

3 - 5 YEARS

CONNECT TRANSIT

Short-Range Transit Plan



BLOOMINGTON-NORMAL | 2019

Prepared By:



MCLEAN COUNTY
Regional Planning Commission

For:



CONNECT TRANSIT

Short-Range Transit Plan (SRTP)

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INTRODUCTION AND EXECUTIVE SUMMARY

Providing urban public transit service is a complex undertaking, bound by extensive regulation, uncertain funding, and the inevitable complications of operating a service for the general public. Accountability demands that every aspect of the operation be documented and structured according to the rules. To carry out these tasks requires careful planning.

This Short-Range Transit Plan fills the gap between immediate decisions and prospective action that extend across decades. In a period of substantial transition in Connect Transit's operations and expectations, and within the major task of establishing and building a complete network of fixed transit stops, the short-range plan focuses on tasks for which preparation has been done but execution is waiting, on small-scale changes that enable more complex actions to follow, and common-sense decisions and implementation to correct specific issues over the next three to five years.

This planning effort provides two advantages. First is its framework for rapid response to issues and actions that support but are not central to long-range goals. Second, the short-range timeline allows for new ideas, new technology and new infrastructure to be integrated into Connect Transit management and operations more quickly, bringing their benefits to bear within the annual and five-year update schedules of existing plans. However, the Short-Range Plan is not intended to short-circuit the program requirements discussed in daily operations and in long-term planning. It is intended to foster greater flexibility, responsiveness, and proactive decision-making into the mix, acknowledging constraints and finding ways to move past them.

This report examines the current status of Connect Transit operations and administration, and focuses on recommendations for actions over the next three to five years.

The plan builds on existing Connect Transit plans, programs and services, ridership data and Transit Ridership Survey conducted earlier in 2018. Additional grounding for the plan draws from the adopted plans such as comprehensive plans for Bloomington and Normal and the Long Range Transportation Plan, review of projects and initiatives Connect Transit has in view or underway. Financial feasibility and feasibility for rapid implementation were also taken into account. It also incorporates an extensive analysis of areas with high likelihood of transit ridership (transit propensity) in Bloomington-Normal, meaning parts of the community where residents (or work locations) exhibit demographic and economic characteristics that indicate a high likelihood of transit use.

KEY FINDINGS AND RECOMMENDATIONS

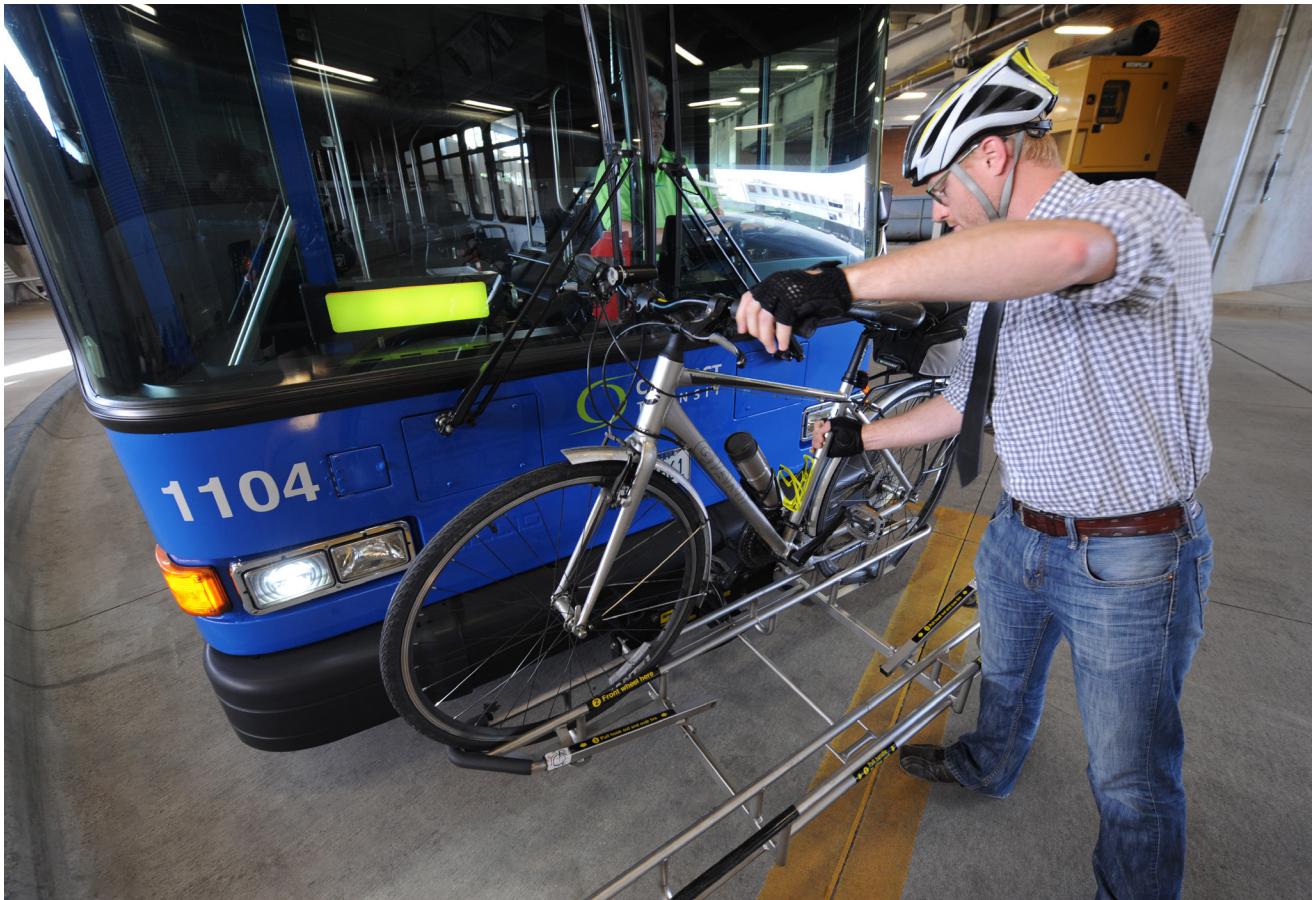
- Current ridership is transit dependent. While transit becoming a mode of choice is a good long-term goal, Connect Transit should focus on serving those who are dependent on it in the short-term.
- Some very low-income transit riders are paying a higher price to ride the bus. Data suggests that frequent transit riders in the lowest income brackets (under \$24,000) are using cash to pay for their rides. The upfront cost of a bus pass can be a real barrier for many of these riders. Connect should prioritize fare capping or other mechanisms to ensure that riders with most need are not unduly burdened. Partnership with the McLean County Chamber of Commerce to expand employer-based bus pass programs to small businesses and retail operations that may employ transit-dependent populations must be considered.
- Generally speaking, Connect Transit routes are aligned well with the transit propensity of the community. Minor modifications to some routes should be further investigated to better align the routes with the community need. Those include:
 - Changing the peak hours of Silver and Purple routes
 - Re-routing Blue through higher transit propensity areas such as Vernon Avenue in Normal
 - Changing the frequency of Brown Route to 30 minutes
 - Consider breaking the Tan Route into two routes, utilizing the Shoppes at College Hills as a minor transfer hub for buses to continue on or turn back around.
 - In the area south of Downtown Bloomington, bounded by Washington on the north, Oakland on the south, Main Street on the east and Morris Avenue on the west, analysis found higher transit propensity with low coverage. Several routes run along Washington Street and Main Street. Connect should examine the possibility of expanding coverage in this area.
- Five out of the fifteen routes (Redbird Express, Green, Red, Lime, and Yellow) account for 70% of all ridership. Routes with 30 minute or better frequency throughout the day typically have higher ridership.
- Ridership is growing on both fixed route and Connect Mobility. There is room for improvement in transit ridership from some institutions and employers who are part of the universal access program.
- There are 480 bus stops serviced daily as of August 2018.

