lafayette, Indianapolis, Bloomington, Bedford, Orleans, Paoli
Miller Transportation	Chicago - Columbus	1	Unsubsidized	Gary, South Bend, Elkhart, Fort Wayne, Richmond

VI. DATA ANALYSIS – INDIANA INTERCITY BUS SERVICE

INTRODUCTION/OVERVIEW

Chapter VI is an analysis of demographic data related to the demand for intercity bus transportation in Indiana. Included in this analysis are mapped visuals of areas and populations that are beyond a 25 mile radius of an intercity bus station or stop. Based on work by the Bureau of Transportation Statistics and the Office of U.S. Secretary of Transportation, a reasonable coverage radius around an intercity bus station is defined as 25 miles. This is the commonly used standard in the intercity bus industry.

Chapter VI is an assessment to what extent the State's existing intercity bus network meets the demand for service across Indiana. Included is an analysis of transit propensity using demographic factors that relate to the overall demand for public transportation. Also considered is the evaluation of intercity bus service coverage with respect to major trip generators that is addressed in Chapter VII. As previously noted, according to research conducted by the Transit Cooperative Research Program (TCRP), these trip generators include colleges and universities, correctional institutions, medical facilities, commercial airports, and military bases.

In 2009 there were twelve ICB routes operating in Indiana, with six of the routes operated by Greyhound. None of these routes were supported with Section 5311(f) funds. At the time, there were only 13 ICB stations/stops in the following municipalities:

- ◆ Anderson;
- ◆ Angola (on-call);
- ◆ Crawfordsville (limited service);
- ◆ Elkhart;
- ◆ Evansville;
- ◆ Fort Wayne;
- ◆ Gary;
- ◆ Hammond;
- ◆ Indianapolis;
- ◆ Lafayette;
- ◆ Marion;
- ◆ South Bend; and
- ◆ Terre Haute.

Today, there are a total of 18 ICB routes operating in the State; four by Greyhound, one by Burlington Trailways, one by Indian Trails, one by Megabus, three by Barons, and eight by Miller. Eight of these routes are subsidized. These 18 routes serve the 46 cities/towns noted in Table 10, which also indicates the carrier(s) serving those cities/towns. Note that there are two additional stops in Indianapolis and Muncie at the Indianapolis International Airport and Ball State University respectively. Angola and Crawfordsville, both with limited service, are the only stations/stops operating in 2009 that are not operated now. With an increase of six routes and 33 served

stations/stops, Indiana has realized a significant increase in intercity bus service since 2009. In 2009 there were 48 cities in the State with a population of over 10,000 persons without ICB service. Today, the number of cities in this category has been reduced to 25.

This increased level of Indiana intercity bus service is largely attributable to the utilization of Section 5311(f) funds to support Barons’ three routes and five routes operated by Miller. The ability to utilize the in-kind local match provision in the Section 5311(f) program certainly encouraged these carriers to provide additional route coverage. It should be noted that Miller has also initiated service along three routes for which they are not currently compensated with FTA funds.

Table 10: Indiana Cities with Intercity Bus Station/Stop

CITY/TOWN	CARRIER(S)
Anderson	Miller
Bedford	Miller
Berne	Barons
Bloomington	Miller
Burns Harbor	Barons
Corydon	Miller
Dale	Miller
Decatur	Barons
Elkhart	Miller
Evansville	Greyhound, Miller
Fort Wayne	Barons, Miller
Gary	Barons, Greyhound, Indian Trails, Miller
Goshen	Barons
Greenfield	Barons
Hammond	Miller
Indianapolis	Barons, Burlington Trailways, Greyhound, Megabus, Miller
Indianapolis Airport	Miller
Kokomo	Miller
La Porte	Barons
Lafayette	Greyhound, Miller
Liberty	Barons
Ligonier	Barons
Marion	Barons
Martinsville	Miller
Merrillville	Miller
Michigan City	Barons
Muncie	Miller
Muncie Ball State	Miller
Nappanee	Barons
New Paris	Barons

CITY/TOWN	CARRIER(S)
Orleans	Miller
Owensboro	Miller
Paoli	Miller
Pendleton	Miller
Peru	Miller
Plymouth	Miller
Portland	Barons
Princeton	Miller
Richmond	Barons, Miller
Rochester	Miller
Rolling Prairie	Barons
South Bend	Barons, Greyhound, Miller
Spencer	Miller
Terre Haute	Greyhound, Miller
Vincennes	Miller
Wakarusa	Barons
Warsaw	Miller
Washington	Miller

IDENTIFY INTERCITY BUS CORRIDORS AND POPULATIONS SERVED

While intercity bus service is used by a cross section of the population, the 2002 TCRP Report 79, “Effective Approaches to Meeting Rural Intercity Bus Transportation Needs,” described the following population characteristics of individuals more likely to use intercity bus services:

- ◆ Youth (18-24 years old): Often these are enlisted military personnel or college students with limited budgets, no access to an automobile, and living or stationed far from home;
- ◆ Elderly (60 and above): Frequently, the elderly have a diminished ability or desire to drive and may be more likely to need to visit distant medical facilities on a regular basis;
- ◆ Persons living below the poverty level: Persons who are less likely to own a car, or if they do, the car may not be suitable for long trips;
- ◆ Persons over 16 with a disability: A group that may be reliant on accessible local transit services and, therefore, may also consider public transit options to make a long trip; and
- ◆ Autoless households: Persons who have to rely on alternative means of transportation.

Exhibit 12 is a map depicting the State’s total population. The higher populated areas that are greater than 25 miles from an intercity bus station/stop are located near urban areas including north and south of Lafayette, south of Terre Haute, south-southeast of Indianapolis along I-65 and US 421, and northeast-southwest of Fort Wayne.

Exhibit 13 illustrates the areas of Indiana with the highest percentage of minority population. With the exception of the areas north and west of Lafayette, the higher concentrations of minority population are located in or near urban areas and within 25 miles of an intercity bus station or stop.

Exhibit 14 depicts the areas of the State with the higher number of individuals living below the poverty level. This is a demographic that appears to be equally concentrated across the State. While many of these individuals live within a 25-mile radius of an intercity bus stop, there are many living outside this boundary. These areas basically mirror those areas noted above of the higher populated areas that are outside the 25-mile radius of an intercity bus station/stop.

Exhibit 15 illustrates that the areas east of Martinsville along I-65, the area outside of the 25-mile radius of the Lafayette ICB station and the northeast corner of the State along I-69 represent the most significant areas of the State with households lacking a vehicle, similar to the map depicting individuals living below the poverty level outside of the 25-mile radius of an intercity bus station/stop.

