

PUBLIC TRANSPORTATION IN INDIANA

An Analysis of Ridership Surveys

Analysis and Research by
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EXECUTIVE SUMMARY

This report provides information on the characteristics of public transit riders in Indiana to provide an overview of who uses transit and for what purpose. We use data from ridership surveys to examine demographic characteristics of riders and rider satisfaction.

The public transit network in Indiana consists of 66 urban and rural public transit systems operating bus and light van passenger vehicles along with one commuter rail system.

In 2010 the transit systems in Indiana provided over 35.2 million passenger trips and logged more than 46.6 million vehicle miles. Operating revenue totaled \$204.1 million. Of this total, \$48.2 million (24 percent) was from state assistance primarily from the Public Mass Transportation Fund (PMTF) funded through the state sales tax.

Fixed-Route Service

- Fixed-route systems are defined by set routes and designated stops. Of the 18 cities with fixed-route systems, all but Muncie have shown increased ridership from 2006 to 2010.
- In the seven fixed-route transit systems for which we have ridership survey data, more than 90 percent of those surveyed were between the ages of 18 and 65, of legal driving age.
- Almost 70 percent of riders surveyed are transit dependent, meaning they do not have access to at least one car in their household.
- Among survey respondents, 49 percent were in the lowest income bracket of their respective surveys, which was an annual household income below \$10,000 or \$15,000 depending on the survey. Only 9.6 percent of respondents' households have an annual income of over \$50,000.
- About one-third of transit riders use the bus system more than 5 days per week. Over 80 percent of riders use the bus a minimum of 3 days per week.
- Sixty percent of transit users described the primary purpose of their trip as being for either work or school.
- We estimate that annual income tied to fixedroute bus transit in the state ranges from \$436 million to \$647 million for riders who use transit to get to work.
- The typical fixed-route bus rider in Indiana is a 19-34 year old female, making less than \$15,000 a year. She is likely to be transit dependent, using the bus 3-5 times or more per week. The trip is likely to be for either school or work.
- Fixed-route passengers are charged an average fee of \$0.96 per ride among all the transit systems in Indiana. The six largest transit systems charge an average of \$1.17 per trip.

Demand-Response Systems

- In total there are over 66 demand-response providers currently operating in Indiana (INDOT Public Transit Annual Report 2010). In rural areas these systems serve as a flexible transportation option in areas with small populations that cannot support a fixed-route service. Demand-response users are required to book trips in advance via telephone or internet.
- Total ridership for the five urban demand-response systems and 43 rural demand/response systems in Indiana totaled over 640,000 and 2 million, respectively in 2010. In addition, we estimate that there were more than one million demand-response riders in the 18 urban transit systems that have both fixed-route and demand-response transit.
- Bloomington was the only system that collected ridership survey data for its demand-response service. In 2010 Bloomington's demand-response completed approximately 31,500 passenger trips. Demand-response riders in Bloomington pay \$2.00 per direction traveled.
- The population demographics for demandresponse service are typically very different from that of fixed-route. More than 50 percent of demand-response users in Bloomington were over the age of 75, and more than 70 percent were over the age of 60.
- Income levels also differed, but not as much.
 There were 34 percent of riders in the lowest income bracket of under \$10,000, while 87 percent made less than \$40,000 per year. Less than 5 percent earned over \$85,000 per year, the highest income bracket.
- The most common trip purpose for demand-response riders are to get to medical appointments, to access community resources and to get to and from work.



INTRODUCTION

The public transit network in Indiana consists of 66 urban and rural public transit systems operating bus and light van passenger vehicles along with one commuter rail system. These include both fixed-route and demand-response systems that provide transit in nearly all urban and most rural locations in the state. The commuter rail system operates in northwestern Indiana between South Bend and Chicago.

In 2010 the transit systems in Indiana provided over 35.2 million passenger trips and logged more than 46.6 million vehicle miles.

Operating revenue for all transit systems in the state totaled \$204.1 million.¹ Of this total, \$48.2 million (24 percent) was from state assistance primarily from the Public Mass Transportation Fund (PMTF) funded through the state sales tax.² The state share of funding ranges from 19 percent to 32 percent for the different types of transit available in the state. Other major sources of revenue were fares contributing

\$41.2 million (20 percent), local assistance contributing \$59.5 million (29 percent), and federal assistance contributing \$51.2 million (25 percent) to total operating revenue.³

Table 1 shows the breakdown of funding sources by type for each type of transit system. For fixed route systems the largest share of funding (35 percent) comes from local sources, while for urban and rural demand-response systems the largest share of funding is from federal sources (42 percent). For commuter rail, the largest share of revenue comes from fares (46 percent).

This report provides information on the characteristics of transit riders in the state to provide an overview of who uses transit in Indiana and for what purpose. We use data from ridership surveys to examine various demographic characteristics of riders and rider satisfaction. We also provide simulations to estimate the amount of earned income tied to transit usage.

Table 1: 2010 Operating Revenue, Indiana Transit Systems

Type of System	Fares [million \$]	%	Local Assistance [million S]	%	State Assistance [million S]	%	Federal Assistance [million \$]	%	Total [million \$]
Large and small fixed-route*	20.6	15%	46.1	35%	29.5	22%	32.5	24%	132.5
Urban and rural demand-response	2.9	9%	9.9	30%	6.4	19%	14.2	42%	33.6
Commuter rail	17.1	46%	3.5	9%	12.3	32%	4.5	12%	38.0
Total	41.2	20%	59.5	29%	48.2	24%	51.2	25%	204.1

Source: INDOT, 2010 Indiana Public Transit Annual Report

Total includes demand-response. All fixed-route systems in the state also operate a demand-response service. The demand-response component of the fixed-route systems is not broken out separately in INDOT's Public Transit Annual Report.

