



FINAL REPORT

Illinois Statewide Public Transportation Plan

FEBRUARY 2018

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FINAL REPORT

Illinois Statewide Public Transportation Plan

I. INTRODUCTION

The Illinois Department of Transportation (IDOT) Office of Planning and Programming (OPP) and Office of Intermodal Project Implementation (OIPI) has completed the first *Statewide Public Transportation Plan* (the Plan). The focus of the Plan was “Downstate” Illinois, the area outside of the six-county Chicago metropolitan area¹. The Plan developed a vision for an integrated public transportation system that promotes mobility and access for people living, working, or visiting Illinois. The Plan identified goals, objectives, and strategies to meet the demand for services. The time frame of the *Statewide Public Transportation Plan* was 2040, and the Plan has been integrated into Illinois’s *2040 Long Range Transportation Plan*.

The *Statewide Public Transportation Plan* included stakeholder and public engagement; assessed the existing transit operating and capital conditions; identified the current technology applications used by the transit agencies; determined the unmet transit needs and gaps; developed performance measures; and made recommendations on new services. Reports were prepared for each of the following topic areas and can be referenced for more detailed information. Summaries and pertinent data from each report were included in the Plan.

- *Inventory and Technical Report*
- *Stakeholder Engagement Report*
- *Service Needs and Gaps Report*
- *Technology Opportunities and Benefits Report*
- *Capital Asset State of Good Repair Report*
- *State Funding and Benefits of Public Transportation Report*
- *Performance Measures Report*

¹ The transit agencies within the Chicago area, i.e. the CTA, Pace, and Metra, have developed separate public transportation plans. This Plan, focused on Downstate Illinois, identified integral public transportation connections to the six county Chicago region.

II. STAKEHOLDER ENGAGEMENT

General public engagement for the *Illinois Statewide Public Transportation Plan* was intended to provide information that cannot easily be obtained by standard data gathering efforts and to gather input on what the public feels are issues and opportunities related to transit. The outreach had a dual purpose to collect important data as well as to engage public officials, agency representatives, and residents in promoting the Plan.

The public outreach strategy for this Plan featured a broad array of tools and approaches for soliciting stakeholder and public input including:

- Interviews with Human Service Transportation Provider coordinators
- Interviews with transit agency providers
- Input and direction from a Steering Committee
- Surveys
- Public meetings
- Listening tours

This Stakeholder Engagement chapter summarizes the results of each outreach effort and discusses how each is relevant to the plan. More detailed information is provided in the *Stakeholder Engagement Report*.

A. Human Service Transportation Providers (HSTP)

In April 2015, one-on-one interviews were held with each of the eleven Human Service Transportation Providers (HSTP) Regional Coordinators. The HSTP coordinators are responsible for coordination and oversight of the delivery of public and specialized transportation services within their region. They also prepare the Human Services Transportation Plan for their region which defines existing services and identifies transportation needs, specifically for those persons with disabilities, older adults, and persons with limited incomes.

The interview session followed a standardized list of questions to allow for consistency and comparability of information across the State. However, interviewers deviated from the list of questions to gather unique and individual information from each of the interviewees. Responses from the HSP coordinators are summarized below.

Each HSTP region brings a unique set of challenges, unmet needs, and gaps in services. However, some commonalities exist. The most consistently mentioned future trends for which HSTP coordinators are planning for include an aging population which will put increasing demands on the network of transportation services, particularly for medical appointments and treatments. In addition to medical appointments, demand is increasing for convenient and affordable transportation options for commuters traveling to/from a rural area and the nearest urbanized area for employment and periodic appointments. In some areas, interstate travel demand is increasing for employment, although in other regions, employment opportunities are decreasing, reducing the potential for general public riders.

For most regions, the leading challenge to coordinating transportation services is the uncertainty of the Illinois State Budget. Agencies cannot predict future funding cuts and working together to coordinate services is not a priority when funding levels are unknown. In some regions there are also challenges to securing a local match for programs; local government entities are not required to participate.

In order to increase service to the general public, coordination among providers and transit vehicle availability is important. Several regions are in the early stages of coordination and are working to overcome the challenges of vehicle or trip sharing. Multi-modal and connector/feeder services and programs are being developed to improve regional and even state-wide transportation options including modes of rural bus service, human service agencies, urban bus services, and even rail (where available). The timing of vehicle delivery to replace aging vehicles or replace vehicles is an issue that has been expressed.

B. Transit Agencies

Key staff members at transit agencies were interviewed to collect important data as well as to provide the opportunity for two-way dialogue and gather insights. The interviews were held over a four month period between March and June 2015. Their responses are summarized below.

A particularly difficult task when studying public transit is to identify passenger travel patterns, especially for the majority of systems in Illinois that do not use electronic fare media, which has the capability of tracking such data. Therefore, much of the focus of the transit agency interviews was on gathering data on existing services, rider origin and destinations, coordination efforts, and service gaps and needs.

The interview data collected differed based on whether the transit provider was an agency providing fixed route services or an agency providing demand response services. Different questions were asked based on the type of services offered. The results of the interviews were incorporated into the *Inventory and Technical Report*. Profile sheets for all services were prepared and included in the report. The profile sheets depicted information on service areas, hours of service, population in service area, ridership, locations served, software, vehicles, funding, destinations, and facilities.

C. Steering Committee

A Steering Committee, composed of representatives of transit agencies and organizations from across the State, was established at the beginning of the planning process to provide oversight and direction. A list of Steering Committee members is included in the *Stakeholder Engagement Report*.

The first Steering Committee meeting was held on June 17, 2015 at IDOT offices in Springfield. A presentation on the purpose of the Plan, the issues raised by the transit agencies in terms of gaps and needs, demographic data, service gaps, a review of transit funding, and next steps was presented. After the presentation, the Steering Committee members participated in an interactive workshop. The following four workshop stations were directed by a facilitator:

- Goals and Objectives
- Transit Needs and Gaps
- Funding
- Performance Measures

At the Goals and Objectives workstation, a draft vision as well as goals and objectives for the Plan were created. The vision, goals, and objectives were reviewed by additional stakeholders and the public. A final version is presented in the *Inventory and Technical Report*.

At the Transit Needs and Gaps workstation, each Steering Committee member was asked to identify service gaps and needs in the State. The result indicated that there were gaps in service availability (i.e. evenings/weekends), in intra-county connectivity, and in origin/destination accessibility.

At the Funding workstation, the facilitator asked questions of the participants in four broad areas: funding constraints, funding utilization, local funding, and service contracts/coordination. Comments and concerns related to: 1) there will be a reduction in the Downstate Operating Assistance Program (DOAP) funding; 2) most agencies have dependent riders and not “choice” riders; 3) there is a large unmet need for a stable, predictable and dedicated source of capital funding, particularly for vehicles; and 4) locally dedicated funding sources need to be identified.

At the Performance Measures workstation, the topic centered on how the State would like to incorporate performance measures as part of the Plan. Potential measures were presented and additional measures were added by the Steering Committee members. There was a consensus that the use of the performance measures must compare similar conditions, flow from the goals and objectives, be supported by accurate, consistent data, and make sure that per capita measures are part of the set of measures and represent both the financial side and the “human side” of public transportation.

A full summary of the workshop station input is provided in the *Stakeholder Engagement Report*.

A second Steering Committee Meeting was held on May 23, 2016. The meeting began with a discussion by IDOT of the *2040 Long Range Transportation Plan*. The discussion then centered on the Statewide Public Transportation Plan and identified the timeline, the specific, measurable, attainable, relevant and time-bound “SMART” Goals and Objectives that had been established for the Plan from the results of the first Steering Committee meeting, the stakeholder and public outreach that had occurred to date, a review of the *Inventory and Technical Report*, a review of the *Service Needs and Gaps Report*, and next steps.

After the presentation, the Steering Committee participated in a workshop. Four workshop stations were set up to discuss different topics as follows:

- SMART Goals
- Performance Measures
- Technology
- Funding

Any input received at the meeting was incorporated into the Plan documents.

D. Public Input

A public survey was developed to gather additional input. The aim of the survey was to ask respondents how familiar they were with public transportation and whether they use it. If they responded that they use it, they were asked to identify how often they use it and describe trip purposes and destinations. The survey also requested background demographic data in order to identify rider or potential rider profiles. Survey results are reflected in the *Stakeholder Engagement Report*.

Nine public meetings were held throughout the State in September and October 2015. The meetings were held in conjunction with other transportation related meetings, generally IDOT’s multi-year transportation plan for a particular district. A total of 216 people attended the meetings.

The meetings were organized as workshops, allowing participants to attend at any time during the two or three hour sessions. At each meeting, the public was invited to view maps showing information for each district:

- Existing Transit Providers
- Fixed Routes
- Scheduled Demand Response Trips to and from the Service Area
- Transit Need Index
- Population Density and Employment Concentration
- Intercity Passenger Rail and Bus Routes
- Regional Public Transportation Connections

In addition to the maps, a presentation described the project purpose, goals, and next steps.

The meetings were designed to be interactive. Meeting participants used a district map where they thought transit services were needed based on the origins and destinations of potential transit users.

The information collected at the public meetings and through the surveys was used to identify transit gaps and needs to be reflected in the Plan.

E. Listening Tour

In April 2015, IDOT and the Capital Development Board (CDB) launched a statewide listening tour to hear about the infrastructure challenges Illinois residents and businesses face. Over 2,730 people attended 39 meetings across the state. An online survey received more than 1,250 responses. This dialogue, emphasizing what infrastructure means to quality of life, mobility, and economic growth, was designed to establish priorities and lay the groundwork for a realistic, sustainable plan to bring Illinois' infrastructure into the 21st century.

A wide spectrum of voices were heard over the course of the listening tour, including those of corporate CEOs, small business owners, school and college officials, local government leaders, agricultural interests, environmentalists, and citizens.

In general, residents, businesses, and local leaders shared these common concerns to public transportation:

- The transportation network is facing both congestion and deterioration issues.
- Transit service and access continues to be a challenge throughout the State.
- In Downstate communities, transit and paratransit are critical in helping residents, students, older adults, and veterans get to jobs, hospital appointments, training programs, and civic and cultural amenities. Paratransit service plays a critical role particularly for the most disadvantaged residents who have limited transportation options available.
- Amtrak passenger rail service provides a critical lifeline between many parts of the State, especially college towns, while Chicago's status as a regional and national rail hub makes the rest of the country accessible to Illinoisans for business and pleasure travel.
- Intercity bus plays an important role in certain markets which have limited or non-existent rail service.
- While transit ridership is growing in many areas of the State, concern was expressed over the proposed FY 2016 budget cuts to transit and passenger rail service. Many shared their frustrations regarding lack of connectivity – while they would like to bike or take transit to reach their destinations, there are often last mile challenges that prevent residents from being able to travel without the use of a vehicle.

- Others highlighted the challenge of adequately funding transit – transit is currently supported through the General Revenue Fund; therefore transit agencies must compete against social service programs and education every year. Downstate transit providers expressed concern that they would be left behind while resources are devoted to bigger systems or other budgetary needs.

From late April through late May, IDOT made the survey available on its website for those who wanted to provide their feedback online. The survey received 1,259 responses. Responses related to public transportation are as follows:

- **Reliable and Accessible Public Transit.** This is important to residents across the State, though many aren't satisfied with the status quo and called on providers to improve performance, frequency of service, and condition of equipment.
- **Access to Transit.** This was the second most popular local concern, with over 400 respondents commenting on the topic. Frequently cited challenges included lack of available bus transit to other communities, need for more Chicago Transit Authority (CTA) rail interconnectivity within the City of Chicago, and lack of available and reliable Metra service. Others expressed concerns over the state of Metra's infrastructure. Many Downstate respondents spoke to the importance and lack of Amtrak service.
- **High-Speed Rail.** Nearly 30 respondents cited the desire for high-speed rail. Of these respondents, many expressed dissatisfaction with current Amtrak services as well as the need to access major Downstate hubs more quickly.

Overall, the information collected in these meetings was used to inform the *Statewide Public Transportation Plan*.

III. INVENTORY OF EXISTING PUBLIC TRANSPORTATION SERVICES²

A. Chicago Metropolitan Region Services

Three public transportation providers operate within the Chicago Metropolitan Region: the Chicago Transit Authority (CTA), Metra (Northeast Illinois Regional Commuter Rail Corporation), and Pace Suburban Bus Service. The Regional Transportation Authority (RTA) is the unit of local government charged with regional financial and budgetary oversight, funding and transit planning for the three transit providers in the Chicago area. The RTA system provides more than two million rides each weekday on bus and rail services in Cook, DuPage, Kane, Lake, McHenry, and Will Counties. The region's system covers approximately 3,700 square miles and serves approximately 8.4 million residents. It is the second largest transit system in the country by passenger miles traveled, behind only New York, and the third largest in the country by ridership, behind only New York and Los Angeles.

The CTA is a regional transit system that operates primarily in the City of Chicago with connections and services in 35 suburbs. On an average weekday, approximately 1.7 million rides are taken on the CTA. CTA has 1,865 buses that operate over 128 routes and 1,354 route miles. On the rail system, CTA's 1,356 rail cars operate over eight routes and 224.1 miles of track to serve 146 stations.

Metra is the commuter rail agency serving Cook, DuPage, Will, Lake, Kane, and McHenry counties in the Chicago area. Metra serves more than 100 communities with 241 stations on 11 lines running from downtown Chicago.

Pace is the suburban public transportation provider operating fixed bus routes, vanpools, paratransit services, and general public Dial-A-Ride services. Pace covers 3,500 square miles and is one of the largest bus services by geographic area in North America.

The Chicago Metropolitan Region will not be analyzed as part of this report; the Statewide Public Transportation Plan concentrates on agencies outside the Chicago Metropolitan Region.

B. Services Outside of the Chicago Metropolitan Region (“Downstate” Services)

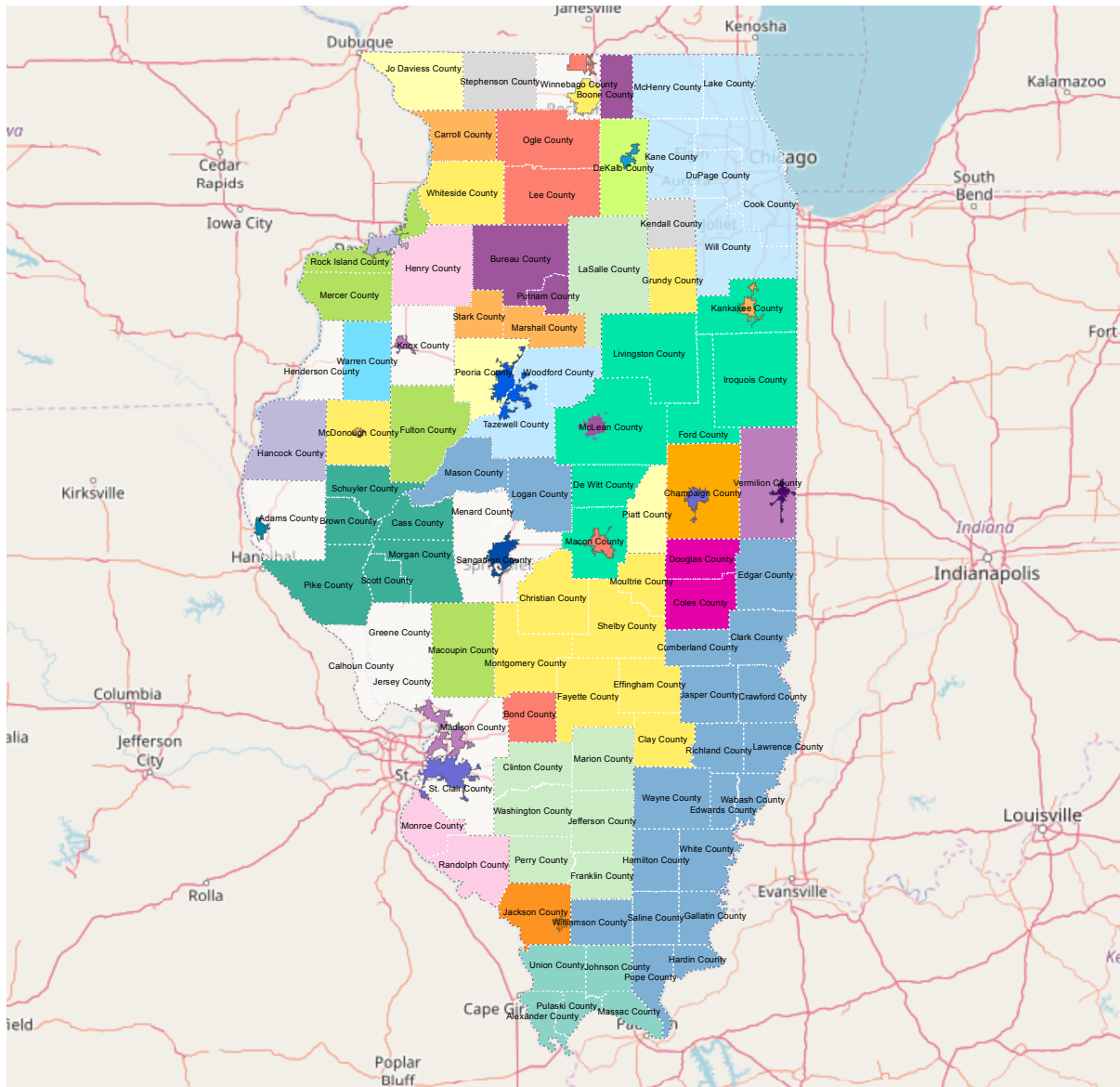
Outside of the six county Chicago areas, 51 transit agencies operate demand response or fixed route transit services. These Downstate services are the focus of this Plan. Figure 1 and Table 1 lists all of the Downstate public transportation systems in the State, indicating the type of service they provide and their respective service area.

² All data in this section is from FY2014

Key findings of the Downstate fixed route bus systems include the following:

- **Ridership has been growing** for virtually every system, **typically by 2% to 5% per year**, even as population has declined in a number of cities.
- **Most systems provide slightly over one revenue vehicle hour of service** (a common measure of effectiveness) annually per capita. Ridership per hour varies more, with most in the 12-30 riders per hour range. Champaign-Urbana and Macomb, with high numbers of college student riders, are much higher; Galesburg and Rockford are lower.
- The **general pattern is** that **evening service** operates until 9:00 p.m. on weekdays, but **not on Saturdays. Most operate Sunday** service, except on major holidays.
- Peak weekday **headways of 30 minutes are common**; hourly is the most common headway at other times that service is operated.
- **Adult fares are typically \$1.00, collected in cash.**
- **Most systems have stops designated with bus stop signs**, or are in the process of implementing this process.
- **Most systems that have Amtrak and/or intercity bus service** in their area **serve their riders in off-street transit centers.**
- **Some smaller systems have not implemented technology** that has the potential to make it easier to update their schedules to reflect changed conditions or provide better information to their customers (“next stop”, real-time “next bus”, or trip planning).
- The **majority of systems are operated directly by employees of the agency**, although a few use national for-profit companies or local non-profits to provide day-to-day operations management.
- **Five systems have contracts with local universities** to provide service; their students ride free on part, or all, of their systems.





Legend

- | | | | |
|--|--|--|------------------------------------|
| Bond County Transportation | Fulton County | Marshall-Stark Transportation | SHOWBUS |
| Boone County Council on Aging | Galesburg City Bus | McDonough County Public Transportation | Saluki Express |
| Bureau-Putnam Area Rural Transit | Go West | MetroLink | Shawnee Mass Transit District |
| CRIS Rural Mass Transit District | Grundy Transit System | Monroe-Randolph Transit District | South Central Transit |
| Carroll County Transit | Hancock County Public Transportation | No Rural Transit | Springfield MTD |
| Central Illinois Public Transportation | Henry County Public Transit | North Central Area Transit | St. Clair County Transit District |
| Champaign County Rural Transportation System | Huskie Lines | Piatt County Public Transportation | Stalene Mass Transit |
| Champaign Urbana MTD | Jackson County Mass Transit District | Pretzel City Area Transit | Voluntary Action Center |
| CityLink | Jo Daviess Transit | Quincy Transit Lines | Warren Achievement Center |
| Connect Transit | Kendall Area Transit | RIDES | WeCare |
| CountyLink | Lee-Ogle Transportation System | RIM Rural Transit | West Central Mass Transit District |
| Danville Mass Transit | Logan-Mason County Public Transportation | RTA | Whiteside County Public Transit |
| Decatur Public Transportation | Macoupin County Public Transportation | River Valley Metro | |
| Dial A Ride | Madison County Transit District | Rockford MTD | |

Figure 1: Downstate Public Transportation Services

Table 1: Downstate Public Transportation Providers

TRANSIT AGENCY	SYSTEM TYPE	GEOGRAPHY SERVED
Bond County Transportation	General Public Demand Response	Bond County
Boone County Council on Aging	General Public Demand Response	Boone County
Bureau-Putnam Area Rural Transit	General Public Demand Response	Bureau County Putnam County
Carroll County Transit	General Public Demand Response	Carroll County
Central Illinois Public Transportation	General Public Demand Response	Christian County Clay County Effingham County Fayette County Montgomery County Moultrie County Shelby County
Champaign County Rural Transportation System	General Public Demand Response	Champaign County
Champaign Urbana MTD	Fixed Route	Champaign Urbana
CityLink	Fixed Route	Peoria, Pekin, East Peoria, Peoria Heights
Connect Transit	Fixed Route	Bloomington Normal
CountyLink	General Public Demand Response	Peoria County
CRIS Rural Mass Transit District	General Public Demand Response	Vermillion County
Danville Mass Transit	Fixed Route	Danville
Decatur Public Transportation	Fixed Route	Decatur
Dial A Ride	General Public Demand Response Flex Route	Coles County
Fulton County	General Public Demand Response	Fulton County
Galesburg City Bus	Fixed Route	Galesburg
Go West	University and Urban Fixed Route	Macomb
Grundy Transit System	General Public Demand Response	Grundy County
Hancock County Public Transportation	General Public Demand Response	Hancock County
Henry County Public Transit	General Public Demand Response	Henry County
Jackson County Mass Transit District	General Public Demand Response Flex Route	Jackson County
Jo Daviess Transit	General Public Demand Response	Jo Daviess County

TRANSIT AGENCY	SYSTEM TYPE	GEOGRAPHY SERVED
Kendall Area Transit	General Public Demand Response	Kendall County
Lee-Ogle Transportation System	General Public Demand Response Flex Route	Lee County Ogle County
Logan-Mason County Public Transportation	General Public Demand Response	Logan County Mason County
Macoupin County Public Transportation	General Public Demand Response	Macoupin County
Madison County Transit District	Fixed Route	Urbanized Madison County
Marshall-Stark Transportation	General Public Demand Response	Marshall County Stark County
McDonough County Public Transportation	General Public Demand Response	McDonough County
MetroLink	Fixed Route	East Moline, Moline, Rock Island
Monroe-Randolph Transit District	General Public Demand Response	Monroe County Randolph County
North Central Area Transit	General Public Demand Response	LaSalle County
Piatt County Public Transportation	General Public Demand Response	Piatt County
Pretzel City Area Transit	General Public Demand Response	Stephenson County
Quincy Transit Lines	Fixed Route	Quincy
RIDES	General Public Demand Response	Clark, Crawford, Cumberland, Edgar, Edwards, Effingham, Gallatin, Hamilton, Hardin, Jasper, Lawrence, Pope, Richland, Saline, Wabash, Wayne, White, and Williamson Counties
RIM Rural Transit	General Public Demand Response Flex Route	Mercer County Rock Island County
River Valley Metro	Fixed Route	Kankakee
Rockford MTD	Fixed Route	Rockford
St. Clair County Transit District (MetroLink)	General Public Demand Response Fixed Route, Rail	Urbanized St Clair County
Shawnee Mass Transit District	General Public Demand Response Flex Route	Alexander, Johnson, Massac, Pulaski, Union Counties
SHOWBUS	General Public Demand Response Flex Route	Iroquois, DeWitt, Ford, Livingston, Kankakee (rural), McLean (rural), Macon (rural) Counties

TRANSIT AGENCY	SYSTEM TYPE	GEOGRAPHY SERVED
South Central Transit	General Public Demand Response Flex Route	Clinton, Franklin, Jefferson, Marion, Perry, Washington Counties
Sangamon MTD	Fixed Route	Springfield
Stateline Mass Transit	General Public Demand Response	Rockton Township, Roscoe, South Beloit
Voluntary Action Center	General Public Demand Response Flex Route	DeKalb County
Warren Achievement Center	General Public Demand Response Flex Route	Warren County
WeCare	General Public Demand Response	Tazewell County Woodford County
West Central Mass Transit District	General Public Demand Response	Brown, Cass, Morgan, Pike, Schuyler, Scott Counties
Whiteside County Public Transit	General Public Demand Response	Whiteside County

1. Fixed Route Systems

There are fourteen fixed route bus systems operating outside the metropolitan Chicago area. Most of these are operated by agencies in urban areas (population in the SMSA over 50,000) and receive funding through FTA 5307 program. All fixed route systems are all-bus systems except St. Clair County Transit District (SCCTD), which contracts with Metro Transit in St. Louis, MO for provision of both bus and light rail service. Some providers operate complementary paratransit service in-house while others contract for its operation. Most systems are managed as independent Mass Transit Districts (MTD), with their own Board of Directors, although four of the smallest fixed-route systems are run through city departments. Table 2 provides a description of the operator, brand name and additional information.