Exhibit 12: High Total Population Block Groups

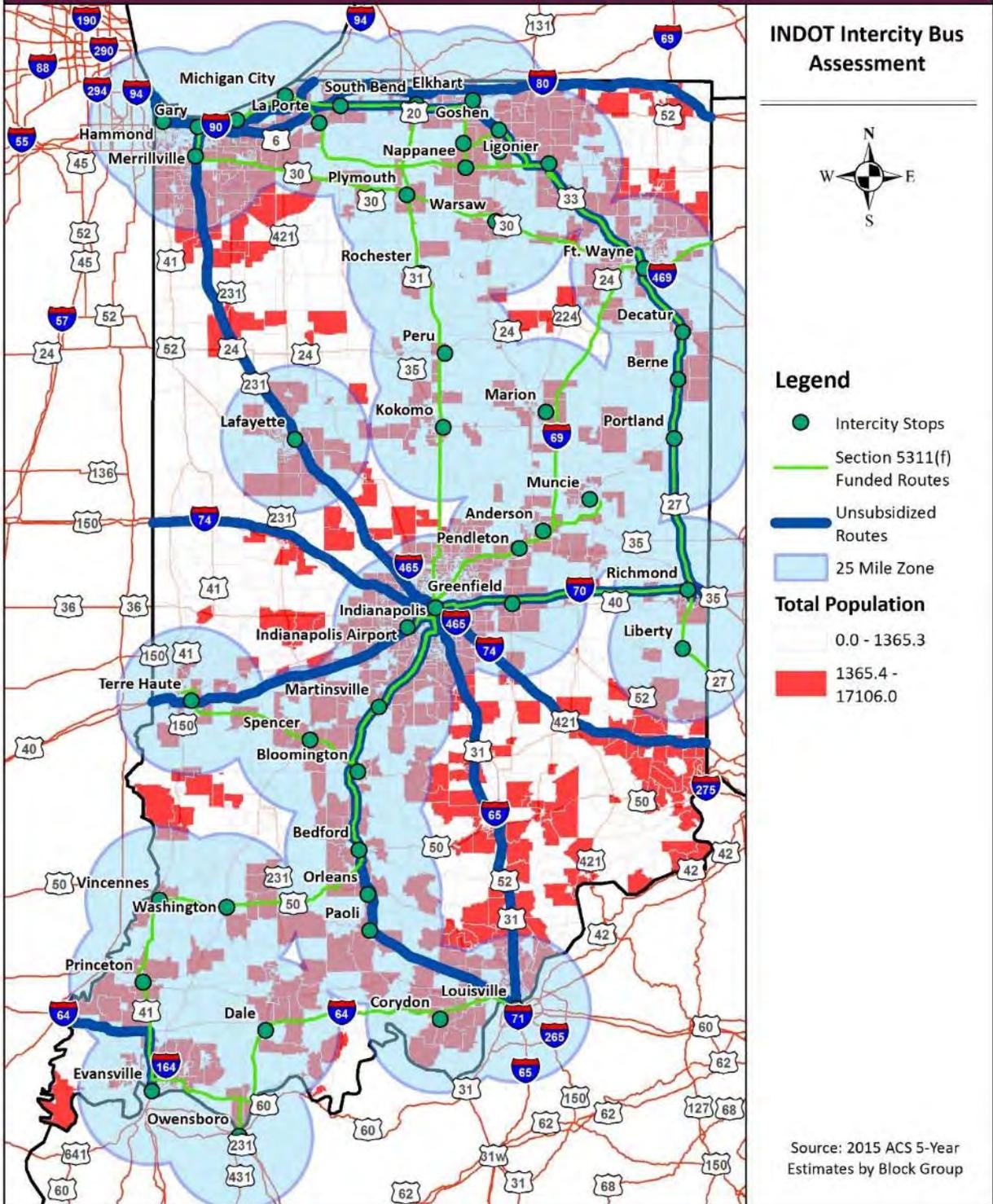


Exhibit 13: High Percentages of Minority Population

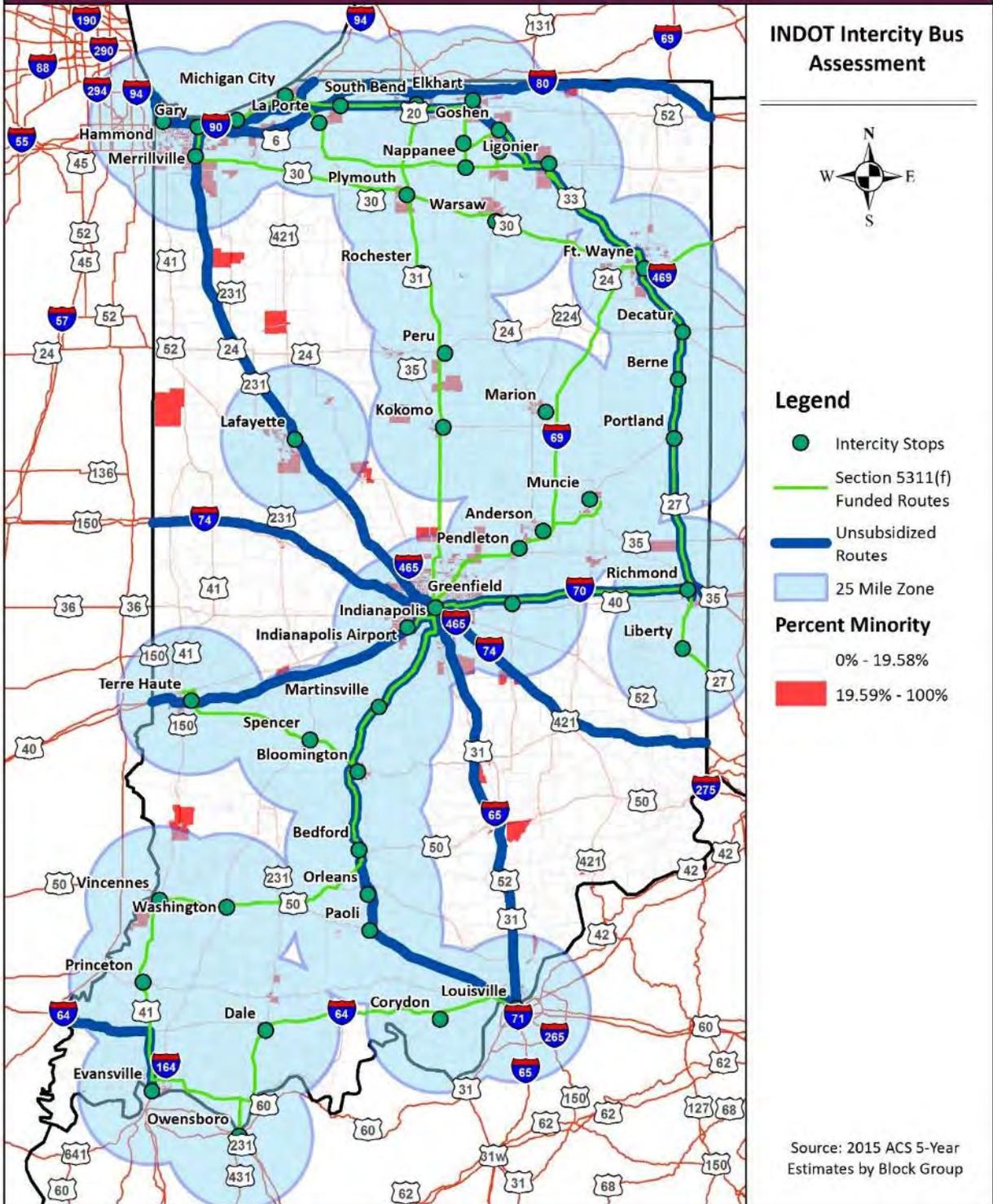


Exhibit 14: High Percentages of Population in Poverty

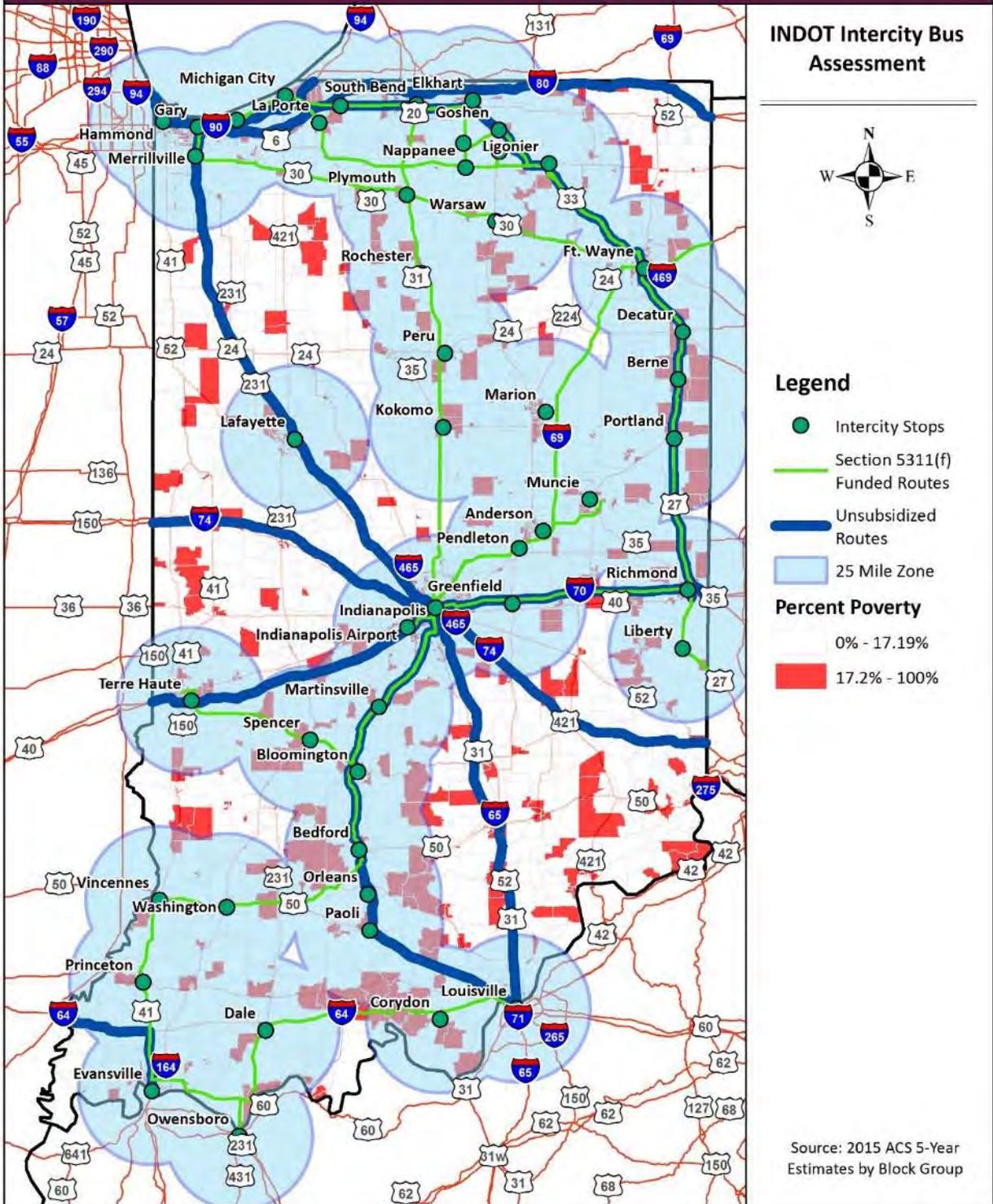
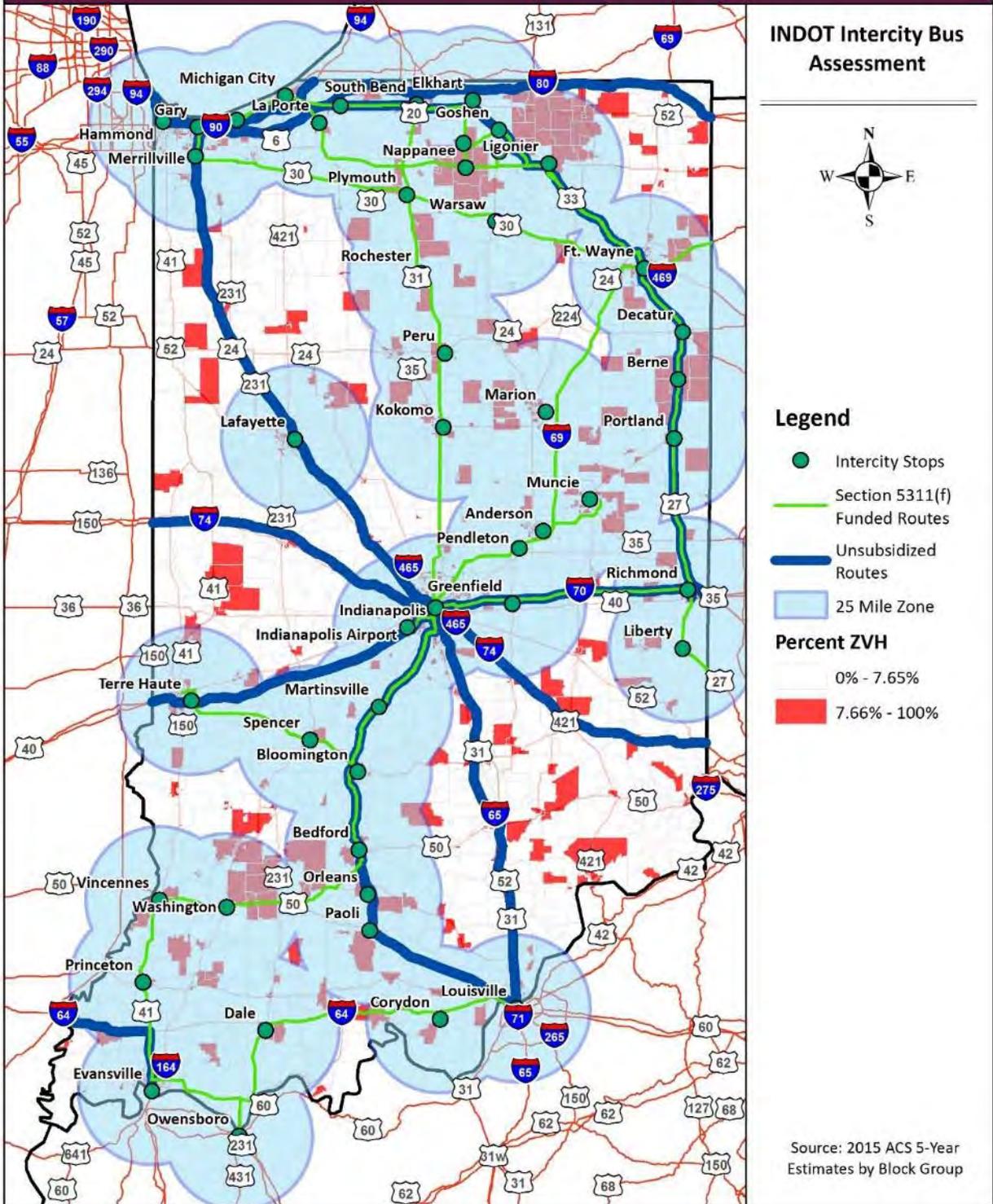


Exhibit 15: High Percentages of Zero Vehicle Households



IDENTIFY POPULATION PROXIMITY TO INTERCITY BUS STATIONS OR STOPS

Spatial analysis of the Indiana intercity bus network indicates that there is good overall coverage across the State. All of the State's 20 most populous cities are within 25 miles of an intercity bus station/stop. However, only 25 of 60 Indiana cities with over 10,000 population have an intercity bus station/stop in their municipality. Approximately 87 percent of the State's population is within 25 miles of an intercity bus station/stop. Table 11 exhibits the Indiana cities with a population of at least 10,000 that have no intercity bus station/stop and are greater than 25 miles from an intercity bus station/stop

The areas of the State with the greatest population without intercity bus coverage exists east of Martinsville along I-65 and the area outside of the 25 mile radius of the Lafayette intercity bus station.

Table 11: Indiana Cities Greater Than 10,000 Population With No Intercity Bus Station/Stop and Greater Than 25 Miles From A Station/Stop

City/Town	Population ³	Bus Station/Stop	> 25 miles From Station
Indianapolis	855,164	Yes	No
Fort Wayne	264,488	Yes	No
Evansville	119,477	Yes	No
South Bend	101,735	Yes	No
Carmel	91,065	No	No
Fishers	90,127	No	No
Bloomington	84,465	Yes	No
Hammond	77,134	Yes	No
Gary	76,424	Yes	No
Lafayette	71,782	Yes	No
Muncie	69,010	Yes	No
Terre Haute	60,852	Yes	No
Noblesville	60,183	No	No
Kokomo	57,799	Yes	No
Greenwood	56,545	No	No
Anderson	55,130	Yes	No
Elkhart	52,221	Yes	No
Mishawaka	48,679	No	No
Lawrence	47,866	No	No

³ *"Annual Estimates of the Resident Population for Incorporated Places: April 1, 2010 to July 1, 2013". United States Census Bureau. Archived from [the original](#) on 22 May 2014. Retrieved 3 December 2014.*

City/Town	Population ³	Bus Station/Stop	> 25 miles From Station
Jeffersonville	47,124	No	No
Columbus	46,850	No	Yes
West Lafayette	45,872	No	No
Westfield	37,221	No	No
New Albany	36,670	No	No
Richmond	35,664	Yes	No
Portage	36,505	No	No
Valparaiso	33,104	No	No
Goshen	33,034	Yes	No
Michigan City	31,157	Yes	No
Crown Point	29,176	No	No
Marion	28,592	Yes	No
East Chicago	28,418	No	No
Hobart	28,248	No	No
Franklin	24,867	No	Yes
La Porte	21,732	Yes	No
Greenfield	21,709	Yes	No
Seymour	19,384	No	Yes
Shelbyville	19,048	No	Yes
Vincennes	17,924	Yes	No
Logansport	17,780	No	No
New Castle	17,426	No	No
Huntington	17,176	No	Yes
Lebanon	16,098	No	Yes
Crawfordsville	16,001	No	Yes
Frankfort	15,951	No	Yes
Jasper	15,503	No	No
New Haven	15,384	No	No
Beech Grove	14,740	No	No
Warsaw	14,662	Yes	Yes
Bedford	13,341	Yes	No
Auburn	13,052	No	Yes
Washington	12,089	Yes	No
Madison	11,985	No	Yes
Lake Station	11,952	No	No
Connersville	12,949	No	No
Greensburg	11,859	No	Yes
Martinsville	11,669	Yes	No
Peru	11,061	Yes	No
Greencastle	10,508	No	Yes
Wabash	10,253	No	No