- 319 (66.5%) stops are serviced at least every 30 minutes at some point during the day, referred to as high-frequency stops. Nearly 75% of high-frequency bus stops are located in low and moderate income census blocks.
- Normal and Bloomington transit riders are very different. Nearly 70% of Normal riders are under the age of 24, and 52% are students while Bloomington riders are more distributed with a majority (48%) of riders being 25–45 and 46% are employed full-time.
- Mobility rides cost Connect Transit nearly three times more than fixed routes. While encouraging more people to use fixed routes seems like a natural solution, the fact that every Mobility rider has a unique set of needed accommodations makes it very difficult to achieve. More than a quarter of Mobility riders live in skilled care group facilities. Connect should continue to partner with local and regional alliances to cooperatively improve and expand ADA/Paratransit services.
- 21st century innovations are revolutionizing transit systems across the world. These include electric vehicles, autonomous vehicles, ride sharing, smart infrastructure, big data and analytics. After carefully reviewing these options, some of these programs may not be feasible for implementation in the Bloomington-Normal market yet. Three to five years (the horizon period of this plan) is a long time in terms of technological advancements. Connect Transit should examine the innovations outlined in Group 6 of the Recommendations chapter closely to determine optimal time for implementation. In the meantime, Connect should focus on streamlining the data it gathers and utilize analytics to improve efficiency as well as utilizing technologies to improve fare management systems.
- This study calls for specific actions to make Bloomington and Normal more transit supportive. Those include:
 - Designating Major and Minor Transit Corridors based on demand and usage of transit. Table 3 in the Gaps and Opportunities Analysis Chapter shows specific suggestions.
 - Improve bus stop facilities and their accessibility, prioritizing those along Major and Minor Transit Corridors.
 - Partner with local municipalities to help them implement programs that enhance the multi-modality of streets in Bloomington-Normal.

WHAT IS TRANSIT PROPENSITY?

Transit propensity means finding the locations that have the highest probability of people using and/or needing public transportation so that Connect Transit can make sure those locations are being served. Finding these locations means more than just finding popular places, it also includes finding high transit propensity populations and learning where they live and travel to. MCRPC conducted this analysis to ensure that Connect Transit reaches these people so they may use transit as a functional, everyday option, as well as having it as a tool to inform future adjustments. See Table 3 and Figure 18 in the Gaps and Opportunities Analysis Chapter to see the breakdown and output of this analysis.





CONNECT TRANSIT SERVICE AREA PROFILE

Urban area public transit has a long history in Bloomington-Normal. Its inception after the Civil War using horse-powered cars as the Bloomington & Normal Street Railway, evolution in the 1930s as the Bloomington-Normal City Lines Inc., and transformation into the Bloomington-Normal Public Transit System in the 1970s set the stage for today's Connect Transit (CT). Over a decade of rapid change and growth, Connect Transit has continued to grow.

Connect Transit Growth in the Last Decade

Connect Transit began and advanced the building of a new and more up-to-date **vehicle fleet**, including vehicles using renewable energy, increasing the fixed route fleet by 45% in the last 3 years



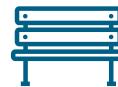
Connect Transit entered into closer **partnerships** with Bloomington, Normal, and MCRPC in 2017-2018 to support the continued development of transit services in the urban area.



In 2018-2019, Connect Transit committed to **participation in several regional studies and projects** aimed at transportation system safety improvements, refining the urban-rural transit relationship, and pursuing long-term fiscal and operational sustainability.



Connect Transit made progress on continuing improvement of **infrastructure at bus stops**, with the Better Bus Stops initiative in 2018



In 2010, Connect Transit moved from its undersized downtown location to a **new facility** on the west side, with capacity for future growth.



In 2015, Connect Transit completed a major operational study and a reinvention of the fixed route system established a **network of fixed-location bus stops** around the community.



Service Area

Connect Transit has unusual characteristics when compared to other small urban transit systems in Illinois. Most notably, Connect Transit is not organized as a mass transit district. Instead, it is a creature of the two municipalities, Bloomington and Normal, which appoint and are represented on the CT Board of Trustees. These two municipalities provide some direct funding support to the system according to an agreed process established in the transit system charter.

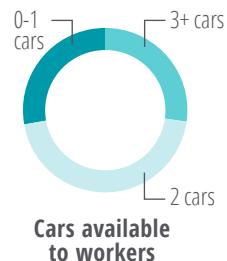
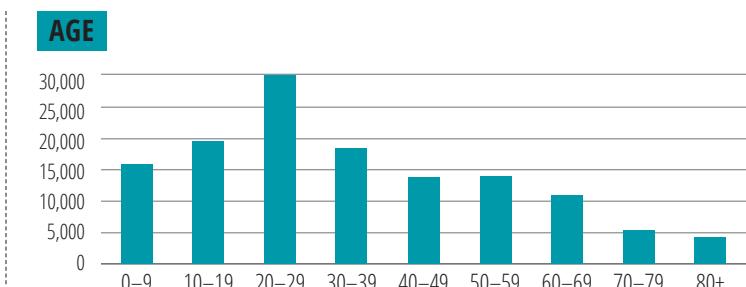
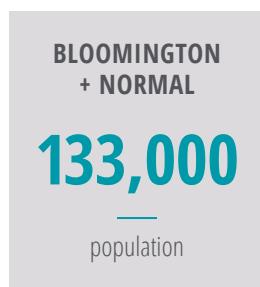
This organization structure limits the Connect Transit service area to within the incorporated boundaries of Bloomington and Normal, a restriction applied to both fixed route and mobility (paratransit) service. (See Figure 6 in the Connect System Profile Chapter, Service Area Map) Given the irregular boundaries of both Bloomington and Normal, this limitation can exclude people likely to have a high propensity for transit use who live immediately outside the incorporation boundaries. There are a number of residential developments immediately adjacent to, but not within, Bloomington and Normal which would benefit greatly from expansion of transit service access beyond the municipal boundaries. While the strategic implications of this structure will be pointed out, these and other longer-term issues are not discussed in this short-range plan as they fall beyond its scope.

Demographic Profile of Bloomington-Normal

Bloomington-Normal is often analyzed as a single community, given that many residents and visitors don't distinguish between them in day-to-day activities. The infographic below highlights some general demographic information applicable to transit about the aggregated population of Bloomington and Normal.