Table 2: Downstate Fixed Route Urban Bus Systems Characteristics

CITY	BLOOMINGTON-NORMAL	CHAMPAIGN-URBANA	DANVILLE	DECATUR	GALESBURG	KANKAKEE	MACOMB	MADISON COUNTY	PEORIA	QUAD CITIES	QUINCY	ROCKFORD	SPRINGFIELD	ST. CLAIR COUNTY
Operator	Bloomington-Normal Public Transit System	Champaign-Urbana Mass Transit District	City	City	City	River Valley Metro Mass Transit District	McDonough County Public Transportation	Madison County Mass Transit District	Greater Peoria Mass Transit District	Rock Island County Metropolitan Mass Transit District	City	Rockford Mass Transit District	Sangamon Mass Transit District	St. Clair County Transit District
Brand name	Connect Transit	CUMTD	DMT	DPTS	Galesburg Transit	River Valley Metro	Go West	MCT	CityLink	MetroLink	Quincy Transit	RMTD	SMTD	Metro
Square Miles of Service Area	46	30	30	53	18	27	9	482	105	46	16	155	65	388
Population (2010)	129,107	141,471	50,996	81,337	32,195	66,386	31,403	232,298	209,896	120,378	40,633	296,863	119,100	248,145
Annual Riders (2013)	2,067,276	11,989,138	638,832	1,463,092	153,831	949,663	1,970,166	2,848,662	3,376,486	3,571,142	514,805	1,904,680	1,863,394	6,446,497
Annual Riders (2008)	1,732,157	9,605,069	477,712	1,242,904	156,846	535,593	1,670,890	2,530,264	2,537,548	2,634,697	398,283	1,768,365	1,482,103	7,148,459
Annual Riders (2003)	771,350	9,355,839	U/K	921,802	129,813	U/K	1,092,863	2,068,744	1,818,134	2,087,055	393,353	1,491,401	1,704,326	7,042,005
Ridership Trend (% Increase/Year)	6%	2%	5%	4%	2%	9%	4%	3%	5%	4%	2%	2%	1%	-1%
Revenue Miles	1,555,991	3,375,304	593,645	1,119,917	215,523	1,002,717	485,980	5,583,842	2,733,844	2,451,868	542,159	1,947,549	1,707,928	5,000,163
Revenue Hours/Capita	0.86	2.09	0.53	1.02	0.42	1.04	1.31	1.12	0.80	1.42	1.33	0.47	1.12	1.13
Revenue Miles/Square Mile	33,826	112,510	19,788	21,131	11,974	37,138	53,998	11,585	26,037	53,301	33,885	12,565	26,276	12,887
Ridership/Capita	16.0	84.7	12.5	18.0	4.8	14.3	62.7	12.3	16.1	29.7	12.7	6.4	15.6	26.0
Ridership/Revenue Hour	18.7	40.5	23.5	17.6	11.4	13.8	47.8	11.0	20.0	20.9	9.5	13.7	14.0	22.9
Peak Vehicle Requirements	33	110	12	17	4	14	17	74	75	58	8	48	58	45 Bus/58 Rail
Service Hours: M-F Span	6:00AM-10:00PM	24 hr.	5:45AM-9:15PM	5:30AM-7:15PM	7:00AM-6:15PM	5:00AM-10:00PM	7:00AM-7:00PM	3:30AM-2:00AM	5:30AM-11:15PM	4:30AM-10:00PM	6:00AM-6:00PM	5:50AM-11:15PM	6:00AM-10:45PM	4:14AM-12:30AM
Service Hours: Saturday Span	6:45AM-9:45PM	24 hr.	7:15AM-6:45PM	6:00AM-7:15PM	7:00AM-6:15PM	6:00AM-10:00PM	10:00AM-6:00PM	4:30AM-2:00AM	7:30AM-10:00PM	5:30AM-6:30PM	6:00AM-6:00PM	6:00AM-5:15PM	6:00AM-6:00PM	5:02AM-11:40AM
Service Hours: Sunday Span	Evenings Only	24 hr.	None	None	None	8:00AM-4:30PM	None	6:30AM-10:00PM	7:45AM-7:30PM	7:00AM-5:00PM	6:45AM-5:00PM	8:15AM-5:15PM	None	5:02AM-11:40AM
Late Night Service	7:00PM to 1:00AM daily for ISU	24 hr.	DR to 9:15PM in Certain Areas	None	None	None	Some WIU Routes to 3:00AM on Weekends	FR to 2:00AM	None	Thurs-Sat to 0330 on Some Routes	None	Only 4 Routes Have Weekday Evening Service	Weekday evening service provided with 5 special routes	N
Typical Headways	30/60	10	30/60	30/60	30/60	30/60	30/60	30/60	30/60	30	30/60	60	30/60	12/20
Basic Cash Fare	\$1.00	\$1.00	\$1.00	\$1.00	\$0.60	\$1.00	Free	\$1.50-3.50	\$1.00	\$1.00	\$0.50	\$1.00	\$1.25	\$2.00-2.50
Marked Bus Stops	Summer '15 (Except ADA Riders)	Only on Campus	All	All	Few	All	All	All	Some (System-Wide in Progress)	Some	85%	Starting to Sign	All	All
Interfaces with Other Operators	ATK, IC bus	ATK, DMT, IC bus	CUMTD in Champaign, IC bus	None	ATK, IC bus	Chicago RTA services	ATK	MetroLink/MetroBus	IC bus	IC bus	None	Stateline MTD, IC bus	ATK, IC bus	MCT
Data in GTFS	Y	Y	N	N	N	Y	N	Y	N	Y	N	N	Y	Y
Real-Time Trip Planning	Y	Y	N	N	N	N	Y	Y	N	Y	N	N	N	Y

2. Demand Response Systems

Most rural service is provided by demand response³. Demand response services can be roughly divided into general public demand response and limited demand response service. Limited demand response services can encompass subscription trips for clients to a social service agency or demand response service only open to certain populations. This type of service is funded under FTA Section 5310 grant for seniors and persons with disabilities. General public demand response systems are open to the public and supported by FTA Section 5311 grant funding. The goal of this Plan is to concentrate on the demand response services that are open to the general public.

Demand response services are provided in 85 of the 96 Downstate counties, primarily in rural areas. Demand response services are currently not provided in Menard, Calhoun, Greene, Henderson, and Jersey Counties and in the non-urban portions of Adams, Knox, Sangamon, Madison, St. Clair, and Winnebago Counties. However, of these counties, Menard, Sangamon, Calhoun, Greene, and Jersey Counties have system startups pending. Some rural agencies also operate fixed route or semi-fixed "flex" routes. Flex routes have scheduled timepoints along a route, but buses can deviate off route by passenger request—either through a dispatcher or a request of the driver.

Many of the agencies provide service to a single county although there are several agencies serving multiple counties, the extreme case being RIDES MTD which serves 17 counties. The multi-county systems are, almost without exception, transportation agencies. However, of the 36 agencies which provide service, 22 serve only one county. Many of these are multi-purpose social service agencies. In nine counties, service is provided directly by a department of county government.

The rural systems primarily transport riders who cannot drive themselves, either because they do not have a vehicle available for the trip or because they are unable to drive due to a disability. Most riders are older adults. The biggest single category of trips on most systems is medical; i.e. travel to doctor appointments or treatment locations. Similar to the way people use their personal vehicle, many rural transit riders combine trip purposes, often involving multiple stops over the course of a day.

Table 3 provides a summary of all rural services in the State that are part of the IDOT Public Transportation System, provide service to the general public, and receive state funding. Additional information, provided in profile sheets, is located in the *Inventory and Technical Report*.

Figure 2 displays a map of Illinois which shows the counties where there is no demand response service. In some cases, fixed route systems are operating in the urban areas of the county but do not serve the rural portion of the county, leaving large areas unserved.

³ A "demand response system" is one where passenger trips are generated by calls from passengers to the transit operator, who then dispatches a vehicle to pick the passengers up and transport them to their destinations. The operation is characterized by the following: a) The vehicles do not operate over a fixed route or on a fixed schedule except, perhaps, on a temporary basis to satisfy a special need b) Typically, the vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destination c) advance notice is needed to schedule a trip (generally 24 hours).

Table 3: Downstate Rural Demand Response Systems Characteristics

TRANSIT AGENCY	SYSTEM TYPE	SERVICE AREA	SERVICE AREA		TRIPS OUTSIDE SERVICE AREA	SERVICE SPAN			ANNUAL RIDERSHIP	PER CAPITA		REVENUE MILES PER SQUARE MILE OF SERVICE AREA
			SQUARE MILES OF	POPULATION		WEEKDAY	SATURDAY	SUNDAY SERVICE SPAN		RIDERSHIP PER CAPITA	REVENUE HOURS	
Bond County Transportation	General Public Demand Response	Bond County	383	17,768	Anywhere within 100 miles of Greenville	6:00 AM to 6:00 PM	No service	No service	35,611	2.00	0.54	760.54
Boone County Council on Aging	General Public Demand Response	Boone County	282	54,165	Medical trips to Rockford	8:00 AM to 4:30 PM	No service	No service	27,825	0.51	0.18	559.49
Bureau-Putnam Area Rural Transit	General Public Demand Response	Bureau and Putnam Counties	1,045	40,984	Peoria, Ottawa, Morton, Peru	6:00 AM to 6:30 PM	No service	No service	75,391	1.83	0.64	59.15
Carroll County Transit	General Public Demand Response	Carroll County	466	15,587	Clinton, Sterling/Rock Falls, Freeport, Sauk Valley Community College	6:00 AM to 6:00 PM	No service	No service	1,578	0.10	0.46	353.84
Central Illinois Public Transportation	General Public Demand Response	Christian, Clay, Effingham, Fayette, Montgomery, Moultrie, and Shelby Counties	4,211	148,947	Greenville, Glen Carbon, Springfield, Mattoon, Champaign/Urbana, Carbondale	6:00 AM to 8:00 PM (Effingham County) 7:00 AM to 5:00 PM all other counties	6:00 AM to 8:00 PM (Effingham County) 7:00 AM to 5:00 PM all other counties	No service	223,743	1.5	0.29	183.18
Champaign County Rural Transportation System	General Public Demand Response	Champaign County (non urbanized area)	950	55,720	None	6:00 AM to 6:00 PM	No service	No service	16,891	0.3	0.22	292.22
CountyLink	General Public Demand Response	Peoria County (non urbanized area)	581	71,916	City of Peoria, Pekin	5:00 AM to 6:00 PM	No service	No service	26,123	0.51	0.17	517.88
CRIS Rural Mass Transit District	General Public Demand Response	Vermillion County (non urbanized area)	868	30,629	Champaign	6:00 AM to 6:00 PM	8:00 AM to 4:00 PM	No service	50,062	1.63	0.49	343.22
Dial A Ride	General Public Demand Response; Flex Route	Coles and Douglas Counties	927	73,858	Champaign/Urbana, Effingham, Springfield	6:00 AM to 6:00 PM	8:00 AM to 4:30 PM	11:00 AM to 6:00 PM	52,534	0.71	0.18	291.58
Fulton County	General Public Demand Response	Fulton County	882	37,069	Macomb, Galesburg, Springfield, Peoria	7:00 AM to 4:30 PM	No service	No service	27,217	0.73	0.08	62.62
Grundy Transit System	General Public Demand Response	Grundy County	432	50,228	Joliet (generally, west of Larkin Ave; Union Station; and VA Clinic)	6:00 AM to 6:00 PM	No service	No service	11,051	0.22	0.16	380.37
Hancock County Public Transportation	General Public Demand Response	Hancock County	813	19,104	Anywhere within 2 hours of Carthage	7:30 AM to 4:30 PM	No service	No service	13,438	0.7	0.4	186.93
Henry County Public Transit	General Public Demand Response	Henry County	827	50,486	Sterling/Rock Falls, Quad Cities (IL), Princeton, Galesburg, Peoria	7:00 AM to 5:00 PM	No service	No service	37,952	0.75	0.25	347.69
Jackson County Mass Transit District	General Public Demand Response; Flex Route	Jackson County	541	60,218	Mt Vernon, Marion, Anna, St Louis	6:00 AM to 5:30 PM	No service	No service	56,729	0.51	0.3	728.15
Jo Daviess Transit	General Public Demand Response	Jo Daviess County	606	22,691	Freeport, Dubuque, Monroe (WI), Rockford, Iowa City (IA), Madison (WI)	6:00 AM to 6:00 PM	9:00 AM to 1:00 PM	No service	39,825	1.76	0.54	467.37

TRANSIT AGENCY	SYSTEM TYPE	SERVICE AREA	SERVICE AREA		TRIPS OUTSIDE SERVICE AREA	SERVICE SPAN			ANNUAL RIDERSHIP	PER CAPITA		REVENUE MILES PER SQUARE MILE OF SERVICE AREA
			SQUARE MILES OF	POPULATION		WEEKDAY	SATURDAY	SUNDAY SERVICE SPAN		RIDERSHIP PER CAPITA	REVENUE HOURS	
Kendall Area Transit	General Public Demand Response	Kendall County and some adjacent areas in Aurora in Plainfield	323	114,736	Anywhere within 20 miles of Yorkville including Aurora, Plainfield, Sandwich, Joliet, Morris	6:00 AM to 7:00 PM	No service	No service	26,000	0.23	0.18	789.47
Lee-Ogle Transportation System	General Public Demand Response; Flex Route	Lee County, Ogle County	1,492	87,243	All adjacent counties, Rockford, DeKalb	6:00 AM to 6:00 PM	No service	No service	92,897	1.06	0.35	332.78
Logan-Mason County Public Transportation	General Public Demand Response	Logan County, Mason County	1,157	44,971	Springfield, Pekin, Peoria, Bloomington	7:30 AM to 4:00 PM	No service	No service	19,838	0.44	0.22	130.45
Macoupin County Public Transportation	General Public Demand Response	Macoupin County	868	47,769	St Louis, Alton, Wood River, Hillsboro (medical trips only); Springfield, Fairview Heights	7:00 AM to 7:00 PM	7:00 AM to 1:00 PM	No service	40,311	0.84	0.52	421.38
Marshall-Stark Transportation	General Public Demand Response	Marshall County, Stark County	685	18,634	Anywhere within an hour of the county lines	8:00 AM to 4:00 PM	No service	No service	7,121	0.34	0.28	154.2
McDonough County Public Transportation	General Public Demand Response	McDonough County	591	36,612	Anywhere within 2 hours of Macomb	6:00 AM to 6:00 PM	7:00 AM to 1:00 PM	No service	49,089	1.34	0.67	520.69
Monroe-Randolph Transit District	General Public Demand Response	Monroe County, Randolph County	995	66,427	Anywhere in adjacent counties for medical/ educational purposes	6:00 AM to 5:00 PM	No service	No service	37,865	0.57	0.2	506.12
North Central Area Transit	General Public Demand Response; Flex Route	LaSalle County	1,148	112,183	Spring Valley	8:00 AM to 4:30 PM	No service	No service	47,943	0.42	0.21	388.93
Piatt County Public Transportation	General Public Demand Response	Piatt County	440	16,433	Decatur, Champaign	6:00 AM to 6:00 PM	No service	No service	43,851	2.62	0.92	672.89
Pretzel City Area Transit	General Public Demand Response	Stephenson County	564	47,711	None	6:00 AM to 12:00 AM	6:00 AM to 1:00 PM	No service	39,550	0.83	0.32	303.8
RIDES	General Public Demand Response; Flex Route	Clark, Crawford, Cumberland, Edgar, Edwards, Gallatin, Hamilton, Hardin, Jasper, Lawrence, Pope, Richland, Saline, Wabash, Wayne, White, and Williamson Counties	7,454	304,824	Rides schedules out of district trips to major medical facilities, shopping centers, employment sites and educational centers throughout Illinois, and in Indiana, Kentucky, and Missouri	7:30 AM to 5:30 PM (Varies by County)	7:30 AM to 4:00 PM (Only Saline County)	No service	3,543,598	2.08	0.58	475.39
RIM Rural Transit	General Public Demand Response	Rock Island County (non-urbanized area), Mercer County	947	42,167	None	8:00 AM to 5:00 PM	No service	No service	6,683	0.16	0.07	86.54
Shawnee Mass Transit District	General Public Demand Response; Flex Route	Pulaski, Alexander, Johnson, Union, Massac	1,438	60,218	Cape Girardeau MO, Paducah KY, Carbondale, Herrin	6:00 AM to 6:00 PM	7:00 AM to 3:30 PM	No service	132,553	2.2	1.21	900.05

TRANSIT AGENCY	SYSTEM TYPE	SERVICE AREA	SERVICE AREA		TRIPS OUTSIDE SERVICE AREA	SERVICE SPAN			ANNUAL RIDERSHIP	PER CAPITA		REVENUE MILES PER SQUARE MILE OF SERVICE AREA
			SQUARE MILES OF	POPULATION		WEEKDAY	SATURDAY	SUNDAY SERVICE SPAN		RIDERSHIP PER CAPITA	REVENUE HOURS	
SHOWBUS	General Public Demand Response; Flex Route	Kankakee, McLean, Macon, Iroquois, DeWitt, Ford, Livingston Counties	5,487	262,709	Champaign, Springfield, Peoria	4:00 AM to 6:00 PM (Kankakee County) 7:30 AM to 5:30 PM all other counties	No service	No service	152,487	0.58	0.19	181.57
South Central Transit	General Public Demand Response; Flex Route	Marion, Clinton, Jefferson, Franklin, Perry, Washington Counties	6,187	192,385	St Louis, Alton, Troy, Marion	9:00 AM to 3:00 PM (Washington County) 5:00 AM to 7:00 PM all other counties	No service	No service	544,285	2.82	0.16	378.7
Stateline Mass Transit	General Public Demand Response	South Beloit, Rockton, Roscoe and Rockton Township	440	31,526	Machesney Park, Rockford, Beloit, Loves Park (medical trips only)	6:00 AM to 10:00 PM	8:00 AM to 6:00 PM	8:30 AM to 4:30 PM	9,743	0.31	0.18	4,831.04
Voluntary Action Center	General Public Demand Response; Flex Route	DeKalb County	634	105,160	100 mile radius (medical appointments only)	7:00 AM to 11:00 PM	10:00 AM to 2:00 PM	No service	228,192	2.17	0.55	1,354.13
Warren Achievement Center	General Public Demand Response; Flex Route	Warren County	541	17,707	Galesburg, Alexis	7:30 AM to 4:30 PM	No service	No service	56,729	3.2	0.82	309.71
WeCare	General Public Demand Response	Tazewell County (rural), Woodford County	1,152	137,863	Peoria, Bloomington, Pekin	5:30 AM to 5:30 PM	No service	No service	35,336	0.16	0.12	418.85
West Central Mass Transit District	General Public Demand Response	Morgan, Scott, Pike, Brown, Schuyler, Cass County	2,769	85,455	Quincy, Peoria, Alton and Springfield, Danville (medical trips only)	6:00 AM to 6:00 PM	No service	No service	148,515	1.74	0.51	235.9
Whiteside County Public Transit	General Public Demand Response	Whiteside County	695	58,498	Freeport, Clinton, Quad Cities, Rockford, Peoria, Dixon, Iowa City	6:00 AM to 6:00 PM	No service	No service	45,504	0.78	0.27	433.94

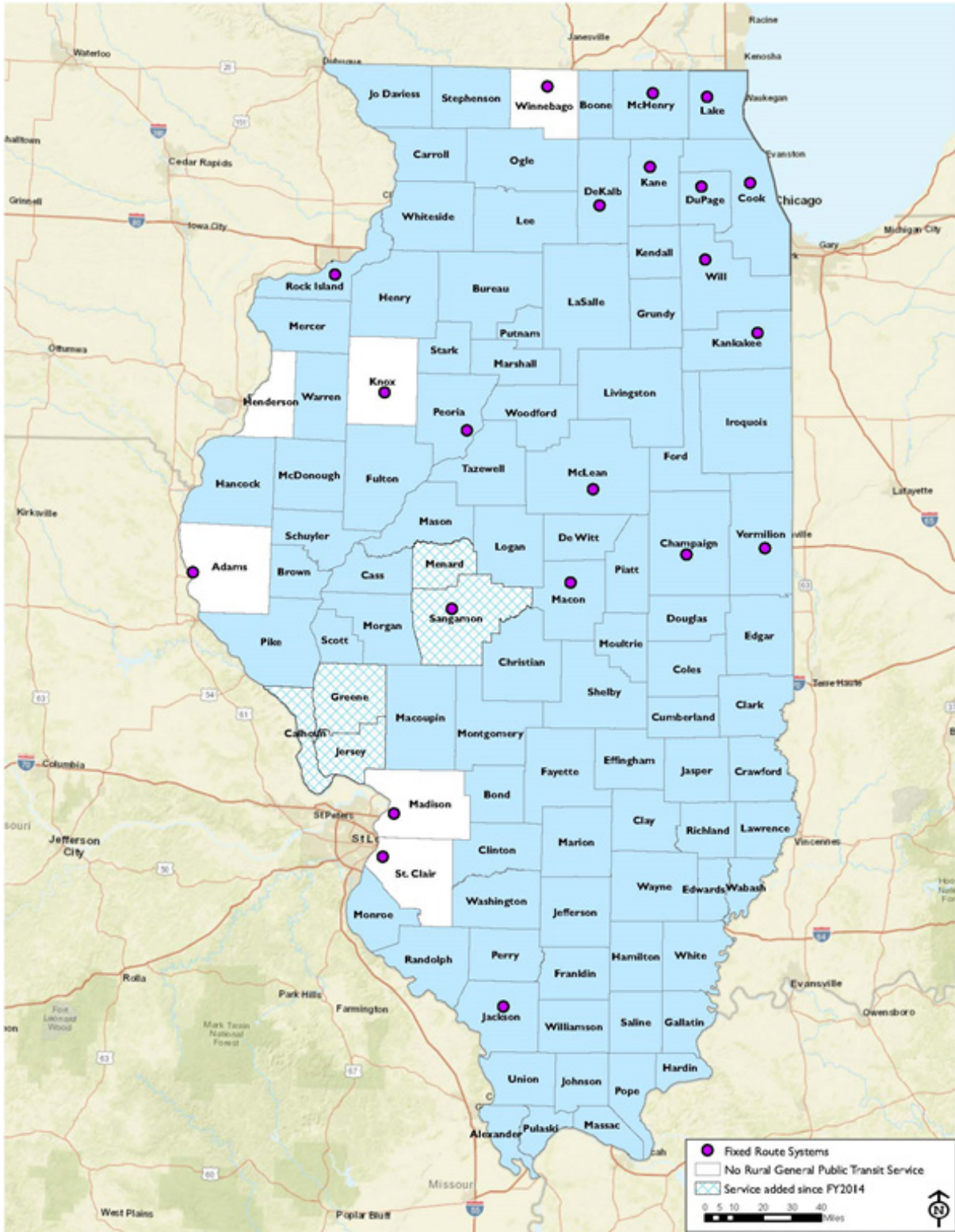


Figure 2: Counties Not Served by Transit Services⁴

4 As of FY 2014; this is the baseline year for the existing conditions section of this report

a. Inter-County and Intercity Travel

Many rural operators routinely operate trips to cities outside of their service area, with many of these trips related to medical appointments (cost of these trips is often reimbursed by Medicaid, or other sources). Often, these trips are advertised to clients and medical service providers as only available on a given day of the week, encouraging appointments to be scheduled on those days. However, a few operators (17%) have a policy of not going out of their service areas. All of the operators serving rural parts of urban counties routinely take people directly to their destination in one or more nearby cities, although many prefer to take people to connecting urban fixed route service if the rider has the ability to ride that service.

Depending on the operator, and the specific trip, some passengers may have to transfer to a vehicle operated by another carrier to complete their trip, reducing the need for long trips (19% of carriers report that they do this regularly). Typically, these transfers take place at a retail store or public building close to the border between counties. However, some operators have a policy of not transferring passengers to or from another rural operator; these carriers tend to make more long distance trips. They also tend to be the large, multi-county operators. Although these larger agencies may not transfer riders to another agency's vehicles, they will do transfers between their own vehicles within their service areas if the need arises; both CIPT and RIDES do this quite often. Virtually all general public demand response systems routinely transfer passengers to and from urban fixed route and intercity operators (i.e. Amtrak, Greyhound, etc.) where these opportunities exist.

b. Fixed Route and Route Deviation Services

With increasing volumes of riders and requests for longer distance trips or varied trip destinations, many carriers have sought to increase the efficiency of their operations by operating more pre-planned flex routes, with designated trip origin and destination locations and times, typically with the ability to go off the most direct route to make pickups or drop-offs. Some agencies post these trips on their websites, while in other cases they are used internally (and probably known by regular riders). In a few cases, the public is told (including posting on the website) that reservations are not required, at least in the direction returning from the destination endpoint. The large, multi-county operators have adopted these procedures (South Central, Shawnee, RIDES, and SHOWBUS).

IV. INVENTORY OF EXISTING INTERCITY SERVICES

Four modes of intercity public passenger transportation provide service within the State and connect to cities in adjacent states:

- Intercity Rail
- Intercity Bus
- Intrastate Air
- Airport Bus

Most intercity passenger service within the State is oriented to Chicago (Union Station, O'Hare Airport, or the Greyhound terminal). Passenger rail is the predominant form of public transportation for travel within the State due to multiple frequencies on all routes, growing ridership, and major planned improvements in speed, reliability, and rolling stock quality in the works. The corridor with the most public transportation service is Chicago-Champaign, with multiple intercity bus, air, airport bus, and rail trips. The O'Hare Airport market is also significant. The only significant "cross-state" route is the Quad Cities-Indianapolis route with stops in Galesburg, Peoria, Normal, Champaign, and Danville.