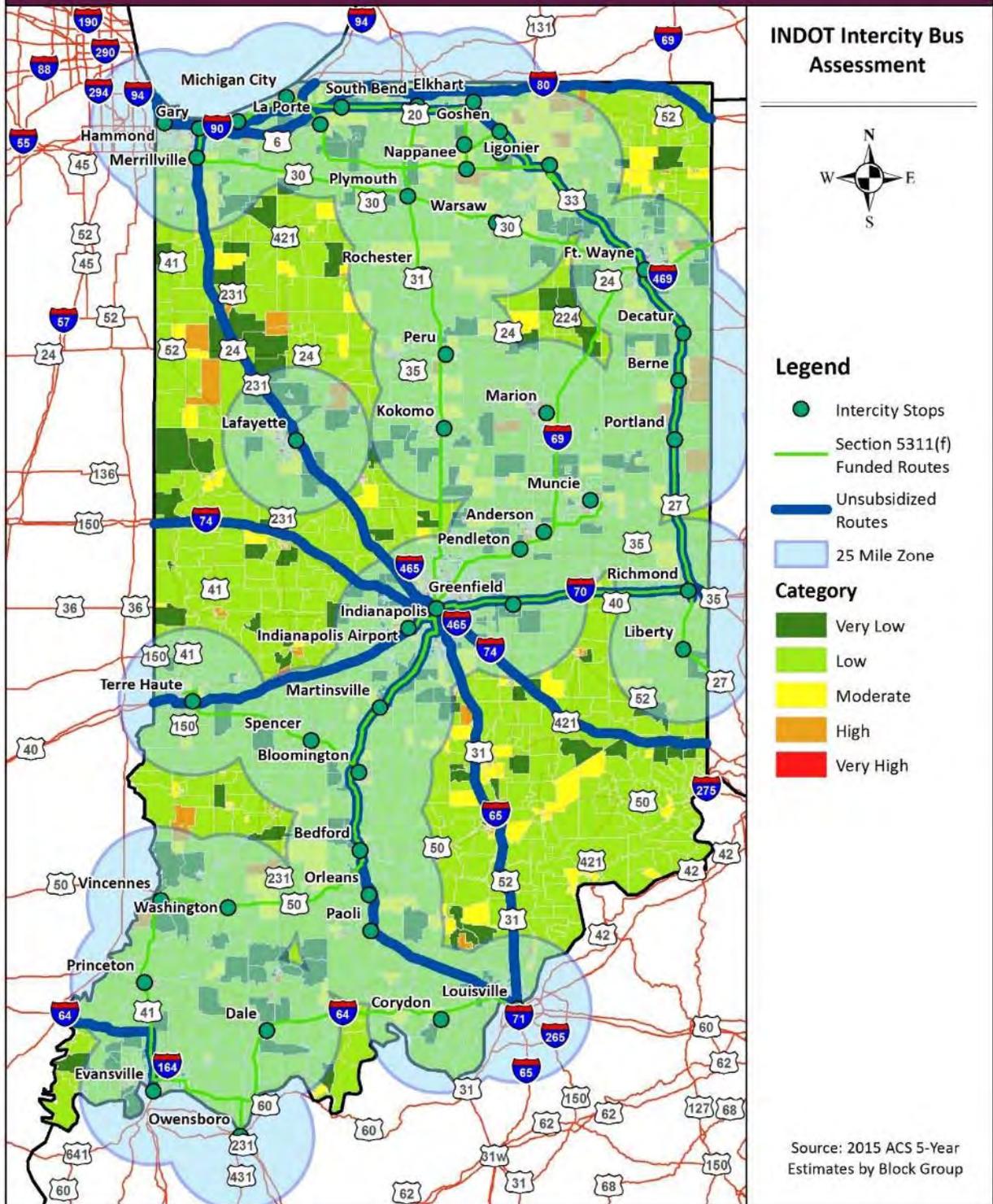
VII. DEMAND FOR INTERCITY BUS (ICB) SERVICE

Chapter VII is an assessment of the extent the State's existing intercity bus network meets the demand for service across Indiana. Included is an analysis of transit propensity using demographic factors that relate to the overall demand for public transportation. Also considered is the evaluation of intercity bus service coverage with respect to major trip generators for the intercity bus industry. As previously noted, according to Transit Cooperative Research Program (TCRP) research, these trip generators include colleges and universities, correctional institutions, medical facilities, commercial airports, and military bases.

IDENTIFY DEMOGRAPHIC FACTORS THAT REFLECT OVERALL NEED FOR ICB SERVICES

Exhibit 16 is a map depicting transit propensity across the State. Determination of transit propensity was accomplished by taking into consideration minority population, zero vehicle households, and population below poverty. As previously noted in the report, these are population characteristics that reflect the likelihood of individuals using ICB services.

Exhibit 16: Transit Propensity



Each block group was assigned a score based on those three demographic factors. For example, if a census block group had a high percentage of minorities, zero vehicle households, and population below poverty, that block group received a score of 9. High percentages received a score of 3, average scored a 2, and low received a 1 for each factor. The total score for each block group was calculated to determine each block group's transit propensity score. A Very Low score received a total of 3 points, Low 4-5 points, Moderate 6 points, High 7-8 points, and Very High received a score of 9.

A calculation was made of the total Indiana population living further than 25 miles from an intercity bus station. As a result, it is determined that approximately 827,950 persons in the State are outside the intercity bus service area. This represents approximately 12.6 percent of the State's total population of 6,568,645, indicating that from a population perspective, the State is well covered by intercity bus service. Based on work by the Bureau of Transportation Statistics and the Office of U.S. Secretary of Transportation, a reasonable coverage radius around an ICB station is defined as 25 miles.

Based on this spatial analysis, the census block groups in Indiana with the greatest demand for intercity bus service that are beyond 25 miles of an intercity bus station/stop, are primarily located in four (4) areas of the State:

- ◆ North/northwest of Lafayette along I-65
- ◆ North of Vincennes along U.S. 41
- ◆ East of Martinsville along I-65
- ◆ East of Paoli and south of IN Hwy. 56

It should be noted that there are no areas in Indiana with a very high transit propensity score outside of the 25-mile radius of an ICB station.

INTERCITY BUS TRIP GENERATORS

As noted earlier, research has concluded that colleges and universities, correctional institutions, medical facilities, commercial airports, and military bases represent the greatest generators of intercity bus service demand. While individual car ownership has had a major impact on the decline of intercity bus ridership, these institutions continue to generate the greatest number of intercity bus passengers. Tables 12-16 include a list of these trip generators by category, indicating their proximity to an intercity bus station. Exhibits 17-21 map the proximity of these major trip generators to an intercity bus station/stop. Following is a summary of the possible impact these trip generators may have on intercity bus demand.

Colleges/Universities

Colleges and universities generate intercity bus trips primarily from the undergraduate student population that live on campus. These trips occur mostly during the beginning and end of school breaks and holidays. The extent to which students may use intercity bus service as a means to make

trips to and from home greatly depends on the distance from the student’s home to the closest bus station and the distance from the college or university to the nearest bus station. While the average distance from the home of the typical Indiana college student to the nearest bus station cannot be determined, the spatial relationship of the State’s colleges and universities to intercity bus stations/stops can be determined.

Table 12 lists the colleges and universities in Indiana and their proximity to the nearest bus station. Exhibit 17 maps the location of the campuses. There are 52, four-year colleges spread over 64 campuses located throughout the State. Of the total, only eight colleges and universities are not within 10 miles of an intercity bus station but within 25 miles of an intercity bus station.

There are seven colleges and universities located greater than 25 miles from an intercity bus stop. These include:

- ◆ DePauw University
- ◆ Franklin College
- ◆ Hanover College
- ◆ Huntington University
- ◆ Saint Joseph's College
- ◆ Trine University
- ◆ Wabash College

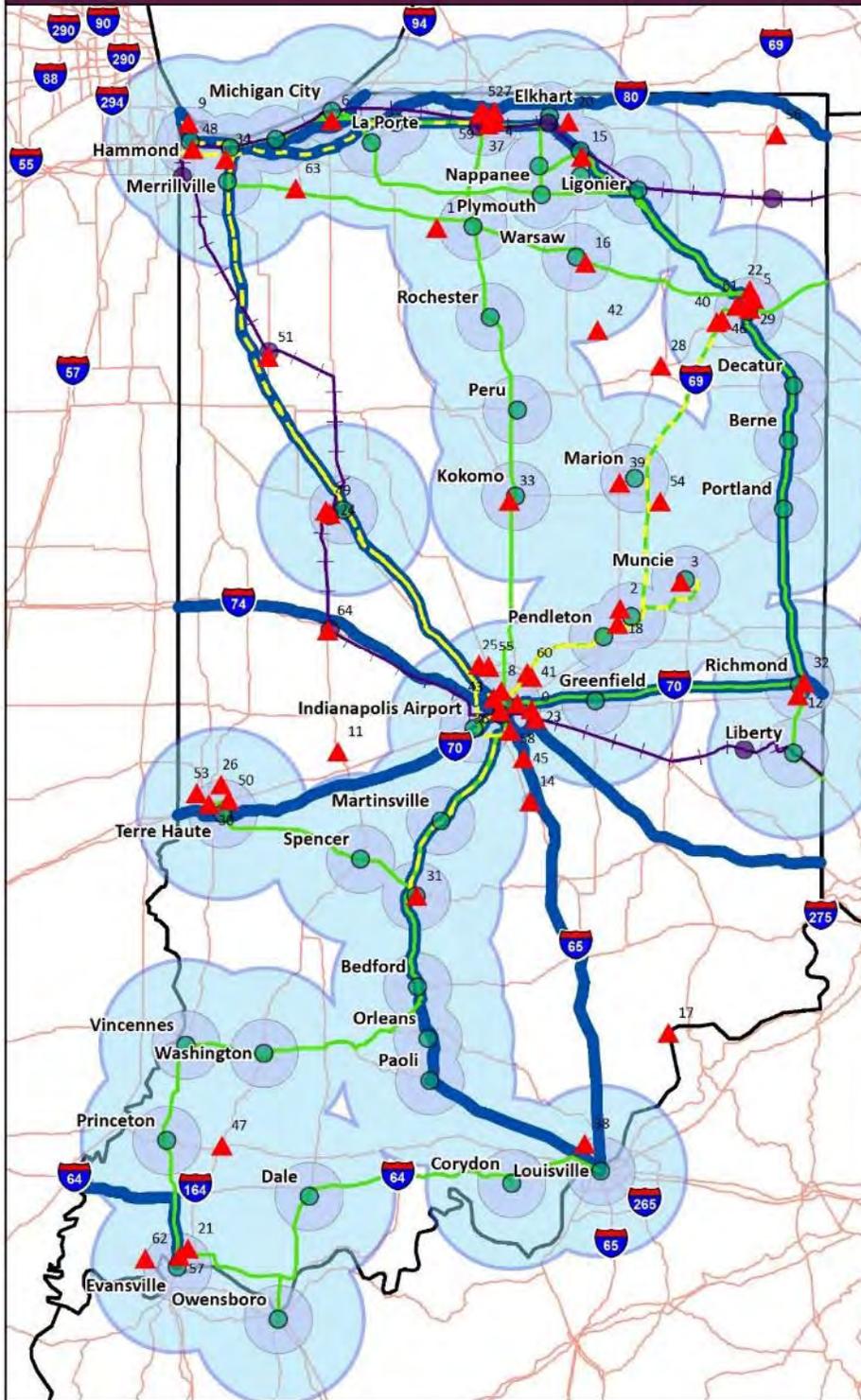
Table 12: Indiana Colleges and Universities

Map Reference	College	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
1	Ancilla College	Plymouth		X	
2	Anderson University	Anderson	X	X	
3	Ball State University	Muncie	X	X	
4	Bethel College Mishawaka	Mishawaka	X	X	
5	Brown Mackie College Fort Wayne	Fort Wayne	X	X	
6	Brown Mackie College Michigan City	Michigan City	X	X	
7	Brown Mackie College South Bend	South Bend	X	X	
8	Butler University	Indianapolis	X	X	
9	Calumet College of Saint Joseph	Whiting	X	X	
10	Crossroads Bible College	Indianapolis	X	X	
11	DePauw University	Greencastle			X
12	Earlham College	Richmond	X	X	
13	Fortis College Indianapolis	Indianapolis		X	
14	Franklin College	Franklin			X