¹The statistics in this paragraph are from the Indiana Department of Transportation's 2010 Indiana Public Transit Annual Report.

²Appendix Table A1 shows the breakdown of PMTF funding for 2011 and 2012.

³The financing of public transit is considered in detail in a forthcoming report.

FIXED-ROUTE BUS TRANSIT IN INDIANA

There are currently 18 fixed-route transit systems operating throughout the state. Fixed-route systems are defined by set routes and designated stops. These systems range in size and scope to facilitate transportation in cities of varying in size from Indianapolis to Columbus. Cities with fixed-route systems accounted for almost 28.9 million riders and logged a combined 25.5 million vehicle miles in 2010 (INDOT Public Transit Annual Report 2010).

According to the 2010 Census, Indiana has a total population of 6,483,802—more than 2.2 million of whom live in one of the eighteen cities with fixed-route bus systems. The breakdown of population by city and metro area is shown in Table 2.

Survey Analysis

A number of the fixed-route transit systems in Indiana (including Muncie, Lafayette, Indianapolis, Bloomington, Terre Haute, Kosciusko County, and Fort Wayne) provided results from recent ridership surveys. This data, along with data provided by the Indiana Department of Transportation (INDOT Annual Report Database 2010), were compiled to examine the characteristics of transit riders in Indiana in the following analysis.

Through the ridership survey, riders were asked a number of questions including age, income, and gender; they were also asked about their trip's purpose, reasons for using the bus, and frequency of use. It should be noted, however, that survey length and sample sizes fluctuated from city to city due to differing objectives and budget constraints. In the following analysis, generalizations were made when exact comparisons could not be ascertained.

Survey data was not available from the other fixedroute systems in Indiana. Surveys in Indianapolis and Fort Wayne far exceed the number completed in other municipalities and make up 70 percent of the total. Muncie, Lafayette, and Bloomington are home to large universities and surveys from these cities largely reflect this fact.

Tabel 2: Indiana City and Metro Area Population 2010

City Center	City Population	Metro Area Population
Anderson	56,129	131,636
Bloomington	80,405	192,714
Columbus	44,061	76,794
East Chicago	29,698	*708,070
Evansville	117,429	298,805
Fort Wayne	253,691	416,257
Gary	80,294	*708,070
Hammond	80,830	*708,070
Indianapolis - Carmel	899,636	1,756,241
Lafayette - West Lafayette	96,736	201,789
Marion	29,948	70,061
Michigan City	31,479	*708,070
Muncie	70,085	117,671
Richmond	36,812	68,917
South Bend - Mishawaka	149,420	266,931
TARC	***103,049	**184,810
Terre Haute	60,785	172,425
Valparaiso	31,730	*708,070
Total	2,215,845	4,730,747

Notes: *Metro area defined as Chicago-Joliet-Naperville, IL-IN-WI Metro Area [part]

Source: Stats Indiana

Table 3: Fixed-Route Bus Surveys Returned

Transit System	Completed Surveys
Bloomington	671
Fort Wayne	2,150
Indianapolis	3,990
Kosciusko	130
Lafayette	670
Muncie	1,061
Terre Haute	155
Total	7,766

Source: Ridership Surveys [see References]

^{**}Clark and Floyd Counties, IN [part of Louisville, KY metro area]

^{***}Clarksville, Jeffersonville, New Albany, IN

Passenger Boardings

Of the cities with fixed-route systems, all but Muncie have shown increased ridership from 2006 to 2010, as shown in Table 4. Decreased ridership in Muncie may be explained in part by the elimination of the JobConnection program in 2008. As expected, Indianapolis leads the way with more than 8 million passenger boardings in 2010. Due to a large base college students, Lafayette and Bloomington come in second and third, respectively. Combined, these cities have shown a ridership increase of 10.1 percent from 2006-2010. Terre Haute has shown the highest increase of bus ridership, with a 58 percent increase. Bloomington also showed a significant increase of 37 percent during the same time period.

Table 4: Total Fixed-Route Bus Ridership by City, 2006 and 2010

City	2006	2010	Change	Percent Change
Bloomington	2,363,526	3,238,391	874,865	37.0%
Fort Wayne	1,886,851	1,888,036	1,185	0.1%
Gary	764,035	897,782	133,747	17.5%
Indianapolis	8,106,683	8,507,644	133,747	4.9%
Lafayette	4,353,281	4,946,242	592,961	13.6%
Muncie	1,979,218	1,847,969	-131,249	-6.6%
Terre Haute	184,581	291,619	107,038	58.0%
Total	19,638,175	21,617,683	1,979,508	10.1%

Source: Ridership count spreadsheets from each transit system

Characteristics of Riders

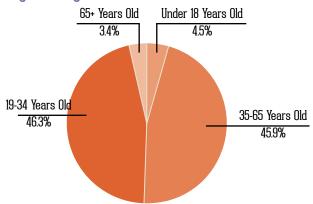
Figure 1 shows the age distribution of transit riders in Indiana. Over 90 percent of those surveyed were between the ages of 18 and 65, of legal driving age. Indianapolis, Bloomington, Muncie, and Terre Haute explicitly examined the ridership usage of college age riders (19-24 and 23.3 percent of riders in these cities are of college age. Lafayette also reported that over 60 percent of its riders were Purdue students, of which 50 percent said their trips were for school purposes.