The provision of intercity public transportation service was, until recent years, left up to for-profit corporations. Intercity service declined as the interstate highway program encouraged users to drive their own vehicles. Rail service declined sharply after the 1968 removal of post office contracts for handling of mail on passenger trains. Air service to smaller cities started declining after deregulation in 1978. Bus service, particularly to small towns, declined after deregulation of interstate bus service in 1982. Over the last few decades, public funding has started to become available for intercity public transportation service, with each program established by Congress. These programs now include:

- In 1971, Amtrak was established as a quasi-public agency to take over intercity passenger rail service. Over time, a number of states contracted with Amtrak for the provision of service over and above its basic network. This process was modified with the passage of the Passenger Rail Investment and Improvement Act (PRIIA) of 2008 which includes Section 209. This established a consistent national policy of making states primarily responsible for regional service, of less than 750 miles, leaving Amtrak responsible for long distance trains (special conditions apply to the Northeast Corridor). Illinois contracts with Amtrak for operation of the trains from Chicago to Carbondale, St. Louis, Quincy, and Milwaukee (the last paid for primarily by Wisconsin).
- In 1978, the Essential Air Service (EAS) program was established to subsidize operation of small aircraft to small airports. The only Illinois intrastate service airport receiving EAS subsidies is O'Hare to Decatur. Illinois airports receiving subsidies for interstate service are Decatur, Quincy, and Marion/Herrin (all for service to St. Louis). Some cities may also subsidize air service.

- The 1998 passage of the Transportation Equity Act for the 21st Century (TEA-21) included Section 5311(f), a 15% set-aside for intercity bus service within the rural transportation element of the Federal Transit Administration program. However, state governors were allowed to certify that there were no unmet intercity bus needs in their state which permitted shifting these funds to other rural transit programs. Illinois has regularly exercised this option until recently. Some shorter (Danville-Campaign and Harrisburg-Carbondale) intercity service was initiated under the Job Access Reverse Commute (JARC) program. IN 2013, IDOT worked with intercity bus operators to establish the www.illinoisbusnetwork.com website, which includes a map and a trip planner function. In 2015, the first intercity bus route funded under the 5311(f) program was established: Chicago to Davenport, with intermediate stops at Naperville, DeKalb, Rochelle, Dixon, and Moline (contracted to Greyhound).

Detailed discussion of the intercity service provided by each mode follows.

A. Intercity Rail

Intercity passenger rail service has been provided in Illinois exclusively by Amtrak since it took over from the private railroads primarily by 1971. Service radiates in every direction from Amtrak's Midwest hub at Chicago Union Station. Since changes in federal legislation adopted in 2008, Amtrak operates all of its regional service which includes most of its service out of Chicago, under contracts with the states. In 2007, Illinois requested that frequency of service on regional routes in Illinois be doubled, making the service much more useful and resulted in greatly increased ridership. The current service pattern on the Illinois routes is as follows:

ROUTE	SERVICE	RIDERSHIP (DOES NOT INCLUDE LONG DISTANCE TRAINS)		
		2007	2013	PERCENT CHANGE
Chicago-St. Louis	5 round trips*	230,179	432,920	88.1%
Chicago-Carbondale	3 round trips*	202,109	342,113	69.3%
Chicago-Quincy	2 round trips**	155,136	230,961	48.9%

* Includes one long distance train round trip

**Two long distance trains operate to Galesburg

These trains serve 29 municipalities in Illinois. For most cities, this is the only intercity public transportation available. With the completion of the improvements currently in progress, the network will serve as a solid public transportation backbone for the State with two or more round trips on each route, therefore allowing same day round trips with reasonably fast service.

Amtrak Regional Service also provides connections to neighboring states, with seven round trips to Milwaukee, three round trips to Detroit and intermediate cities, a single daily train on two other Michigan routes, and one train to Indianapolis. Chicago is also the hub of Amtrak's long distance service with eight of the national network's fifteen trains terminating at Union Station. Several of the long distance trains also serve Downstate cities along their routes.

A major upgrade of the Chicago-St. Louis rail infrastructure is in progress. New track and signals, the addition of several passing sidings and the upgrade of the track will permit increasing the maximum authorized speed over most of the route from 79 mph to 110 mph. New locomotives as part of a coordinated procurement by the Midwest states, California, and Washington recently went into service. These capital improvements primarily rely on funding from the Federal Railroad Administration (FRA). The result of these improvements will be significantly shorter end-to-end trip times as well as increased reliability.

The FRA has also awarded funding for track and signal upgrades to permit the implementation of new service with two daily round trips between Chicago and Moline (in the Quad Cities area) and another stop at Geneseo. This mostly involves construction of a new connection between the existing Amtrak-served route and the existing freight-only route to Moline at Wyanet as well as upgrading the freight-only track west of the crossing. This project does not have a completion date.

B. Intercity Bus

Intercity bus service in Illinois has been much less stable than intercity rail passenger service. Almost all long distance bus service in Illinois is operated by for-profit corporations with no public funding. Intercity bus service was deregulated in the United States in 1982. Since that time, the companies have considered ridership information to be proprietary information and it is not available for analysis. While there are no government regulatory filings to establish a record, it is apparent that the pre-deregulation trend of declining ridership and service particularly to small towns which had started before deregulation, has generally continued. Local service, which included “flag stops” along country highways has disappeared. With its acquisition of most of the Burlington Trailways network in 1987, Greyhound became the primary operator of intercity bus service in the State.

However, deregulation has also allowed new service to be established without requiring regulatory agency approval. The first significant expansion of intercity bus service in the Midwest came with the start of service by Megabus of a number of express routes radiating in all directions out of a hub based on curbside loading near Chicago Union Station. Megabus has now discontinued its only other stop in Illinois (at Champaign, on its Chicago–Memphis route), leaving Illinois with no intrastate service. Greyhound’s response has been to further focus on express operation on routes that were doing well and to abandon the other routes. Greyhound operates four daily round trips between St. Louis and Nashville; two of these stop enroute in Illinois at Carbondale, Marion, and Vienna and the other two only at Mt. Vernon. Greyhound’s only other routes with stops in Illinois are a Chicago–Memphis route, which includes trips that stop in Champaign, Mattoon, Effingham, Mt. Vernon, and Marion and a single trip on a Champaign–Decatur–Springfield–St. Louis route. Burlington Trailways is now operating the routes west out of Chicago abandoned by Greyhound, and the Quad Cities to Indianapolis route previously operated by Illini Swallow Lines. The intercity bus route with the most intense service in Illinois is the route between Chicago and Madison (WI), with stops in Rockford, South Beloit, and Janesville, which is operated by Coach USA (eight daily round trips).

Most intercity bus service in Illinois is part of the Amtrak Thruway branded bus network. Tickets are available from Amtrak although most tickets are sold directly by bus operators. Only the Galesburg–Springfield and St. Louis–Carbondale routes require bus tickets to be purchased in combination with rail tickets. Information regarding these services is widely distributed by Amtrak and buses stop at the Amtrak stations.

Recently, public transit agencies have begun operation of some relatively short distance intercity service, including:

- Danville–Champaign (about 32 miles) with eight weekday and five Saturday trips each way (operated by Danville Mass Transit)
- Carbondale–Marion–Harrisburg (about 37 miles) with five weekday trips each way to Harrisburg and nine to and from Marion, operated by RIDES

Another recent development was the establishment of the first publicly-funded long distance intercity bus service in Illinois: Moline to Chicago via I-88, with two daily round trips. This service is funded by IDOT, administered by rural operator Lee-Ogle Transportation System, and operated under contract by Greyhound. Cutaway vehicles which are smaller than standard intercity coaches, are used for this service.

C. Air Service

Commercial airline service, not commonly regarded as a form of public transportation, is extremely important in Illinois. Two of the busiest airports in the country are located in the State: Chicago’s O’Hare and Midway International Airports. These airports focus on interstate and international travel. There are six airlines that provide service within the State; these all operate to/from O’Hare and each has from three to seven daily flights. Their primary function is to serve as feeders to long distance flights with fares for the relatively short trips expensive. Several other smaller airports also have interstate service. Air service that was more oriented to serving intrastate markets, most notably Chicago-Springfield, used to be prevalent but this is no longer the case.

D. Airport Bus

With the tremendous growth in air travel, the number of people riding buses to airports has grown as well. In Illinois, this refers exclusively to service to/from O’Hare and Midway Airports with the vast majority to O’Hare. At O’Hare, the bus service operates out of the Bus Shuttle Center, located on the ground floor of the main parking garage proximate to the CTA rail station. Although similar to intercity buses, there are distinct differences between airport buses and intercity buses, making it appropriate to separate the two categories. Similar to intercity bus services, airport bus routes are not regulated; ridership information is not available and there is no record of changes in service over the years.

Airport bus service to/from O'Hare is currently operated in five corridors, listed in in order of decreasing service frequency:

- **Rockford:** Coach USA operates hourly service to O'Hare, as part of a route that originates in Madison, WI with stops in Janesville, WI and Beloit, IL. The service also operates nine trips per day on a second route through Rockford to Union Station in downtown Chicago and Midway Airport.
- **Champaign:** Peoria Charter Coach operates eight trips per day to O'Hare. Two of these also serve Midway and Union Station, two serve Woodridge, and four serve Oakbrook, IL. Five continue beyond O'Hare to serve Woodfield Mall in Schaumburg. Illini Shuttle operates six trips to O'Hare; all of these continue to Woodfield Mall.
- **Peoria and Normal:** Peoria Charter Coach operates four trips per day to O'Hare, which all continue to Midway.
- **Moline:** Act II Transportation operates three trips per day to O'Hare, with intermediate stops at businesses near freeway exits in Annawan, Princeton, LaSalle, and Ottawa.

V. SERVICE GAPS AND NEEDS

A. Overall Transit Demand

The Plan identifies transit gaps and needs throughout the State and addresses ways to fulfill demand that is currently unmet.⁵ To estimate demand, the number of transit rides needed in a given area, three different approaches were taken: 1) an approach for demand response/flex route/commuter systems open to the general public, 2) an approach for “limited” demand response systems, and 3) an approach for fixed route systems. For the demand response systems, key demographics were used to estimate demand. For fixed route systems, Illinois’ fourteen systems were compared to peer systems outside of the State. Methodologies employed to estimate demand were based on research developed through the Transit Cooperative Research Program (TCRP). The results of this analysis are presented below. Full details of the methodologies are described in the *Service Needs and Gaps Report*.

B. Fixed Route Service Demand

This Plan does not analyze the local situation in each city to identify specific gaps in service coverage. Instead, a peer review was used as an alternative approach to determining how much demand each of these systems is meeting. Each of the systems was compared to that of a non-Illinois peer system (i.e. the availability of service in comparison to the characteristics of service area population). A methodical system was used to select peer agencies is described in detail in the *Service Needs and Gaps Report*.

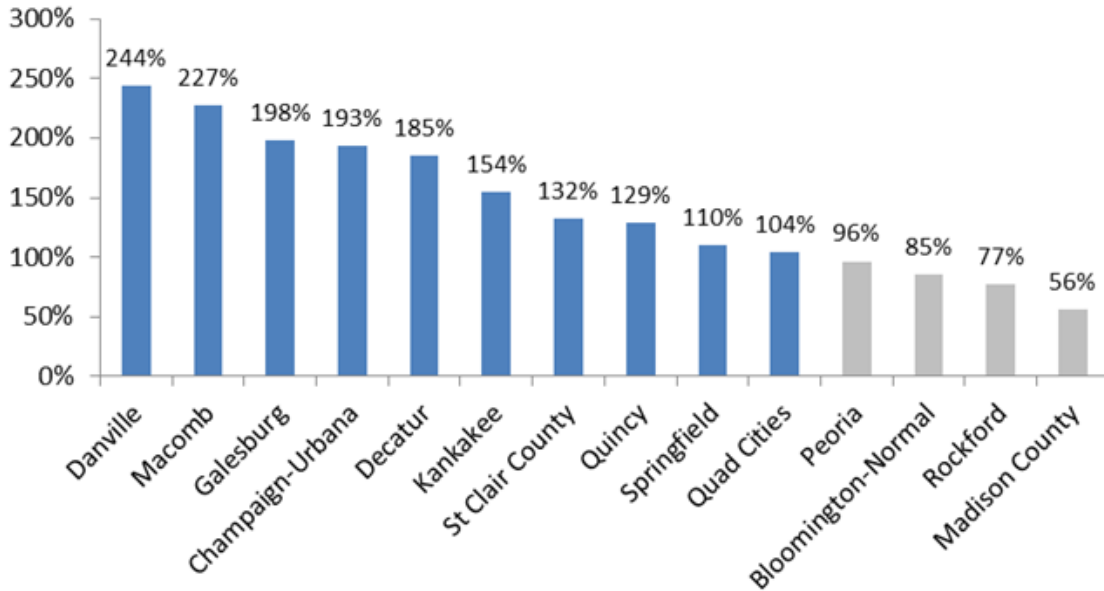
Based on this analysis, it appears that most of the Downstate urban fixed route systems are meeting demand at a substantially higher percentage than their peers from other states. Because the amount of service provided actually exceeds the amount of demand that would be predicted by simple demographics, it can be inferred that a significant number of “choice” riders are being attracted by these agencies. Choice riders are riders who are not necessarily dependent on public transportation for their travel mode, but choose public transportation as they find it more convenient than driving.

It appears that most of the Downstate urban fixed route systems are meeting demand at a substantially higher percentage than their peers from other states.

The analysis indicated that only four of the 14 Downstate Illinois urban fixed route systems have unmet projected demand. As shown in Figure 3, these systems are: Peoria/CityLink, Bloomington/Connect Transit, Rockford RMTD, and Madison County MCT. It appears that these systems most likely are operating fewer service hours than would be expected when compared to peer services. An approach for most effectively increasing service to be more consistent with the service levels offered by their peers is suggested for each of the four agencies as follows.

⁵ All data in this section is from FY2014.

Figure 3: Percentage of Demand Met by Downstate Urban Fixed Route Systems⁶



a. Peoria

Agencies with the highest “Peer Similarity” scores for Peoria CityLink are transit systems in the Quad Cities (IA/IL), Shreveport (LA), Erie (PA), Savannah (GA), and South Bend (IN). CityLink is currently meeting 96% of all demographically anticipated demand. In order to reach 100% demand, it is estimated that CityLink would need to provide approximately 6,000 more service hours annually. Extending all routes until 8:00 PM is a potential way to fill this gap.

b. Bloomington-Normal

Agencies with the highest “Peer Similarity” scores for Connect Transit are the transit systems in Lafayette (IN), Charlottesville (VA), Kenosha (WI), Racine (WI), and Bloomington (IN). Connect Transit is meeting 85% of demographically anticipated demand currently, leading to a deficit of about 19,000 revenue hours. Connect Transit recently initiated Sunday service to match current Saturday service on all routes, which should help close most of this gap; the rest of the gap could be closed by starting the three highest ridership routes an hour earlier on Saturday and reinstating the Teal Route.

⁶ Demand is considered “demographically anticipated demand”

c. Rockford

Agencies with the highest “Peer Similarity” scores for RMTD are the transit systems in Fort Wayne (IN), South Bend (IN), Evansville (IN), Springfield (IL), and Shreveport (LA). RMTD is meeting 77% of expected demand, which translates to a deficit of about 28,000 hours. Implementing the following service expansions could make up the difference:

- Implementing half hour peak weekday service on the 11 routes currently running hourly or less than hourly headways all day; most peer systems have at least some half hour peak service
- A commuter route, proposed in this Plan, between Rockton and Rockford
- Restore hourly service to Belvidere

d. Madison County

Peer systems selected for Madison County Transit (MCT) are other regionally focused systems: Greater Attleboro-Taunton Regional Transit Authority (several exurban Boston communities); CATA (Lansing, East Lansing, MI); Pioneer Valley (Springfield, MA region); Metro RTA (Summit County, OH); and Jefferson Transit (Jefferson Parish, part of suburban New Orleans, LA). MCT is meeting just over half (55%) of projected demand, a deficit of 121,000 hours.

This hourly deficit would require extensive system expansion, which could include:

- Running all regional, cross county and shuttle routes at half hour intervals on all days
- Running *all shuttle routes on Sunday*
- Expanding demand response service in rural Madison County (outside of its designated service area)
- Running limited midday and weekend service on the St. Louis express routes

C. Identification of Potential New Fixed Route Systems

Cities that are not part of a larger metropolitan area without a fixed route system and with a projected demand greater than 48,000 riders should be considered ideal candidates for the initiation of fixed route system service. This assumption is based on examining the successful fixed route systems of five peer cities including Paducah and Frankfort, KY; Muskogee, OK; Bluefield-Princeton, WV; and Vicksburg, MS. Subsequently, it is thought that the City of Freeport in Illinois presents itself particularly as a strong candidate for fixed route transit service. Freeport has a higher than state average poverty and unemployment rate; introducing a fixed route system will improve mobility for job access for these residents. In addition, Stephenson County has only 44% of demand being met; with a city that is struggling economically as much as Freeport within its borders, the transit demand met needs to be much closer to 100%. Implementing a fixed route system in Freeport would help achieve that goal.

At present, Freeport has a demand response system which is open to the general public; however, general public demand systems are more useful for lifeline transportation (medical appointments, and essential shopping trips) than for trips requiring regular daily drop-offs and pick-ups (such as for a job). Those working need to have a regular transit schedule to rely on, and not be subject to the possibility that a ride will not be available. Berner Food and Beverage, based in Dakota, has recognized this type of demand and has contracted with Pretzel Area Transit to run an employee shuttle to Freeport and Rockford. However, that employer has 500 employees; workers at smaller companies will likely not be able to rely on that type of similar employer support.

Using the methodology explained in the Service Needs and Gaps Report, a demand estimate for the City of Freeport was developed. The demand shown in Freeport is greater than 48,000 riders which, as noted above, is the minimum threshold to start a fixed route system:

A conceptual routing map is included in the *Service Needs and Gap Report*.

D. Identification of Potential New Commuter Routes

Commuter routes are defined as buses running on fixed routes on fixed schedules over a distance greater than ten miles with limited stops. Most trips bring residents from suburban areas to nearby urban cores, focusing on work trips or trips to higher education institutes, but some serve demand along a reverse commute path as well. Major portions of these routes are typically operated non-stop, i.e. as express service. Routes between Danville and Champaign-Urbana and from Carbondale to Marion and Harrisburg are successful examples of such service initiated in recent years.

The following analysis was conducted to identify potential new commuter routes. For those counties with above 2,000 projected daily trips to a nearby urban core, trip origin was ascertained first at the ZIP code level and then at the community level to determine whether a fixed commuter route would be feasible. If transit ridership from one of these communities to the urban core was projected to be above 125 riders, it was marked in this report as candidate for a potential new commuter route. The following regions in the State are candidates for new commuter routes. Conceptual routing maps are shown in the *Service Needs and Gap Report*.

a. Rockford Region

In recent years, suburban areas to the north of Rockford have grown in population even as the population of the core city has remained static. While the Rockford Mass Transit District (MTD) operates two routes in suburban Machesney Park and Loves Park, the villages of Roscoe and Rockton (population 10,680 and 5,296, respectively) currently only have access to general public demand service provided by Stateline Mass Transit District. Daily demand for a route connecting Roscoe and Rockton to Rockford is estimated at approximately 150 commuters; a potential commuter, peak hour only service would appear to be both viable and needed. Once a commuter route is established, further travel within Rockford, Belvidere, Cherry Valley, Loves Park, and Machesney Park could be accomplished via transfers to existing Rockford MTD Routes.

Other commuter routes to connect this region to the Chicago metropolitan area, such as Elgin, Schaumburg, and the CTA Blue Line at Rosemont to downtown Chicago, could also be explored.

b. Peoria Region

Two communities east of Peoria show high commuter demand: Washington, with a population of about 15,000 and Morton, with a population of 16,525. Washington shows a projected demand of 160 riders to workplaces in East Peoria and Peoria, which is sufficient for a peak period express route. This could either be a new route with limited stops all the way to Peoria, or an extension of the current CityLink Route 8 eastward from its present terminus at Sunnyland Plaza. Connections to other CityLink routes can be made in Peoria as well.

Morton has sufficient demand in both directions to warrant an all-day route; there are about 150 commuters projected to use to transit to access jobs in and around Morton (large employers in the community include a pumpkin canning factory operated by Nestle; Morton Buildings; Morton Industries; Matcor Metal Fabrication, and a Caterpillar parts warehouse). About 180 commuters are projected to use the service in the “traditional” commute manner. Connections to other CityLink routes can be made in downtown Peoria.

c. Aurora Region

There is strong projected demand for a commuter route from the Village of Oswego to the City of Aurora. A previous route operated between Oswego and the Aurora Metra station, but this route focused more on commuters to and from the urban core of Chicago rather than central Aurora. A route designed to connect to the Pace “pulse” at the Aurora Transportation Center would reorient this service to those working in the Aurora-Naperville-Warrenville employment corridor along I-88. If Metra decides to extend service to Oswego, this route will serve as an interim option until that line is completed.

E. Commuting Possibilities in High-Need, Low-Density Areas

There is a great need in the State for connecting counties with high unemployment levels to nearby counties with large employment bases. One of the primary goals for public transportation is to help residents access opportunities to advance their personal and economic prospects, either through education or employment, without necessarily making a cost prohibitive investment in a personal vehicle. Many Illinois counties with high levels of joblessness do not meet the daily ridership threshold set for traditional rural to urban commuter routes (i.e. 125 projected riders per day). However, the need for opportunity is no less acute for these residents who happen to live in areas with lower population densities. Establishing rural intercity flex routes with limited stops in small communities could help address this gap. Services of this type should use minibuses and operate on a limited basis (i.e. not on regular headways). These flex routes should run a consistent schedule in order for riders to plan for work shifts.

The following flex commuter routes were explored and are located in counties with commuter flows of more than 2,000 a day, have poverty rates above the State average, and are adjacent to counties with more than 24,000 jobs.⁷

Anna to Carbondale

- Connections can be made throughout Carbondale with existing Jackson County MTD Flex Routes
- 28 minute running time (one way)

Greenville to Edwardsville

- Connections can be made throughout Madison County, and to St. Louis, at the MCT Edwardsville Station
- 39 minute running time (one way)

Watseka to Kankakee via St Anne and Aroma Park

- Connections could be made in Kankakee with River Valley Metro; perhaps could be through routed with their route to University Park Metra
- 40 minute running time (one way)

Vienna to Marion

- This route could possibly be through routed with existing RIDES intercity route to Carbondale
- 28 minute running time (one way)

Pinckneyville to Murphysboro and Carbondale

- Connections can be made throughout Carbondale with existing Jackson County MTD flex routes
- 37 minute running time (one way)

Freeport to Rockford

- Connections can be made throughout Rockford with the RMTD
- 35 minute running time (one way)

⁷ Note that smaller populated counties like Alexander and Union were not deemed to have a population threshold to make a commuter route feasible. Also, although Pittsfield (to Quincy) and Paris (to Danville) have similar demand to the above commuter services, their running time (over 45 minutes) would not likely attract any regular riders.

F. Demand Response Service Demand

Demand response services can be roughly divided into general public demand response/ flex route service (represented by non-program demand) and limited demand response service (represented by program demand). For the purposes of this section, those demand projections are added together, with the assumption that a hypothetical flex route/demand response service could serve both types of demand, either independently or in tandem with social service agencies.

Based on the methodologies used and described in the Service Needs and Gap Report, the total amount of demand response need in the Downstate HSTP regions is estimated at 5.2 million demand response rides per year. Since 2.9 million rides were provided last year by the current human service transportation providers, it is estimated that nearly 45% of demand was not met.

Figure 4 provides a display of all counties where demand is currently met (shown in green) or not met (shown in white). Table 4 shows the percent of current demand met for each county. In general, the amount of demand met varies throughout the State but it appears that regions that include one or more urbanized areas have more difficulty meeting estimated demand than those which are primarily rural. Also, demand appears to be met the farther south in the State, especially south of I-70.