Map Reference	College	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
15	Goshen College	Goshen	X	X	
16	Grace College and Theological Seminary	Winona Lake	X	X	
17	Hanover College	Hanover			X
18	Harrison College Anderson	Anderson	X	X	
19	Harrison College Columbus	Grove City			
20	Harrison College Elkhart	Elkhart	X	X	
21	Harrison College Evansville	Evansville	X	X	
22	Harrison College Fort Wayne	Fort Wayne	X	X	
23	Harrison College Indianapolis East	Indianapolis	X	X	
24	Harrison College Lafayette	Lafayette	X	X	
25	Harrison College Northwest	Indianapolis		X	
26	Harrison College Terre haute	Terre Haute	X	X	
27	Holy Cross College	Notre Dame	X	X	
28	Huntington University	Huntington			X
29	Indiana Institute of Technology	Fort Wayne	X	X	
30	Indiana State University	Terre Haute	X	X	
31	Indiana University Bloomington	Bloomington	X	X	
32	Indiana University East	Richmond	X	X	
33	Indiana University Kokomo	Kokomo	X	X	
34	Indiana University Northwest	Gary	X	X	
35	Indiana University Purdue University Fort Wayne	Fort Wayne	X	X	
36	Indiana University Purdue University Indianapolis	Indianapolis	X	X	
37	Indiana University South Bend	South Bend	X	X	
38	Indiana University Southeast	New Albany		X	
39	Indiana Wesleyan University	Marion	X	X	
40	International Business College	Fort Wayne	X	X	
41	International Business College Indianapolis	Indianapolis		X	
42	Manchester College	North Manchester		X	
43	Marian University	Indianapolis	X	X	
44	Martin University	Indianapolis	X	X	
45	MedTech College	Greenwood		X	
46	MedTech College Ft. Wayne Campus	Fort Wayne	X	X	
47	Oakland City University	Oakland City		X	

Map Reference	College	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
48	Purdue University Northwest	Hammond	X	X	
49	Purdue University Main Campus	West Lafayette	X	X	
50	Rose Hulman Institute of Technology	Terre Haute	X	X	
51	Saint Joseph's College	Rensselaer			X
52	Saint Mary's College	Notre Dame	X	X	
53	Saint Mary of the Woods College	West Terre Haute	X	X	
54	Taylor University	Upland	X	X	
55	The Art Institute of Indianapolis	Indianapolis		X	
56	Trine University	Angola			X
57	University of Evansville	Evansville	X	X	
58	University of Indianapolis	Indianapolis	X	X	
59	University of Notre Dame	Notre Dame	X	X	
60	University of Phoenix Indianapolis Campus	Indianapolis		X	
61	University of Saint Francis Fort Wayne	Fort Wayne	X	X	
62	University of Southern Indiana	Evansville	X	X	
63	Valparaiso University	Valparaiso		X	
64	Wabash College	Crawfordsville			X

Exhibit 17: Indiana Colleges and Universities



INDOT Intercity Bus Assessment



Legend

- ▲ College/ University
- Amtrak Stops
- Intercity Stops
- Shuttle Services
- +--- Amtrak Routes
- Section 5311(f) Funded Routes
- Unsubsidized Routes
- 10 Mile Zone
- 25 Mile Zone

Correctional Facilities

Correctional facilities generate a relatively modest demand for intercity bus service from relatives who take the bus for visitation with inmates and service needed when inmates are released from the facilities. In the case of State or Federal facilities, both types of trips may involve intercity travel, as inmate populations may not typically be local residents. In planning rural intercity bus routes, the presence of a state or federal correctional facility may warrant a stop near it.

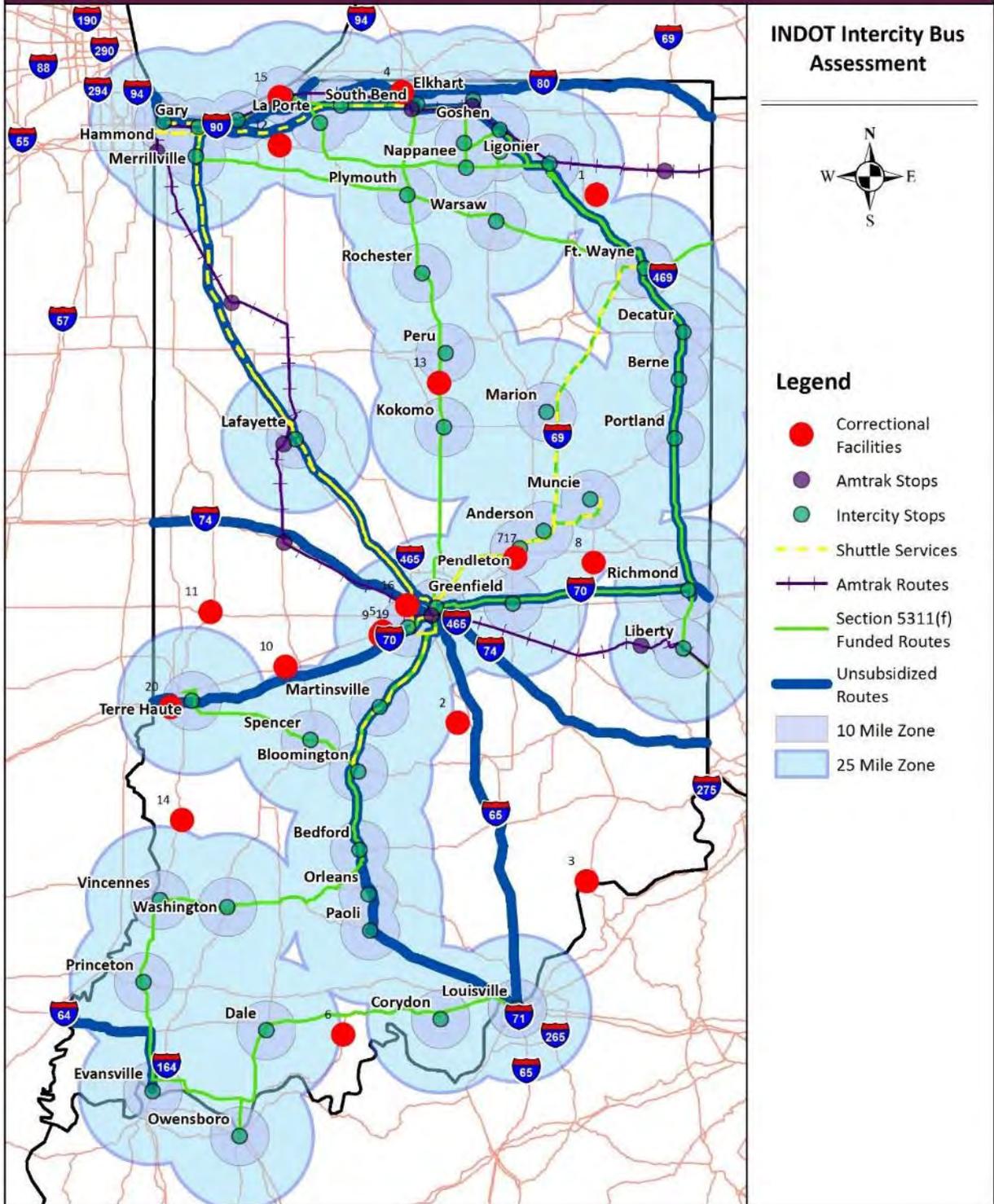
Table 13 lists the correctional facilities in Indiana with their proximity to the nearest intercity bus station. Exhibit 18 includes a map showing the locations of 19 State and/or Federal correctional facilities in Indiana. Of these, six are beyond 25 miles of an intercity bus station. These include:

- ◆ Edinburgh Correctional Facility
- ◆ Madison Correctional Facility (Female)
- ◆ Branchville Correctional Facility
- ◆ Putnamville Correctional Facility
- ◆ Rockville Correctional Facility (Female)
- ◆ Wabash Valley Correctional Facility

Table 13: Indiana Correctional Facilities

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
1	Chain O'Lakes Correctional Facility	Albion		X	
2	Edinburgh Correctional Facility	Edinburgh			X
3	Madison Correctional Facility (Female)	Madison			X
4	South Bend Community Re-Entry Center	South Bend	X	X	
5	Heritage Trail Correctional Facility	Plainfield	X	X	
6	Branchville Correctional Facility	Branchville			X
7	Correctional Industrial Facility	Pendleton	X	X	
8	New Castle Correctional Facility	New Castle		X	
9	Plainfield Correctional Facility	Plainfield	X	X	
10	Putnamville Correctional Facility	Greencastle			X
11	Rockville Correctional Facility (Female)	Rockville			X
12	Westville Correctional Facility	Westville		X	
13	Miami Correctional Facility	Bunker Hill		X	
14	Wabash Valley Correctional Facility	Carlisle			X
15	Indiana State Prison	Michigan City	X	X	
16	Indiana Women's Prison	Indianapolis	X	X	
17	Pendleton Correctional Facility	Pendleton	X	X	
19	Reception Diagnostic Center (Male)	Plainfield	X	X	
20	Federal Correctional Institution, Terre Haute	Terre Haute	X	X	

Exhibit 18: Indiana Correctional Facilities



Military Bases

Some military bases can be significant destinations on intercity bus routes. Military bases serve as a generator of intercity bus trips primarily due to many military personnel not having access to a private vehicle while living on base. They may have to travel long distances to return home and typically funds are limited. There are 61 bases/locations identified in Indiana.

It should be noted that an industry representative stated that despite the increase in individual car ownership by military personnel, the carrier "transports large numbers of military personnel on the major peak travel periods of the year, including Thanksgiving, Christmas and other holidays."

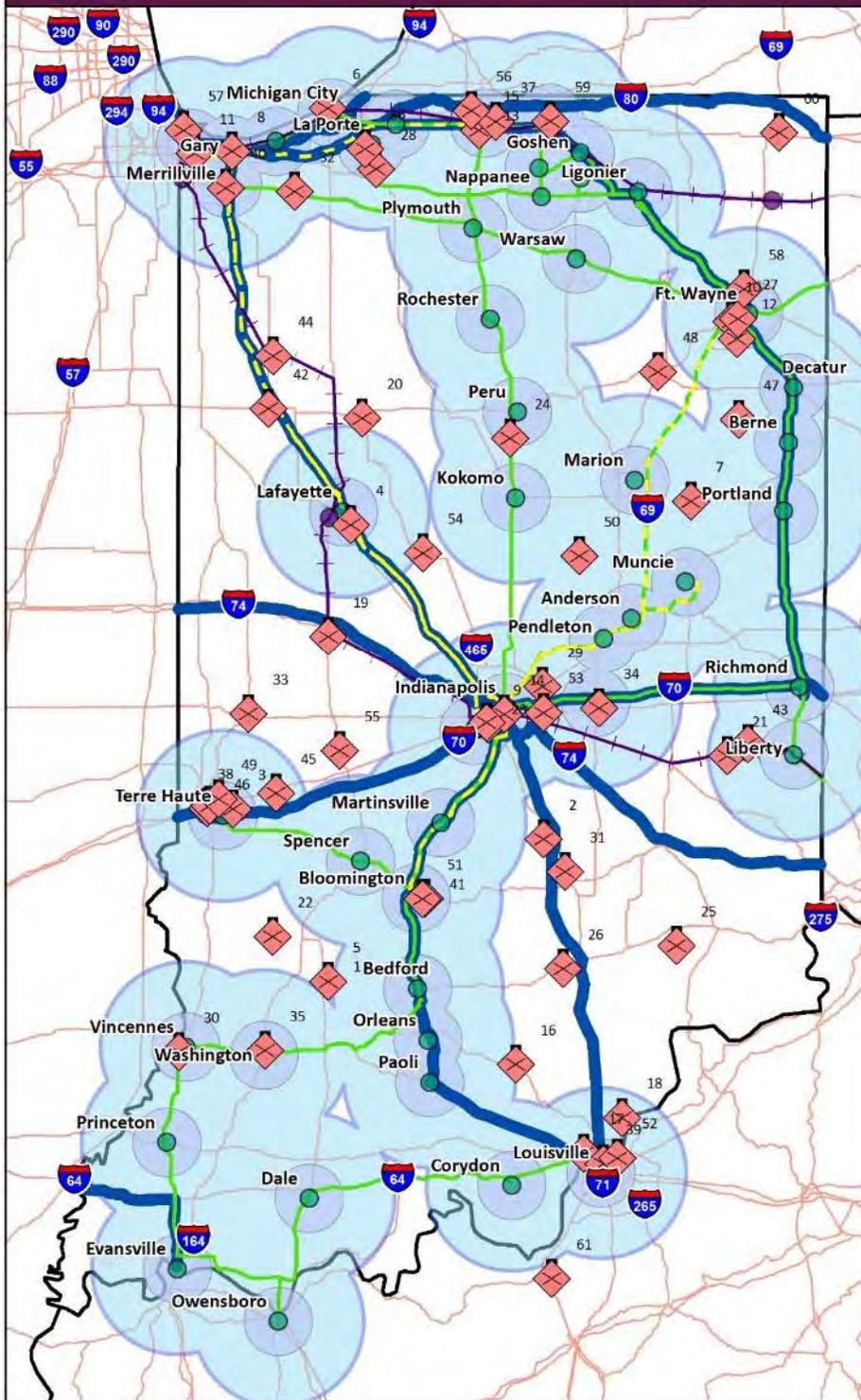
Table 14 lists the military bases/locations in Indiana. As shown, 21 bases/locations are located further than 25 miles from an intercity bus stop. Exhibit 19 includes a map showing the location of these military bases.