Females account for 53.3 percent of bus ridership. They were the majority of riders in every city that reported gender data.

Almost 70 percent of riders surveyed are transit dependent, meaning they do not have access to at least one car in their household. Results indicate that if the transit system they currently use did not exist, they would either ride a bike, get a ride from a friend, or not make the trip at all, depending on the circumstances and trip's purpose.

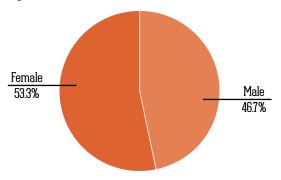
The Muncie and Bloomington surveys indicated that lack of vehicle access was the main reason riders chose bus transit. Other reasons commonly reported were to save money and avoid traffic/parking issues, especially in the Indianapolis area.

Figure 1: Age of Fixed-Route Bus Riders



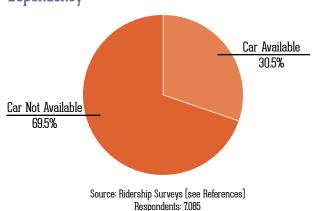
Source: Ridership Surveys [see References] Respondents: 5,589

Figure 2: Gender of Fixed-Route Bus Riders



Source: Ridership Surveys [see References] Respondents: 6,966 Among survey respondents, 49 percent were in the lowest income bracket of their respective surveys, which was an annual household income below \$10,000 or \$15,000 depending on the survey. Only 9.6 percent of respondents have an annual income of over \$50,000.

Figure 3: Fixed-Route Bus Rider Transit Dependency



Frequency of Use

About a third of transit riders use the bus system more than five days per week. Over 80 percent of riders use the bus a minimum of three days per week. Those who use the bus less than once a week make up only 8.1 percent of ridership. Frequency of use data was only reported for Indianapolis, Bloomington, and Lafayette, although Terre Haute reported two-thirds of their riders used the system on Saturdays. The data is likely skewed because those who ride the bus most frequently were more likely to be surveyed.

Trip Purpose

Sixty percent of transit users described the primary purpose of their trip as being for either work or school. Shopping accounted for almost 14 percent, while medical purposes only amounted to 5 percent. The rest of the results are labeled "other" and include social purposes, miscellaneous errands, and religious reasons. Riders may be making more than one stop along the way for errands of some sort, but work or school remains the primary purpose of the trip.

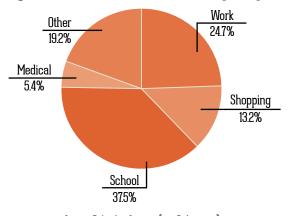
Rider History

Over 70 percent of riders in Lafayette responded that they rode the bus as much or more than they had in the previous year. Only 4.4 percent said they rode less frequently. Results were similar in Terre Haute, where more than 70 percent said they rode the same or more frequently than a year ago, and only 10 percent said they rode less often. Sixty-five percent of Bloomington riders have been using the bus for more than one year. Fort Wayne shows that 43 percent of respondents have ridden the bus for more than five years. This shows a consistent, reliable rider base.

Late Night Usage

Terre Haute and Lafayette's surveys asked respondents about late night service. Terre Haute reported a low number of night riders, with 55 percent of riders saying they did not use the bus system after 6 p.m. When asked what time of day they most often rode the bus almost 100 percent rode between 6:15 a.m. and 6:15 p.m. Among riders in Lafayette, 26 percent reported using the bus at night at least once a week, with another 21 percent occasionally riding at night, and 27 percent said they do not ride any bus late at night. The remainder complained that buses did not run late enough in their area, hindering any potential for night usage.

Figure 4: Fixed-Route Bus Rider Trip Purpose



Source: Ridership Surveys [see References] Respondents: 4,608



Typical Bus Rider

Due to the different survey methods of the transit systems in Indiana, it is somewhat difficult to establish statewide who uses transit the most. However, we can make reliable generalizations based on the reported data. The typical fixed-route bus rider in Indiana is a 19-34 year old female, who makes less than \$15,000 a year. She is likely to be transit dependent, using the bus 3-5 times or more per week. The trip is likely to be for either school or work.

Trip Fares

Fixed-route passengers are charged an average fee of \$0.96 per ride among all the transit systems in Indiana. The six largest transit systems with data available charge an average of \$1.17 per trip, the breakdown of which appears in Table 5. However, there are also passes available for an average of \$36.83 per month in these same cities. Several systems also have other deals and discounts available, such as those to youth, elderly, and disabled riders. Furthermore, pre-paid access is often given to students on college campuses. (INDOT Annual Report Database 2011)

Table 5: Fixed-Route Bus Trip Fares

City	Per Ride	Monthly Pass
Bloomington	\$1.00	\$30.00
Fort Wayne	\$1.25	\$45.00
Indianapolis	\$1.75	\$60.00
Lafayette	\$1.00	\$28.00
Muncie	\$0.50	\$18.00
Terre Haute	\$1.50	\$40.00
Average	\$1.17	\$36.83

Source: INDOT Annual Report 2010

Rider Satisfaction

Several of the transit systems in Indiana asked riders how satisfied they were with their service. How satisfaction was measured varied among systems, but generally transit services scored well in most categories. When asked about general satisfaction, respondents reported a 93 percent satisfaction rate in Kosciusko County and 85 percent in Lafayette and Bloomington.