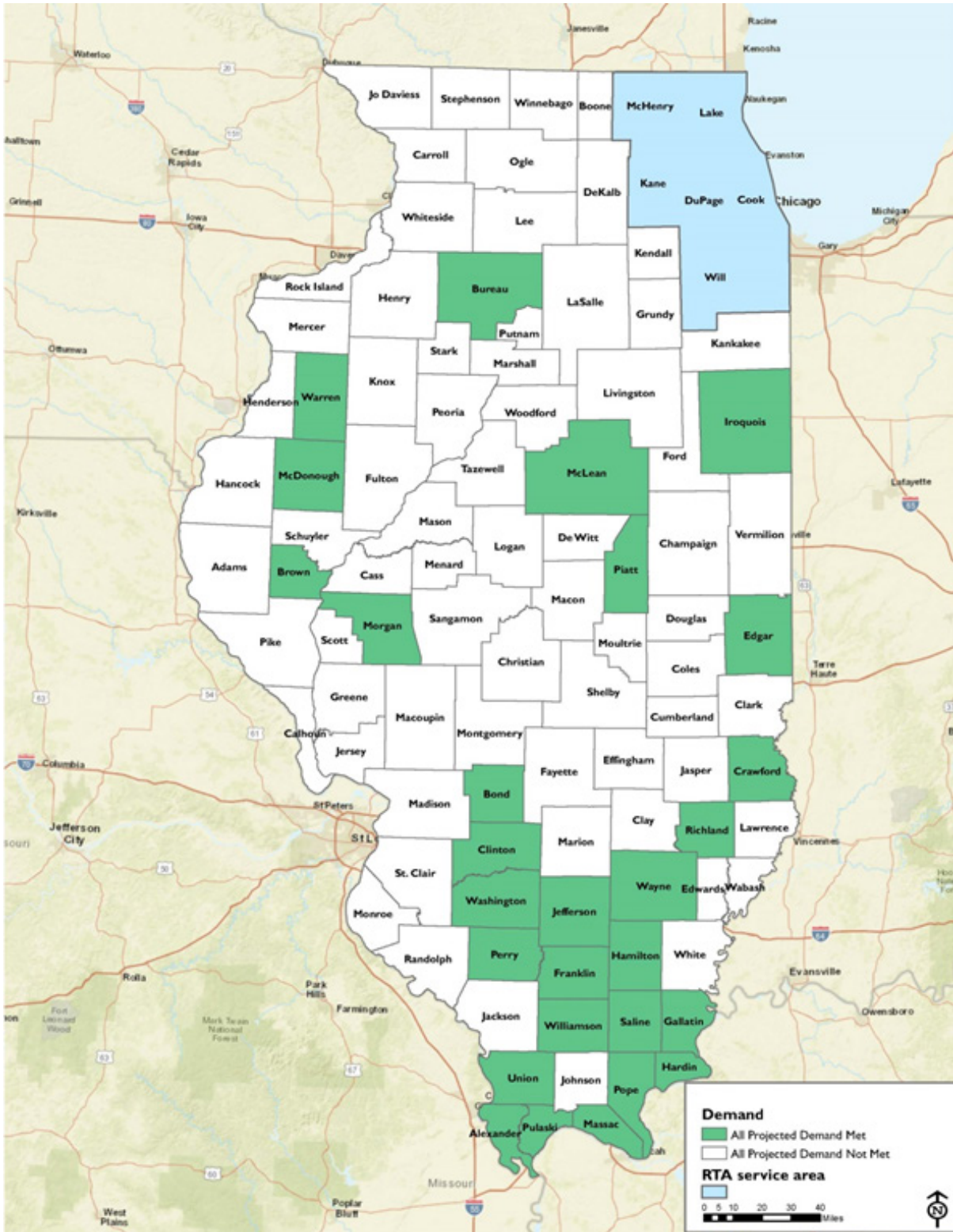


Figure 4: Counties Showing Unmet Demand (in White)

Table 4: Percent of Demand Being Met by County⁸

County	Current Demand	Current Ridership	Percent of Current Demand Met	2025 Demand	Percent of Future Demand Met	County	Current Demand	Current Ridership	Percent of Current Demand Met	2025 Demand	Percent of Future Demand Met
Adams	43,128	0	0%	41,079	0%	Livingston	64,135	18,560	29%	66,002	28%
Alexander	18,248	29,164	100%	17,049	100%	Logan	48,070	20,027	42%	48,700	41%
Bond	30,082	35,611	100%	31,996	100%	McDonough	24,682	49,029	100%	26,341	100%
Boone	70,765	27,825	39%	85,585	33%	McLean	57,366	124,497	100%	65,840	100%
Brown	10,331	20,108	100%	11,783	100%	Macon	55,035	7,659	14%	51,674	15%
Bureau	63,588	63,816	100%	61,336	100%	Macoupin	86,066	40,311	47%	82,300	49%
Calhoun	11,000	0	0%	10,613	0%	Madison	142,704	0	0%	145,394	0%
Carroll	30,179	1,578	5%	27,315	6%	Marion	72,828	10,971	15%	67,890	16%
Cass	21,418	19,039	89%	20,301	94%	Marshall	23,374	4,183	18%	21,989	19%
Champaign	108,224	16,891	16%	119,571	14%	Mason	28,224	1,761	6%	23,815	7%
Christian	62,932	0	0%	59,147	0%	Massac	31,145	36,616	100%	31,742	100%
Clark	27,412	6,531	24%	25,278	26%	Menard	21,039	0	0%	21,462	0%
Clay	25,475	6,166	24%	24,085	26%	Mercer	29,046	4,425	15%	28,057	16%
Clinton	58,460	104,199	100%	60,275	100%	Monroe	48,265	13,405	28%	55,034	24%
Coles	86,929	52,534	60%	94,625	56%	Montgomery	48,634	10,802	22%	47,936	23%
Crawford	34,896	39,398	100%	33,582	100%	Morgan	62,386	108,814	100%	62,142	100%
Cumberland	20,721	10,678	52%	20,191	53%	Moultrie	26,344	15,432	59%	26,008	59%
DeKalb	130,843	50,008	38%	158,289	32%	Ogle	83,291	9,829	12%	86,534	11%
De Witt	27,851	21,885	78%	26,217	83%	Peoria	145,899	26,123	18%	142,372	18%
Douglas	32,699	7,465	23%	32,439	23%	Perry	38,021	52,901	100%	38,929	100%
Edgar	33,702	35,615	100%	29,931	100%	Piatt	26,485	43,851	100%	25,602	100%
Edwards	13,326	3,552	27%	12,453	29%	Pike	30,944	19,821	64%	29,144	68%
Effingham	52,536	37,020	70%	50,849	73%	Pope	11,248	17,173	100%	11,125	100%
Fayette	37,659	5,865	16%	39,519	15%	Pulaski	13,737	23,616	100%	11,692	100%
Ford	25,806	7,395	29%	24,577	30%	Putnam	10,966	3,008	27%	11,119	27%
Franklin	83,141	208,496	100%	79,345	100%	Randolph	57,305	19,735	34%	55,577	36%
Fulton	66,845	27,217	41%	64,298	42%	Richland	32,108	37,012	100%	28,934	100%
Gallatin	12,339	20,761	100%	10,549	100%	Rock Island	64,177	15,350	24%	61,711	25%
Greene	24,558	0	0%	22,317	0%	St. Clair	213,180	0	0%	211,776	0%
Grundy	69,605	11,051	16%	81,773	14%	Saline	54,362	100,165	100%	50,918	100%
Hamilton	16,971	21,623	100%	16,859	100%	Sangamon	111,093	0	0%	115,779	0%
Hancock	35,183	13,438	38%	31,013	43%	Schuyler	14,737	2,946	20%	13,922	21%
Hardin	10,980	21,623	100%	9,774	100%	Scott	10,498	1,272	12%	10,123	13%
Henderson	14,926	0	0%	13,769	0%	Shelby	42,175	21,131	50%	40,091	53%
Henry	88,645	37,952	43%	83,718	45%	Stark	12,758	1,949	15%	11,785	17%
Iroquois	53,955	55,433	100%	49,428	100%	Stephenson	90,336	39,550	44%	87,525	45%
Jackson	92,377	56,729	61%	96,515	59%	Tazewell	114,244	35,371	31%	114,719	31%
Jasper	17,826	5,637	32%	15,327	32%	Union	36,997	37,101	100%	35,968	100%
Jefferson	71,568	117,081	100%	72,705	100%	Vermilion	82,149	50,062	61%	77,743	64%
Jersey	37,029	0	0%	38,875	0%	Wabash	21,989	20,731	94%	20,557	100%
Jo Daviess	45,395	39,825	88%	44,136	90%	Warren	30,101	56,729	100%	28,891	100%
Johnson	23,786	22,964	97%	26,116	88%	Washington	25,725	40,283	100%	25,058	100%
Kankakee	143,064	32,823	23%	151,178	22%	Wayne	31,324	72,813	100%	29,086	100%
Kendall	108,336	26,000	24%	143,162	18%	White	29,271	22,701	78%	25,863	88%
Knox	36,196	0	0%	34,044	0%	Whiteside	104,301	45,504	44%	97,506	47%
La Salle	191,154	47,943	25%	190,028	25%	Williamson	121,957	177,224	100%	126,407	100%
Lawrence	26,729	23,361	87%	26,156	89%	Winnebago	246,421	9,748	4%	258,287	4%
Lee	59,715	47,470	79%	61,191	78%	Woodford	56,635	13,232	23%	60,116	22%

1. Identification of New and Enhanced Rural Demand Response Services

For counties where service demand is currently not being met and that show 1,000 and 2,000 daily commute trips (i.e. vehicle trips) between them, it is recommended that a scheduled demand response trip be instituted. These trips can accommodate subscribed riders for work trips, medical appointments, and for social visits. The trips would not have a specific route; rather, they would spend a period of time picking up riders around the origin county, and then drop them off in the largest community or urban area in the adjacent county where the commute patterns are being shown.

Table 5 shows the origin counties recommended for such a service.

⁸ Highlighted rows are where all projected demand is being met; percentages above 100 percent rounded down to that number

Table 5: Proposed Scheduled Demand Response Trips by County

COUNTY	DESTINATION	CONNECTIONS
Christian	Springfield	SMTD Transfer Center (SMTD)
DeKalb	Rockford	Downtown Transit Center (RMTD)
	Elgin	Elgin Transportation Center (Pace, Metra)
	Aurora	Aurora Transportation Center (Pace, Metra)
Fulton	Peoria	CityLink Transfer Center (CityLink)
Kendall	Joliet	Joliet Union Station (Pace, Metra)
Logan	Springfield	SMTD Transfer Center (SMTD)
Morgan	Springfield	SMTD Transfer Center (SMTD)
Whiteside	Clinton, IA	Central Transfer Point (MTA)
Woodford	Peoria	CityLink Transfer Center (CityLink)
	Bloomington	Uptown Normal (Connect Transit, Amtrak)

In addition, general public demand response service should be established in the 11 counties that do not currently have it as mentioned in Chapter 3 either by extending services from a nearby provider or establishing a new provider. The counties that have no public transit service are Calhoun, Greene, Henderson, Jersey, and Menard Counties. Adams, Knox, Madison, Sangamon, St Clair, and Winnebago Counties have fixed route and paratransit service but have gaps, i.e. large rural segments of the counties with no general public demand response service.

Providing transportation to jobs is an important function of public transportation. However, this report has found that a third (12 of 36) of rural agencies operate fewer than 12 hours per day, making it difficult for most people to access full-time jobs. Conversely, seven operate longer weekday hours and ten operate Saturday service. Only two operate limited service on Sundays. It is recommended that IDOT encourage demand response operators to support work trips by providing a minimum span of 12 hours per day, five days per week. It is also recommended that a minimum service area size should be established for all general public demand response transit providers. Best practices indicate that 4,500 square miles is a good threshold for service area and/or a minimum population of 150,000. Implementing service areas of this size will also reduce the need to make interagency transfers or to run trips out of the service area to access medical appointments, educational or vocational opportunities, and social service agency visits. Having a general public demand response service area meet these minimum thresholds will also enable the agency to access a large enough base of potential service contracts for local match and allow the agency to be more cost effective when purchasing vehicles or technology products.

Five Downstate demand response agencies have a policy of only serving residents of their service area, but there is anecdotal evidence there are more agencies that implement a similar policy. This prohibits people being able to get around the State on public transportation without restrictions. As a policy it is recommended that, as a condition of receiving state operating assistance, IDOT require rural operators to not restrict members of the general public residing outside of their service area. This should also include the stipulation that passengers should be able to request a service to/from connecting carriers without pre-registration.

G. Intercity Rail and Bus Service Gaps/Needs

The intercity rail and bus system in the State is a patchwork which has evolved over the years. Inevitably, it has a number of gaps and several major cities in the State have less service than appropriate for a city of their size or their proximity to other cities. Examples of cities that could benefit from connections to other urban destinations (including Chicago) are as follows:

- Peoria has no direct intercity rail or bus to downtown Chicago, although it does have both air and airport bus service to O'Hare Airport.
- Decatur has only one daily intercity bus trip, no rail service, and very limited air service.
- Other cities that could use additional access considering their size are Rockford, the Quad Cities, DeKalb, Ottawa, and LaSalle-Peru. Funding is in place for implementation of rail service (with two daily round trips) between Chicago and the Quad Cities (Moline) and some of the necessary work has been performed. Service is expected to start within the next year.

1. Intercity Rail Gaps/Needs/Opportunities

Intercity passenger rail service, provided by Amtrak, is the public transportation backbone connecting most cities and many small towns in the State, with at least twice daily service. However, all of the existing routes in Illinois operate on tracks owned by freight railroads and are shared with freight trains, with associated capacity limitations (limiting frequencies that can be operated) and reliability issues. An additional issue on the Chicago–Champaign–Carbondale route is that it is impacted by slow Chicago access, which involves a slow speed backup movement to access/leave the Union Station in downtown Chicago. Union Station is currently experiencing capacity issues and the implementation of master plan improvements is underway. Concept design for improvements to Union Station, including significant capacity increases, were developed in the Union Station Master Plan Study led by the City of Chicago with the active participation of Amtrak, Metra, RTA, and other stakeholders. The study was completed in 2016 and Amtrak is now leading preliminary engineering and pursuing various approaches to funding construction. The Chicago–Champaign–Carbondale rail route is also hampered by extensive freight traffic on single-track. As a result, there are significant service reliability issues.

For the last 15 years, Illinois has pursued implementation of higher speed passenger rail service on the Chicago–Normal–Springfield–St. Louis spine. Train frequency on the route has been increased to five daily round trips and track upgrades to permit 110 mph are nearly complete. Passing sidings have been added which permit more reliable service. Federal funding was received for new locomotives for the Midwest network. The locomotives, capable of operation at up to 125 mph, recently entered service. However, signal upgrades required to permit the faster speeds lag behind. The Federal Railroad Administration (FRA) issued a Record of Decision (ROD) that authorizes (i.e. environmentally clears) double-tracking most of the existing Chicago–St. Louis route. However, the cost of this improvement is estimated at approximately \$2 billion and the agreement with the host railroad would only permit an increase of four daily trains in each direction. Some segments south of Springfield would not be able to be double-tracked. Speed would not be further increased and no funding is available for this double-track concept.

As outlined in the *State Rail Plan*, the University of Illinois has studied construction of an electrified true high speed rail (HSR) dedicated passenger route on an O’Hare–Chicago–Champaign–Decatur–Springfield–Edwardsville–St. Louis spine with a possible branch to Indianapolis via Danville. This would have no at-grade highway crossings, and enable 220 mph operation, which would permit frequent service (i.e. every 30 minutes, or better) and fast travel times (see Figure 5 and Table 6). The route between Springfield and St. Louis would be shorter than the present route yet better serve the intermediate population. Rail service to/from Carbondale could move to the new route north of Champaign. While the cost would be substantially higher than further upgrades of the existing Union Pacific route, the economic benefits of a system that would provide fast, frequent, reasonably-priced connections between many of the key cities in the State would be very great. Same day round trips, with a full day of work in the destination city would become feasible. There would be easy connections to domestic and international long distance flights at O’Hare, thereby promoting commerce. Capacity would be available to provide local service to smaller towns along the route, improving connections between rural areas and cities in the State. Intercity and rural transit system buses could connect to high speed rail service combining to provide safe, fast, frequent, and reliable public transportation for most of the residents of the State. This alternative would provide a viable alternative to auto travel and short distance air travel. Ridership in 2035 was estimated in the report at 10 to 14 million passengers per year. Eventually, HSR could be potentially extended along the I-90 corridor to Rockford.

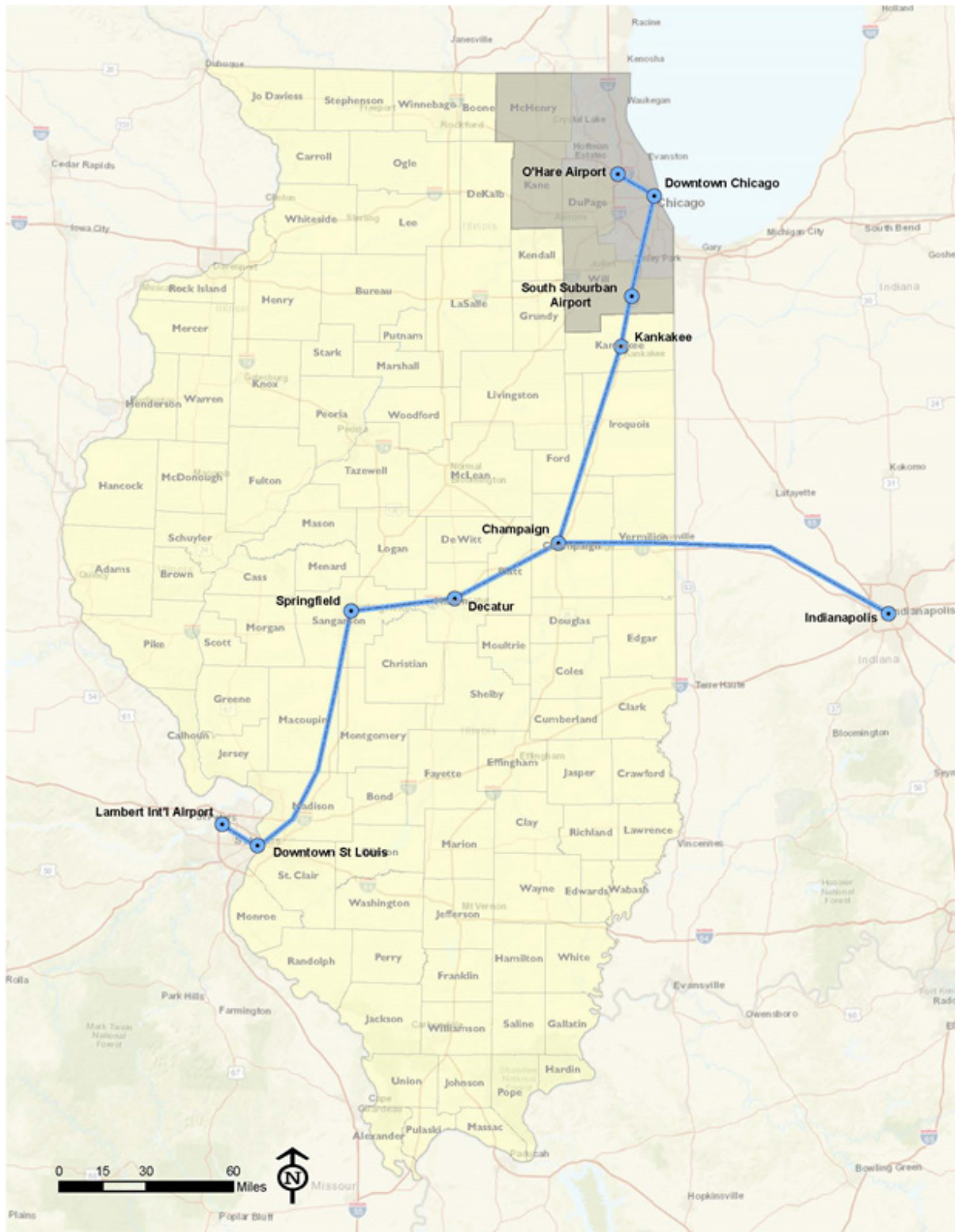


Figure 5: High Speed Rail Route Studied by University of Illinois

Table 6: Projected Illinois High Speed Rail Travel Times, in Minutes⁹

Southbound					Northbound		
Exp.	Local		Miles	Station		Local	Exp.
0	0	Dp	0	O'Hare International Airport	Ar	154	140
10	10		16	Chicago Union Station		142	128
	28		47	University Park		124	
	40		72	Kankakee		112	
55	65		145	Champaign-Urbana		87	83
	84		193	Decatur		68	
88	102		233	Springfield		50	50
127	141		330	St. Louis Downtown		10	10
140	154		Ar	343		Lambert - St. Louis International Airport	Dp

The remaining gap that has been identified is the need for better service between DeKalb, Ottawa, LaSalle-Peru and Chicago, as well as the need for service to Kankakee and Rockford, in the absence of HSR. Studies of the service potential on each of these routes have been performed. All of them identified extension of Metra service as being the most practical solution. Metra equipment would be suitable for these relatively short distance services and, in many/most cases the expectation was that existing trains could be extended to new terminals to provide the service. The longest of these routes, LaSalle to Peru, is less than 50 miles beyond the border of the RTA district. The biggest challenge is the lack of an institutional/funding structure for a new Metra service beyond the six-county Northeast Illinois RTA District.

2. Intercity Bus

As previously noted in this report, intercity bus service has been operated almost entirely by the private sector on a for profit basis. Some recent exceptions include intercity bus service operated under contract between Chicago and Moline by Greyhound, Danville-Champaign service operated by Danville Mass Transit, and service between Harrisburg-Marion-Carbondale operates by rural agency RIDES.

With the focus in the State on intercity rail passenger service, there is limited opportunity for publicly-funded expansion of intercity bus service. Exceptions would include the commuter services proposed in the rural transit section of this report. Another condition where public funding of expanded intercity bus service might be feasible would be routes where passenger service is recommended but is not yet implemented. Such routes might include Peoria-Normal, improved Springfield-Decatur-Champaign service, and service between Chicago and De Kalb, Oswego, and LaSalle-Peru. Service could either be operated under contract with intercity bus operators or by rural or urban operators in the area.

⁹ From IDOT High Speed Rail Executive Report, 2013

3. Multimodal Facilities

While there have been several multimodal transit centers constructed (Champaign, Normal, Peoria, Danville, and Alton) and more are planned (Joliet and Springfield), there are several other cities where intercity buses, Amtrak, and the local transit system have different terminals (Decatur, Quincy, Galesburg, Kankakee, and Effingham), making coordinated trips difficult. The intercity operators should be encouraged to modify operations to use existing transit centers or rail station (Decatur, Galesburg, and Effingham) or encourage communities and the transit operators to construct new multimodal facilities (i.e. Quincy, Kankakee) that could be used by local buses, Amtrak, and intercity buses.

VI. TECHNOLOGY: OPPORTUNITIES AND BENEFITS

While increasing the deployment of technology on transit systems has been identified as a goal it is important to understand the benefits which will result from implementation.

A. Fixed Route Systems

The types of technologies available for fixed route systems are described below.

1. Schedule System and Trip Planning

For fixed route systems, the foundation for all other technology is having routes, stops, and schedules available in a software-based system. Having the data in a format consistent with the General Transit Data Feed Standard (GTFS) will ensure compatibility with other technology elements and between carriers. GTFS is an open (non-proprietary) standard composed of data elements for bus stops and routes that facilitate transfer of information between systems within a transit agency as well as companies that provide information to the public. GTFS data can be submitted to U.S. DOT for inclusion into the National Transit Map (<http://gis.rita.dot.gov/Transit/>) and submitted to Google for publishing in Google Maps. Stops will appear on Google Maps and Google Earth and trips can be planned using Google Maps. Amtrak and Greyhound routes and schedules are already included in the dataset which makes it possible to plan some long distance, inter-agency trips.

The majority of the urban fixed route transit operators have data on their systems in GTFS feeds. However, they vary considerably in the extent to which they have released/distributed the data; it appears that not all of the operators have made the data readily available to the public or, more importantly, for third party app developers.

2. Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL)

CAD/AVL systems are used by transit operating agencies for real-time location and schedule adherence tracking. Several vendors are now able to cost-effectively provide GPS-based systems that are scaled appropriately for the Downstate systems. The universal availability of cellular data service has made deployment of these systems much simpler. A key feature that CTA and Pace in northeastern Illinois have added to their CAD/AVL systems is the use of an onboard mobile router which provides communications that can be shared by multiple onboard systems, avoiding the need to install duplicative communication systems. New systems should adopt this architecture at the beginning of operation.

3. Onboard “Next Stop” Audio and Visual Annunciator System

“Next Stop” announcement systems help transit systems meet ADA requirements, and add convenience for all customers. Once a CAD/AVL system is in place, there will be an onboard computer driving the sign and audio announcements. While these were previously sold as standalone systems, they are most cost-effectively provided as an option by CAD/AVL system vendors.

4. Automatic Passenger Counters

Automatic Passenger Counter (APC) systems allow detailed analysis of ridership by trip to the route segment, and, even, stop level. While not 100% accurate, the data is easy to collect and makes planning much easier. Over time these systems have become more standardized and, thus, easier to deploy. Currently, these systems typically work with a CAD/AVL system which aggregates the data and transfers it to the agency network when the bus returns to the garage. These systems can be procured either separately or through the CAD/AVL system vendor.

5. “Next Bus” Information

The feature that is probably most popular with passengers is the provision of real-time predicted arrival time information for buses at a specific stop. It is normally delivered over the internet (using either wired or wireless/cellular data). Smart phone access is typically used to view the information through use of the third party apps. Many real-time information signs have been installed by agencies at transit centers or bus stops. Some building owners and stores have installed also signs for the convenience of their customers. CAD/AVL systems all now provide an output of this data in a format called GTFS real-time.

6. Fare Collection

It is important to move to modern systems that include stored value options to reduce cash handling requirements and provide convenience for passengers. With modern fare collection systems, people do not pay with cash. Until recently it appeared that credit cards might be able to function as universal transit cards similar with European transit systems. However, the U.S. standard adopted in conjunction with adding chips to credit cards did not include the second chip included on European cards that is optimized for rapid, small transactions. Thus, transit agencies wanting the benefits of smart cards will continue to be required to issue them. To date, the following Illinois transit systems have smart cards: CTA/Pace/Metra in Chicago, Connect in Bloomington-Normal, Danville, and the St. Louis area systems (including Madison and St. Clair Counties) which have the Gateway card. However, the level of effort involved in each agency developing, marketing, distributing, and selling smart cards is a concern for smaller agencies. The ability to expand the Chicago area Ventra card or the St. Louis area Gateway card to other parts of the State should be analyzed. The use of an onboard router may also facilitate the farebox sharing a Mobile Data Terminal (MDT) with a CAD/AVL system reducing cellular data charges.