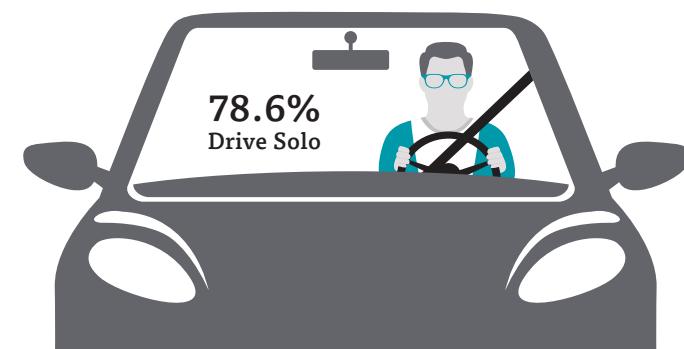
Information based on data from the U.S. Census American Community Survey (ACS) five-year samples for 2013-2017.

BLOOMINGTON-NORMAL



Less than \$10,000	9%
\$10,000 to \$14,999	5%
\$15,000 to \$24,999	9%
\$25,000 to \$34,999	8%
\$35,000 to \$49,999	11%
\$50,000 to \$74,999	17%
\$75,000 to \$99,999	13%
\$100,000 to \$149,999	16%
\$150,000 to \$199,999	7%
\$200,000 or more	6%

HOW WE GET TO WORK



5.1% Walk



3.6% Work at Home



2.2% Take the Bus

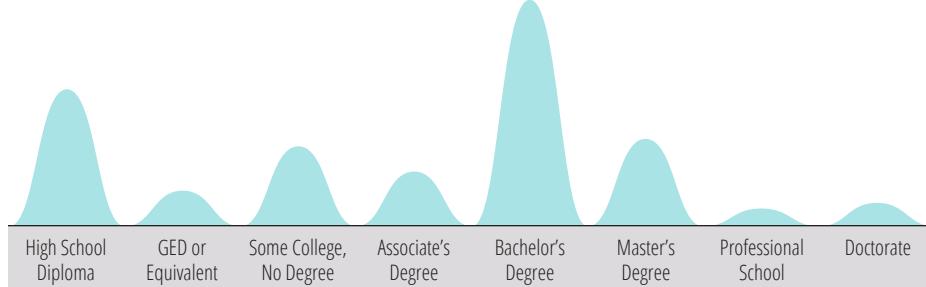


.5% Pedal

RACE

White	80.0%
Black/African American	10.0%
Asian	6.5%
2 or More Races	2.4%
Other	1.2%
American Indian/ Alaska Native	0.2%

EDUCATION





CONNECT SYSTEM PROFILE

Connect Transit offers two distinct transportation programs.

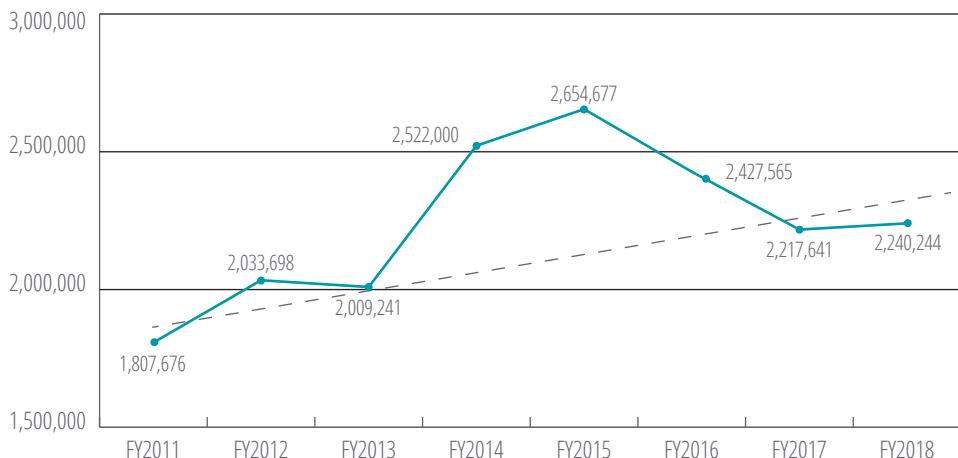
- 1. Fixed Route:** Fixed route services include any transit service in which vehicles run along an established path at preset scheduled times. Passengers are expected to get on-board and off-board at designated bus stops.
- 2. Paratransit:** Paratransit is specialized bus service providing curb to curb transportation for persons whose disability prevents them from riding local fixed route buses. Vehicles used to provide paratransit (mobility) service are equipped to give access to people with mobility issues and for those using assistive devices, such as walkers or wheelchairs.

Fixed Route

Connect Transit's current fixed route system operates using 15 different fixed routes and currently services 480 bus stops. Uptown Station in Normal and Downtown Bloomington serve as major transfer centers offering 3 or more route transfers. Walmart store locations in both Bloomington and Normal serve as micro transfer centers as well as the Shoppes at College Hills

As shown in Figure 1, fixed route ridership has fluctuated over the years. The route restructuring in 2016 initially caused a decrease in FY 2017. FY 2018 saw a modest increase of 1% compared to the previous year. Connect Transit estimates nearly 16% (or 3% annually from FY 2018 to FY 2023) increase in its ridership by 2023.¹