When asked to rate their level of service in different categories, those surveyed again gave high marks. Lafayette averaged 5.9 out of 7 in all categories. Terre Haute gave an average satisfaction rate of 3.8 out of 5 for cleanliness, staff helpfulness, on-time service, and safety, with safety scoring particularly high marks. Bloomington reported an even higher satisfaction rate of 4.05 out of 5 across these same categories, but scored lower in trip frequency. Fort Wayne also scored well in safety, cleanliness, and staff helpfulness.

Customer Suggestions for Improvements

Statewide, the majority of transit users are satisfied with their level of service, but transit systems were also interested in improvement suggestions. Riders were consequently asked to give recommendations on how to improve transit service in their community. The surveys went about this in a number of ways, but the results show some trends. Riders across Indiana seem to desire more service on weekends, especially on Sundays, when transit routes do not currently run in several cities. Customers also requested that bus systems run for longer hours during the week and on weekends, especially at night. Other suggestions included more frequent trips during peak hours and improved shelters in high-use areas.



DEMAND-RESPONSE

The Indiana Department of Transportation tracks two types of demand-response systems: urban demand-response (5 systems) and rural demand-response (43 systems). In addition, the 18 systems with fixed-route bus transit also offer demand-response. In total there are more than 66 demand-response providers currently operating in Indiana (INDOT Public Transit Annual Report 2010). These systems serve as a flexible transportation option in areas with small populations that cannot support a fixed-route service. In populated areas, demand-response is typically used to transport riders (such as the elderly

and the disabled) who, for some reason, are not able to use the fixed-route system.

Total ridership for the five urban demand-response systems totaled over 640,000, while ridership for the 43 rural demand/response systems in Indiana totaled 2 million in 2010 (INDOT Public Transit Annual Report 2010). In addition, we estimate that there were over one million demand-response riders in the 18 urban transit systems that have both fixed route and demand-response transit.

Demand-Response Rider Demographics

Bloomington was the only system that collected ridership survey data for its demand-response service. In 2010 Bloomington's demand-response completed approximately 31,500 passenger trips with 18,900 revenue hours provided, which represents approximately 1.7 passengers per hour. Demand-response riders in Bloomington pay \$2.00 per direction traveled. The population demographics for demand-response service are typically very different from that of fixed-route.

Over 50 percent of demand-response users in Bloomington were over the age of 75, and over 70 percent were over the age of 60. The 18-24 age group accounted for almost half of all fixed-route users, but only represents 3.7 percent of the total for demand-response riders.

Income levels also differed, but not as much. There were 34 percent of riders in the lowest income bracket of under \$10,000, while 87 percent made less than \$40,000 per year. Less than 5 percent earned more than \$85,000 per year, the highest category.

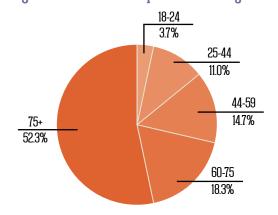
More than 60 percent of those riding demandresponse in Bloomington are retired, with the rest scattered throughout various professions. Twenty percent were unemployed, disabled, or "other." More complete occupation information can be seen in Table 6.

Table 6: Demand-Response Rider Occupation

Occupation	Percentage	Respondents
Retail	1.0%	1
Manufacturing	1.0%	1
Services	6.0%	7
Education/Health	1.0%	1
Professional	1.0%	1
Clerical	1.0%	1
Homemaker	5.0%	6
Student	1.0%	1
Retired	62.0%	69
Unemployed	7.0%	8
Disabled	7.0%	8
Other	6.0%	7

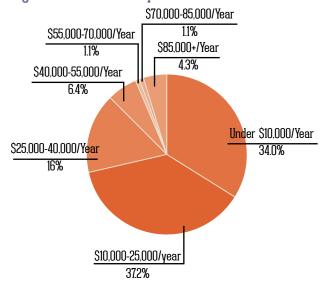
Source: Bloomington Public Transportation Corporation

Figure 5: Demand-Response Rider Age



Source: Bloomington Public Transportation Corporation Respondents: 111

Figure 6: Demand-Response Rider Income



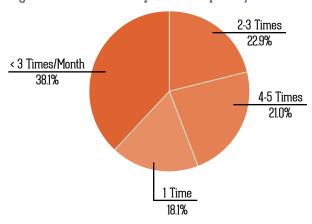
Source: Bloomington Public Transportation Corporation Respondents: 112

Use Frequency

Demand-response use varied somewhat among individuals. Some use the service quite frequently, with a large amount of their trips made using the demand-response service. Others use it more sporadically, relying on other means to make most necessary trips. Only 40 percent said they also used

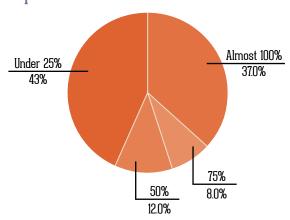
the fixed-route system in Bloomington. The most common reasons for using the demand-response service were that users needed assistance getting in/out of the vehicle or that they were not able to get to a bus stop. The following tables and charts explain this more fully.