B. Demand Response Systems

Software that is appropriate for rural systems, which predominantly operate demand response service, provides dispatchers with status information (including location and schedule adherence), manages voice and data communications, and records statistics. For demand response system, software takes rider requests, assigns them to trips, manages the performance of the service in real-time, and assigns detailed records, including fares paid and creating any invoices. Many trip types require eligibility certification or are eligible for reimbursement by third parties (i.e. Medicaid, Medicare, or Veterans Administration). Thus, the systems maintain client records and create invoices. The

algorithms in computer-aided software are typically able to increase efficiency. The central system creates “manifests” which list all trips scheduled for each driver. Today, these are typically transmitted by cellular data to drivers using tablet computers. The tablets also provide turn-by-turn directions to drivers. It should be noted that many of the rural agencies primarily operate demand response service, but several of the systems operate significant amounts of flex route service and, even, pure fixed route service usually, with no reservation requirement. A trend in the development of management systems for the rural operators is to move toward “cloud-based computing”, i.e. with the server(s) housed remotely, with access via the internet. Thus, the transit agency is relieved of the responsibility for providing a person with the skills required for system maintenance, backups, and security. Today, even small towns typically have internet service of sufficient bandwidth and reliability for this approach to be feasible.

C. Technology Deployment

There is a wide variation in the degree to which technology systems have been deployed among the 16 urban fixed route transit systems. At one end of the spectrum, the Chicago Transit Authority (CTA) has deployed all of the systems described above (and Pace is in the process of deploying “next bus” signs and signal priority. Connect (Bloomington-Normal) is also in the process of deploying technology including smart card fare payment. St. Clair County Transit has a fairly complete deployment of technology, largely as a benefit of its operating contract with St. Louis Metro (including integrated fares). CUMTD (Champaign-Urbana) and MetroLink (Rock Island) are also nearly at that point, although they do not have electronic fare collection; most CUMTD riders have prepaid farecards through the University of Illinois. Rockford, Springfield, Danville, Madison County and Go West (Macomb) are at various stages of implementing CAD/AVL systems. At the other end of the spectrum, Peoria, River Valley (Kankakee), Decatur, Quincy, and Galesburg (in descending order, by size) have not taken steps to implement technology systems. Table 7 outlines the status of the deployment of technology for the fixed route systems.

Almost half of the rural operators, particularly the large, multi-county systems which serve a majority of Downstate counties, use computerized dispatch systems, usually in conjunction with tablets, to deploy demand response services. While it is not perfect, cellular coverage is now good enough Downstate for this to be relied upon for both voice and data communications. Therefore, traditional two-way radio infrastructure is no longer required. Tablets are rapidly replacing Mobile Data Terminals (MDTs). Computerized software has functions that facilitate coordinated trips to create and work with pre-designated trips. There is also the potential to automate the process of posting routes and schedules to the internet. Of the systems using computerized dispatching, 44% use CTS, 11% use Ecolane, and 17% use systems provided by one of several other suppliers. Of these systems that do not yet have computerized dispatching, 20% identified implementing it as a high priority need in the agency interviews.

Additional information is available in the *Technology Opportunities and Benefits Report*.

Table 7: Status of Deployment of Technology on Fixed Route Transit Systems in Illinois

	Routes mapped in GIS?	Data in GTFS?	Schedule System?	All bus stops signed?	Trip planning in Google Maps?	Other trip planning?	Full CAD/AVL?	Interior "Next Stop" Annunciators?	"Next Bus" data on web?	"Next Bus" data on signs in terminal(s)?	"Next Bus" data at stops?	Automatic Passenger Counters?	Electronic Fare Collection?	Bus Signal Priority?
Bloomington-Normal (Connect)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Champaign-Urbana (CUMTD)	Yes	Yes	Yes	Some	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Chicago Transit Authority (CTA)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Danville (DMT)	Yes	Yes	No	Yes	IP	No	IP	IP	IP	IP	No	No	Yes	No
Decatur (DPTS)	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No
Galesburg (GT)	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No
Kankakee (RVMTD)	Yes	Yes	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Macomb (Go West)	Yes	Yes	No	Yes	IP	No	Yes	No	Yes	No	No	No	No	No
Madison County (MCMTD)	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes	No
Pace	Yes	Yes	Yes	35%	Yes	Yes	Yes	Yes	Yes	IP	IP	Yes	Yes	IP
Peoria (CityLink)	Yes	Yes	No	Some	Yes	No	No	No	No	No	No	No	No	No
Quad Cities (MetroLink)	Yes	Yes	Yes	Some	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Quincy (QT)	No	No	No	85%	No	No	No	No	No	No	No	No	No	No
Rockford (RMTD)	Yes	Yes	Yes	Some	IP	No	Yes	Yes	No	No	No	No	Yes	No
Springfield (SMTD)	Yes	Yes	IP	Yes	Yes	No	IP	No	IP	No	No	IP	No	No
St. Clair County (Metro)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Number installed, or in progress	14	13	9	11	12	6	10	8	9	6	4	7	7	2
Percent installed, or in progress	88%	81%	56%	69%	75%	38%	63%	50%	56%	38%	25%	44%	44%	13%

IP In Progress (in procurement or under contract)

D. Technology Recommendations

There are several items related to transit technology which IDOT should consider for implementation. As part of IDOT's policy of encouraging the development of a statewide public transportation network, readily accessible to all, IDOT has taken a leadership role in the development, assembling, and deployment of GTFS data on transit routes, stops, and schedules for transit systems in the State. The initial focus is on ensuring that all data appears in Google Maps but deployment by independent app developers will be encouraged as well. It is anticipated that all fixed route service in the State (both urban and intercity) will be available in GTFS format by early 2018. IDOT is monitoring software development in other states and hopes to be able to integrate rural demand response service within another year, making statewide transit trip planning possible.

About half of the State's transit systems have bus location/computer-aided dispatch systems (urban fixed route and rural systems). At this point, with all the larger systems installed, it is recommended that IDOT have a single procurement process for the remaining systems (either combining all of them or a separate one for urban and rural systems). In conversation with vendors, economies of scale (and better pricing) can be achieved if a joint procurement can be made.

VII. CAPITAL ASSET STATE OF GOOD REPAIR

In July 2016, FTA released its Final Rule on Transit Asset Management (TAM). The primary basis of this regulation is to ensure that transit providers are tracking the condition of their assets throughout their entire lifecycles before they start to fail. Having a TAM program in place can help transit agencies better forecast their capital needs while maintaining system reliability due to having better maintained equipment. The TAM Final Rule also outlines annual reporting requirements as they relate to the National Transit Database (NTD). The TAM Final Rule established the requirement of reporting an inventory of additional asset classes to the NTD not previously addressed, a condition assessment for assets for which the transit provider has capital replacement responsibility, and on performance measures and performance targets for all inventoried asset classes. The TAM final rule discusses four transit asset categories; **Rolling Stock, Equipment, Facilities, and Infrastructure.**

This chapter will examine the state of good repair status for all transit assets reported by Downstate transit providers, provide best practices for implementing TAM, and discuss recommendations offered for establishing TAM procedures at the state level. Additional information is provided in the *Capital Asset State of Good Repair Report*.

A. Rolling Stock

Rolling stock refers to any type of revenue, passenger vehicle used in the provision of public transit service. An indicator of state of good repair for rolling stock is age and/or mileage. Most, if not all, assets have an expected useful life threshold which the manufacturer and/or a transit provider may establish. In the case of rolling stock, the useful life threshold varies based on the vehicle type. Once an asset has reached its useful life threshold, it is said to be “beyond its useful life” or no longer in a state of good repair. Like all assets, rolling stock can still be utilized for revenue service by a transit provider after meeting its useful life threshold as is typically the case due to limited funding available to purchase all the new vehicles needed at one time. However, maintenance costs typically tend to increase the longer an asset remains in service beyond the useful life threshold unless refurbishment occurs. Between the increased likelihood of mechanical failure and increasing maintenance costs, it is in a transit provider’s best interest to maintain its vehicle fleet in a state of good repair. The same is true for all transit assets.

Because useful life is a benchmark being used by the NTD and TAM Final Rule to determine a vehicle’s state of good repair, the age of all the vehicles reported by all 51 Downstate agencies were compared to their useful life threshold as currently established by IDOT for this state of good repair analysis. The date range by which the ages of the reported vehicles were extrapolated started with the date the vehicle was built and ended on February 1, 2017.¹⁰ Ideally, a condition assessment would be reported for all vehicles which could then be compared with the years beyond useful life in order to determine a more applicable useful life benchmark for each vehicle type. However, not every agency had this information; therefore, only age of the vehicle was used for the analysis.

¹⁰ February 1, 2017 is date that Capital Asset State of Good Repair Report was completed

The transit agency with the highest percentage of its fleet to be beyond its state of good repair was Rock Island County with 100% of its 16 vehicles beyond their useful life with an average age of 2.9 years. River Valley Metro had the second highest percentage of its fleet beyond their useful life thresholds with 96% of its 26 vehicles being beyond their useful life and an average age of 2.2 years. All the agencies that had the highest average years beyond useful life (five years or above) were also identified. The two highest average ages were observed for Fulton County (10.1 years), City of Decatur (6.2 years), and Rockford MTD (6.1 years). Three of the transit providers, Champaign County, Stateline MTD, and Woodford County, had no vehicles that are beyond their useful life. Table 8 displays a breakdown of how many vehicles from each asset class were beyond their useful life and what the average years beyond useful life for the vehicles from each class.

B. Facilities

The TAM Final Rule defines facilities as, “any buildings or structures used in providing public transportation, including passenger stations, operations, maintenance, and administrative facilities.” Inherent in this definition of facilities are the asset classes (i.e. subgroup of capital assets within an asset category), which the TAM Final Rule displays in a sample Asset Inventory Hierarchy, of Support Facilities; which include Facilities used for Maintenance, Administrative, and Operations activities; Passenger Facilities which include bus transfer stations and rail terminals, and Parking Facilities, which include parking garages and park-and-ride lots adjacent to transit facilities.

There are approximately 158 total administrative and maintenance facilities for the Downstate agencies. RIDES MTD reported the most administrative and maintenance facilities (14) and South Central MTD reported the second most administrative and maintenance facilities (13). A summary of each facility type is:

- Combined administrative & maintenance facility (73)
- General purpose maintenance facility/depot (51)
- Administrative office/sales office (31)
- Parking lot (2)
- Vehicle fueling facility (1)

With regard to passenger facilities (i.e. bus transfer centers, parking lots, ferry docks, and fixed guideway stations), 13 out of the Downstate agencies reported having passenger facilities. St. Clair County had the most reported passenger facilities (19) while MCT and MetroLink had 15 and seven passenger facilities, respectively. Bus transfer centers were the most common passenger facility with 17 reported among the agencies while there were 15 surface parking lots (park-and-ride lots), 12 elevated fixed guideway stations, four docks, and three at-grade fixed guideway stations.

Table 8: Observed Average Age Beyond Useful Life of Vehicle Asset Classes¹¹

Asset Category	Asset Class	Total in Asset Class	Total Beyond Useful Life			Current IDOT Useful Life Policy Age Threshold	Average Years Over Age + IDOT Policy Age Threshold	Recommended ULB for Asset Class <small>(Average Years Over Age + IDOT Policy Age Rounded)</small>	Years Difference Between Recommended ULB & IDOT Policy
			Total	% of Asset Class	Average Years Over Age				
Rolling Stock	Autos / Minivans / Raised Roof Vans	388	248	64%	3.9	5	8.9	9	4
	Light Duty Paratransit Vehicle	291	151	52%	2.6	7	9.6	10	3
	Medium Duty Paratransit Vehicle / School Bus	609	239	39%	3.5	8	11.5	12	4
	Super Medium Duty Paratransit Vehicle (>16 Passenger)	173	63	36%	5.1	9	14.1	14	5
	Heavy Duty Transit Vehicle (>30 Passenger)	642	255	40%	4.8	10	14.8	15	5
	A Fixed Guideway Steel-Wheeled "Trolley" <small>(Streetcar or Other Light Rail Vehicle)</small>	24	-	0%	-	25	25	25	0
	Passenger Ferries	3	-	0%	-	25	25	25	0
	Service Vehicles	62	48	77%	9.2	*5	14.2	14	9

11 Note: Five years is used as the useful life threshold for Service Vehicles in this state of good repair analysis because the majority of those vehicles that were indicated as "Service Vehicle" or "Other" in the CNA inventory would have fit in the "Autos / Minivans / Raised Roof Vans" IDOT vehicle type based on the observation of their make and model had they not been indicated as "Service Vehicle" or "Other".

Condition of facilities that the transit provider has full or partial capital replacement responsibility is required to be reported in the annual NTD report. The condition measure to be used is that of the FTA TERM (Transit Economic Requirements Model) scale, which has a 1 through 5 rating scale where 1 = Poor and 5 = Excellent. FTA has developed a *Facility Condition Assessment Guidebook* which transit providers are offered to use for guidance in conducting their facility condition assessments. The TERM score will determine each facility's state of good repair. Each agency must also set a performance target; the performance target for facilities is an established percentage of facilities with a TERM scale condition rating below 3.0 by the end of the following reporting fiscal year.

In addition to a condition assessment, the TAM Manual requires that Useful Life Benchmarks (ULB) be set for all facilities. The FTA *Grant Management Requirements* circular offers minimum useful life thresholds of 50 years and 40 years respectively for "railroad/highway structures" and "most other buildings and facilities". IDOT currently addresses one facilities category in its asset management practices, which is "buildings constructed from concrete or steel and frame". IDOT has assigned 40 years of useful life to this facilities category and states reference to the *Grant Management Requirements* circular as the source of this useful life threshold. Subsequently, 40 years is the useful life that will be used for the state of good repair analysis for the reported Downstate facilities.

C. Equipment

The FTA *Grant Management Requirements* circular addresses the asset category of Equipment requiring that an asset inventory capture information about each piece of equipment, which is classified as, "an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals or exceeds the lesser of the capitalization level established by the governmental unit for financial statement purposes," (i.e. \$50,000 minimum). The circular also includes light duty vehicles such as vans, sedans, and pick-up trucks employed in administrative and maintenance purposes and all other such property used in the provision of public transit service in its definition of Equipment.

Although the TAM Final rule does not give State of Good Repair criteria on equipment types other than non-revenue service vehicles, years beyond useful life can be used to assess this category.

D. Infrastructure

The TAM Final Rule defines Infrastructure as, “the underlying framework or structures that support a public transportation system.” Infrastructure categories include:

1. Fixed Guideway:

- *Track Segment*
- *Ballast Segment*
- *Exclusive Bus Right-of-Way Segment*

2. Structures:

- *Bridge*
- *Tunnel*
- *Elevated Structure (i.e. viaduct, etc.)*

3. Systems

- *Signal Substation*

4. Power

- *Catenary Segment*
- *Third Rail Segment*

Of all the Downstate agencies, St. Clair County was the only grantee that reported having rail track and guideway infrastructure. The median expected useful life of all reported revenue track segments was 25 years while the median age was 18 years. Only two segments of track have exceeded their useful life: one curve segment and one single turnout segment. Combined, both segments make up only four percent of linear track mileage. Both segments have exceeded their useful life by only two years.

E. Best Practices

Transit agencies around the country and the world have established various frameworks for determining when assets should be replaced and the prioritization method to select which vehicles should be replaced before others. For vehicles, age appears to be the most commonly used factor in determining replacement since it is the most easily recordable. Researchers note that the preferred measures to determine which vehicles should be replaced first are those that tie asset condition to the impact its deterioration is having on the service.¹² An example of this kind of performance measure is the number of lost customer hours, which is used by London Underground. The one common theme across all agencies is that the replacement schedule is ultimately limited by the anticipated capital budget.

¹² Spy Pond Partners, LLC., et. al, TCRP Report 157 - State of Good Repair: Prioritizing the Rehabilitation and Replacement of Existing Capital Assets and Evaluating the Implications for Transit, 2012.

Many of the large transit systems in the United States, such as MBTA in Boston and MTC in San Francisco, have developed asset management database programs to help track inventory. The FTA has also developed the TERM model that state DOTs and transit agencies alike can use to predict their capital needs. TERM takes economic and asset condition assessment information in to account to produce a score between one and five where 1 = Poor and 5 = Excellent.

The NTD records asset condition information at the group level but many transit agencies will capture information at the individual asset vehicle level during regular inventory cycles. Some transit agencies have weighted prioritization systems in place where various performance measures are weighted to determine a score for each asset or an average score for an entire fleet may be used. Some of the performance measures used by transit agencies around the world are exhibited in Table 9.

F. Recommendations

In order to ensure that its investment in its public transit assets remains viable over a longer period of time, IDOT should consider implementing several practices.

1. Standardize Asset Classification

There is no description provided of what constitutes the various types of assets in the IDOT asset useful life policy or the Rural Transit Assistance Center's (RTAC) Capital Needs Assessment (CNA). For example, a review of the CNA vehicle inventory shows that the same vehicle models have been categorized in to different vehicle categories by different transit agencies. A Turtle Top (raised roof van model) was classified as a Light Duty Paratransit Vehicle by some agencies and as an Auto/Mini-Van/Raised Roof Van vehicle by other agencies. It also needs to be made clear, again, in the case of rolling stock, that any spare or back-up revenue vehicles must be categorized as "Revenue" vehicles rather than "Non-Revenue" vehicles per NTD policy.

In order to ensure that the correct asset types are prioritized and budgeted for, IDOT and RTAC should consider developing a joint asset type manual which includes pictures of the various asset types and what specifications would qualify each asset to fit in to a certain asset type. Furthermore, it is recommended that the asset categories align with those used in the NTD as this will make the annual reporting process more seamless.

Table 9: Representative Measures of Transit Asset Conditions and Performance¹³

Category	Type	Measure	Example Application
Asset Condition	Age	Average Fleet Age	TCRP Report 141 (29)
		Average Age of Assets as Percent of Their Useful Life (AAPUL)	Metropolitan Transportation Commission (MTC) (Appendix D)
		Remaining Useful Life	MBTA (Appendix D)
	Condition	Percent of Assets in a State of Good Repair	FTA (1, 5, 22)
		Condition Rating	FTA (1, 5, 22)
		Percent of Assets Eligible for Replacement	MTC (Appendix D)
		Percent of Vehicles with Functioning Climate Control Systems	NYCT (28)
Cost	Investment Needs	Estimated Cost to Achieve Target Condition Level or Eliminate Deficiencies	FTA (1, 5, 22)
	Maintenance Cost	Average Annual Maintenance Cost Per Vehicle Operated in Maximum Service	TCRP Report 141 (29)
		Maintenance Full Time Equivalents (FTE) per Vehicle Operated in Maximum Service	
		Non-Vehicle Maintenance Cost/Track Mile	
		Maintenance Cost per Revenue Mile/Hour	
Availability/Capability	Accessibility (Capability to Meet Accessibility Commitments)	Percent of Trips/Vehicles Wheelchair Accessible	Metropolitan Transit Authority of Harris County (Houston METRO) (28)
	Sustainability (Capability to Meet Environmental Commitments)	Percent of Fleet Meeting Emissions Standards	Mass Transit Railway Corporation Limited of Hong Kong (Hong Kong MTRCL) (33)
	Availability of Safety Equipment	Percent of Vehicles with Specified Safety Devices	Los Angeles County Metropolitan Transportation Authority (28)

13 Spy Pond Partners, LLC., et. al, TCRP Report 157 - State of Good Repair: Prioritizing the Rehabilitation and Replacement of Existing Capital Assets and Evaluating the Implications for Transit, 2012.

Category	Type	Measure	Example Application	
	Quantity Unavailable for Intended Use	Percent of Slow Zone Mileage	CTA (31)	
		Minutes of Impact of Speed Restrictions	MBTA (30)	
		Percent Asset Quantity Out of Service Due to Deteriorated Condition	<i>NCHRP Report 551 (15)</i>	
		Average Number of Stations with Out-of-Service Elevators/Escalators	BART (32), Hong Kong MTRCL (35)	
		Actual Number of Departures as Percent of Scheduled Number of Departures During Peak Hours	Hong Kong MTRCL (33)	
		Automated Fare Collector Gate Availability	BART (32)	
		Percent of Time Ticket Machines in Service	NYCT (28), BART (32)	
	Travel Time	Average Journey Travel Time	London Underground (Appendix D)	
	Spare Ratio	Ratio of Spare Vehicle Quantity to Fleet Size	<i>TCRP Report 141 (29)</i>	
		Ratio of Number of Vehicles Available for Service to Number of Vehicles Required for Peak Service	MBTA (30)	
		Percent of Licensed Fleet that is Actually on the Road	Hong Kong MTRCL (33)	
		Average Spare Ratio vs. Scheduled Spare Ratio	<i>TCRP Report 88 (28)</i>	
	Reliability	Failure Rate	Mean Time/Distance Between Failures	<i>TCRP Report 141 (29)</i>
			Percent of Lost/Dropped Trips	MBTA (30), Hong Kong MTRCL (33)
Number of Bus Defects Per Vehicle Per Year			Hong Kong MTRCL (33)	
Unscheduled Door Openings per Million Car Miles			BART (32)	
Wheelchair Lift Failure Rate			NYCT (28)	
Number of Failures		Number of Road Calls	San Francisco Municipal Transportation Administration (San Francisco MUNI) (28)	
		Number of Subway Derailments	NYCT (Appendix D)	
		Number of Fires	NYCT (Appendix D)	

Category	Type	Measure	Example Application
	Delay to Customers	Lost Customer Hours	London Underground (Appendix D)
		Subway Wait Assessment	NYCT (Appendix D)
		Delays per 100 Trips	BART (32)
		Actual Number of Departures as Percent of Scheduled Number of Departures During Peak Hours	Hong Kong MTRCL (28)
Service Quality	Passenger Comfort and Convenience	Ambience Score	London Underground (Appendix D)
		Cleanliness Score	CTA (31), BART (32), Foothills Transit (36), Hong Kong MTRCL (33).
		Comfortable Temperature Score	BART (32)
	Ride Quality	Acceleration/Jerk Levels	Amtrak (Appendix D)

2. Develop a Group TAM Plan

With the establishment of the new TAM rulemaking, all state DOTs are responsible for developing a Group TAM Plan which encompasses all the assets of its subrecipients. All Tier II agencies must be included in a Group Plan as must any Small Urban Recipient (FTA Section 5307 grant) that wishes to be included. There is the TCRP Report 172: Guidance for Developing a Transit Asset Management Plan, which can be a helpful resource for developing the Group Plan. FTA has also posted the PowerPoint presentations FTA staff presented on the new TAM requirements including TAM Plan elements on their webpage: <https://www.transit.dot.gov/TAM/rulemaking>.

3. Establish Useful Life Benchmarks (ULB) for Rolling Stock and Equipment

Establishing a Useful Life Benchmark (ULB) for each vehicle type or for each asset class for the rolling stock and equipment asset categories is a requirement of the new TAM rulemaking. IDOT can continue to use the age thresholds established for its consolidated vehicle procurement program, utilize the FTA default ULBs that were recently published, or utilize the useful life guidelines that are established for FTA grant programs. If IDOT wishes to tailor its useful life benchmarks for its agencies' operating environments, it may want to consider tracking at what age the majority of vehicles for each class are marked as "unsafe" or "request replacement" in the annual CNA reports. Over time, IDOT can ascertain what ULBs are appropriate to establish for revenue and non-revenue vehicle types or classes. It may also want to consider having the agencies keep track of the reasons why the vehicles marked this way are being marked as such.

4. Establish State of Good Repair Performance Targets for all Asset Categories

The performance targets vary by asset category and, according to the TAM Final Rule, must be established by all applicable transit providers by January 1, 2017. Useful Life Benchmark is the performance measure to be used for rolling stock and equipment (i.e. non-revenue service vehicles), while percentage of track with performance restrictions is the performance measure for the infrastructure asset category and condition as determined by the TERM scale is the performance measure for facilities. For the rolling stock and equipment asset categories, the performance targets must be set in terms of percentage of vehicles per asset class that have met or exceeded its ULB. In considering what percentage of vehicles is appropriate to establish for each asset class, IDOT should evaluate the percentage of assets that are beyond their useful life. What needs to be considered is if there will be the budget available in the upcoming fiscal year to purchase new vehicles so that the percentage of vehicles in each asset class beyond their agency-established useful life benchmark can be lowered. If there will be funds available to purchase new vehicles in the upcoming fiscal year, then the performance measure target for each asset class should be established at a percentage that matches the projected percentages of assets to be beyond their useful life for the upcoming fiscal year. A similar methodology would be applied to determining appropriate percentage of track with performance restrictions¹⁴ and facilities with a TERM score below 3.0 after the necessary data to make these determinations has been collected.

5. Establish Prioritization System for Asset Replacement

The decision of which assets to replace before others throughout the State can be made easier by establishing a ranking system for asset replacement based on certain criteria. Age is perhaps the easiest criteria to collect by keeping track of the date a new vehicle is placed in to service. Other performance criteria can provide inspiration for developing and giving weight to various factors that should be considered. Another alternative ranking system to consider implementing is that of the FTA TERM model, which FTA has developed spreadsheet templates that agencies can utilize.

6. Establish Dedicated Transit Facilities

A refrain among many providers was that sharing space with other uses presents difficulties. In many cases, lack of office space has hampered the ability to hire staff to expand service. In addition, many of these shared use facilities lack indoor storage and on-site maintenance facilities. This leads to the deterioration of vehicles quicker than what would be expected under useful life guidelines. For agencies using above ten revenue vehicles, a purpose built transit facility should be provided with administration and maintenance facilities co-located. In Downstate Illinois, this would mean that 11 facilities will need to be built.

¹⁴ St. Clair County is the only agency that reported having track assets. Therefore, it is considered a Tier I transit provider (in terms of TAM) and will need to develop its own TAM plan.