Table 14: Indiana Military Bases/Locations

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
1.	Naval Surface Warfare Center - Crane Division	Crane			X
2.	Indiana National Guard	Edinburgh			X
3.	Indiana National Guard	Terre Haute	X	X	
4.	Indiana Army National Guard	Lafayette	X	X	
5.	Crane Army Ammunition Activity	Crane			X
6.	Indiana Army National Guard	Michigan City	X	X	
7.	Indiana National Guard	Hartford City		X	
8.	Indiana National Guard	Gary	X	X	
9.	Indiana National Guard	Indianapolis	X	X	
10.	US Army Department	Fort Wayne	X	X	
11.	Indiana Army National Guard	Hammond	X	X	
12.	Indiana National Guard	Fort Wayne	X	X	
13.	US Marine Corps Reserve	South Bend	X	X	
14.	US Marine Corps	Indianapolis	X	X	
15.	State of Indiana Army National Guard	South Bend	X	X	
16.	Salem Armory	Salem			X
17.	US Army	New Albany		X	
18.	US Army	Charlestown		X	
19.	National Guard Recruiting	Crawfordsville			X
20.	Indiana National Guard	Monticello			X
21.	Grissom Aeroplex	Bunker Hill		X	
22.	Indiana National Guard	Linton			X
23.	Indiana Army National Guard	Indianapolis	X	X	

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
24.	US Marine Reserve Center	Peru	X	X	
25.	Indiana National Guard	Holton			X
26.	Indiana National Guard	Seymour			X
27.	US Army Reserve	Fort Wayne	X	X	
28.	US Army Reserve	Kingsbury	X	X	
29.	US Army Reserve	Indianapolis		X	
30.	Indiana Army National Guard	Vincennes	X	X	
31.	Indiana National Guard	Columbus			X
32.	Indiana National Guard	Valparaiso		X	
33.	Indiana National Guard	Rockville			X
34.	Indiana National Guard	Greenfield	X	X	
35.	Indiana National Guard	Washington	X	X	
36.	Indiana National Guard	La Porte	X	X	
37.	Indiana Army National Guard	Mishawaka	X	X	
38.	US Defense Department	Terre Haute	X	X	
39.	US Army Department	Jeffersonville	X	X	
40.	US Army Reserve	Merrillville	X	X	
41.	Indiana Army National Guard	Bloomington	X	X	
42.	Indiana National Guard	Remington			X
43.	Indiana National Guard	Connersville		X	
44.	Indiana National Guard	Rensselaer			X
45.	National Guard Armory	Brazil		X	
46.	Indiana National Guard	Terre Haute	X	X	
47.	Indiana National Guard	Bluffton		X	
48.	Indiana National Guard	Huntington			X
49.	Indiana National Guard	Terre Haute	X	X	
50.	Indiana National Guard	Elwood		X	
51.	US Army Reserve Center	Bloomington	X	X	
52.	US Coast Guard-Auxiliary	Jeffersonville	X	X	
53.	Air Force Reserve	Indianapolis		X	
54.	Indiana National Guard	Frankfort			X
55.	Indiana National Guard	Greencastle,			X
56.	US Army Reserve	South Bend	X	X	
57.	US Defense Logistics Agency	Hammond	X	X	
58.	US Military Department	Fort Wayne	X	X	
59.	Elkhart Civil Air Patrol	Elkhart	X	X	
60.	National Guard Armory	Angola			X
61.	US Army Department	Fort Knox			X

Exhibit 19: Indiana Military Bases



INDOT Intercity Bus Assessment



Legend

- Military Bases
- Amtrak Stops
- Intercity Stops
- Shuttle Services
- Amtrak Routes
- Section 5311(f) Funded Routes
- Unsubsidized Routes
- 10 Mile Zone
- 25 Mile Zone

Medical Facilities

While not considered a major generator of intercity bus trips, hospitals can attract intercity bus passengers who have extended stays or family or friends that are visiting someone with an extended stay. This normally requires that a connection be made between the intercity bus station and the hospital via local transit or taxi service. Reasonably good connections are needed to consider the hospital adequately served even if it is within ten miles of the intercity bus station.

There are 151 identified major medical facilities that are located throughout the State. Of these, 81 are located within 10 miles of an intercity bus station, with only 23 being located farther than 25 miles from a stop.

Table 15 lists these medical facilities and their proximity to intercity bus stations, while Exhibit 20 includes a map of these locations.

Table 15: Indiana Medical Facilities

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
1.	Adams Memorial Hospital	Decatur	X	X	
2.	Bedford Regional Medical Center	Bedford	X	X	
3.	BHC Valle Vista Hospital	Greenwood		X	
4.	Blackford Community Hospital	Hartford City		X	
5.	Bloomington Hospital of Orange County	Paoli	X	X	
6.	Bloomington Meadows Hospital	Bloomington	X	X	
7.	Bluffton Regional Medical Center	Bluffton		X	
8.	Cameron Memorial Community Hospital	Angola			X
9.	Clark Memorial Hospital	Jeffersonville	X	X	
10.	Columbus Regional Health	Columbus			X
11.	Community Hospital	Munster	X	X	
12.	Community Hospital of Anderson and Madison County	Anderson	X	X	
13.	Community Hospital of Bremen	Bremen		X	
14.	Community Hospital East	Indianapolis	X	X	
15.	Community Hospital North	Indianapolis		X	
16.	Community Hospital South	Indianapolis		X	
17.	Community Howard Regional Health	Kokomo	X	X	
18.	Community Mental Health Center	Lawrenceburg			X
19.	Daviess Community Hospital	Washington	X	X	
20.	Deaconess Cross Pointe Center	Evansville	X	X	
21.	Deaconess Gateway Hospital	Newburgh	X	X	
22.	Deaconess Hospital	Evansville	X	X	
23.	Dearborn County Hospital	Lawrenceburg			X
24.	Decatur County Memorial Hospital	Greensburg			X

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
25.	DeKalb Memorial Hospital	Auburn			X
26.	Dukes Memorial Hospital	Peru	X	X	
27.	Dunn Memorial Hospital	Bedford	X	X	
28.	Dupont Hospital	Fort Wayne	X	X	
29.	Elkhart General Hospital	Elkhart	X	X	
30.	Evansville Psychiatric Children's Center	Evansville	X	X	
31.	Fairbanks Hospital	Indianapolis		X	
32.	Fayette Memorial Hospital Association	Connersville		X	
33.	Floyd Memorial Hospital and Health Services	New Albany		X	
34.	Four County Counseling Center	Logansport		X	
35.	Franciscan Health Carmel	Carmel		X	
36.	Franciscan Health Crawfordsville	Crawfordsville			X
37.	Franciscan Health Crown Point	Crown Point	X	X	
38.	Franciscan Health Dyer	Dyer		X	
39.	Franciscan Health Hammond	Hammond	X	X	
40.	Franciscan Health Indianapolis	Indianapolis		X	
41.	Franciscan Health Lafayette Central	Lafayette	X	X	
42.	Franciscan Health Lafayette East	Lafayette	X	X	
43.	Franciscan Health Michigan City	Michigan City	X	X	
44.	Franciscan Health Mooresville	Mooresville		X	
45.	Franciscan Health Munster	Munster	X	X	
46.	Franciscan Health Rensselaer	Rensselaer			X
47.	Gibson General Hospital	Princeton	X	X	
48.	Greene County General Hospital	Linton			X
49.	Good Samaritan Hospital	Vincennes	X	X	
50.	Goshen General Hospital	Goshen	X	X	
51.	Grant-Blackford Mental Health	Marion	X	X	
52.	Hamilton Center	Terre Haute	X	X	
53.	Hancock Regional Hospital	Greenfield	X	X	
54.	Harrison County Hospital	Corydon	X	X	
55.	HealthSouth Deaconess Rehabilitation Hospital	Evansville	X	X	
56.	HealthSouth Hospital of Terre Haute	Terre Haute	X	X	
57.	Heart Center of Indiana	Indianapolis		X	
58.	Hendricks Regional Health	Danville		X	
59.	Henry County Memorial Hospital	New Castle		X	
60.	Indiana Heart Hospital	Indianapolis	X	X	
61.	Indiana Orthopedic Hospital	Indianapolis	X	X	
62.	Indiana University Health Arnett Hospital	Lafayette	X	X	
63.	Indiana University Health Ball Memorial Hospital	Muncie	X	X	

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
64.	Indiana University Health Bloomington Hospital	Bloomington	X	X	
65.	Indiana University Health La Porte Hospital	La Porte	X	X	
66.	Indiana University Health Methodist Hospital	Indianapolis	X	X	
67.	Indiana University Health North Hospital	Carmel		X	
68.	Indiana University Health Starke Hospital	Knox		X	
69.	Indiana University Health Tipton Hospital	Tipton		X	
70.	Indiana University Health West Hospital	Avon	X	X	
71.	Indiana University Health University Hospital	Indianapolis	X	X	
72.	Jay County Hospital	Portland	X	X	
73.	Johnson Memorial Hospital	Franklin		X	
74.	Kindred Hospital	Indianapolis	X	X	
75.	King's Daughters Hospital and Health Services	Madison			X
76.	Kosciusko Community Hospital	Warsaw	X	X	
77.	Larue D. Carter Memorial Hospital	Indianapolis	X	X	
78.	Logansport State Hospital	Logansport		X	
79.	Lutheran Hospital of Indiana	Fort Wayne	X	X	
80.	Madison State Hospital	Madison			X
81.	Major Hospital	Shelbyville		X	
82.	Margaret Mary Community Hospital	Batesville			X
83.	Marion General Hospital	Marion	X	X	
84.	Medical Center of Southern Indiana	Charlestown		X	
85.	Memorial Hospital	Logansport		X	
86.	Memorial Hospital and Health Care Center	Jasper		X	
87.	Memorial Hospital of South Bend	South Bend	X	X	
88.	Methodist Hospitals-Gary	Gary	X	X	
89.	Methodist Hospitals-Merrillville	Merrillville	X	X	
90.	Michiana Behavioral Health Center	Plymouth	X	X	
91.	Morgan Hospital & Medical Center	Martinsville	X	X	
92.	Northeastern Center	Auburn			X
93.	Oaklawn Psychiatric Center	Goshen	X	X	
94.	Otis R. Bowen Center for Human Services	Warsaw	X	X	
95.	Our Lady of Peace Hospital	Mishawaka	X	X	
96.	Parkview Hospital Randallia	Fort Wayne	X	X	
97.	Parkview Huntington Hospital	Huntington			X
98.	Parkview LaGrange Hospital	LaGrange		X	
99.	Parkview Noble Hospital	Kendallville		X	
100.	Parkview Regional Medical Center	Fort Wayne		X	

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
101.	Parkview Whitley Hospital	Columbia City			X
102.	Perry County Memorial Hospital	Tell City		X	
103.	Pinnacle Hospital	Crown Point	X	X	
104.	Portage Hospital	Portage	X	X	
105.	Porter Regional Hospital	Valparaiso	X	X	
106.	Pulaski Memorial Hospital	Winamac			X
107.	Putnam County Hospital	Greencastle			X
108.	Regency Hospital of Northwest Indiana	East Chicago	X	X	
109.	Rehabilitation Hospital of Fort Wayne	Fort Wayne	X	X	
110.	Rehabilitation Hospital of Indiana	Indianapolis	X	X	
111.	Reid Hospital and Health Care Services	Richmond	X	X	
112.	Richmond State Hospital	Richmond	X	X	
113.	Riley Hospital for Children	Indianapolis	X	X	
114.	Riverview Hospital	Noblesville		X	
115.	Rush Memorial Hospital	Rushville			X
116.	Saint John's Health System	Anderson	X	X	
117.	Schneck Medical Center	Seymour			X
118.	Scott County Memorial Hospital	Scottsburg			X
119.	Southern Indiana Rehabilitation Hospital	New Albany	X	X	
120.	Southlake Center for Mental Health	Merrillville	X	X	
121.	St. Catherine Hospital	East Chicago	X	X	
122.	St. Elizabeth Ann Seton Hospital of Carmel	Carmel		X	
123.	St. Elizabeth Ann Seton Hospital of Indianapolis	Indianapolis		X	
124.	St. Joseph Hospital	Fort Wayne	X	X	
125.	St. Joseph Hospital and Health Center	Kokomo	X	X	
126.	St. Joseph Regional Medical Center	Mishawaka	X	X	
127.	St. Joseph's Hospital of Huntingburg	Huntingburg		X	
128.	St. Joseph's Regional Medical Center	Plymouth	X	X	
129.	St. Mary Medical Center	Hobart	X	X	
130.	St. Mary's Hospital and Medical Center	Evansville	X	X	
131.	St. Mary's Warrick Hospital	Boonville		X	
132.	St. Vincent Anderson Regional Hospital	Anderson	X	X	
133.	St. Vincent Carmel Hospital	Carmel		X	
134.	St. Vincent Clay Hospital	Brazil		X	
135.	St. Vincent Frankfort Hospital	Frankfort			X
136.	St. Vincent Hospital and Health Services	Indianapolis		X	
137.	St. Vincent Jennings Hospital	North Vernon			X
138.	St. Vincent Mercy Hospital	Elwood		X	