Figure 7: Demand-Response Frequency of Use



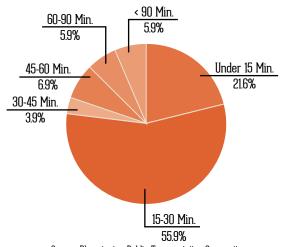
Source: Bloomington Public Transportation Corporation Respondents: 113

Figure 8: Percentage of Trips Taken on Demand-Response



Source: Bloomington Public Transportation Corporation Respondents: 111

Figure 9: Demand-Response Trip Length



Source: Bloomington Public Transportation Corporation Respondents: 113

Table 7: Reason for Using Demand-Response

Reason	Percentage	Respondents
Need assistance to/from vehicle	43.8%	49
Can't get to regular bus stops	21.9%	25
Bus stop too far	15.2%	17
Fixed-route doesn't go to destination	12.4%	14
Don't want to wait in heat/cold	1.0%	1
Safety issues with fixed-route	2.9%	3
Don't know how to use fixed-route	2.9%	3

Source: Bloomington Public Transportation Corporation

Trip Booking

Demand-response users are required to book trips in advance via telephone. Almost 80 percent responded that they booked the trips themselves, rather than through a relative or case worker. Over 70 percent indicated that they had access to the internet; however, 80 percent said they would not be willing to use the internet to book trips if such a service were available in the future.

Satisfaction

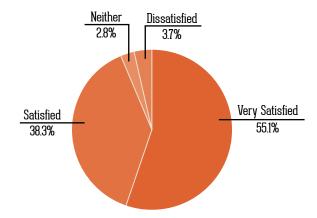
Overall satisfaction with the demand-response service was high, with 93 percent satisfied with their experience. As with fixed-route, those surveyed were asked to rate certain aspects of their service. The table below shows the results, in which employee safety and helpfulness received high scores.

Trip Purpose—Demand-Response

Figure 11 and Table 9 provide information on demand-response rider's trip purpose. Figure 11 shows trip purposes for the demand-response system in Indianapolis. The largest portion of riders takes demand-response to get to work followed by personal and medical-related trips.

The information in Table 9 was collected in March and April 2011 from a variety of agencies overseeing demand-response systems in small cities and rural areas. The largest portion of riders access demandresponse services to get to medical appointments, to access community resources and to get to and from work. The high level of variation in trip purpose among the transit agencies results, in part, from differences in the mission of these agencies. Nearly all of these transit agencies receive funding from the Federal Transportation Administration (FTA) and the Public Mass Transportation Fund (PMTF) and therefore serve the general public. Other demandresponse systems are associated with agencies that serve specific populations such as senior citizens or people with physical limitations and primarily serve these populations.

Figure 10: Demand-Response Satisfaction Rates



Source: Bloomington Public Transportation Corporation Respondents: 113

Table 8: Demand-Response Rider Satisfaction by Category

Category	Score*
Reservation people are courteous and helpful	4.6
Driver polite	4.6
Get through for reservations	4.5
Able to schedule trips	4.5
Drop off time	4. 5
Pick up time	4.4
Ready 10 min prior	4.4
Trip length	4.3
Scheduling trips on internet helpful	2.1

Source: Bloomington Public Transportation Corporation *The maximus score was 5 - strongly agree.

Figure 11: Demand-Response by Trip Purpose 2011, Indianapolis

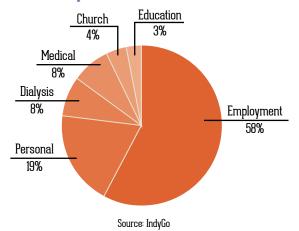


Table 9: Trip Purpose Surveys Rural Transit/Small City

Agency	Employment	Community Resources	Education	Medical	Unknown
New Interurban	56%	19%	14%	11%	0%
Hope Transit - Benton County	0%	10%	0%	90%	0%
Brown County	70%	5%	0%	25%	0%
City of Bedford	15%	38%	12%	35%	0%
City of Huntingburg	6%	20%	43%	9%	22%
City of New Castle	5%	53%	3%	39%	0%
City of Richmond	30%	25%	15%	30%	0%
Lifespan Resources	0%	10%	0%	90%	0%
Volunteer Public Transit - Area IV	0%	63%	0%	5%	32%
Catch A Ride	43%	36%	4%	17%	0%
DeKalb County	5%	24%	1%	48%	22%
Fulton County	24%	0%	0%	0%	76%
Hamilton County	50%	25%	0%	25%	0%
Hendricks County - LINK	25%	25%	0%	50%	0%
Arrowhead [Jasper]	13%	38%	27%	22%	0%
Access Johnson County	28%	36%	10%	0%	26%
Knox County - VanGo	33%	39%	21%	7%	0%
Kokomo	34%	50%	0%	16%	0%
KABS	20%	55%	20%	5%	0%
TransPorte	45%	5%	0%	50%	0%
Y Miami Go	13%	0%	7%	12%	68%
Rural Transit	20%	0%	30%	50%	0%
Noble Transit System	10%	30%	0%	60%	0%
Orange County	3%	0%	2%	95%	0%
Area 7 (WCIEDD)	8%	38%	6%	48%	0%
Arrowhead [Pulaski]	20%	30%	25%	25%	0%
ShelbyGo	10%	70%	0%	17%	3%
Arrowhead [Starke]	2%	86%	1%	9%	2%
Ride Solution - Warrick County	38%	26%	7%	29%	0%
Wabash County	23%	41%	16%	20%	0%
Wells on Wheels	0%	57%	0%	31%	12%
White County	5%	35%	5%	55%	0%
Whitley County	30%	0%	0%	0%	70%
Percent of Total	20.73%	29.97%	8.15%	31.06%	10.09%

Community Resources = shopping, banking, groceries, etc.