VIII. FUNDING AND BENEFITS OF PUBLIC TRANSPORTATION

A. History of State Investment in Public Transportation

States have had a long history of funding public transportation services. In FY2015, the latest year in which data were available, the American Association of State Highway and Transportation Officials (AASHTO) found that \$18.8 billion was invested in public transportation. This represents more than a 400% increase over funding in 1990. No less than 45 states provide some level of public transportation funding. The five states that provide no state financial assistance for public transportation include¹⁵:

- Alabama
- Arizona
- Hawaii
- Nevada
- Utah

Several states dominate investment in public transportation. Indeed, seven of the 45 states that provide public transit funding account for 83% of all public transit investment – a ratio that has held relatively constant since 2010. Of the total \$18.8 billion expended in FY2015, these seven states account for \$15.8 billion. These states are characterized by expenditures that exceed \$500 million per year. New York, alone, provides nearly 25% of all state funding for public transit.

- New York
- Illinois
- California
- Massachusetts
- Pennsylvania
- Maryland
- Connecticut

A more comprehensive look at funding can be found in the *State Funding and Benefits of Public Transportation Report*.

¹⁵ Nevada has a sporadic history of providing some transit funding; the most recent year funding was provided was in FY2013, where the state appropriated \$37,501 in state assistance. During the two most recent fiscal years in which data is available, no state funding was authorized.

While Illinois now ranks second among the states in terms of public transit funding, Illinois' relative ranking over the last five years has changed, ranking third in FY2011, then falling to sixth in FY2012 and FY2013, finally rising to second in FY2014 and FY2015 (Table 10). However, when investment is allocated per capita, Illinois falls back down to fifth in 2015 (see Table 11).

Table 10: Top Seven States, Investment in Public Transportation, FY2013 - FY2015¹⁶

RANK	FY 2013		FY 2014		FY 2015	
	STATE	AMOUNT	STATE	AMOUNT	STATE	AMOUNT
1	New York	\$4,465,883,700	New York	\$4,786,084,700	New York	\$4,786,084,700
2	California	\$3,040,697,663	Illinois	\$3,118,234,749	Illinois	\$3,536,569,161
3	Maryland	\$1,522,123,479	California	\$2,259,430,056	California	\$2,898,424,596
4	Massachusetts	\$1,392,854,042	Massachusetts	\$1,550,905,555	Massachusetts	\$1,649,889,696
5	Pennsylvania	\$1,161,119,714	Pennsylvania	\$1,237,148,591	Pennsylvania	\$1,532,172,650
6	New Jersey	\$1,076,490,515	Maryland	\$906,699,174	Maryland	\$815,472,457
7	Illinois	\$854,683,301	Connecticut	\$465,086,221	Connecticut	\$515,278,413

Table 11: Top Seven States, Ranked by Per Capita Investment, FY2015

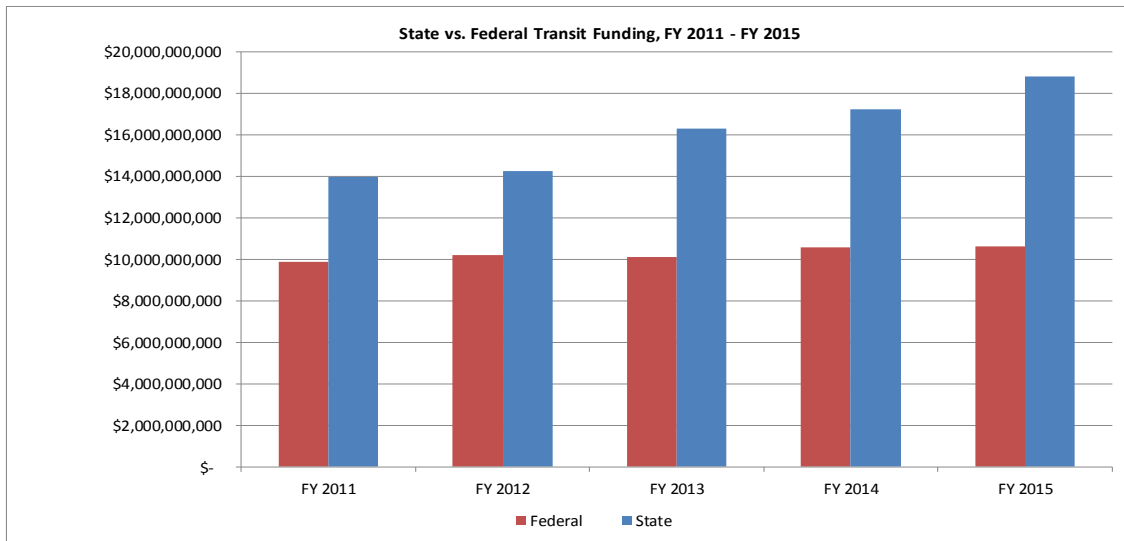
RANK	STATE	AMOUNT	POPULATION	AMOUNT PER CAPITA
1	New York	\$4,786,084,700	8,550,405	\$559.75
2	California	\$2,898,424,596	6,016,447	\$481.75
3	Massachusetts	\$1,649,889,696	6,794,422	\$242.83
4	Pennsylvania	\$1,532,172,650	12,784,227	\$119.85
5	Illinois	\$3,536,569,161	38,715,000	\$91.35
6	Maryland	\$815,472,457	8,944,469	\$91.17
7	Connecticut	\$515,278,413	12,837,801	\$40.14

¹⁶ Survey of State Funding in Public Transportation, Final Report: FY2017 - FY2015 Data, American Association of State Highway and Transportation Officials (2017).

B. State Funding vs. Federal Funding for Public Transportation

State funding of public transit surpassed federal funding in the early 1990s and the gap has continued to grow since that time. Over the last five years state funding has increased 34.4%. During this same period, federal funding has increased 7.7% (see Figure 6).

Figure 6: State and Federal Funding for Public Transit, FY2011 – FY2015¹⁷



C. How the States Fund Public Transportation

There is no clear or consensus methodology employed by the state; AASHTO tabulated funding sources by the following categories:

- General Sales Tax
- Vehicle/Rental Car Sales Tax
- Gas Tax
- Lottery
- Registration/License/Title Fees
- Trust Fund
- Interest Income
- General Fund
- State Transit Fund
- Bond Proceeds
- Other

¹⁷ Source: Survey of State Funding in Public Transportation, Final Report: FY2017 – FY2015 Data, American Association of State Highway and Transportation Officials (2017).

While multiple sources are cited, the top three sources (general sales taxes, trust fund revenues, and bond proceeds) constitute the revenue source for greater than 57.4% of all state funding for public transportation.

Within the “Other” category, a wide range of funding sources was cited, but detailed descriptions were not solicited. These other sources included:

- Corporate franchise tax
- Fuel users tax
- Diesel sales tax
- Parking revenues
- Rental car surcharges & document stamps
- Situs tax/electric rail fund
- Casino revenues/taxes
- Corporate income tax
- Toll authority revenues
- Gross receipts tax
- Payroll mobility tax
- Capital fund program
- State highway/road funds
- Recordation tax
- Other, undefined miscellaneous revenues and fees

Total percentages, for all funding cited, is documented in Table 12.

Table 12: Relative Percentages of State Funding for Public Transportation, FY2015¹⁸

SOURCE OF STATE FUNDING	PERCENT
Other	24.46%
General Sales Tax	20.19%
Trust Fund	19.09%
Bond Proceeds	18.13%
General Fund	5.91%
Registration/License/Title Fees	3.21%
Gasoline Tax	3.10%
State Transit Fund	2.82%
Vehicle/Rental Car Sales Tax	2.09%
Lottery Funds	0.98%
Total	100.00%

Of the 45 states that provide funds for public transportation, the majority (43) provide funding for operating assistance (state funding is either directed to operations and/or there are no restrictions on use of the funds). Approximately 55% of all state funds are dedicated to operations; another 15.5% are unrestricted, meaning that the funds can be used for capital, operations, or other purposes. Only two states limit public transportation funding to capital uses only (Idaho and Kentucky).

¹⁸ Source: Survey of State Funding in Public Transportation, Final Report: FY2017 – FY2015 Data, American Association of State Highway and Transportation Officials (2017).

D. Economic Benefits of Transit

A summary of the potential economic impacts that investment in public transit would bring to the State of Illinois is presented below. The information emulates a nationally respected approach used by the Institute for Transportation Research and Education (ITRE) for the North Carolina Department of Public Transportation to assess impacts at the system level. The methodology incorporates an analytic approach first developed by Upper Great Plains Transportation Institute.¹⁹

This report cites potential economic benefits of transit:

- Cost reductions in personal expenditures when transit trip opportunities are available;
- Energy and environmental benefits;
- Benefits obtained through improved safety and security, particularly for older drivers; and
- Direct job creation by the transit system and parallel induced economic activity.²⁰

The ITRE analysis argues that conducting such analyses is necessary in today's economic climate for the following reasons:

- Subsidized programs may face calls for reduced subsidies at any time;
- It is important to have data and statistics on hand to prove the value of the services;
- Intrinsic value is not enough;
- Client and agency testimonials are helpful; and
- Monetized benefits level the playing field between modes and other programs.²¹

This analysis also expands upon the Upper Great Plains Transportation Institute's study in that it incorporates some modeling processes for urban areas from a study conducted for the Florida Department of Transportation.

¹⁹ Godavarthy, Ranjit, Jeremy Mattson, and Elvis Ndembe, Upper Great Plains Transportation Institute at North Dakota State University, Cost-Benefit Analysis of Rural and Small Urban Transit: Final Report, prepared for the United State Department of Transportation, 21177060-NCTR-NDSU03, Fargo, ND (July 2014).

²⁰ Ibid.

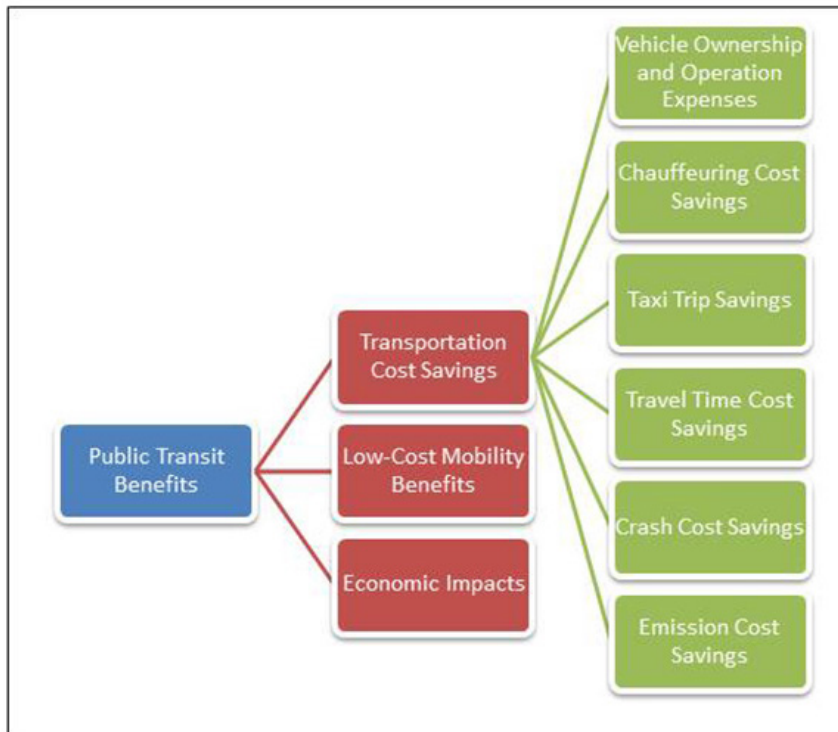
²¹ Monast, Kai, Institute for Transportation Research and Education (ITRE), Calculating the Benefits of Transit, undated PowerPoint presentation.

Both studies cited above have adopted the so-called “transit benefits assessment tree,” advocated by various researchers examining transit’s potential benefits. The tree used by in the ITRE/Great Plains analysis is a modification of one developed by HDR Decision Economics²². In this schematic, transit benefits:

...are primarily categorized as transportation cost saving benefits, low-cost mobility benefits, and economic impact benefits. If transit is not provided in a community, then transit riders would have to either use a different mode or forego the trip. Transportation cost savings are the savings that result when individuals are able to use transit in place of another mode, and affordable mobility benefits are the benefits that result when trips are made that would otherwise be foregone in the absence of transit. Economic benefits result from the economic activity generated by transit operations.

This tree is depicted in Figure 7.

Figure 7: Transit Economic Benefits Tree²³



The authors note that there are other potential economic benefits of transit; however, the difficulties in quantification of these other benefits are often impossible to calculate. Thus, only factors addressed in Figure 7 are addressed in the computations in this method.

²² HDR Decision Economics, Costs and Benefits of Public Transit in South Dakota, prepared for the South Dakota Department of Transportation (2011).

²³ Source: Godavarthy, et. al, op.cit., page 11.

1. Transportation Cost Savings

2015 NTD data from Downstate transportation operations served, in part, as inputs for the economic benefits analysis. In the Downstate area, NTD data suggests that about 32 million annual unlinked passenger trips are provided in fixed route bus or commuter bus mode. An additional 6.6 million demand response trips are provided.

This data was segregated by mode, consistent with the approach taken elsewhere in this Plan; thus fixed route mode data (primarily urban and small urban) and demand response data were examined in this analysis. Fixed mode data include NTD data for motor bus and commuter bus. Both fixed route and demand response modes include directly operated and purchased transportation. Ferry boat and vanpool modes were excluded from the analysis consistent with the research and approach adopted by North Carolina. In all cases, the research methodology provides a basis for quantification of cost savings to the traveler of using public transportation. In the absence of these services, other modes will be used or trips will not be undertaken altogether.

- **Vehicle Ownership and Operation Cost Savings:** This element of the analysis assumes that if public transportation was not available, a portion of the riders would make the trip in their personal automobiles and some who do not own one would have to purchase an automobile. Therefore, transit riders using personal automobiles for their trips would incur vehicle ownership and operating expenses, which can be considered savings if the rider instead used transit for making the trip. The savings can be calculated based on the savings per vehicle mile of the personal vehicle traveled.
- **Avoided Chauffeuring Costs:** Many transit users, however, do not own or operate a personal automobile and therefore will not use the previously discussed alternative in order to take a trip. In these instances, it is likely that the individual will request a ride with a family member or other friend (referred to as “chauffeuring costs” in the literature; this does not mean limousine service in lieu of transit service). These trips provided by others do have a cost; the research methodology, based on individual travel study data, estimates the potential costs of these trips being provided by others.
- **Taxi Trips/Shared Use Mobility:** Where these services are available, taxicabs or shared use mobility (Lyft, Uber, car sharing, etc.) may provide essential mobility to individuals who do not have access to transit. These trips are more expensive than transit, thus, diversion of transit trips to this mode will involve additional costs to the individual. The difference between anticipated use of taxicabs in lieu of transit use has been estimated.
- **Additional Travel Time Costs:** In addition to out-of-pocket costs, there are other costs associated with travel, such as the amount of time devoted to travel. Because travel times differ between transit and other modes, the methodology used took into account the value of this additional time. Travel time comparison were made with auto usage; chauffeured modes, taxicabs, walking, and bicycle alternatives to public transit usage. Because some trips on transit may take longer than comparable trips on other modes, such as auto, values may be negative for this factor when one factors into wait time at the bus stop, walk time to the bus stop, etc. The expected result occurred in the fixed route mode analysis in Illinois. Due to the nature of demand response transportation, cost savings are shown.

- **Crash Cost Savings:** Public transportation is a relatively safe mode of travel in comparison to automobile, pedestrian, or bicycle modes. Research indicates that the fatality rate for transit users is very low when compared to that of car occupants (one tenth of the rate for car occupants).²⁴ Measuring the value of transit requires an estimate of the value it provides by reducing crash costs.
- **Environmental Emission Cost Savings:** Public transit, in particular with use of newer, cleaner fuels and technology, can help reduce environmental emissions when enough passengers use the service. This effect is more pronounced in larger communities where there is a large demand for transit. However, for smaller urban and rural areas, the number of people riding transit can be low and, therefore, the environmental emissions cost savings are more modest. However, with increased transit demand and effective management of transit, these savings can be evident.

2. Forgone Trips

This section of the analysis assumes that benefits accrue to the individual and others when transit trips are made. For example, if an individual who uses transit to commute to work did not have that option, there are likely to be costs in terms of lost productivity, lost wages, absenteeism, etc.

- **Work Trips:** The approach articulated in the North Carolina study estimates the benefit of providing work trips by the impact it has on reducing public assistance spending (this assumes that a non-working individual will have some impact on assistance programs offered by federal and state governments). If an individual cannot go to work because of a lack of transportation, he or she may become eligible for assistance from the government.
- **Medical Trips:** Similarly, an individual who is unable to make doctor appointments or other medical trips may suffer from lack of preventive care, as well as providing adverse economic impacts on the health care provider. Based on research primarily aimed at Non-Emergency Medical Transportation (NEMT),²⁵ the research develops a methodology to quantify missed medical trips.
- **Other Trips:** For purposes of this analysis, education, shopping, recreational, and all other trips were aggregated into a single category for cost estimation purposes.

²⁴ Litman, Todd, "Transportation Cost and Benefit Analysis: Techniques, Estimates and Implications, Second Edition," Victoria Transport Policy Institute (2011).

²⁵ Hughes-Cromwick, P., R. Wallace, H. Mull, J. Bologna, C. Kangas, J. Lee, and S. Khasnabis, "Cost Benefit Analysis of Providing Non-Emergency Medical Transportation: Final Report," TCRP Web-Only Document 29, Transit Cooperative Research Program (TCRP), Transportation Research Board of the National Academies (2005).

E. Results of the Analysis

Emulating the North Carolina approach, estimated impacts transportation costs saving accrued due to the public transportation services provided in Illinois were calculated for the following categories.

1. Transportation Cost Savings

This grouping includes costs savings associated with an entity's decision to provide public transit versus the cost of alternative modes used by the individual in the absence of available public transportation. In the Downstate region, these costs are estimated to be approximately \$89 million per year based on FY 2015 dollars. See Table 13.

Table 13: Estimated Transportation Cost Savings, by Mode – Downstate Illinois²⁶

TRANSPORTATION COSTS SAVING CATEGORIES	FIXED ROUTE BENEFITS	DEMAND RESPONSE BENEFITS	TOTAL BENEFITS
Vehicle Ownership and Operations Savings	\$9,821,980	\$1,301,170	\$11,123,150
Chauffeuring Cost Savings	\$21,196,352	\$16,407,615	\$37,603,967
Taxi/Shared Use Mobility Cost Savings	\$31,077,358	\$6,342,440	\$37,419,798
Travel Cost Savings	\$(8,493,906.89)	\$2,249,729.43	(\$6,244,177)
Crash Cost Savings	\$2,445,779	\$2,249,729	\$4,695,508
Emission Cost Savings	\$3,088,166	\$1,167,444	\$4,255,610
Total Transportation Cost Savings	\$59,135,728	\$29,718,127	\$88,853,856

2. Affordable Mobility Results

Additional economic impacts are felt when considering the costs of missed trips due to the absence of public transportation in a community. Table 14 summarizes the benefits of having available transit to provide this mobility in the community.

Table 14: Affordable Mobility Benefits, by Mode – Downstate Illinois²⁷

TRANSPORTATION COSTS SAVING CATEGORIES	FIXED ROUTE BENEFITS	DEMAND RESPONSE BENEFITS	TOTAL BENEFITS
Medical Trips	\$153,043,224	\$54,651,866	\$207,695,090
Work Trips	\$136,705,276	\$41,155,433	\$177,860,709
Other Trip Purposes	\$2,664,637	\$904,592	\$3,569,230
Total Transportation Cost Savings	\$292,413,137	\$96,711,891	\$389,125,029

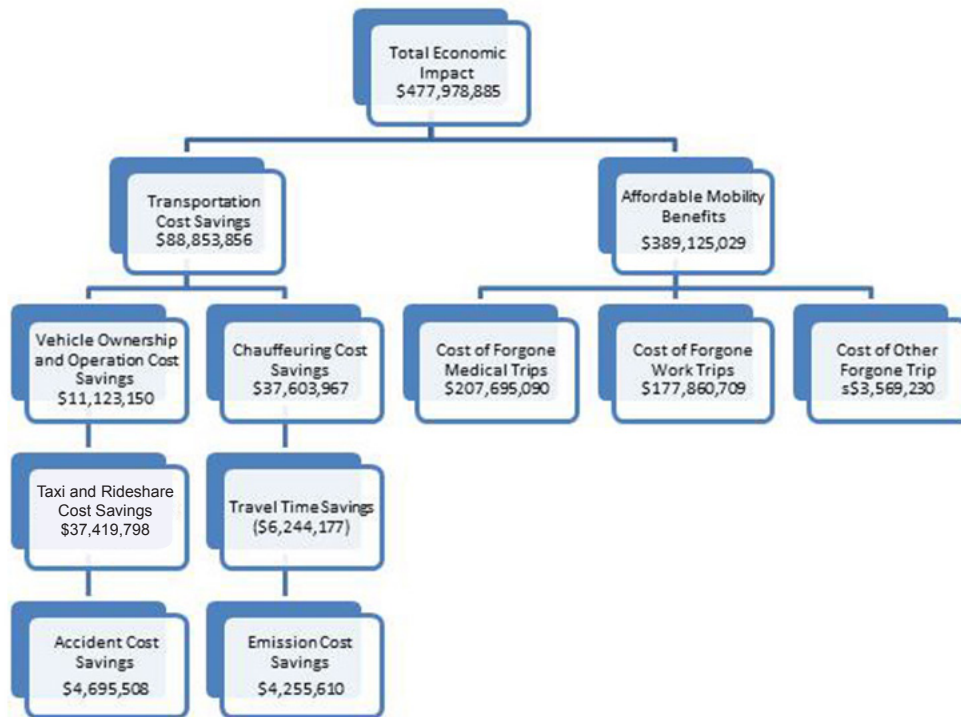
3. Combined Results

Based on this analysis, it is estimated that the public transportation systems in Downstate Illinois create an economic impact of approximately \$478 million in terms of costs savings and ensuring access to work, health care, and other destinations. A summary of these cost savings is shown in Figure 8.

²⁶ Godavarthy, et. al., and RLS & Associates, Inc. computations.

²⁷ Godavarthy, et. al., and RLS & Associates, Inc. computations

Figure 8: Public Transit Benefits/Economic Impacts²⁸



F. Economic Contribution Analysis

The foregoing process does not assess the economic impact that the actual operation of public transportation may have through the employment of operations, maintenance, and administrative personnel; the wages paid, and the direct and indirect impact of transit system expenditures may have on the local economy.

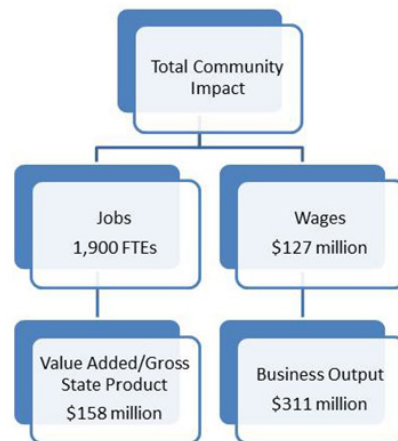
The North Carolina analysis provided such an assessment; this was made possible by the fact that the North Carolina Department of Transportation collects detailed employment and payroll data from all transportation systems in the State. For the Illinois analysis, the analysis relies solely on NTD data. FTA does not require rural reporters to submit labor data; thus this analysis was hindered due to lack of data.

Based on NTD data for those agencies that report, it is estimated that Downstate transit systems employ about 1,900 full time equivalent (FTE) employees with annual estimated wages of \$127,063,060. Using multipliers from the North Carolina analysis, statewide impact of investment in transit will produce (Figure 9):

- Value added/gross state product - \$158 million
- Business output - \$311 million

²⁸ Godavarthy, et. al., and RLS & Associates, Inc. computations.

Figure 9: Community Economic Benefits, Statewide²⁹



G. Conclusion

This analysis suggests a total economic impact of about \$948 million annually (2015 dollars) in economic benefits accrue to the state of Illinois as a result of public transportation.

Additional information is presented in the *State Funding and Economic Benefits Report*.

²⁹ Godavarthy, et. al., and RLS & Associates, Inc. computations

IX. PERFORMANCE MEASURES

Systematic performance measurement can provide objective assessments of current conditions, including successes, deficiencies, challenges, and trends. The most important use is the ability to compare performance over time, learning about the specific nuances of each agency and being able to identify true trends. Performance measures should reflect a broad range of relevant issues, yet be detailed enough to accurately identify areas needing improvement.

Any performance measures developed need to be relevant, representative and related to specific policy objectives. Measures should be regularly monitored. The best measures are those that are relevant to agencies as well as the State and have been developed with a broad base of stakeholder support. The use of performance measures should be to guide improvement rather than used in a punitive manner.

For all fixed route figures in this report, National Transit Database (NTD) data from FY 2015 was used. Demand response figures are from FY 2016 and are culled from paper forms submitted to IDOT as part of these agencies' year end reporting.

Over time, if a performance measurement scheme is established and tested, then benchmarks or standards can be thoughtfully established. Benchmarks should be realistic, but optimistic—and they should be appropriate to the type of system measured. Ultimately, performance measures can be utilized to guide decision making. It is very important to have widespread buy in of the measurement scheme as well as a solid understanding of the ramifications of implementing the scheme.