Map Reference	Facility	Location	Within 10 Miles	Within 25 Miles	Outside 25 Miles
139.	St. Vincent Pediatric Rehabilitation Center	Indianapolis		X	
140.	St. Vincent Randolph Hospital	Winchester		X	
141.	St. Vincent Williamsport Hospital	Williamsport			X
142.	Sullivan County Community Hospital	Sullivan			X
143.	Terre Haute Regional Hospital	Terre Haute	X	X	
144.	Union Hospital	Terre Haute	X	X	
145.	Wabash Valley Hospital	West Lafayette	X	X	
146.	Wellstone Regional Hospital	Jeffersonville	X	X	
147.	White County Memorial Hospital	Monticello			X
148.	Sidney & Lois Eskenazi Hospital	Indianapolis	X	X	
149.	Witham Health Services	Lebanon			X
150.	Women's Hospital	Newburgh	X	X	
151.	Woodlawn Hospital	Rochester	X	X	

Airports

Ridership will be generated on intercity bus routes that serve airports with scheduled commercial air service. Service can be directly to the airport terminal or to a transfer center enabling passengers to reach the airport with a single transfer. There are six commercial airports in Indiana, all of which are located within ten miles of an intercity bus station.

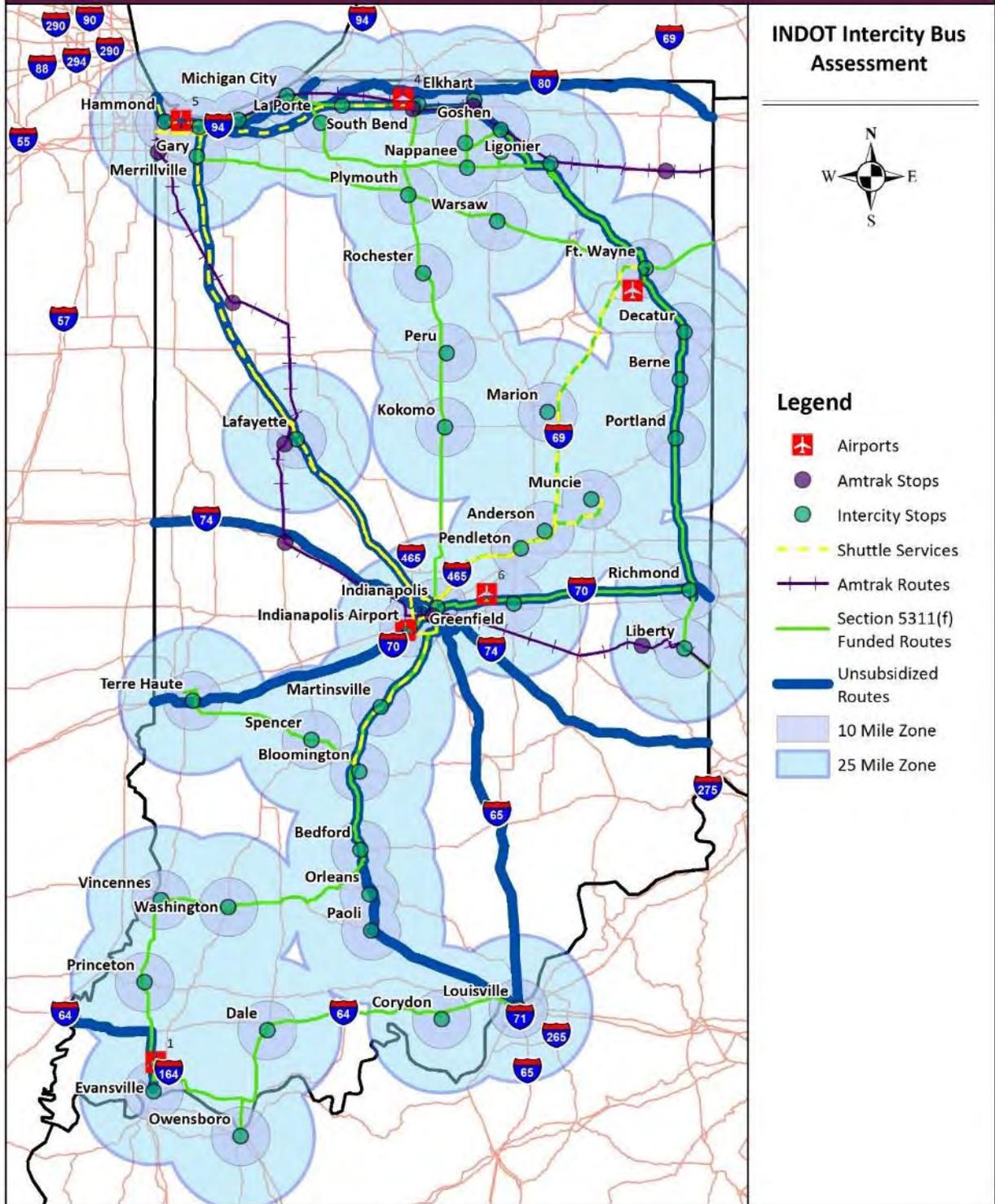
A list of the airports and their locations is shown in Table 16. Exhibit 21 is a map of all commercial airports in Indiana showing their proximity to intercity bus stations.

Table 16: Indiana Airports

Map Reference	Facility	Location	Within 10 Miles
1	Evansville Regional Airport	Evansville	X
2	Fort Wayne International Airport	Fort Wayne	X
3	Indianapolis International Airport	Indianapolis	X
4	South Bend International Airport	South Bend	X
5	Gary/Chicago International Airport	Gary	X
6	Indianapolis Regional Airport	Greenfield	X

All major intercity bus trip generators, are generally well positioned relative to their proximity to intercity bus stations/stops. With a total of 301 trip generators recognized in the study, only 57 or about 19 percent are located greater than 25 miles from an intercity bus station/stop. The only exception is medical facilities due to the number of such facilities in the rural areas of the State. The State's rural transit agencies help alleviate intercity bus needs in these areas through their volume of out-of-county medical trips.

Exhibit 21: Indiana Airports



VIII. STAKEHOLDER INPUT

OVERVIEW

Receiving input from various stakeholders is a most important task in the assessment of the State's ICB needs and determination of how best to utilize INDOT's Section 5311(f) allocation. Survey instruments were developed for three distinct stakeholder groups. One survey was developed for intercity bus carriers operating in the State and another for the State's public transportation providers. The third survey instrument was developed for general stakeholders including local and regional planners, economic development representatives, local government officials, and colleges and universities. The survey instruments can be found in Appendix A of this Study.

The surveys were made available through SurveyMonkey, an online survey provider. Stakeholders were provided approximately two to three weeks to submit their survey responses. This section contains the results from the three surveys.

A total of 17 completed surveys were returned from general stakeholders, two from intercity bus carriers, and 42 from public transit providers. This rather poor response rate from the general stakeholders could be interpreted as an indication that stakeholders across the state do not consider intercity bus service to be a significant need and/or have little interest in intercity bus service. The higher response rate from intercity bus and public transit providers was anticipated due to their relationship with transit operations as opposed to most general stakeholders.

While the survey contained a clear definition of intercity bus service and provided an example of such service, several of the responses seemed to indicate that general stakeholders in particular, and some public transportation providers, misunderstood the difference between intercity bus service and other forms of public/private transportation services. In some cases, intercity bus service was confused with fixed route public transportation provided within an urban area, such as Indianapolis or Bloomington. Also, some of the survey responses indicated that responding stakeholders were not aware of intercity bus service that is currently operating in their area of the State.

INTERCITY BUS CARRIERS

Barons Bus and Miller Transportation, Inc. responded to the survey, while Greyhound participated via a conference call with RLS and INDOT staff.

The carriers indicated that **Indianapolis-Greenwood-Franklin-Shelbyville-Greensburg and South Bend-Elkhart-Shipshewana-Angola-Toledo should be considered for intercity bus service along with Columbus as a stop on Greyhound's Indianapolis-Louisville route. Also, it was noted that** feeder service is needed in the Crawfordsville-Indianapolis and Logansport-Kokomo corridors to provide citizens access to the State's intercity bus network. Another indicated that Indiana has great intercity bus service, but should Amtrak service between Indianapolis and Chicago be terminated, additional intercity bus service would be needed to fill that transport gap.

PUBLIC TRANSPORTATION PROVIDERS

While 37 of the 42 responders indicated that they do not operate intercity or feeder services, the following three (3) agencies noted that they do provide such services:

- ◆ SIDC – Ride Solution
- ◆ CDC Resources
- ◆ Hillcroft Services, Inc.

Based on responses received from these agencies, it appears there was a misunderstanding of the question posed in the survey. Follow-up emails and calls to the agencies indicated that the agencies responded from the perspective of their transit system's connections with other rural and urban transit systems.

The majority of responses to survey questions related to public transportation as opposed to intercity bus service. The following notable responses are intercity bus needs related:

- ◆ Currently if travelling from east-central Indiana to Indianapolis you must ride early in the morning and return in late afternoon
- ◆ Fixed route service from rural location to intercity services (Posey County)
- ◆ Extended service hours/getting people to Columbus, IN and vice versa. (Johnson County)
- ◆ Evening and weekend bus service, connecting people from Anderson and rural areas to Indianapolis/Marion County and Muncie/Delaware County

The responses received concerning public transportation needs generally related to:

- ◆ Transportation for low income families to work
- ◆ Connecting small urban/rural areas with urban transit services
- ◆ Connecting public transit systems for transport to VA hospitals and other health care locations
- ◆ Extended service days/hours
- ◆ Lack of sufficient funding
- ◆ Public knowledge of local transit system
- ◆ Lack of drivers
- ◆ More and newer vehicles and technology upgrades
- ◆ Public awareness and understanding of local transit system

GENERAL STAKEHOLDERS

Approximately 53 percent of those responding to the general stakeholder survey indicated that there are intercity bus needs in their area that are not being met. It appears this may be attributed to these stakeholders not fully understanding intercity bus service and possibly not aware of its availability.

The survey asked responders to indicate the value of ICB service operating in their area, and for those areas without intercity bus service, the perceived value of such service if it was initiated. The survey provided options of “not important (1),” “somewhat important (2),” “important (3),” and very important (4). Responses indicated a value of 2.92 and 2.75 respectively for these questions, falling between ‘somewhat important’ and ‘important.’