Source: Survey conducted by the Indiana Council on Specialized Transportation [INCOST] at the request of the Indiana Transportation Association, March and April 2011.



NORTHERN INDIANA COMMUTER TRANSPORTATION DISTRICT

The Northern Indiana Commuter Transportation District (NICTD) provides commuter rail services between South Bend, IN, and Chicago, IL, with stops at 12 stations in northwestern Indiana. In 2010 NICTD served over 3.7 million riders and had operating expenditures of over \$38 million, recovering 46 percent of expenses through fare revenue (INDOT 2011).

Demographic characteristics of riders are provided from a 2004 commuter survey (NICTD 2004). Responses to this survey indicate that the largest share of riders (approximately 30 percent) are between 40-49 years of age and just over 20 percent of riders are aged 30-39 and 50-59. The average age of the commuter was 42.7 years in 2004.

The average income of commuters was \$54,400 in 2004 with the largest share of commuters (38.1 percent earning between \$40,000 and \$60,000 and 18.9 percent of commuters earning more than

\$75,000). In aggregate, NICTD commuters earn \$265.5 million in the NICTD service area and \$237.7 million in the Indiana counties of that service area (St. Joseph, La Porte, Porter and Lake counties).

Just over 50 percent of NICTD commuters have an undergraduate or graduate degree. The most common occupational categories of commuters are clerical/office (28.7 percent), professional services (25 percent), supervisor/manager (18.2 percent) and technical specialist (11.7 percent). Commuters tend to have a relatively long association with NICTD. Over 37 percent of riders have commuted for more than 10 years.

More detailed analysis of commuter characteristics can be found in Northern Indiana Commuter Transportation District (2004). A detailed analysis of economic and demographic trends in the NICTD region is available in *Policy Analytics* (2006).

AVERAGE EXPENDITURE COMPARISON

The cost per trip measures annual operating expenditures per rider for each of the five types of public transit offered in Indiana. The cost per vehicle mile measures annual operating expenditures per vehicle mile traveled. The large fixed route systems have the lowest average expenditures per rider, while rural

demand-response systems have the highest. In contrast, expenditure per vehicle mile is lowest for the rural demand-response systems due to the large area that these systems serve and highest for the large fixed route systems.

Table 9: Trip Purpose Surveys for Rural Transit/Small City

Mode	Total Operating Expendtitures	Ridership	Total Vehicle Miles	Expenditures per Rider	Expenditures per Vehicle Mile Traveled
Large Fixed Route*	112,576,551	26,400,978	21,408,660	4.26	5.26
Small Fixed Route	19,911,396	2,460,234	4,065,119	8.09	4.90
Urban Demand Response	7,191,148	641,630	3,229,187	11,21	2.23
Rural Demand Response	26,382,830	2,025,348	14,219,949	13.03	1,86
NICTD	38,050,828	3,714,356	3,706,042	10.24	10.27

Source: 2010 Indiana Public Transit Annual Report

ESTIMATES OF INCOME LINKED TO FIXED-ROUTE BUS SYSTEMS

The fixed-route bus systems in Fort Wayne (Citilink) and Indianapolis (IndyGo) provided datasets with individual level survey responses. We assume that the number of surveys returned for each transit system and the information contained in these surveys is representative of ridership in the host city.

To estimate income linked to workers using fixedroute transit, we examine riders who report their main trip purpose as "work". We examine two groups of workers: those who use the bus to get to work because of a lack of vehicle access and those who report having access to one or more vehicles who use the bus to get to work. We use information on trip purpose, income, and vehicle access to estimate the amount of income tied to transit access.

Workers with No Vehicle Access

We examine workers with no vehicle access because these workers are transit dependent and would likely be unable maintain employment without access to bus transit. Seventeen percent of Fort Wayne Citilink riders and 25 percent of IndyGo riders

do not have access to a private vehicle.

Of workers with no vehicle access taking the bus to their job, 53.7 percent report household income under \$10,000 in Fort Wayne, and 48.9 percent report household income below \$15,000 (the lowest income category on the survey) in Indianapolis. Approximately \$7.3 million to \$11.3 million of income is tied to transit in Fort Wayne and \$60.9 to \$105.5 million in Indianapolis.

Statewide Estimates: We estimate income statewide linked to the 18 fixed-route bus systems in the state for riders with no vehicle access who take the bus to work. Using information from Fort Wayne's Citilink ridership surveys, we assume that 16.7 percent of riders have no access to a private vehicle and take bus transit to work. This equates to approximately 6,000 workers with no vehicle access in the state. Using the Fort Wayne data, we assume that the average household income for these workers is \$11,500 to \$18,000. Under these assumptions, annual household income tied to fixed-route bus transit in the state ranges from \$137 million to \$225 million (Table 11).

^{*}Total includes demand-response service. All fixed route systems in the state also operate demand-response service. The demand-response component of fixed route systems is not broken out separately for these systems in INDOT's Public Transit Annual Report.