The topic of performance measures was presented at the June 17, 2015 Steering Committee meeting. At this meeting, the Steering Committee suggested dividing the rural agencies in some type of peer groups in order to better compare their performance. The Committee proposed the following groups for demand response agencies:

- Number of Counties Served
- Population Density
- Agency Type
- Average Miles per Trip

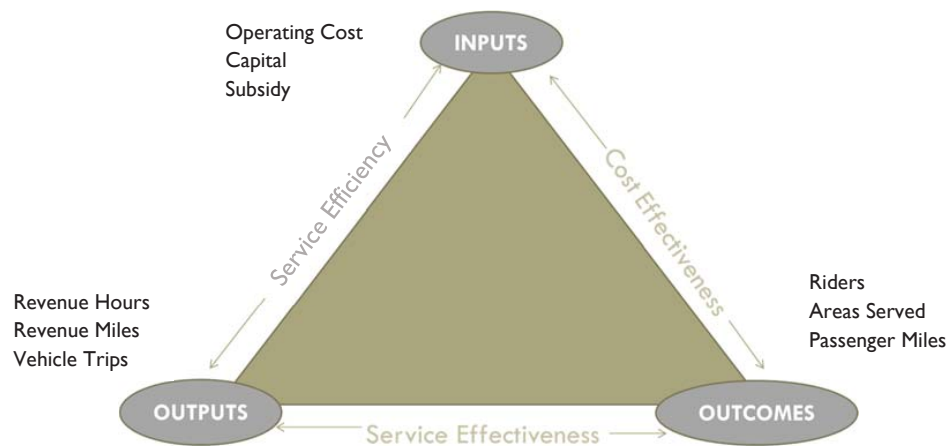
All demand response agencies within a group were compared against each other. Fixed routes agencies were grouped in five ways: large cities, medium cities, small cities, suburban, and university systems. Since there were not enough agencies of each group in the State, peers were chosen that operate in similar geographies, have a similar demographic profile, and serve a similar sized population as their Illinois counterparts. The *Performance Measures Report* provides greater detail of this analysis.

A. Performance Measure Methodologies

Each group was evaluated using two different performance measure constructs, Efficiency Measures and Availability Measures; fixed route adds an additional Solvency Measure. The three types of measures reflect different aspects of service.

Efficiency Measures: Efficiency Measures are useful for assessing management efficiency and the effectiveness of service delivery. They are frequently the types of measures that an agency will use to track their own performance over time. Three Efficiency Measures were selected to fully depict transit operations. These measures represent dimensions of cost efficiency, cost effectiveness, and service effectiveness. Figure 10 depicts the philosophy behind the Efficiency Measures.

Figure 10: Efficiency Measures Concept



The Efficiency Measures used are:

- Operating Cost per Revenue Hour (Service Efficiency)
- Trips per Revenue Hour (Service Effectiveness)
- Operating Cost per Trip (Cost Effectiveness)

Availability Measures: Availability Measures assess and compare the amount of service provided in an area on a per capita basis. This often produces enlightening statistics when comparing across regions or comparing peer agencies elsewhere in the country. In some ways, Availability Measures can be viewed as a measure of policy in which the level of resources for transit in a community is reflected.

The Availability Measures used are:

- Revenue Hours per Capita (Service Availability)
- Trips per Capita (Market Penetration)

Solvency Measures: Solvency Measures refer to how sustainable an agency's finances and assets will be in the future. This measure is particularly useful for gauging how well current funding matches up to an agency's needs. Funding includes both fares and government funding. Capital assets include funding for vehicles, facilities, and fixed guideways. In order to smooth out inconsistencies in capital funding, three years of funding (2013-2015) will be averaged for the investment measure.

The Solvency Measures used for this report are:

- Fare Revenue Shortfall per Passenger Trip (Subsidy)
- Farebox Recovery Ratio (Share)
- Capital Funding per Capita (Investment)

B. Current Performance

Acknowledging that each operator is different because they face unique geographies, operating environments, funding situations, political support, and populations there is still value in analyzing agency performance using performance metrics. A more complete analysis of the performance of Illinois transit agencies can be found in the *Performance Measurements Report*. The top three ranked agencies in each measure are highlighted in red.

1. Demand Response Efficiency Measures

Efficiency measures for those agencies considered to be “long trippers” (those with an average trip length over 9 miles) are shown in Table 15. As the data indicates, Warren Achievement Center provides the least expensive trips in Illinois; Pretzel City Area Transit costs the least per hour; and Fulton County has the most riders per hour.

Table 15: Long Tripper Efficiency Measures

Agency	Cost Effectiveness	Rank	Service Efficiency	Rank	Service Effectiveness	Rank
	Cost per Trip	↓	Cost per Rev Hr	↓	Riders per Rev Hr	↓
Bond County Senior Center	\$17.47	11	\$ 69.92	18	4.00	6
Boone County Council on Aging	\$12.07	4	\$ 48.64	11	4.03	5
Bureau-Putnam Area Rural Transit	\$17.84	13	\$ 47.30	10	2.65	15
Carroll County Transit	\$23.80	21	\$ 32.32	2	1.36	22
Central Illinois Public Transportation	\$21.08	20	\$ 43.74	9	2.07	18
CRIS Rural MTD	\$18.19	14	\$ 79.94	20	4.40	4
Dial A Ride	\$13.44	6	\$ 56.85	17	3.92	8
Fulton County	\$11.09	3	\$ 85.16	22	7.68	1
Henry County Public Transit	\$15.04	9	\$ 49.61	12	3.30	10
Jackson County MTD	\$20.98	19	\$ 39.72	8	1.89	20
Jo Daviess Transit	\$18.19	15	\$ 81.43	21	4.48	3
Lee-Ogle Transportation System	\$9.77	2	\$ 35.92	5	3.05	12
Logan-Mason County Public Transportation	\$37.30	22	\$ 35.00	3	2.04	19
Piatt County Public Transportation	\$20.71	18	\$ 35.17	4	1.70	21
Pretzel City Area Transit	\$12.22	5	\$ 28.30	1	2.32	17
RIDES	\$14.59	7	\$ 50.27	13	3.45	9
SHOWBUS	\$19.53	17	\$ 53.89	15	2.76	14
South Central Transit	\$15.23	10	\$ 74.19	19	4.87	2
TransVAC (Voluntary Action Center)	\$18.32	16	\$ 52.00	14	2.84	13
Warren Achievement Center	\$9.30	1	\$ 36.76	6	3.95	7
West Central MTD	\$14.89	8	\$ 38.14	7	2.56	16
Whiteside County Public Transportation	\$17.73	12	\$ 55.64	16	3.14	11

Table 16 shows the measures for agencies categorized as “short trippers” (average trip length is less than nine miles). Hancock County Public Transportation provides the least expensive trips and costs the least per hour. RIM Rural Transit has the most trips per hour.

Table 16: Short Tripper Efficiency Measures

	Cost Effectiveness	Rank	Service Efficiency	Rank	Service Effectiveness	
Agency	Cost per Trip	↓	Cost per Rev Hr	↓	Riders per Rev Hr	↓
Champaign County Rural Transportation System	\$27.52	7	\$ 35.29	4	1.28	3
CountyLink	\$41.46	11	\$ 48.80	9	1.18	2
Grundy Transit System	\$25.25	6	\$ 47.81	8	1.89	9
Hancock County Public Transportation	\$15.07	1	\$ 27.54	1	1.83	7
Kendall Area Transit	\$40.04	10	\$ 68.35	10	1.71	6
Macoupin County Public Transportation	\$18.69	3	\$ 31.32	2	1.68	5
Marshall-Stark Transportation	\$35.86	8	\$ 36.27	5	1.01	1
Monroe Randolph Transit District	\$61.83	12	\$ 99.72	12	1.61	4
North Central Area Transit	\$15.83	2	\$ 34.58	3	2.18	11
RIM Rural Transit	\$37.43	9	\$ 83.03	11	2.22	12
Shawnee MTD	\$23.48	5	\$ 47.08	7	2.01	10
WE Care	\$21.70	4	\$ 40.04	6	1.85	8

2. Fixed Route Efficiency Measures

Tables 17 through 21 show the efficiency measures for fixed route agencies. Among large city systems in Illinois, Connect Transit offers trips at the lowest cost, lowest per hour, and carries the most riders per hour. These numbers also compare well to peers. The same does not hold true with Rockford and Springfield, which are in the lowest in the cost per trip and riders per hour measures, respectively, and also are near the bottom when compared to peers. TARTA, the transit agency in Toledo, Ohio is the lowest in these measures.

Decatur offers trips for the least expense for medium city systems and is near the bottom in expense per hour; STARS (Saginaw, MI) carries the most riders per hour. River Valley Metro rests near the middle of the pack in these measures. Among the peers, STARS is the least efficient system.

Most of the Illinois small city systems are not considered to be in urbanized areas, while all of their peers are. Unlike the large and medium city systems in Illinois, there are no significant outliers. Most fall into the middle of the range of the peers. JETS (Jonesboro, AR) is the cheapest system on a per trip basis; San Marcos Transit (south of Austin, TX) is the cheapest system to operate per hour; and the Mankato Transit System has the most riders per hour. El Dorado County (in the California Sierra Mountains) is the least efficient system, most likely because of the challenging terrain and the fact that it is a county based system with a large percentage of trips operating as demand response trip.

Since St Clair County is the only of the suburban systems that funds light rail, the cost to operate (by trip and by hour) this system far exceeds its peers. However, that high funding cost does result in the second highest riders per revenue hour, behind Broward County (home to Fort Lauderdale, FL). Broward County is the least expensive system on a per hour basis, while PCPT (Pasco County, FL) is the least expensive per trip. Broward County also carries the most riders per hour.

Considering the high numbers of riders for such a small city, it is not surprising that Go West ranks highest in cost per trip and operating expense per hour for university systems. CUMTD has one of the highest operating expenses per hour, although they do carry the largest number of passengers among peers, which translates to a reasonably low cost per trip. The MET (Waterloo, IA) is the least efficient system.

Table 17: Large City Systems Efficiency Measures Versus Peers³⁰

	Cost Effectiveness	Rank	Service Efficiency	Rank	Service Effectiveness	Rank
Agency	Cost per Trip	↓	Operating Expense per Hour	↓	Riders per Revenue Hour	↓
CitiLink (IN)	\$6.53	7	\$101.01	7	15.50	6
CityLink	\$6.08	6	\$117.84	10	19.40	3
Connect Transit	\$3.79	1	\$88.17	4	23.30	1
MetroLink	\$4.98	3	\$103.29	8	20.70	2
METS (IN)	\$4.00	2	\$66.66	1	16.70	4
Rockford MTD	\$8.65	9	\$109.02	9	12.60	9
Springfield MTD	\$6.95	8	\$97.95	6	14.10	8
TARTA (OH)	\$9.02	10	\$67.33	2	7.50	10
The E (PA)	\$5.21	4	\$74.15	3	14.20	7
Transpo (IN)	\$5.48	5	\$90.78	5	16.60	5

Table 18: Medium City Systems Efficiency Measures Versus Peers³¹

	Cost Effectiveness	Rank	Service Efficiency	Rank	Service Effectiveness	Rank
Agency	Cost per Trip	↓	Operating Expense per Hour	↓	Riders per Revenue Hour	↓
Bay Metro (MI)	\$13.96	10	\$99.77	9	7.10	10
Decatur	\$4.16	3	\$75.78	4	18.20	4
Eau Claire (WI)	\$5.68	7	\$62.58	1	11.00	9
Kenosha (WI)	\$4.50	4	\$76.71	5	17.00	5
MTU (WI)	\$4.84	5	\$67.83	2	14.00	7
River Valley Metro	\$6.96	9	\$84.56	8	12.20	8
Rochester (MN)	\$4.07	2	\$81.41	7	20.00	2
Sioux City (IA)	\$3.80	1	\$74.31	3	19.60	3
STARS (MI)	\$5.74	8	\$120.09	10	20.90	1
The Bus (WI)	\$5.67	6	\$80.18	6	14.10	6

30 Bolded agencies are located in Illinois

31 Bolded agencies are located in Illinois

Table 19: Small City Systems Efficiency Measures Versus Peers³²

Agency	Cost Effectiveness Cost per Trip	Rank ↓	Service Efficiency Operating Expense per Hour	Rank ↓	Service Effectiveness Riders per Revenue Hour	Rank ↓
Danville	\$6.17	7	\$ 52.19	7	20.35	3
El Dorado Transit (CA)	\$15.37	1	\$ 127.97	2	8.33	5
Galesburg	\$2.85	8	\$ 57.83	6	7.65	6
JETS (AR)	\$2.56	9	\$ 45.84	9	4.93	9
Josephine County (OR)	\$7.56	4	\$ 65.31	4	9.33	4
Mankato Transit System (MN)	\$6.91	6	\$ 82.01	3	28.78	1
Quincy	\$14.89	2	\$ 58.29	5	6.16	8
San Marcos Transit (TX)	\$7.00	5	\$ 22.55	10	1.51	10
St Mary's Transit System (CA)	\$9.30	3	\$ 51.42	8	7.44	7
Valley Transit (WA)	\$5.65	10	\$ 131.80	1	23.31	2

Table 20: Suburban Systems Efficiency Measures Versus Peers³³

Agency	Cost Effectiveness Cost per Trip	Rank ↓	Service Efficiency Operating Expense per Hour	Rank ↓	Service Effectiveness Riders per Revenue Hour	Rank ↓
ART (VA)	\$77.04	8	\$4.27	8	18.10	4
Broward County (FL)	\$86.32	5	\$3.39	10	25.50	1
LANTA (PA)	\$78.35	7	\$6.24	4	12.60	7
MCT	\$89.49	4	\$8.05	2	11.10	9
METRO (OH)	\$102.07	2	\$8.32	1	12.30	8
PCPT (FL)	\$65.80	10	\$6.48	3	10.20	10
St Clair County	\$129.69	1	\$5.38	7	24.10	2
TANK (OH)	\$80.90	6	\$6.04	5	13.40	6
The Rapid (MI)	\$74.09	9	\$3.70	9	20.00	3
WRTA (MA)	\$100.91	3	\$5.78	6	17.50	5

32 Bolded agencies are located in Illinois

33 Bolded agencies are located in Illinois

Table 21: University Systems Efficiency Measures Versus Peers³⁴

	Cost Effectiveness	Rank	Service Efficiency	Rank	Service Effectiveness	Rank
Agency	Cost per Trip	↓	Operating Expense per Hour	↓	Riders per Revenue Hour	↓
AppalCart (NC)	\$1.75	9	\$48.13	9	27.53	6
CATA (PA)	\$1.90	8	\$74.77	6	39.30	2
CUMTD	\$2.41	5	\$109.05	1	45.20	1
Go West	\$1.58	10	\$44.12	10	27.90	5
Lafayette City Bus (IN)	\$2.24	7	\$79.31	5	35.30	3
RTS (FL)	\$2.26	6	\$69.65	7	30.80	4
Star Metro (FL)	\$4.16	4	\$65.48	8	15.70	8
Stevens Point City Bus	\$6.37	2	\$83.06	4	13.04	9
The MET (IA)	\$9.99	1	\$85.42	3	8.55	10
The Ride (MI)	\$5.21	3	\$98.54	2	18.90	7

3. Demand Response Availability Measures

Tables 22 and 23 provide availability measures for both long tripper and short tripper agencies. For the long trippers, Warren Achievement Center has the most riders per capita and Boone County Council on Aging has the least. Piatt County Public Transportation provides the most hours per capita and Fulton County has the lowest availability compared to other agencies.

³⁴ Bolded agencies are located in Illinois

Table 22: Long Tripper Availability Measures

Agency	Penetration Riders per Capita	Rank ↓	Service Availability Rev. Hrs. per capita	Rank ↓
Bond County Senior Center	2.33	3	0.58	8
Boone County Council on Aging	0.19	22	0.05	22
Bureau-Putnam Area Rural Transit	1.61	9	0.61	6
Carroll County Transit	0.72	17	0.53	9
Central Illinois Public Transportation	0.62	19	0.30	14
CRIS Rural MTD	1.32	10	0.23	18
Dial A Ride	0.71	18	0.28	15
Fulton County	0.84	15	0.11	21
Henry County Public Transit	0.90	12	0.27	16
Jackson County MTD	0.89	14	0.47	10
Jo Daviess Transit	1.90	6	0.43	11
Lee-Ogle Transportation System	1.06	11	0.41	12
Logan-Mason County Public Transportation	0.44	20	0.18	19
Piatt County Public Transportation	2.11	5	1.24	1
Pretzel City Area Transit	1.82	7	0.78	3
RIDES	2.17	4	0.63	5
SHOWBUS	0.89	13	0.32	13
South Central Transit	2.84	2	0.58	7
TransVAC (Voluntary Action Center)	0.36	21	0.13	20
Warren Achievement Center	3.22	1	0.82	2
West Central MTD	1.72	8	0.67	4
Whiteside County Public Transportation	0.80	16	0.25	17

Table 22 indicates that Shawnee MTD tops both the service penetration and service availability measures, despite having the largest service area of all their peer agencies. Monroe Randolph Transit District ranks the lowest for these two measures because they had to suspend operations in 2016.

Table 23: Short Tripper Availability Measures

Agency	Penetration Riders per Capita	Rank ↓	Service Availability Rev. Hrs. per capita	Rank ↓
Champaign County Rural Transportation System	0.23	10	0.10	11
CountyLink	0.54	4	0.25	6
Grundy Transit System	2.63	1	1.31	1
Hancock County Public Transportation	0.33	8	0.17	9
Kendall Area Transit	0.44	5	0.24	7
Macoupin County Public Transportation	0.73	3	0.40	3
Marshall-Stark Transportation	0.19	11	0.11	10
Monroe Randolph Transit District	1.40	2	0.83	2
North Central Area Transit	0.12	12	0.08	12
RIM Rural Transit	0.37	6	0.29	5
Shawnee MTD	0.23	9	0.20	8
WE Care	0.33	7	0.33	4

4. Fixed Route Availability Measures

Tables 24 through 28 provide availability measures for fixed route agencies. Rockford MTD has the lowest trips per capita of any of the large city systems; this has as much to do with the particular geography of the city as it does for the transit system’s performance. Rockford MTD “farms” out a part of its service area to Stateline Mass Transit, which only runs demand response trips. Many of its peers extend many more of their fixed routes into suburban areas. MetroLink, on the other hand, with its denser land use patterns (it serves three sizeable downtowns) and more extensive service span, provides the most trips per capita of any large city system. For the large city systems, the service hours per capita fall within a narrow range with the exception of TARTA (Toledo, OH). For medium city systems, Decatur ranks at the top for both trips and revenue hours per capita.

Valley Transit in Walla Walla, WA, has the most trips per capita. This agency benefits from a large migrant worker population that utilizes its services. For Illinois small cities, Quincy and Danville compare well in the trips per capita measure, and Quincy has the highest revenue hours per capita.

The Rapid (Grand Rapids, MI) has an advanced bus transit system, which includes a BRT line and state-of-the-art fare and communication technology and has the highest revenue hours and riders per capita, although St. Clair County is not far behind. Pasco County Transit, which serves exurban Tampa-St Petersburg, runs their service in a low density county, suffers from their geography, and brings up the rear in both of these measures.

Champaign-Urbana hosts a large university population within a relatively small metropolitan area. In addition, on-campus parking is severely limited. While freshmen are required to live in dorms, most students live off campus. As the student population has increased over the years, the density of student housing has not increased; rather, large gated communities designed for students have been located on the fringes of the urban area, requiring students to take buses to class. In addition, the student body has changed over this time period; foreign born students make up a greater percentage of university attendees and these students are more likely to take transit than native-born students. These are some of the reasons for the extremely high trips per capita of this system. Despite being a fareless system and located in a small town (Macomb), Go West provides almost as many revenue hours per capita as Gainesville, a much bigger community with a much bigger university (University of Florida).

Table 24: Large City System Availability Measures versus Peers³⁵

	<i>Market Penetration</i>	<i>Rank</i>	<i>Service Availability</i>	<i>Rank</i>
Agency	Riders per Capita	↓	Revenue Hours per Capita	↓
CitiLink (IN)	13.31	6	0.04	10
CityLink	13.00	7	0.07	5
Connect Transit	14.47	5	0.06	8
MetroLink	29.17	1	0.05	9
METS (IN)	16.47	3	0.06	7
Rockford MTD	8.07	10	0.08	2
Springfield MTD	16.02	4	0.07	3
TARTA (OH)	8.43	9	0.13	1
The E (PA)	18.53	2	0.07	4
Transpo (IN)	12.57	8	0.06	6

³⁵ Bolded agencies are located in Illinois

Table 25: Medium City System Availability Measures versus Peers³⁶

	Market Penetration	Rank	Service Availability	Rank
Agency	Riders per Capita	↓	Revenue Hours per Capita	↓
Bay Metro (MI)	5.21	10	0.73	8
Decatur	20.32	1	1.11	2
Eau Claire (WI)	11.02	7	0.87	4
Kenosha (WI)	13.18	4	0.77	7
MTU (WI)	15.86	3	1.13	1
River Valley Metro	12.12	6	1.00	3
Rochester (MN)	16.76	2	0.84	6
Sioux City (IA)	9.24	8	0.47	9
STARS (MI)	5.48	9	0.26	10
The Bus (WI)	12.17	5	0.86	5

Table 26: Small City System Availability Measures versus Peers³⁷

	Market Penetration	Rank	Service Availability	Rank
Agency	Riders per Capita	↓	Revenue Hours per Capita	↓
Danville	15.97	3	0.78	4
El Dorado Transit (CA)	2.02	8	0.24	10
Galesburg	5.49	5	0.72	5
JETS (AR)	1.42	10	0.29	8
Joesphine County (OR)	2.61	7	0.28	9
Mankato Transit System (MN)	18.11	2	0.63	6
Quincy	10.93	4	1.16	1
San Marcos Transit (CA)	1.56	9	1.03	2
St Mary's Transit System (CA)	3.21	6	0.43	7
Valley Transit (WA)	23.78	1	1.02	3

36 Bolded agencies are located in Illinois

37 Bolded agencies are located in Illinois

Table 27: Suburban System Availability Measures versus Peers³⁸

	Market Penetration	Rank	Service Availability	Rank
Agency	Riders per Capita	↓	Revenue Hours per Capita	↓
ART (VA)	13.53	4	0.75	8
Broward County (FL)	20.23	3	0.79	7
LANTA (PA)	11.02	6	0.88	4
MCT	10.67	7	0.86	5
METRO (OH)	9.82	8	0.80	6
PCPT (FL)	4.13	10	0.41	10
St Clair County	24.31	2	1.01	2
TANK (OH)	13.01	5	0.97	3
The Rapid (MI)	24.78	1	1.24	1
WRTA (MA)	8.27	9	0.47	9

Table 28: University System Availability Measures versus Peers³⁹

	Market Penetration	Rank	Service Availability	Rank
Agency	Trips per Capita	↓	Revenue Hours per Capita	↓
AppalCart (NC)	33.92	6	1.23	7
CATA (PA)	72.90	2	1.86	4
CUMTD	108.63	1	2.40	1
Go West	56.71	4	2.03	3
Lafayette City Bus (IN)	37.11	5	1.05	8
RTS (FL)	62.82	3	2.04	2
Star Metro (FL)	23.50	8	1.49	6
Stevens Point City Bus (WI)	9.85	9	0.76	9
The MET (IA)	3.74	10	0.44	10
The Ride (MI)	31.48	7	1.66	5

38 Bolded agencies are located in Illinois

39 Bolded agencies are located in Illinois

5. Fixed Route Solvency Measures

Tables 29 through 33 provide solvency measures for fixed route agencies. All Illinois large city agencies (with the exception of Connect Transit) have lower farebox recovery ratios than all peers outside the State. MetroLink stands out for its high average capital funding over the past three years; Rockford and Connect Transit in comparison had done less investment.

Much like the large cities, the medium city agencies lag behind their peers with farebox recovery. Rochester, MN has the lowest fare revenue shortfall per trip, although Decatur has only a dollar more of shortfall due to their relatively robust ridership. Rochester also stands out for their robust capital funding compared to their population. Due to lower infrastructure needs (buses, shelters, signs), there is much less capital funding per person with these agencies. This is a trend that continues as the cities get smaller.

As a reminder, for the investment measures, the capital funding is averaged over three years. This measure may be skewed if an agency has recently bought a large number of buses or replaced a large number of shelters in the previous three years, for instance, which would not necessitate more recent high levels of investment.

Peers from out-of-state (San Marcos, TX and El Dorado County, CA) perform much worse than in-state systems when it comes to fare revenue shortfalls per trip. Galesburg and Quincy bring up the rear in farebox recovery ratios, suggesting fares there may be too low (at 60 and 50 cents, respectively with students riding free in Quincy). Despite its low public buy-in in terms of fares, Galesburg has the highest capital funding per capita. Quincy has not spent any capital money the last three years, but that is not unusual among small city systems: Peer systems Josephine County, OR and San Marcos, TX have also not spent anything.

ART (Arlington, VA) is a large outlier in all of these measures. It is the densest of all of the suburban areas served by these systems, thus invests much more heavily in its transit system, reflected by its high fare revenue shortfalls and capital funding per capita. St. Clair County's capital funding per capita is on par with the average for small city systems rather than its peers. However, it is just a small part of the St. Louis Metro system, and is mostly rural, leading to less attention than the city proper.

Both AppalCart and Go West are fareless systems; student fees pay for almost all of their operating costs. Students make up a larger majority of their ridership than their peers due to the size of the universities relative to their host communities. The MET (Waterloo-Cedar Falls, IA), which operates as much in a small city as in a university town environment, has the highest fare revenue shortfall. Both CUMTD and Go West have a robust capital funding program; RTS (Gainesville, FL) and CATA (State College, PA) have extremely high farebox recovery ratios. If student fees were factored in, CUMTD and Go West would likely approach an over 50% farebox recovery ratio.