The responses noted several areas currently void of intercity bus service that would benefit from connections to existing service. Those routes receiving the greatest priority include:

- ◆ Elkhart – Bristol – Middlebury – Shpshewana for daily work commutes
- ◆ Franklin – Indianapolis
- ◆ People from surrounding counties trying to get to jobs/healthcare/etc. in Marion County
- ◆ Muncie to Indianapolis with convenient timing
- ◆ Columbus IN – Indianapolis
- ◆ Hobart – Chicago
- ◆ Terre Haute – Central Illinois regions
- ◆ Louisville – Frankfort – Lexington
- ◆ University of Manchester – Wabash – Huntington – Fort Wayne

Additional routes cited as lesser priority were:

- ◆ Chicago – Warsaw – Ft. Wayne
- ◆ Franklin – Greenwood
- ◆ Muncie – Anderson
- ◆ Columbus IN – Louisville KY
- ◆ Crown Point – Chicago
- ◆ Louisville – Indianapolis
- ◆ Muncie – South Bend
- ◆ Columbus IN – Bloomington
- ◆ Munster – Chicago
- ◆ Louisville – Cincinnati

Several of the survey responses indicated that local public transportation was their greatest need as opposed to intercity bus. The most common public transit needs cited were:

- ◆ More intermodal facilities to ease connections
- ◆ Additional service to and from major airports such as Indianapolis and Chicago
- ◆ Extended service days/hours
- ◆ More employment, medical and educational trips
- ◆ Central Indiana needs better coordination among providers to negate so much transferring, thereby reducing trip denials
- ◆ More transport options to the South Shore Train and Chicago from northwestern Indiana

INTERCITY BUS ROUTE COVERAGE

The following findings related to intercity bus route coverage in Indiana are based on the analysis of previously described data:

- ◆ Spatial analysis of the Indiana intercity bus network indicates that there is good overall coverage across the State. All of the State's 20 most populous cities are within 25 miles of an intercity bus station/stop. However, only 25 of 60 Indiana cities with over 10,000 population have an intercity bus station/stop in their municipality. Approximately 87 percent of the State's population is within 25 miles of an intercity bus station/stop. Research has indicated that for most state intercity bus programs, there is a goal of having 75-85 percent of the State's population living within 25 miles of an intercity bus station/stop. Indiana has already surpassed this threshold.
- ◆ The areas of the State with the greatest population without intercity bus coverage exists east of Martinsville along I-65 and the area outside of the 25-mile radius of the Lafayette intercity bus station.
- ◆ The area north and west of Lafayette represents the primary location of minority population living beyond 25 miles of an intercity bus station/stop.
- ◆ The areas east of Martinsville along I-65, the area outside of the 25-mile radius of the Lafayette ICB station and the northeast corner of the State along I-69 represent the most significant areas of the State with households lacking a vehicle and individuals living below the poverty level outside of the 25-mile radius of an intercity bus station/stop.
- ◆ The major intercity bus trip generators, colleges and universities, correctional institutions, medical facilities, commercial airports, and military bases, are generally well positioned relative to their proximity to intercity bus stations/stops. With a total of 301 trip generators recognized in the study, only 57 or about 19 percent are located greater than 25 miles from an intercity bus station/stop. The only exception is medical facilities due to the number of such facilities in the rural areas of the State. The State's rural transit agencies help alleviate intercity bus needs in these areas through their volume of out-of-county medical trips.

IX. EVALUATION OF SECTION 5311(F) FUNDED ROUTES

As previously noted, the availability of Section 5311(f) funds has resulted in the operation of eight (8) subsidized intercity bus routes in Indiana under the program. Indiana has some additional intercity bus needs, as illustrated in Chapters VI and VII, and projects may be developed in the future to address these needs through the Section 5311(f) grant solicitation process. With the possibility of future additional intercity bus projects and limited funds to meet these needs, along with INDOT's desire to support intercity bus projects that are efficient and effective, it is important to evaluate the current projects and provide service standards for new projects that may be funded.

Table 17: Evaluation of Section 5311(f) Funded Routes Based on 2016 Data

Carrier/Route	Farebox Recovery Ratio	Boardings per Trip	Cost Per Rider	Subsidy per Rider Including In-Kind Match	Revenue per Mile
Barons Bus					
Fort Wayne – Gary	28%	19.59	\$48.29	\$34.84	\$1.20
Liberty – Fort Wayne	35%	31.83	\$47.35	\$30.58	\$1.88
Richmond – Gary	23%	18.33	\$79.83	\$61.83	\$1.08
Average	29%	23.25	\$58.49	\$40.04	\$1.39
Miller Transportation					
Indianapolis – Elkhart	56%	13.20	\$53.55	\$19.77	\$2.11
Louisville – Evansville	38%	9.85	\$42.41	\$26.43	\$1.40
Indianapolis – Evansville	43%	12.50	\$54.43	\$34.09	\$1.52
Indianapolis – Fort Wayne*	18%	5.30	\$119.98	\$42.86	\$0.84
Richmond – Gary	12%	5.05	\$92.55	\$38.45	\$2.23
Average	33%	9.18	\$59.20	\$32.77**	\$1.62

*In 2016 Miller operated this route from Indianapolis to Fort Wayne. Beginning in 2017 the route terminated in Muncie.

**Net cost per rider is \$36.09 with \$32.77 representing subsidy per rider due to budget limitation.

PERFORMANCE STANDARDS FOR INTERCITY BUS SERVICES

Currently INDOT's Section 5311(f) program does not have performance standards in place to evaluate funded projects. Decisions on route restructuring or termination is left to the discretion of the carrier's assessment of ridership, revenue, or other contributing factors. Discussions with Barons

and Miller, the current providers of the state's Section 5311(f) supported services, indicated that the carriers have applied limited performance standards to their operations. Each carrier routinely collects data that would be required to maintain typical performance measures as called for in this Study.

To date, INDOT has not received project requests beyond the volume of available Section 5311(f) funding. This may change in the future and it will be important to have standards to determine projects that may need to be restructured or terminated to allow new projects to be funded. Performance standards should be established for new projects so that service expectations are clearly understood. Utilizing performance measures to evaluate currently funded projects will serve as a means to establish criteria for future project selection and expectations for supported routes, including feeder connections.

It should be noted that intercity bus standards are typically based on revenue miles as opposed to revenue hours which are more associated with urban transit operations. This is due to carriers operating at more consistent speeds and intercity bus costs are likely to be driven by miles rather than service hours. The following performance measures have been used to evaluate the current Section 5311(f) supported routes.

- ◆ Farebox recovery
- ◆ Boardings per trip
- ◆ Cost per trip
- ◆ Subsidy per passenger
- ◆ Revenue per mile

It should be noted that in their respective Quarterly Operating Data Reports and Quarterly Operating Financial Status Reports, both Barons and Miller consolidate all reporting into a single report, with no information provided separately for each subsidized route. It is strongly recommended that INDOT require Quarterly Operating Data Reports and Quarterly Operating Financial Status Reports for each Section 5311(f) funded route. That will enable INDOT staff to routinely monitor each route on a quarterly basis for efficiency and effectiveness.

Note that cost per mile, which is total operating costs divided by revenue miles, is also an important performance measurement. It is discussed later in the Cost Per Mile Analysis section of this Study.

Farebox Recovery

Farebox recovery represents the ratio of farebox revenue to total operating costs. In other words, it illustrates to what extent passengers pay for the actual cost of the service. Farebox recovery also, to some extent, reflects the carrier's ability to minimize operating costs.

Routes perform at different levels of success for various reasons, but primarily due to the population density through which the route travels. Typically routes that originate or terminate in a larger urban area, such as Indianapolis, should be expected to have higher farebox revenue as compared to routes that operate entirely in less densely populated rural areas of the State. Research has

determined that most states establish a tier approach for the farebox recovery ratio anticipated from different Section 5311(f) funded routes. It is recommended that INDOT utilize the following farebox recovery ratio threshold for Section 5311(f) supported routes:

- ◆ Minimum of 30 percent for routes with one end serving Indianapolis
- ◆ Minimum of 20 percent for all other routes
- ◆ Minimum of 10 percent for feeder services

Boardings Per Trip

It is important that route productivity be measured for intercity bus services. Boardings per trip is considered a fair measurement of route productivity and is calculated by dividing total passengers by total trips. As with farebox recovery, productivity should be higher on those routes that serve a large urban area, such as Indianapolis. Research conducted as part of this Study has resulted in the following recommended thresholds for boardings per trip:

- ◆ Minimum 10 percent for routes with one end serving Indianapolis
- ◆ Minimum 3 percent for all other routes, including feeder services

Cost Per Rider

This performance measure, calculated by dividing total route costs by the number of riders, is reflective of the extent to which the carrier has minimized costs, along with the volume of generated ridership. This is a measurement used universally in the public transportation industry. The cost per rider should not exceed:

- ◆ Maximum of \$60

Subsidy Per Passenger

Subsidy per passenger measures both the volume of revenue per passenger as well as the cost per passenger. It is determined by subtracting the average annual revenue per passenger from the average annual cost per passenger or by dividing the total subsidy by the number of riders. Note that in the INDOT Intercity Bus Program, carriers are permitted to use the in-kind match provision which doubles the subsidy per rider through the Section 5311(f) program. For the purpose of performance measurement, subsidy per passenger is considered the subsidy with the in-kind match included. Subsidy per passenger should not exceed:

- ◆ \$50 per passenger

Revenue Per Mile

Revenue per mile is total operating revenue divided by revenue miles, which represents the miles that a vehicle actually travels while in revenue service. This measurement reflects the effectiveness of the route from a revenue perspective. Routes should achieve a revenue per mile of:

- ◆ Minimum \$0.50 per mile

EXISTING SERVICE

The above performance measures are recommended based on the consultant's research and knowledge of the country's intercity bus industry. With a few exceptions, the State's subsidized routes are operating close to or above the recommended levels. INDOT should continue to work with the carriers to improve the performance of each route. Each of these routes is important to the Indiana intercity bus network and should not be terminated without an effort to improve its performance, unless the allocation of Section 5311(f) funds is decreased.

Note that for new routes it is recognized that these levels may not be achieved immediately following service initiation. Each route should be evaluated at the end of the first nine months and routes operating below these performance levels at that time may need to be adjusted, depending on the level of performance. It is recommended that carriers be given two years to prove the value of a route before it is terminated. Routes not meeting these levels after two years should be evaluated to determine if operational changes are needed such as schedule, service frequency, fare structure, marketing efforts, etc.

Richmond – Gary Service

Richmond – Gary service is provided by both Barons and Miller, with both routes receiving Section 5311(f) funding. Barons serves the route via Portland, Berne, Decatur, Fort Wayne, New Paris, Nappanee, Wakarusa, La Porte, Michigan City, and Burns Harbor. Miller operates their Richmond – Gary route via Fort Wayne and Warsaw, **the only rural community served by the route.**

The history of this Indiana intercity bus route has evolved over the years. Based on the consultant's understanding, it appears that Lakefront Lines was operating subsidized service between Richmond and Gary and in 2012 Lakefront Lines was purchased by Coach USA. Greyhound terminated their Bus Terminal License Agreements at that time, and Miller began operating the service which was being operated by Megabus and Barons as well. Megabus issued an injunction against Barons and Barons terminated the service for a few months to litigate the injunction. Once the injunction was lifted, Barons began operating the route with a schedule that closely resembled that of Miller. Miller continued to operate the route with limited success. Barons subsequently received a Section 5311(f) grant to operate the service over a similar route to Miller's. This service duplication resulted in the Richmond - Gary route not being very successful for either carrier.

It is recommended that INDOT consult with both Barons and Miller regarding the Richmond – Gary route to reach an agreement that is beneficial to both carriers and maximizes the use of the Section 5311(f) funds. It is possible that other subsidized routes could be affected by the agreement.

COST PER MILE ANALYSIS – BARONS AND MILLER

The cost per mile for the Section 5311(f) supported routes varies considerably by carrier. In their respective applications for FTA assistance, each carrier provides a Cost Per Mile Identification, which includes the operating, administrative, and capital expenses whose sum identifies the cost per mile charged by the carrier.

Barons charges a different cost per mile rate for each of their three Section 5311(f) funded routes. In their 2018 intercity bus application, Barons quoted a cost per mile rate of \$5.37, \$4.40 and \$4.91 for the Liberty – Fort Wayne, Fort Wayne – Gary, and Richmond – Gary routes, respectively. Barons indicates that it uses a different cost per mile for each route due to ticket commission and driver wages being different for each route. Review of the Cost Per Mile Identification for each Barons' route indicates that wages and salaries vary by as much as \$0.15, with the greatest variance being under the "other" line item with a variance of as much as \$0.77. Barons notes that the "other" line item includes Bus/Vehicle Cost, Insurance, Ticket Commission, Management Service Fee, Professional Fees, Drug and Alcohol Testing, Bus Electronics, Rent, etc., several of the items that could be identified under the administration and capital line items.

Miller utilizes a single cost per mile rate of \$3.80 for all its Section 5311(f) supported routes. The carrier's wages and salaries are about half of that charged by Barons, with the remainder of the cost difference coming from administration and capital line items. Further comparison of the cost per mile structure of the two carriers would be contingent on having a breakdown of Barons' "other" expenses line item.

Greyhound, in an attachment to its in-kind match commitment letters for the Indiana Section 5311(f) routes, indicates that the cost per mile rate across its national intercity bus network is \$4.75. No information is provided as to how this number was derived.

Based on the consultant's research, it is believed that while different, the cost per mile rates for both Barons and Miller are reasonable. However, in an effort to ensure that intercity bus services supported with Section 5311(f) funding are provided as cost efficiently as possible, INDOT may want to consider utilizing a bid procedure for the routes it desires to fund rather than the current procedure of soliciting applications from the carriers for the intercity bus routes they would like to operate with Section 5311(f) assistance.