Figure 1: Fixed Route Ridership from FY 2011 to FY 2018¹

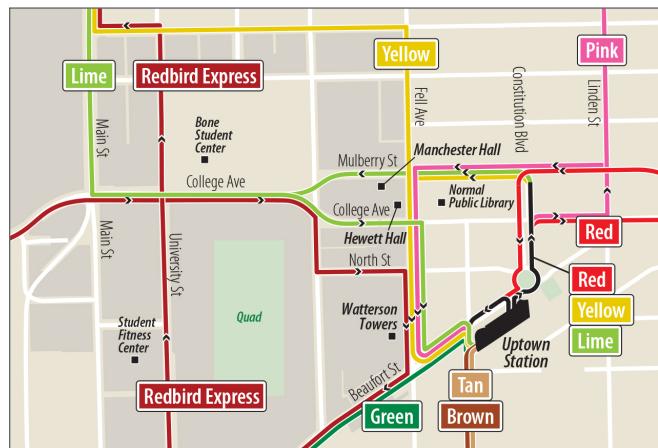
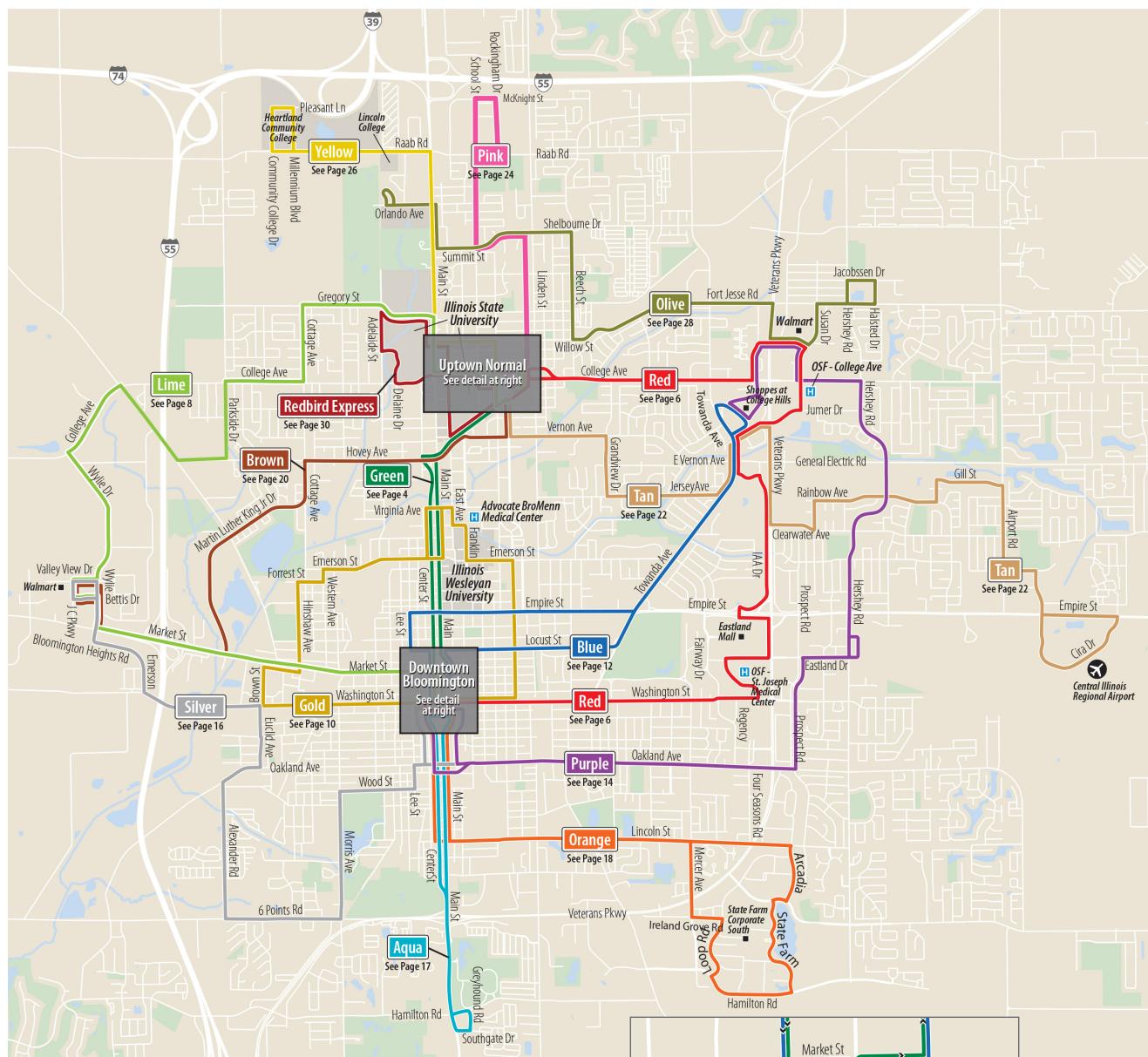


Frequency

Fixed routes run between the times of 5:40 a.m. to 10:00 p.m and Monday through Saturday with compressed schedules on Sundays. Extended hours on a number of routes begin when the school and university academic year begins in August, and can extend as late as 3:00 a.m. on weekends. As identified in Table 1, eleven (11) of the 15 routes have 30 minutes or better frequencies at some point during the weekday, while 6 of them have 30 minutes or better frequencies at all times during weekdays. Appendix A provides a detailed description of span, frequency, and daily trips during weekdays and weekends.

¹ Source: Connect Transit Fleet Management Plan, Revised July 2018

Routes Map



Uptown Normal



Downtown Bloomington

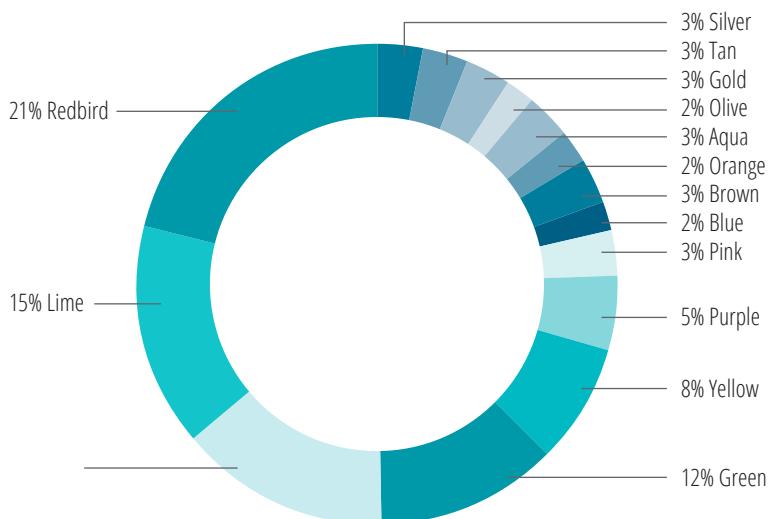
Table 1: Route Frequencies

Route	Peak Frequency	Off Peak Frequency	RPH During Peak*	Overall Average RPH
Redbird	5–7 Minutes	20 Minutes	249.1	75.1
Yellow	15 Minutes	30 Minutes	55.1	28.2
Green	15 Minutes	15 Minutes	51.8	45.4
Lime	30 Minutes	30 Minutes	64.5	59.3
Red	30 Minutes	30 Minutes	63.2	60.3
Purple	30 Minutes	60 Minutes	39.0	22.1
Silver	30 Minutes	60 Minutes	21.6	13.0
Aqua	30 Minutes	60 Minutes	20.9	12.9
Orange	30 Minutes	60 Minutes	14.5	8.3
Blue	30 Minutes	60 Minutes	12.9	8.3
Pink	30 Minutes	30 Minutes	12.2	11.6
Gold	60 Minutes	60 Minutes	14.5	13.1
Tan	60 Minutes	60 Minutes	10.4	10.3
Brown	60 Minutes	60 Minutes	9.6	9.2
Olive	60 Minutes	60 Minutes	9.3	8.7