Table 29: Large City System Solvency Measures versus Peers⁴⁰

	Subsidy	Rank	Share	Rank	Investment	Rank
Agency	Fare Revenue Shortfall per Trip	↓	Farebox Recovery Ratio	↓	Capital Funding per Capita	↓
CitiLink (IN)	\$ 2.49	1	16.1%	4	\$ 3.03	7
CityLink	\$ 8.93	10	7.4%	9	\$ 4.77	5
Connect Transit	\$ 4.52	4	13.9%	5	\$ 1.64	10
MetroLink	\$ 4.76	6	6.8%	10	\$ 34.19	1
METS (IN)	\$ 3.08	2	23.1%	3	\$ 1.75	9
Rockford MTD	\$ 7.89	9	8.9%	8	\$ 2.82	8
Springfield MTD	\$ 6.55	7	9.1%	7	\$ 9.83	3
TARTA (OH)	\$ 6.93	8	23.2%	2	\$ 3.14	6
The E (PA)	\$ 3.49	3	33.0%	1	\$ 21.75	2
Transpo (IN)	\$ 4.75	5	13.3%	6	\$ 9.19	4

Table 30: Medium City System Solvency Measures versus Peers⁴¹

	Subsidy	Rank	Share	Rank	Investment	Rank
Agency	Fare Revenue Shortfall per Trip	↓	Farebox Recovery Ratio	↓	Capital Funding per Capita	↓
Bay Metro (MI)	\$ 12.71	10	9.0%	9	\$ 4.29	2
Decatur	\$ 3.77	3	9.3%	8	\$ 0.50	10
Eau Claire (WI)	\$ 4.63	6	18.5%	3	\$ 0.99	6
Kenosha (WI)	\$ 4.01	5	12.9%	6	\$ 3.40	3
MTU (WI)	\$ 4.01	4	17.3%	5	\$ 0.80	8
River Valley Metro	\$ 6.62	9	5.8%	10	\$ 0.82	7
Rochester (MN)	\$ 2.77	1	31.9%	1	\$ 10.52	1
Sioux City (IA)	\$ 3.03	2	20.3%	2	\$ 1.04	5
STARS (MI)	\$ 5.01	8	12.7%	7	\$ 0.76	9
The Bus (WI)	\$ 4.77	7	18.2%	4	\$ 1.73	4

40 Bolded agencies are located in Illinois

41 Bolded agencies are located in Illinois

Table 31: Small City System Solvency Measures versus Peers⁴²

	Subsidy	Rank	Share	Rank	Investment	Rank
Agency	Fare Revenue Shortfall per Trip	↓	Farebox Recovery Ratio	↓	Capital Funding per Capita	↓
Danville	\$ 3.34	2	13.7%	3	\$ 0.10	5
El Dorado Transit (CA)	\$ 12.43	9	19.1%	2	\$ 1.12	3
Galesburg	\$ 7.26	7	5.1%	7	\$ 1.90	1
JETS (AR)	\$ 8.51	8	8.4%	6	\$ 1.26	2
Joesphine County (OR)	\$ 6.09	6	9.8%	5	\$ -	8
Mankato Transit System (MN)	\$ 2.08	1	27.0%	1	\$ 0.29	4
Quincy	\$ 5.98	5	3.0%	10	\$ -	10
San Marcos Transit (CA)	\$ 14.16	10	4.9%	8	\$ -	9
St Mary's Transit System (CA)	\$ 5.98	4	13.5%	4	\$ 0.05	7
Valley Transit (WA)	\$ 5.39	3	4.7%	9	\$ 0.09	6

Table 32: Suburban System Solvency Measures versus Peers⁴³

	Subsidy	Rank	Share	Rank	Investment	Rank
Agency	Fare Revenue Shortfall per Trip	↓	Farebox Recovery Ratio	↓	Capital Funding per Capita	↓
ART (VA)	\$ 32.27	10	27.0%	1	\$ 62.60	1
Broward County (FL)	\$ 0.74	1	16.2%	5	\$ 1.72	8
LANTA (PA)	\$ 3.82	4	11.8%	9	\$ 5.81	7
MCT	\$ 13.99	9	9.9%	10	\$ 18.21	2
METRO (OR)	\$ 1.79	2	26.4%	2	\$ 9.44	4
PCPT (FL)	\$ 5.48	7	15.5%	7	\$ 1.13	10
St Clair County	\$ 7.91	8	12.2%	8	\$ 1.17	9
TANK (OH)	\$ 4.84	5	20.4%	4	\$ 7.15	6
The Rapid (MI)	\$ 2.91	3	22.4%	3	\$ 8.89	5
WRTA (MA)	\$ 4.87	6	15.9%	6	\$ 14.77	3

42 Bolded agencies are located in Illinois

43 Bolded agencies are located in Illinois

Table 33: University System Solvency Measures versus Peers⁴⁴

	Subsidy	Rank	Share	Rank	Investment	Rank
Agency	Fare Revenue Shortfall per Trip	↓	Farebox Recovery Ratio	↓	Capital Funding per Capita	↓
AppalCart (NC)	\$ 1.74	5	0.2%	10	\$ 7.81	9
CATA (PA)	\$ 0.88	2	54.4%	2	\$ 16.74	4
CUMTD	\$ 1.94	7	20.4%	5	\$ 14.43	5
Go West	\$ 1.57	4	0.3%	9	\$ 19.03	2
Lafayette City Bus (IN)	\$ 1.75	6	21.9%	4	\$ 8.84	7
RTS (FL)	\$ 1.02	3	57.0%	1	\$ 31.28	1
Star Metro (FL)	\$ 2.73	8	34.4%	3	\$ 8.35	8
Stevens Point City Bus (WI)	\$ 0.40	1	6.7%	8	\$ 18.58	3
The MET (IA)	\$ 8.06	10	19.2%	6	\$ 1.55	10
The Ride (MI)	\$ 4.44	9	17.6%	7	\$ 13.52	6

C. Conclusion

There are numerous ways to measure performance of transit agencies. This analysis has explored and identified methods to represent agency performance that is reasonably representative when compared within its group.

There is always a balance between efficiency and availability. There is a danger that an agency can focus on efficiency to the detriment of serving their entire service area. An agency can, for instance, neglect harder-to-serve areas (generally rural in nature) in favor of large towns in their service area. This can drive down the cost per trip, but only because the more expensive trips, with less likelihood of combined trips, are not served. In addition, agencies that provide many long-distance out-of-service-area trips may also have difficulty in completely serving their service area given the absence of vehicles during most of a day. Solvency measures bring local policymaking (fares) into comparison. While these are independent local decisions, it is important to see the results of those local decisions. In general, Illinois agencies rank the lowest on the solvency measures and highest on the availability measures compared to their peers. For efficiency measures, they generally match their peers.

44 Bolded agencies are located in Illinois

X. COORDINATION WITH 2040 LONG RANGE TRANSPORTATION PLAN (LRTP)

The recommendations contained in the Statewide Public Transportation Plan relate to many of the goals, objectives, and strategies contained in the 2040 Long Range Transportation Plan. This chapter compares the goals and strategies for both Plans.

A. Statewide Public Transportation Plan Vision, Goals and Objectives

In June of 2015, the *Statewide Public Transportation Plan* Steering Committee convened to establish a draft vision, and goals and objectives for the Plan. They were then presented at IDOT public meetings that were held in September and October of 2015 throughout the State, refined, and finalized. They are presented below.

Vision Statement: Illinois will lead the nation in public transportation access and quality of mobility.

GOAL	OBJECTIVES
<p>Goal 1: Improve mobility and accessibility for all Illinoisans</p>	<ul style="list-style-type: none"> • Provide transit service or increased transit services in areas where viable demand levels exist • Improve connectivity between service areas • Improve connectivity both within modes (i.e. intercity bus network) and between modes (i.e. local fixed route and rural demand response service)
<p>Goal 2: Secure and increase funding for public transit</p>	<ul style="list-style-type: none"> • Identify new public/private funding sources at the state and local levels • Better leverage existing financial resources at the federal, state, and local levels • Build active, ground-level support for transit among residents, businesses, and local leaders
<p>Goal 3: Increase the use of innovative technology to provide transit</p>	<ul style="list-style-type: none"> • Improve ridership levels and riders' experiences through use of rider-oriented technology • Establish time-, money-, and effort-saving platforms across transit providers (i.e., joint purchasing, common management tools, etc.) • Support increased and/or more efficient use of scheduling and dispatching software • Identify the need for signal-priority and other related technologies (queue jumping) and/or strategies for fixed route systems • Advocate for revisions to federal funding rules to maximize technology investment

GOAL	OBJECTIVES
<p>Goal 4: Embrace public transportation to support economic vitality</p>	<ul style="list-style-type: none"> • Improve access to high demand destinations (medical, employment, education, etc.) • Promote partnerships to increase the number of transit services to high-demand destinations • Advise local leaders about the economic development benefits associated with public transit • Encourage land use and development practices that consider public transportation • Support sustainable practices in the delivery of public transportation
<p>Goal 5: Enhance transit infrastructure, rolling stock, and facilities</p>	<ul style="list-style-type: none"> • Identify needed capital improvement projects • Support the utilization of asset management capabilities • Increase the number of multimodal facilities in Illinois • Explore and encourage a maintainable source of capital funding
<p>Goal 6: Achieve the maximum practical coordination of public transportation services in Illinois</p>	<ul style="list-style-type: none"> • Facilitate improved service coordination between adjacent providers and between local operators and intercity operators • Establish technical and qualitative analysis criteria for identifying linkage points and opportunities for service efficiencies • Establish a reliable, comprehensive atlas of private, non-profit and for-profit specialized transportation providers to identify service gaps and demand generators in the mobility network that might not otherwise be accounted for • Identify ways to enhance connectivity through telecommunication, car and ride sharing, and other related services (Divvy, Moovit, Uber, Zip Car)

B. 2040 Long Range Transportation Plan Goals, Objectives, Strategies, Measures

The following tables lists the goals in the *Long Range Transportation Plan* that are related to implementing the *Statewide Public Transportation Plan*. Goals are divided into categories of **Economic Growth, Livability, Mobility, Resilience, and Stewardship**. They are presented on the following pages.

GOAL CATEGORY	GOAL	OBJECTIVE	STRATEGY	MEASURES
Mobility	<i>Goal 1:</i> Provide transit service or increased transit services	Provide transit service or increased transit services in areas where viable demand exists	Identify and define levels of demand and/or need for areas across the State and examine costs of additional services	Number of rides provided per individual at the service provider, regional and statewide levels Improved cost/trip ratios at the provider, regional and statewide levels
	<i>Goal 2:</i> Improve connectivity between service areas	Improve connectivity between service areas	Identify most frequent trips to outside service areas Work with HSTP Coordinators and adjacent transit providers to determine feasible times and locations for transfers between providers	Number of inter-provider transfer points at the regional and statewide levels Creation or expansion of the Transit Riders Information Project (TRIP), or similar system
	<i>Goal 3:</i> Improve connectivity both within modes and between modes	Improve connectivity both within modes (i.e. inter-city bus network) and between modes (i.e. bike racks on transit buses)	Identify need for linkages to intercity services Work with local communities to identify infrastructure improvements at/or surrounding bus stops Purchase bike racks for all fixed bus routes within 5 years	Number of inter-urban and rural-to-urban trips at the regional and statewide levels; Number of municipality / county / regional modal plans (pedestrian, bicycle plans, etc.)
	<i>Goal 4:</i> Facilitate improved service coordination between adjacent providers	Facilitate improved service coordination between adjacent providers	Work with HSTP Coordinator and adjacent transit providers to coordinate and improve services	Number of multi-provider transfer/connection points at the regional and statewide levels Maximum distance an Illinois resident can travel via public transit, originating from various different points of the state (from Springfield, from Chicago, from Carbondale, from Quincy, etc.)
	<i>Goal 5:</i> Establish a reliable, comprehensive atlas of private, non-profit and for-profit specialized transportation provider	Establish a reliable, comprehensive atlas of private, non-profit and for-profit specialized transportation providers to identify service gaps and demand generators in the mobility network that might not otherwise be accounted for	Create a directory of service providers in region Expand the TRIP system, or find a workable interface (i.e., Google Transit)	Existence of provider atlas

GOAL CATEGORY	GOAL	OBJECTIVE	STRATEGY	MEASURES
Livability	Goal 6: Identify ways to enhance connectivity	Identify ways to enhance connectivity through transportation network companies (TNCs), car and ride sharing, and other related services (Divvy, Moovit, Uber, Zip Car).	Identify other providers in area and enhance opportunities for riders through dispatch service	Publish independent report on implications of TNCs, carsharing, etc. Pursue pilot projects for first- and last-mile transit connections via TNCs, et al.
	Goal 1: Improve access to essential destinations	Improve access to essential destinations (medical, employment, education, etc.)	Work with HSTP Coordinator and adjacent transit providers to coordinate and improve services to essential destinations, and examine feasibility of expanding service to all high demand destinations currently unserved by transit Actively engage key local stakeholders to identify opportunities	Number/proportion of essential destinations served by public transportation at the service provider, regional and statewide levels. Number of rides provided to essential location per use (number of rides provided per job at employment centers, transit at the provider, regional and statewide levels)
	Goal 2: Encourage land use and development practices	Encourage land use and development practices that consider public transportation	Meet with local officials to discuss and identify best practices related to land use densities that support transit	Number of municipality/service/area/regional land use plans that productively incorporate transit impacts & development potential (incl. RTA and other Community Planning Grants)
	Goal 3: Support sustainable practices in the delivery of public transportation	Support sustainable practices in the delivery of public transportation	Adopt promotion of sustainability and energy efficiency as an IDOT goal Purchase or promote the purchase of energy/fuel efficient vehicles Construct or facilitate the construction of energy efficient facilities	Annual statewide transit sustainability report summarizing sustainability measures by agency within 5 years (OPP) Number of energy/fuel efficient vehicles added to provider fleets (and estimated fuel savings) Number of energy efficient facilities constructed (and estimated energy savings)
Goal 4: Improve ridership levels and riders' experiences	Improve ridership levels and riders' experiences through the use of rider-oriented technology	Increase the proportion of statewide public transportation vehicles and routes providing data	Percentage of vehicles and routes supplying GTFS data and the provider, regional and statewide levels	

GOAL CATEGORY	GOAL	OBJECTIVE	STRATEGY	MEASURES
			via General Transit Feed Specification (GTFS) data Create social media and user-review presences (Yelp, etc.) for every transit provider in the State	Number/proportion of providers with social media presences and number of provider/rider connections via those modes ('Likes', etc.)
	<i>Goal 5:</i> Increase the number of multimodal facilities in Illinois	Increase the number of multimodal facilities in Illinois	Identify need, demand and locations for multimodal facilities	Number of multimodal facilities and use (# of transfers, rides originating/ending) per facility
	<i>Goal 6:</i> Identify linkage points and opportunities for service efficiencies	Establish technical and qualitative analysis criteria for identifying linkage points and opportunities for service efficiencies Establish performance metrics	Communicate adopted technical analysis methods and criteria to provider-level and provide training	Number of providers trained by IDOT staff or representatives on analysis methods
	<i>Goal 1:</i> Address backlog of capital improvement projects	Address backlog of capital improvement projects	Develop state of good repair (SOGR) analysis Collect life of capital assets	Annual capital needs backlog at provider, regional and statewide levels
Resiliency	<i>Goal 2:</i> Support the utilization of asset management capabilities	Support the utilization of asset management capabilities	Prepare asset management plans Promote indoor storage and expansion of maintenance facilities	Increased life of capital assets annually Average actual useful life of assets by asset type at the provider, regional and statewide levels Proportion of assets successfully reaching and surpassing expected useful life \$ invested per vehicle service mile at the provider, regional and statewide levels

GOAL CATEGORY	GOAL	OBJECTIVE	STRATEGY	MEASURES
<p>Safety</p>	<p><i>Goal 1:</i> Identify the need for signal priority and strategies for fixed routes</p>	<p>Identify the need for signal-priority and other related technologies and/or strategies for fixed route systems</p>	<p>Work with the local community to identify locations for signal-priority</p> <p>Provide technical and administrative support regarding the implementation of signal-priority measures</p>	<p>Number of signal priority measures implemented</p> <p>Route-time savings on affected routes</p> <p>Cost savings on affected routes</p> <p>Transit modal representation during IDOT ITS Strategy development</p>
	<p><i>Goal 1:</i> Identify new public/private funding sources at the state and local levels</p>	<p>Identify new public/private funding sources at the state and local levels</p>	<p>Work with IDOT legislative affairs to develop models for removing transit operating and capital funding from the State General Revenue Fund</p> <p>Work with employers and other private sources to encourage financial support of transit (incl. service contracts). Create fact sheets/marketing materials outlining popular contract/employer subsidized models nationwide</p> <p>Separation of State public transportation operating and capital funding from General Revenue Fund to dedicated revenue stream</p>	<p>Number of employer-based contracts or contributions to transit service</p> <p>Creation of employer outreach materials</p>
<p>Stewardship</p>	<p><i>Goal 2:</i> Better leverage existing financial resources at the federal, state and local levels</p>	<p>Better leverage existing financial resources at the federal, state and local levels</p>	<p>Work with providers to reduce or eliminate redundant and inefficient services</p> <p>Use geographic and demand analysis to reduce number of individual, "single passenger" demand response trips</p>	<p>Number of redundant routes eliminated and attendant saved costs</p> <p>Number of individual "single passenger" demand response trips reduced</p>

GOAL CATEGORY	GOAL	OBJECTIVE	STRATEGY	MEASURES
			Explore ways to convert demand response trips to flex route trips as applicable	
	<i>Goal 3:</i> Build active, ground-level support for transit among residents, businesses, and local leaders	Build active, ground-level support for transit among residents, businesses, and local leaders	Create a marketing campaign to identify benefits of transit; consider an umbrella 'Quality Seal of Approval' for public transportation across the Downstate region	Resolutions of praise and support for public transportation at the service area and regional levels Informal user-posted reviews on social media and rating sites (Yelp, etc.)
	<i>Goal 4:</i> Establish time, money, and effort saving platforms across transit providers	Establish time, money, and effort saving platforms across transit providers (i.e. joint purchasing, common management tools)	Continue and expand the joint procurement of scheduling software and other purchases	Number of successful joint procurements and attendant cost savings
	<i>Goal 5:</i> Maximize technology investment	Advocate for revisions to federal funding rules to maximize technology investment	Work with State and federal officials to increase federal funding for technology	Federal funds obtained by Illinois (both IDOT and providers) for technology improvements

C. Goal Coordination

The following highlights each *Long Range Transportation Plan* goal highlighted in the table above and details the strategies for implementing this goal within the Statewide Public Transportation Plan.

GOAL CATEGORY: MOBILITY

Goal: *Provide transit service or increased transit service*

Objective: *Provide transit service or increased transit service in areas where viable demand exists*

Statewide Public Transportation Plan Strategy to Achieve Goal:

- Strategies on how to fill gaps in the service provided and needs for improvement for areas with low quality service are identified in Chapter 5 of the Service Needs and Gaps Report.
- Some counties or portions of counties have no public transportation services. Chapter 5 makes recommendations on how to improve public transportation in these areas. It is recommended that IDOT prioritize the technical support needed to initiate service in counties that don't have general public service.
- Some agencies have formal, or informal, residency requirements, making service unusable by commuters, visitors, travelers. The report recommends that residency requirements be eliminated as a requirement for state funding.
- Some agencies have service hours too short to be usable for commuters to full-time jobs. Expansion to twelve hour service days are recommended to serve the job market.

Goal: *Improve connectivity between service areas*

Objective: *Improve connectivity between service areas*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The report recommends that connectivity throughout the State can be provided by the intercity rail and bus network. Subsequently, the Plan recommends:
 - *A program for gradually increasing the number of cities served by rail and eventual construction of a true high speed rail line in the O'Hare-Chicago-Champaign-Springfield-St. Louis corridor.*
 - *Improvements in intercity and commuter bus service to accommodate both local area trips and serve as feeders to rail routes.*
 - *Continued construction of multimodal terminals to facilitate transfers between services.*

Goal: *Improve connectivity both within modes and between modes*

Objective: *Improve connectivity both within modes (i.e. rail) and between modes*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- Many transfer terminals have been constructed in the State in recent years, most of them are multimodal (i.e. Champaign, Normal, Moline, Peoria, Rockford, Macomb, Danville, and Joliet). This report recommends continued development of such facilities (i.e. Springfield, Kankakee, and Quincy as well as improvements to Chicago Union Station). Intercity bus operators should be encouraged to move to existing local transit centers or rail stations in Rockford, Decatur, Danville, and Effingham.
- The Plan recommends basic improvements such as marking all stops on fixed routes with bus stop signs and installation of shelters at stops with greater boarding numbers.
- Rural transit agencies should work to mark their stops at their primary destinations and at interagency transfer points.
- Interagency transfer points should be located at public buildings or other locations with weather protection such as large retail stores or truck stops.

Goal: *Improve connectivity both within modes and between modes*

Objective: *Improve connectivity both within modes (i.e. rail) and between modes (i.e. bike racks on buses)*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- Bike racks are typically installed on new buses at the factory, but can be retrofitted as an aftermarket add-on as well. Most transit buses in the State already have bike racks. The few smaller cities which have not done so (Decatur, Galesburg, Macomb, and Quincy) should be encouraged to do retrofit their buses accordingly and specify bike racks on any new rolling stock purchases. Note that bike racks on smaller cutaway type buses, particularly demand used by rural transit agencies is not typical.
- IDOT should consider adding bike racks this to their standard specification for rolling stock.

- Goal:** *Facilitate improved service coordination between adjacent providers*
- Objective:** *Improve connectivity both within modes (i.e. rail) and between modes (i.e. bike racks on buses).*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The Plan recommends that a transit agency meets a minimum threshold of 4,500 square miles and/or 150,000 in population in order to reduce interagency transfers.
- Safe transfer points on the edges of service areas should be established to improve connectivity. These should be at public places or places with long service hours (libraries, hospitals, community colleges, and gas stations).
- Fixed routes should have their pulse points as close as possible to rail stations or bus stations if they are located in a central location.

GOAL CATEGORY: LIVABILITY

- Goal:** *Improve access to essential destinations*
- Objective:** *Improve access to destination such as medical, employment, education, etc.*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- A range of recommendations are made in Chapter 5 related to responding to gaps and needs identified in the Study (i.e. new/extended routes, days/hours of service, etc.)

- Goal:** *Improve ridership levels and riders' experiences through use of rider-oriented technology*
- Objective:** *Improve ridership levels and riders' experiences through use of rider-oriented technology*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- IDOT is working to complete GTFS data for urban and rural fixed route service in the State and encouraging agencies to submit data to Google Transit. This will allow for trip planning through Google Maps. Most of the urban fixed route transit and intercity operators (including Amtrak, Greyhound, and some other intercity services) are already included on Google Maps.
- It would be beneficial to have trip planning capabilities for demand response services; this application is in the process of being developed by private companies. IDOT should continue to monitor development in other states of GTFS linkage to/from demand response service.
- IDOT could provide its own trip planner on its website (using "open trip planner").

Goal: *Increase the number of multimodal facilities in Illinois*

Objective: *Identify need, demand, and locations for multimodal facilities*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The Plan recommends continued development of such facilities (i.e. Springfield, Kankakee, and Quincy as well as improvements to Chicago Union Station).
- Intercity bus operators should be encouraged to move to existing local transit centers or rail stations in Rockford, Decatur, Danville, and Effingham.

Goal: *Identify linkage points and opportunities for service efficiencies*

Objective: *Establish technical and qualitative analysis criteria for identifying linkage points and opportunities for service efficiencies*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The Plan recommends the establishment of performance measure levels to better understand transit delivery in the state. Performance measures should fall into three categories: Efficiency, Accessibility, and Solvency

GOAL CATEGORY: RESILIENCY

Goal: *Support the utilization of asset management capabilities*

Objective: *Support the utilization of asset management capabilities*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- IDOT will need to develop a Group TAM Plan as per the FTA guidelines. FTA staff has presented the new TAM requirements including TAM Plan elements on their webpage: <https://www.transit.dot.gov/TAM/rulemaking>. The TAM should include useful life benchmarks (ULB) for revenue and non-revenue vehicles and an asset category ranking system.
- In order to ensure that the correct asset types are prioritized and budgeted for, IDOT and RTAC should consider developing a joint asset type manual which includes pictures of the various asset types and what specifications would qualify each asset to fit in to a certain asset type. Furthermore, it is recommended that the asset categories align with those used in the NTD as this will make the annual reporting process more seamless.
- The Plan recommends indoor storage of rolling stock and expansion/upgrade of maintenance facilities. For agencies using more than ten revenue vehicles, a purpose built transit facility should be provided with administration and maintenance facilities co-located. In Downstate Illinois, this would mean that 11 will need to be built.

GOAL CATEGORY: SAFETY

Goal: *Identify the need for signal priority and strategies for fixed routes*

Objective: *Identify the need for signal-priority and other related technologies and/or strategies for fixed route systems*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The Plan supports any technology applications that would make public transportation more effective, efficient, and encourage greater ridership.

GOAL CATEGORY: STEWARDSHIP

Goal: *Identify new public/private funding sources at the state and local levels*

Objective: *Identify new public/private funding sources at the state and local levels*

Statewide Public Transportation Plan Strategies to Achieve Goal:

- The Plan depicts various revenue sources being used by different states as an example of potential new funding sources for the State of IL and provides information on the economic benefits of transit.