INTERCITY BUS INDUSTRY TRENDS

The May 2014 report, "The Shrinking, Rural Intercity Bus Network: A Problem of Immobility for Rural Residents without Automobiles and Possible Solutions," found that intercity bus service in rural areas had been on a severe decline since deregulation in 1982. In 2007, for the first time in more than 40 years, the level of intercity bus service across the country grew significantly. This was largely due to the emergence of low-cost "curbside" operators, such as Megabus, providing express service between major cities. However, in its 2011 "Report on Curbside Motorcoach Safety," the

National Transportation Safety Board (NTSB) found that the oversight for this segment of the intercity bus industry has overburdened FMCSA and state investigators, resulting in these carriers having higher fatal accident and death rates and higher out-of-service rates resulting from driver violations as compared with conventional carriers. Several of the more serious accidents have been chronicled in the media in recent years.

The Chaddick Institute for Metropolitan Development at DePaul University report, "The Remaking Of The Motor Coach: 2015 Year in Review of Intercity Bus Service in the United States," noted that competition on the nation's busiest routes has grown sharply since 2007 although a dramatic fall in fuel prices in recent years has intensified competition from private vehicles. The report also indicated that many of the most lucrative new markets for expansion have already been tapped, encouraging carriers to focus on broadening their appeal among demographic groups that have been reluctant to give intercity bus travel a try along existing routes.

A more recent Chaddick Institute study, "Running Express: 2017 Outlook for the Intercity Bus Industry in the United States," indicates that revenues from passenger operations appear to be on an upward trajectory, due to some extent to a recent modest increase in the price of fuel. The study notes a trend in intercity bus travel has been the gradual expansion of subsidized service and the integration of this service into the Greyhound national network, primarily due to the availability of Section 5311(f) funds. Also addressed in the study is the significant role that emerging technology will play in the industry along with the increase of express bus service in the country's most heavily-traveled markets, such as Chicago to Indianapolis.

X. CONCLUSIONS AND OBSERVATIONS

These study conclusions and observations are based on the research and findings documented throughout the Study. Indiana has made some significant strides in its intercity bus program since the 2009 Intercity Bus Study was completed. These conclusions and observations recognize INDOT's progress, while also indicating those areas where efforts should be continued or initiated for future improvements.

- ◆ Since the 2009 Intercity Bus Study, Greyhound has decreased its Indiana service from six routes to four, with stops in six cities instead of ten.
- ◆ Stops terminated by some carriers are not served by existing Section 5311(f) supported routes.
- ◆ Numerous private operators provide shuttle services between cities, airports and universities primarily along the Bloomington – Indianapolis – Muncie – Fort Wayne corridor, the Chicago – Lafayette – Indianapolis corridor and the Chicago – South Bend corridor.
- ◆ Today there are 18 routes serving 46 cities/towns, an increase from 12 routes and 13 Indiana bus stations/stops served in 2009, primarily attributable to the provision of Section 5311(f) program funding.
- ◆ The State is well served geographically with approximately 87 percent of the State's population living within 25 miles of an intercity bus station/stop.
- ◆ The general trend in ridership is increasing for Barons while Miller experienced a decrease in ridership in 2016, particularly on the Indianapolis – Evansville and Louisville – Evansville routes.
- ◆ Demographic and spatial analysis indicates the greatest demand for intercity bus service is primarily in these four areas of the State:
 - North/northwest of Lafayette along I-65
 - North of Vincennes along U.S. 41
 - East of Martinsville along I-65
 - East of Paoli and south of IN Hwy. 56
- ◆ The State's major trip generators are well served by intercity bus.
- ◆ Richmond – Gary service operated by both Barons and Miller on different routes, appears to be a duplication of service.
- ◆ Barons' Richmond – Gary route lacks productivity which calls for additional marketing and/or route revision.
- ◆ There is service duplication between Indianapolis and Bloomington by several providers.

- ◆ Miller's Indianapolis – Muncie route is not very productive – two round trips daily may not be needed as well as Indianapolis Airport stop (15 additional deviated miles) that is served by other providers.
- ◆ Miller's Indianapolis – Terre Haute route is costly as compared to performance.
- ◆ Service should be considered along the Indianapolis – Columbus – Louisville corridor.
Columbus should be considered as a possible stop on Greyhound route from Indianapolis to Louisville.
- ◆ Unlike Miller and the norm for the intercity bus industry of having a single cost per mile for all scheduled services, Barons charges a different rate per mile for each of its three subsidized routes.

XI. RECOMMENDATIONS

These study recommendations take into account the conclusions and observations noted above along with the consultant's research and discussions with the INDOT staff and Section 5311(f) subrecipients. In general, research concluded that Indiana has good overall intercity bus coverage, and efforts should continue to maintain and improve the State's intercity bus network. Specific recommendations for INDOT are:

- ◆ Continue utilization of the State's Section 5311(f) apportionment to provide intercity bus service across Indiana.
- ◆ Maintain coverage of the intercity bus network of subsidized routes.
- ◆ Apply performance measures to subsidized routes and make service modifications as needed if measures are not being met, possibly shifting resources to more productive services if warranted.
- ◆ Initiate discussions with Barons and Miller regarding service duplication in their respective Richmond – Gary routes.
- ◆ Require carriers to invoice and report by route rather than submitting a consolidated Section 5311(f) invoice, Quarterly Operating Data Reports, and Quarterly Operating Financial Status Reports.
- ◆ Encourage Barons and Miller to routinely evaluate their subsidized routes to ensure the routes are operating as efficiently and effectively as possible to maximize use of the Section 5411(f) funds.
- ◆ Require an annual report that includes ridership and revenue produced for each stop on each subsidized route.
- ◆ **Encourage Barons to utilize a single cost per mile for all subsidized routes.**
- ◆ Increase volume of marketing of the State's intercity bus services in an effort to increase the public's awareness of available services. A minimum of two percent of each Section 5311(f) route budget should be earmarked for marketing activities.
- ◆ Increase the use of social media in an effort to reach more potential intercity bus passengers.
- ◆ Utilize available technology such as General Transit Feed Specification (GTFS) and make it available through such platforms as Google Transit or Google Maps to enhance the rider's intercity bus experience.
- ◆ Install intercity bus station/stop directional signage across the State to assist the public with locating stations/stops while also serving as marketing of intercity bus availability.

- ◆ Intercity bus stations/stops should be inspected to ensure the locations have such items as visible signage, posted schedules, ground transportation options/phone numbers, and information on local accommodations.
- ◆ Consider conducting a solicitation of bids for identified intercity routes rather than the current program application format or retain the application process but solicit applications for particular routes/corridors that are identified by INDOT, rather than the applicant.
- ◆ Consider utilizing a scaled approach to route subsidy, with new service funded at a higher subsidy than existing routes. This would allow some Section 5311(f) funds to be available for limited service expansion.
- ◆ Encourage the State's general public transportation operators to provide rural intercity feeder services to connect to the existing intercity bus network. A small portion of Indiana's Section 5311(f) apportionment could be used for this purpose.

APPENDIX A: SURVEY INSTRUMENTS

INDOT Intercity Bus Providers

The Indiana Department of Transportation (INDOT) has contracted with RLS & Associates, Inc. to conduct a study to evaluate intercity bus service in the State of Indiana. INDOT is surveying intercity bus carriers, transportation planners, colleges and universities, human service agencies, and public transportation providers throughout the state to obtain statewide input. Your feedback is important and your completion of this brief survey by September 8, 2017 would be appreciated. For additional information please contact:

Charles Glover
RLS & Associates, Inc.
Tel.: 919-971-5668/Email: cgllover@rlsandassoc.com

1. Contact Information

Name & Title	<input type="text"/>
Organization Name	<input type="text"/>
Address	<input type="text"/>
Address 2	<input type="text"/>
City/Town	<input type="text"/>
State/Province	<input type="text"/>
ZIP/Postal Code	<input type="text"/>
Country	<input type="text"/>
Email Address	<input type="text"/>
Phone Number	<input type="text"/>

2. Is your company a provider of scheduled intercity bus service in Indiana?

- Yes
 No

If you answered yes, please indicate the schedule, stops served, ridership, etc. for each route served.

3. If you have schedules or other information that can be uploaded, please do so

Choose File

No file chosen

4. Explain how you make information regarding your scheduled service available to the public.

5. Are there corridors in Indiana that you believe are in need of intercity bus service?

Yes

No

If yes, please identify the corridor(s) and explain the service that you believe should be made available in this area(s).

6. Please identify any intercity bus feeder services that you believe are needed to strengthen intercity bus services in specific corridors.

7. Provide any additional comments or suggestions regarding current or needed scheduled intercity bus service in Indiana.

INDOT Intercity Bus Public Transportation Providers

The Indiana Department of Transportation (INDOT) has contracted with RLS & Associates, Inc. to conduct a study to evaluate intercity bus service in the State of Indiana. INDOT is surveying intercity bus carriers, transportation planners, colleges and universities, human service agencies, and public transportation providers throughout the state to obtain statewide input. Your feedback is important and your completion of this brief survey by September 8, 2017 would be appreciated. For additional information please contact:

Charles Glover
RLS & Associates, Inc.
Tel.: 919-971-5668/Email: cglover@rlsandassoc.com

1. Contact Information

Name & Title	<input type="text"/>
Organization Name	<input type="text"/>
Address	<input type="text"/>
Address 2	<input type="text"/>
City/Town	<input type="text"/>
State/Province	<input type="text"/>
ZIP/Postal Code	<input type="text"/>
Country	<input type="text"/>
Email Address	<input type="text"/>
Phone Number	<input type="text"/>

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound is an example of an intercity bus carrier.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

2. Using the above definition, do you currently have route(s) that can be considered intercity bus or feeder service?

Yes

No

INDOT Intercity Bus Public Transportation Providers

3. Please indicate the schedule, stops served, ridership, etc. for the service provided.

4. If you have schedules or other information that can be uploaded, please do so

Choose File

No file chosen

5. Do your intercity bus routes or feeder services connect with private intercity bus service on either/both ends of the route?

Yes

No

Please explain the connections if applicable.

6. Please list the communities served by your intercity bus or feeder services (as defined above).

7. Is there a demand for intercity bus service to destinations that you do not currently serve or the need for expansion of current service?

Yes

No

If "Yes," what are these destinations and/or service expansion needs?

8. Please identify route(s) by origin/destination pairs that could benefit most from the provision or improvement of services (e.g., new routes, increased frequency of service on existing runs, evening or weekend service).

INDOT Intercity Bus Public Transportation Providers

9. Are there existing intercity and public transportation services in your area that may be facing termination due to lack of ridership?

Yes

No

If yes, please identify these services?

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound is an example of an intercity bus carrier.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

10. Including the need for intercity bus services (as defined above), what are the greatest unmet public transportation needs in your rural/regional area? (please prioritize)

11. Please describe any intercity bus needs or concerns that you have not addressed in an earlier question.

INDOT Intercity Bus Stakeholders

The Indiana Department of Transportation (INDOT) has contracted with RLS & Associates, Inc. to conduct a study to evaluate intercity bus service in the State of Indiana. INDOT is surveying intercity bus carriers, transportation planners, colleges and universities, human service agencies, and public transportation providers throughout the state to obtain statewide input. Your feedback is important and your completion of this brief survey by September 8, 2017 would be appreciated. For additional information please contact:

Charles Glover
RLS & Associates, Inc.
Tel.: 919-971-5668/Email: cglover@rlsandassoc.com

1. Contact Information

Name & Title	<input type="text"/>
Organization Name	<input type="text"/>
Address	<input type="text"/>
Address 2	<input type="text"/>
City/Town	<input type="text"/>
State/Province	<input type="text"/>
ZIP/Postal Code	<input type="text"/>
Country	<input type="text"/>
Email Address	<input type="text"/>
Phone Number	<input type="text"/>

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound is an example of an intercity bus carrier.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

2. Do you think there are currently intercity bus needs in your area that are not being met?

Yes

No

3. If you answered Yes to Question 2, please identify three top areas of need by origin/destination pairs.

Area 1

Area 2

Area 3

4. Including the need for intercity bus services (as defined above), what are the greatest unmet public transportation needs in your rural/regional area? (please prioritize)

5. If you are a social service agency/college or university, what percentage of your clients/students do you estimate currently use intercity bus service?

0 100

6. If your area **has** intercity bus service, on a scale of 1-4, with "1" representing no importance and "4" representing a high degree of importance, please rank the value of intercity bus service in your area. (indicate one)

	Not Important (1)	Somewhat Important (2)	Important (3)	Very Important (4)
Value of Intercity Bus Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. If your area **DOES NOT** have intercity bus service, on a scale of 1-4, with "1" representing no importance and "4" representing a high degree of importance, please rank the value of intercity bus service in your area. (indicate one)

	Not Important (1)	Somewhat Important (2)	Important (3)	Very Important (4)
Value of Intercity Bus Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Please describe any intercity bus needs or concerns that you have not addressed in an earlier question.