*Weekday riders per hour (RPH) for routes with same frequency all day

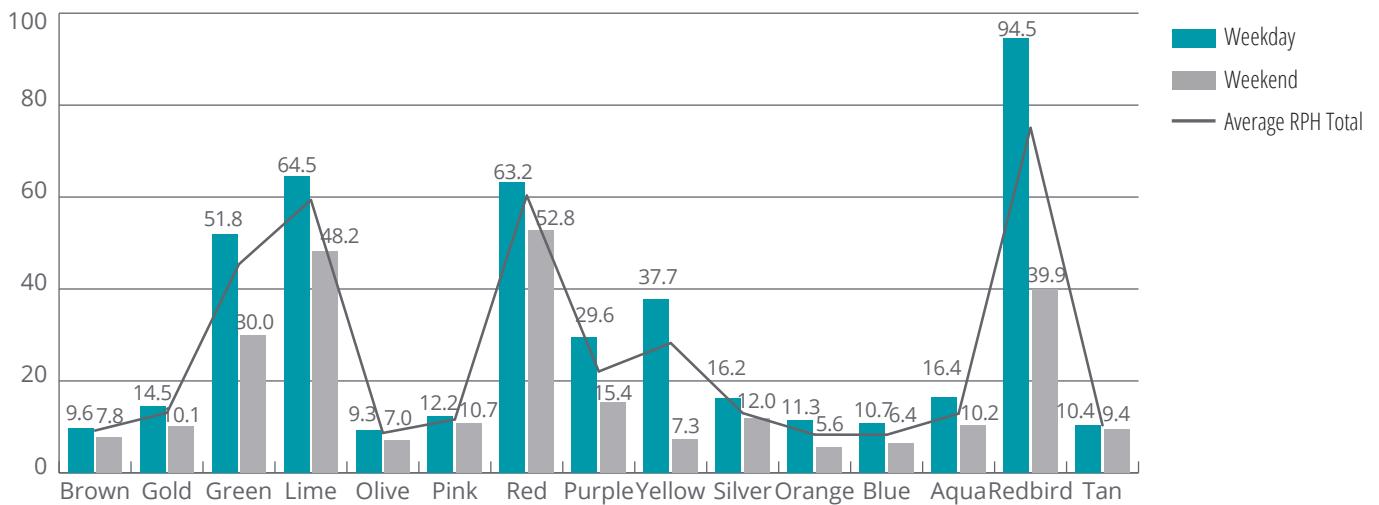
As shown in Figure 2, the Redbird route alone accounts for over 20% of ridership. This route predominantly serves the Illinois State University campus, servicing the stops every 5 to 7 minutes and no longer than 20 minutes during weekdays. The Green, Red, Lime, and Yellow routes account for over 50% of all Connect transit rides. Downtown Bloomington and Uptown Normal are among the popular destinations on these routes along with student apartments, schools and colleges, shopping and entertainment venues. Figure 3 shows individual route performance during weekdays and weekends. A third, 30%, of the ridership is shared by the rest of the routes.

Figure 2: Share of Overall Ridership Per Route



The Green, Lime, Red, and Yellow routes account for over 50% of all Connect Transit rides. Those routes plus the Redbird Express make up over 70% of all Connect Transit rides.

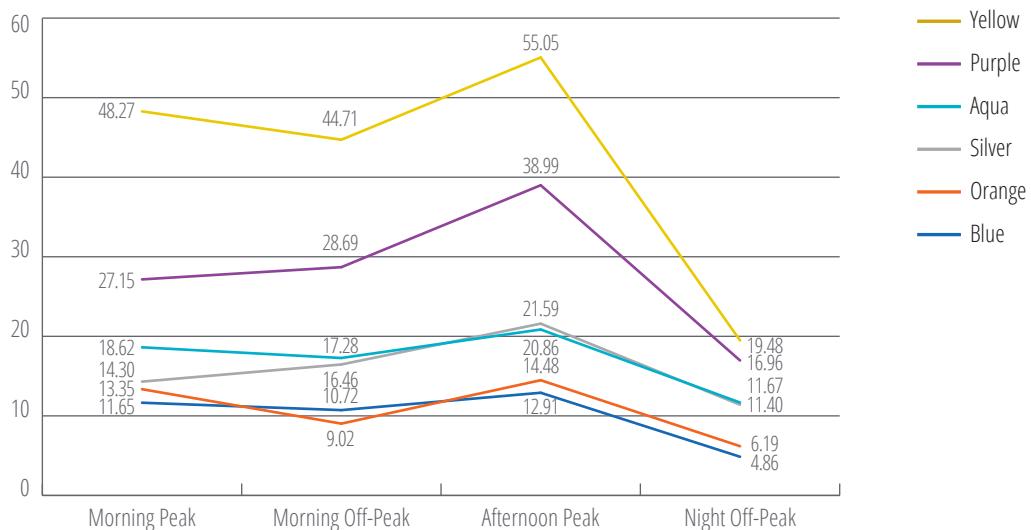
Figure 3: Average Riders Per Hour (RPH)



Data from October 2017 to August 2018 averaged

Based on the data, it is safe to say that frequency has a large effect on ridership. Routes that have consistently high frequencies (30 minutes or better) throughout the day such as Redbird, Yellow, Green, Lime and Red have the highest ridership.

Figure 4: Ridership Frequency by Route and by Time of the Day



Price and Availability Factors

A typical Connect Transit ride costs \$1 including transfers. Many Connect riders take advantage of bus passes allowing access over a set period of time. Regular service fare options include:

- 1 Ride—\$1
- 1 Day Pass—\$3
- 7 Day Pass—\$10
- 30 Day Pass—\$32

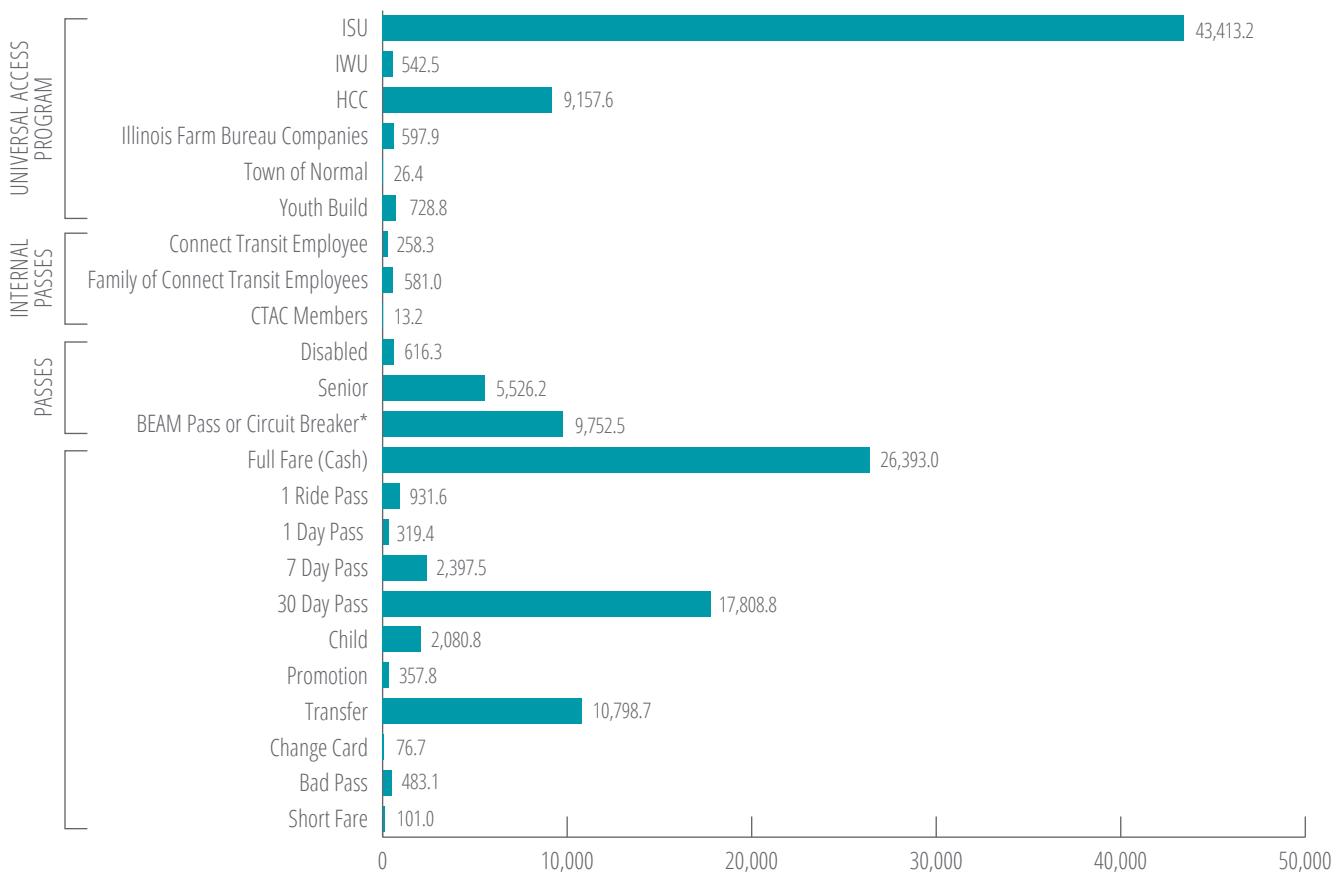
A few area employers, educational institutions, and social service agencies offer fare subsidy programs. These programs allow unlimited rides for students, and employees of these agencies. These include:

- Illinois State University
- Illinois Wesleyan University
- Heartland Community College
- Illinois Farm Bureau Companies
- Town of Normal
- Youth Build

Other fare subsidy programs include:

- Free rides for kids under the age of 5 when accompanied by a fare paying rider
- Senior Free Ride Pass for people 65 years or older
- BEAM Pass (or Circuit Breaker) recipients
- People with disabilities are offered half fare after receiving a pass from Connect Transit Administration Office.

Figure 5: Fare Type and Monthly Average Users (June 2017- June 2018)



*Illinois Benefit Access Program for seniors and persons with disabilities

Figure 5 shows the breakdown of how each of these fares and passes were used, calculated as a monthly average from June 2017 to June 2018. Similar to the trend in route use, those connected to ISU are overwhelmingly the majority of riders. The next closest are those paying full fare, followed by those with 30 day passes. 65% of those using an ISU IDs are riding the Redbird service. The remaining uses are distributed similarly to the most populated routes with 26% using the Red, Lime, Green, and Yellow routes. People paying full fare are mostly on the Red route, closely followed by Lime, then Green, Purple, and then Yellow. The 30 day pass holders share the same order of shares per route as those paying full fare.

Key Observations

- Connect Transit fixed route ridership is growing.
- Five out of the fifteen routes account for 70% of all Connect Transit ridership. The remaining 30% ridership is distributed among 10 routes.
 - The Redbird route alone accounts for over 20% of total ridership. This route predominantly serves the Illinois State University campus and services the stops every 5 to 7 minutes and no longer than 20 minutes during weekdays. ISU riders are the single largest user group on the system.
 - The Green, Red, Lime, and Yellow lines account for over 50% of all riders.
- Routes with 30 minute or better frequency throughout the day typically have highest ridership than those with more than 30 minutes or varied frequencies. The Pink route is an exception. Despite 30 minute frequency throughout the day, ridership is low on this route.
- For the six routes that do change frequency, the peak times have higher ridership than off-peak, except for the Silver and Purple routes.
- There is room for improvement in transit ridership from some institutions and employers, such as the Town of Normal or Illinois Farm Bureau Companies, who are signed up for universal access programs.
- As noted in the Connect Transit Survey Results chapter, those who are paying full fare rather than buying a monthly pass are typically lower income who cannot afford to buy a pass upfront. With around 8,000 riders buying ride by ride rather than getting a monthly pass each month, Connect should institute programs like fare caps for more equitable pricing.



The Redbird route accounts for over 20% of total ridership. This route serves the Illinois State University campus and services the stops every 5 to 7 minutes and no longer than 20 minutes during weekdays.

Connect Mobility (Paratransit)

Mobility service upends the usual relationship between transit and transit users, in which fixed-route service is offered at specific locations and at times determined by the transit system. The demand-response service model used for Connect Mobility service radically expands the possible points of origin, as eligible riders may live anywhere in the incorporated areas of Bloomington-Normal, and seek transportation to the same distribution of destinations served by the fixed route.

Service Area

By law, paratransit service is provided by urban public transit systems according to a formula based on the extent of the fixed route system, in which paratransit service must be provided at any point within 0.75 miles on either side of a fixed route. In Bloomington-Normal this requirement covers a substantial portion of the incorporated areas to which Connect Transit is restricted. Connect Mobility satisfies this requirement for a fare of \$2 each way for standard paratransit demand-response service.