Table 9: Trip Purpose Surveys for Rural Transit/Small City

	Fort Wayne Lower Bound [S]	Fort Wayne Upper Bound [S]	Indianapolis Lower Bound [S]	Indianapolis Upper Bound [S]	Statewide Lower Bound [S]	Statewide Upper Bound [S]
Workers with no vehicle access: Income linked to transit	7,349,000	11,384,000	60,952,000	105,549,000	137,787,000	224,561,000
Workers with vehicle access: Income linked to transit	12,285,000	17,643,000	172,456,000	240,466,000	298,955,000	422,145,000
Total	19,634,000	29,027,000	233,408,000	346,015,000	436,742,000	646,706,000

Workers with Vehicle Access

Workers with access to one or more vehicles in their household are likely to have other transportation options if bus transit were not available. Fifteen percent of Fort Wayne's Citilink riders and 27 percent of IndyGo riders using transit to get to work have access to at least one private vehicle in their households.

These workers tend to have higher household incomes than the workers with no vehicle access discussed in the previous section. Of workers with vehicle access in Fort Wayne, 23.3 percent of riders report household income below \$10,000; 16.1 percent have household incomes between \$10,000 and \$20,000; and 29.3 percent have household incomes between \$20,000 and \$35,000. In Indianapolis 17.2 percent of these workers report household income below \$15,000; 18.3 percent report income between \$15,000 and \$24,999; and 13.9 percent report income between \$25,000 and \$34,999.

We estimate (Table 9) that the household income of workers with vehicle access totals \$12.3 million to \$17.6 million in the Fort Wayne metro area and \$172 million to \$240 million in the Indianapolis area.

Statewide Estimates: In the last two columns of Table 9, we provide estimates of statewide income linked to the state's 18 fixed-route bus systems for riders with vehicle access who take the bus to work. Using information from Fort Wayne's Citilink ridership surveys, we assume that 14.86 percent of riders statewide have access to a private vehicle but use transit to get to work. This equates to approximately 5,250 workers with vehicle access in the state. We assume that the average household income of these workers is \$21,000 to \$31,000 (assuming that these averages from the Fort Wayne survey are applicable



statewide). We estimate that annual income ranges from \$298 million to \$422 million.

Aggregating the incomes of workers with and without vehicle access, the household income of workers taking bus transit to work totals \$436 million to \$647 million.



IMPLICATIONS AND CONCLUSION

The 66 transit systems in Indiana served over 35 million riders in 2010. An analysis of ridership surveys from seven of these systems showed that the majority of fixed-route riders in Indiana are from the college-age and working-age populations (ages 19 to 65), while demand-response riders tend to be senior citizens (age 65+). School and work were the primary trip purposes for fixed route riders, while medical care, accessing community services (such as shopping, banking, groceries, and work) were the most common trip purposes on demand-responses riders.

Analysis of ridership survey data from seven fixedroute bus systems around the state reveals that the largest portions of riders take the bus to work (24.7 percent) and school (37.5 percent) indicating that the availability of transit has a large impact on current and future earnings within the state.

A large portion of riders are transit dependent. Almost 70 percent of fixed-route respondents had no access to a private vehicle in their household; while 45 percent of demand-response respondents rely on demand-response as their primary mode of transportation (75 percent or more of all trips are on demand-response).

Public transit primarily serves low income populations. Almost half of fixed-route bus riders are in the lowest income category included on the survey, with annual household incomes below \$10,000 or \$15,000 depending on the survey. Less than 10 percent of survey respondents had annual household income above \$50,000. Among demandresponse riders, 34 percent have annual household incomes below \$10,000.

For workers who do not have access to a private vehicle, lack of bus access or cuts to existing transit is likely to have an impact on their ability to get to work and maintain employment. Workers with at least one vehicle in the household are less likely to be affected by transit cuts. We estimate the aggregate (statewide) household income to be \$436 million to \$647 million for workers who take the bus to work.

Survey responses indicate high levels of satisfaction with public transit among users.

APPENDIX

Table A1: Funding from the Public Mass Transit Fund [State Sales Tax], by Transit System