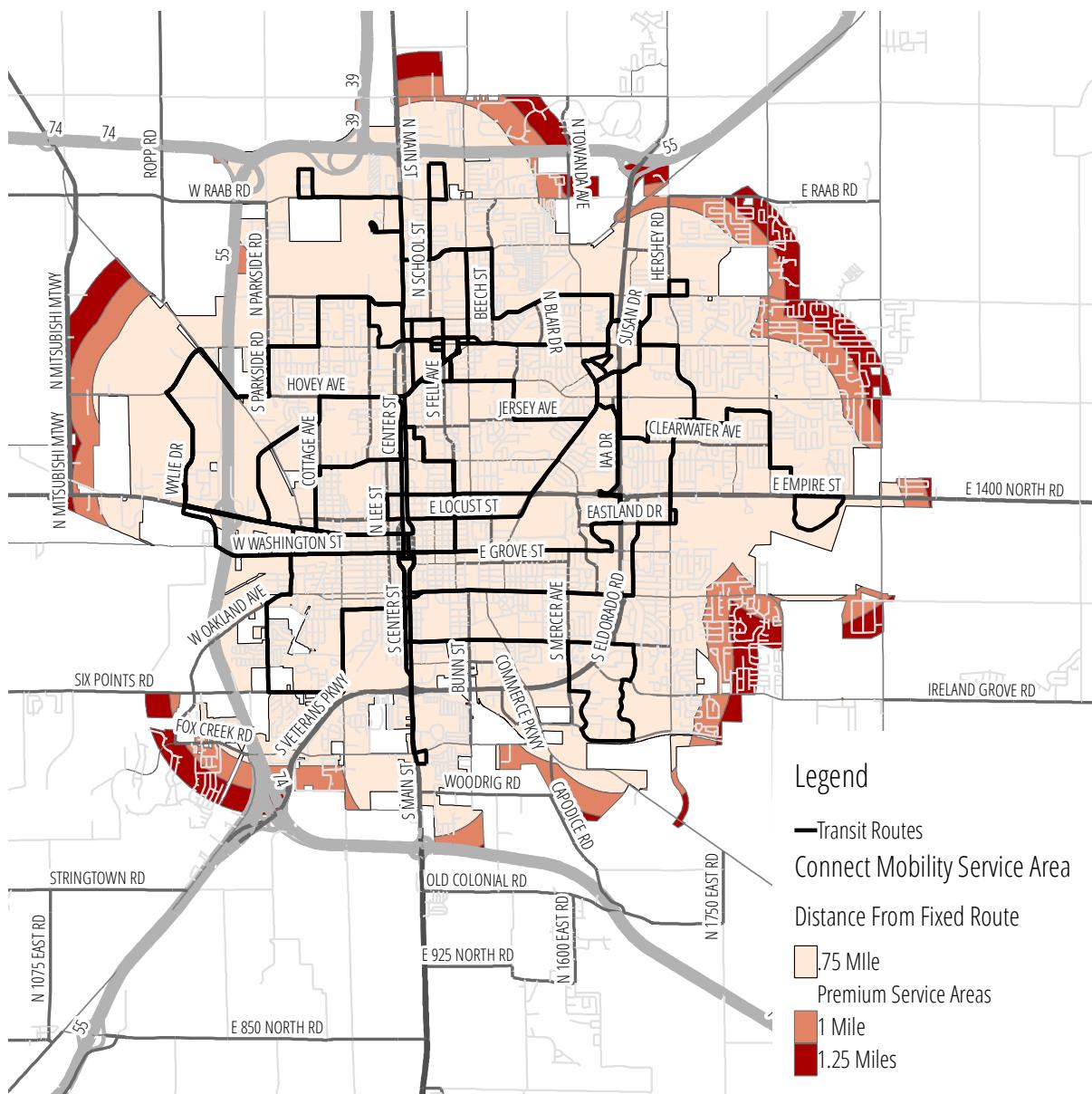
Connect Mobility also provides paratransit services beyond the area required by the fixed routes, through two premium mobility services. These expanded services areas go to points up to an additional 0.25 and 0.5 miles beyond the required core zone, with \$1 and \$2 increases in the base fare, respectively. Currently the premium service is not heavily used, but is used at levels consistent with the much smaller areas the outlying service bands serve within the corporate limits of Bloomington and Normal (See Figure 6, Service Area Map). Together, the regular and premium Mobility service areas cover most of the combined urbanized area of Bloomington and Normal, including much of the residential neighborhood areas.

Even with the addition of the premium Mobility service areas, notable exceptions to the served area within the incorporation boundaries remain. These include portions of the Ironwood subdivision and all of the Northbridge and Eagle Crest subdivisions in northeast Normal, most of the Fox Creek area in southwest Bloomington, and the entire Grove subdivision in far southeast Bloomington. Some of these developed areas include public schools and amenities not now accessible by public transit.

These gaps in service emphasize the limitations on Connect Transit service resulting from urban sprawl and the restriction to serving only the incorporated areas of Bloomington and Normal. As with the fixed route service, this limitation on Connect Transit service reduces the options available to optimize service delivery and control costs. This remains a matter for discussion by the Board of Trustees and Connect Transit administration. However, the complexities involved in altering the system's fundamental structure place such an action outside the three- to five-year window of this plan.

A moderating factor on the provision of mobility service in the ongoing is Connect Mobility cooperation with non-profit and other providers, both directly and through the MCRPC Transportation Advisory Committee (TAC). Providers such as Advocate BroMenn Adult Day Services, Marcfirst, Faith in Action and rural public transit provider SHOW BUS supplement Connect Mobility services, either for agency clients or the general public. Continuing and increasing coordination and cooperation with these entities is essential to maintaining and expanding services available for people who need and qualify for mobility service. This effort is very much within the window for action in this short-term plan.

Figure 6: Connect Mobility Service Areas



The service area for the Mobility program is determined by the location of the fixed routes and the incorporated areas of Bloomington and Normal. As currently organized, Connect Transit cannot provide service beyond the incorporated areas. The standard Mobility service area extends up to three-quarters of a mile (.75) on each side of a fixed route. In Figure 6, that area, shown in light peach, covers a substantial portion of the community. To extend the reach of Mobility service, Connect Transit created two Premium service categories. The first, shown in dark pink, extends service an additional quarter-mile outward from the fixed routes, and the second, shown in red, extends service an additional half-mile beyond standard service. Fares are higher than for Mobility service in the standard service area.

Mobility Ridership

Mobility is not an area of service directed at choice riders. People who wish to use the Mobility service must go through a qualification process. The Connect Transit website and office provide the application form, which is intended to ensure that Connect Mobility riders meet the requirements for paratransit service as set forth in the Americans With Disabilities Act (ADA). The application is very detailed, and requires a great deal of information regarding the applicant's disability and medical diagnosis, their cognitive and physical capacities, capacity to use the fixed route system and a list of the assistive devices used by the applicant.

The application process also requires that a medical professional be identified who can and will verify the information in the application. Once the complete application is submitted, Connect Transit reviews the application and the medical verification and determines if the applicant qualifies for Mobility service. There is an appeal process should the initial review result in a denial.

Three years ago Connect Transit entered into an agreement with the Life Center for Independent Living (LIFE-CIL) office in Bloomington for assistance in reviewing applications from potential riders seeking to use Connect Mobility services. LIFE-CIL was also tasked with reviewing the full roster of eligible riders to determine the current eligibility status of each person listed. (This contract is no longer in force, and Connect Transit is now maintaining Mobility program and rider information internally.)

Responding to the Connect Transit requirements, LIFE-CIL staff compiled an index of Mobility riders, including demographic and location information for each qualified rider. Specifically, data collected regarding each rider included age, gender, race or ethnicity, veteran status, residential address/point of trip origin, and trip destination addresses. Importantly, it also identifies the primary disability for which Mobility eligibility was determined, as well as any co-morbid conditions or disabilities experienced by the rider. During the eligibility review process carried out by LIFE-CIL, the current status of user's eligibility was assessed, with the determination that roughly half of the 950 identified users were no longer actively using the service.

The LIFE-CIL dataset and the opportunity it provides for detailed comparison and analysis have been essential to the understanding of the challenges and opportunities ahead for Connect Transit's Mobility service. Although not all of the riders included are known to be currently using the service, the large size of the ridership sample provides a better cross-section of the likely ridership mix than can be derived from the smaller group of recent riders.

The striking characteristic of the currently qualified Mobility riders is the small size of the group in comparison with the overall ridership of Connect Transit. In addition, the active qualified riders represent only about ten percent of persons with disabilities in the area, based on the aggregated five-year findings of the American Community Survey for 2013–2017. The latter statistic suggests that Mobility service ridership is focused on persons who not only have a qualifying condition or circumstance, but who also have very limited choices for transportation in daily life.

The paradox of mobility service is the inverse relationship between the number of unduplicated riders and the resources needed to provide the necessary transit services, as compared to the fixed route service. Because each population of Mobility riders represents an aggregation of needs and circumstances that is both unique and constantly changing, efforts to manage costs and improve efficiency confront requirements that are difficult to predict.