System Name	2012 Allocation	2011 Allocation	% Change	S Change
Group One				
Bloomington	\$2,513,792	\$2,263,594	11.05%	\$250,198
Evansville	\$1,951,369	\$1,719,029	13.52%	\$232,340
Fort Wayne	\$2,058,317	\$1,898,399	8.42%	\$159,918
Gary	\$901,290	\$1,030,777	-12.56%	-\$129,487
Indianapolis	\$10,573,121	\$10,612,174	-0.37%	-\$39,053
Lafayette	\$3,952,341	\$3,785,914	4.40%	\$166,427
Muncie	\$1,489,902	\$1,505,642	-1.05%	-\$15,740
South Bend	\$2,300,983	\$2,499,115	-7.93%	-\$198,132
Subtotal	\$25,741,115	\$25,314,644	1.68%	\$426,471
Group Two				
Anderson	\$331,580	\$300,051	10.51%	\$31,529
Columbus	\$298,611	\$282,085	5.86%	\$16,526
East Chicago	\$323,261	\$354,433	-8.79%	-\$31,172
Hammond	\$391,193	\$425,494	-8.06%	-\$34,301
Marion	\$304,821	\$242,370	25.77%	\$62,451
Michigan City	\$276,286	\$280,361	-1.45%	-\$4,075
Richmond	\$420,882	\$417,800	0.74%	\$3,082
TARC	\$1,260,352	\$1,219,275	3.37%	\$41,077
Terre Haute	\$461,694	\$431,441	7.01%	\$30,253
Subtotal	\$4,068,680	\$3,953,310	2.92%	\$115,370
Group Three				
Elkhart	\$679,086	\$686,684	-1,11%	-\$7,598
Goshen	\$51,823	\$67,861	-23.63%	-\$16,038
Kokomo	\$508,696	\$421,095	20.80%	\$87,601
LaPorte	\$72,028	\$78,065	-7.73	-\$6,037
NIRPC	\$560,794	\$628,466	-10.77%	-\$67,672
Valparaiso	\$129,415	\$60,757	n/a	
Subtotal	\$2,001,842	\$1,942,928	3.03%	\$58,914
Group Four				
Allen County	\$55,357	\$25,110	120.46%	\$30,247
Bedford	\$97,830	\$97,533	0.30%	\$297
Boone County	\$76,456	\$83,590	-8.53%	-\$7,134
Cass County	\$470,633	\$434,845	8.23%	\$35,788
Clinton County	\$78,074	\$84,820	-7.95%	-\$6,746
DeKalb County	\$98,678	\$71,314	n/a	\$27,364
Fayette County	\$68,695	\$73,064	-5.98%	-\$4,369
Franklin County	\$123,690	\$122,006	1.38%	\$1,684
Fulton County	\$102,593	\$91,201	12.49%	\$11,392
Hamilton County	\$141,185	\$114,964	22.81%	\$26,221
Hancock County	\$57,815	\$55,904	3.42%	\$1,911

System Name	2012 Allocation	2011 Allocation	% Change	\$ Change
Hendricks County	\$206,397	\$171,264	20.51%	\$35,133
Huntingburg	\$13,206	\$11,923	10.76%	\$1,283
Huntington County	\$84,670	\$80,232	5.53%	\$4,438
Jay/Randolph/Delaware/ Blackford/Henry	\$207,922	\$206,389	0.74%	\$1,533
Johnson County	\$309,268	\$235,298	31.44%	\$73,970
KIRPC	\$154,258	\$165,215	-6,63%	-\$10,957
Knox County	\$201,869	\$187,406	7.72%	\$14,463
Kosciusko County	\$101,011	\$94,502	6.89%	\$6,509
LaGrange County	\$113,663	\$60,603	n/a	\$53,060
Madison County	\$69,556	\$65,193	6.69%	\$4,363
Marshall County	\$45,604	\$31,829	43.28%	\$13,775
Miami County	\$75,321	\$71,918	4.73%	\$3,403
Mitchell	\$13,694	\$15,661	-12.56%	-\$1,967
Monroe County	\$336,599	\$287,423	17.11%	\$49,176
New Castle	\$76,601	\$81,614	-6.14%	-\$5,013
Newton County	\$92,824	\$91,000	2.00%	\$1,824
Noble County	\$111,519	\$99,170	12.45%	\$12,349
Orange County	\$136,804	\$140,885	-2.90%	-\$4,081
Rush County	\$45,335	\$24,076	n/a	\$21,259
Seymour	\$68,628	\$58,656	17.00%	\$9,972
SIDC	\$664,019	\$622,136	6.73%	\$41,883
SIRPC	\$342,642	\$342,919	-0.08%	-\$277
SITS	\$170,662	\$169,257	0.83%	\$1,405
Steuben County	\$78,123	\$53,590	n/a	\$24,533
Union County	\$71,265	\$73,858	-3.51%	-\$22,593
Vigo County	\$37,569	\$44,645	-15.85%	-\$7,076
Wabash County	\$70,598	\$71,624	-1.43%	-\$71,026
Washington	\$23,082	\$23,977	-3.73%	-\$895
Waveland	\$7,981	\$7,355	8.51%	\$626
Wells County	\$81,991	\$87,877	-6.70%	-\$5,886
White County	\$46,400	\$41,812	10.97%	\$4,588
Whitley County	\$84,825	\$106,700	-20.50%	-\$21,875
Subtotal	\$5,514,912	\$5,055,248	9.09%	\$459,664
Total Groups 1-4	\$37,326,549	\$36,266,130	2.92%	\$1,060,419
NICTD	\$5,254,502	\$5,108,760	2.85%	\$145,742
Total	\$42,581,051	\$41,374,890	2.92%	\$1,206,161

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About the ITA

Since 1935, ITA has represented public transportation, intercity, and private charter bus operators in Indiana, in addition to a commuter railroad and other transportation-related agencies (including manufacturers, insurance companies, consultants, and government and planning agencies).

The Purpose of the Indiana Transportation Association Is:

- To carry out the general functions of a trade organization and to provide information for its members through publications and the sponsorship of meetings and conferences.
- To help promote the interests of its members through programs of education and information outreach for its members, the general public, and special publics in Indiana and elsewhere.
- To disseminate Association information to local, state, and federal levels of government to protect, advocate, and advance the interests of its members.
- To act as a liaison with government on the state and local level in Indiana and with key governmental agencies, such as the Indiana Department of Transportation, the U.S. Department of Transportation, and the Federal Transit Administration.
- To act as a liaison with other trade organizations in Indiana, such as the Indiana Association of Cities
 and Towns, and the State Chamber of Commerce; to work with trade organizations in other states; and
 to act as a liaison with such national organizations such as the American Bus Association, the United
 Motorcoach Association, the American Association of State Highway and Transportation Officials, and
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