Mobility Rider Profile

Mobility riders are generally older than the ridership of the fixed route system.

Riders qualified to use the Mobility service range in age from 12 to 100 years, but the ridership is concentrated in the upper range of age groups. Persons aged 51 or above make up more than 73% of the total roster of qualified riders, and have an average age of 62 years. This finding is derived from the LIFE-CIL dataset, and is consistent with broader demographic data for Bloomington-Normal.

Many Mobility users live in group care facilities.

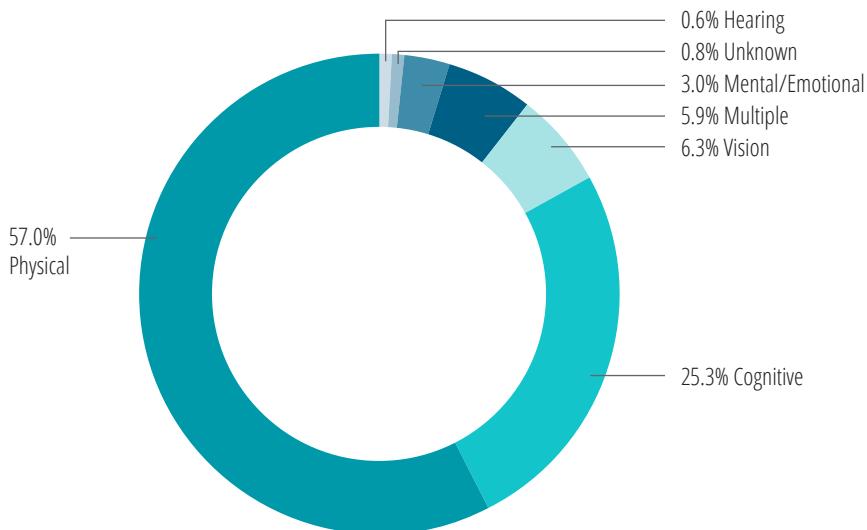
A notable subgroup among Mobility riders includes people who live in some form of group facility, such as nursing homes or rehabilitation providers; the principal location of these riders is the McLean County Nursing Home in Normal. In the LIFE-CIL dataset, 26% of all qualified riders live in nursing homes. Although this concentration of riders in a handful of locations in Bloomington-Normal might simplify routing Mobility vehicles, the scheduling needs of each individual rider may not correlate at all with other residents at the same facility. For Connect Transit, any operational efficiencies realized will need to offset the administrative demands of coordinating transportation for multiple riders at one origin point to an array of destinations. In the short term, studying a systematic process of continuing coordination with care facilities should be investigated as a means to manage transportation for these riders before this aspect of mobility service creates greater difficulties in managing transportation for all Mobility riders. This proposal is sufficiently complex that it is likely to require more than five years to implement, but the idea will be raised during the development of the next long-range transportation plan.

Table 2: Connect Mobility Frequent Destinations

Frequent Residential Mobility Destinations	Frequent Non-Residential Mobility Destinations
<ul style="list-style-type: none">■ The Irvin Apartments (239)■ 215 Douglas (188)■ Phoenix Towers (172)■ Near Shelbourne and School Intersection (157)■ Fox Creek Neighborhood (intersection of Fox Creek Road and Savannah Road) (152)■ 898–800 West Oakland Avenue (114)■ 9th Street in Hilltop Mobile Home Park (110)■ Landings Estate Mobile Home Park (91)■ Woodhill Towers (89)	<ul style="list-style-type: none">■ Marcfirst (784)■ Country Financial (GE Road) (144)■ Second Presbyterian Church (136)■ Pheasant Lanes Family Fun Center (106)■ OSF Medical Group College Avenue (106)■ Walmart (Normal) (105)■ Walmart (Bloomington) (103)■ Advocate BroMenn Medical Center (95)■ Afni (87)■ Nicor Gas (82)

Persons aged 51 or above make up more than 73% of the total roster of qualified riders, and have an average age of 62 years.

Figure 7: Type of Disability by Percentage of Mobility Riders



Mobility users have limitations that forestall use of the fixed-route system.

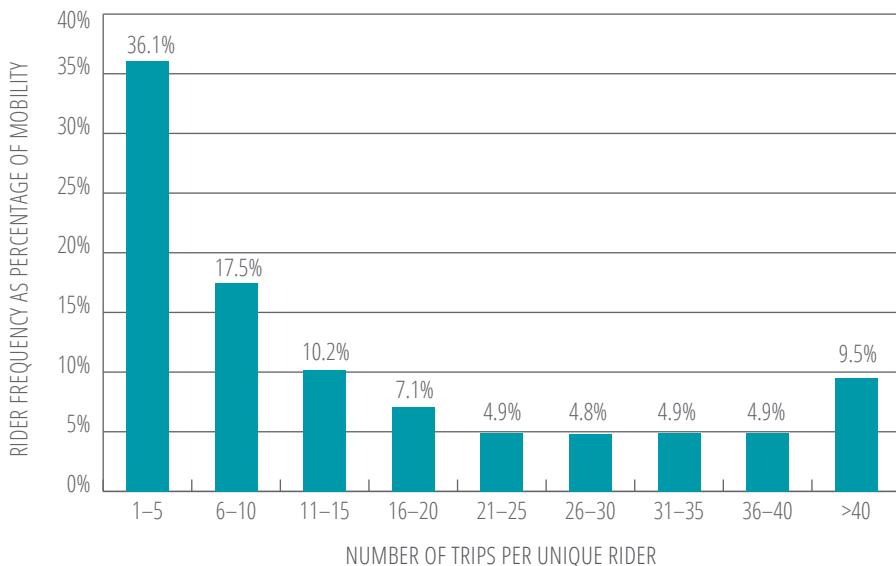
By definition, Mobility riders are constrained by physician-confirmed medically-based limitations, and live with a broad range of conditions, circumstances or illnesses. This includes riders who qualify for the service on a temporary basis, but who may be expected to return to the fixed route system. The destinations and accommodations riders need will vary for each rider, and for that same rider over time. Rather than the broad service created by the design, networked capacity and reach of the fixed route system, mobility service requires flexibility in the fundamentals of the riders' interactions with the service as provided by the demand-response model of operation.

Cognitive limitations may forestall a rider's ability to use fixed-route service even with considerable support. However, many people with disabilities may find that they prefer the fixed-route service. Shifting Mobility riders to the fixed-route system was once a specific policy target, with the dual goals of enabling people with disabilities to use the more frequent and less costly service, and of reducing demand for the higher level of service required with paratransit.

At minimum, this shift requires a high level of access across the fixed-route system, with adaptable vehicles, fully accessible bus stops, and staff trained with respect to requirements under the Americans with Disabilities Act and related legislation. Vehicle specifications, routing choices and efforts such as the Better Bus Stops campaign should include robust analysis not only of conventional fixed-route standards, but also of designing the elements of the fixed route system to enable and expand its use by Mobility riders as they prefer.

For many riders, their ability to navigate Mobility service, let alone to transition to the fixed route system, is challenged by additional conditions which reduce their capacity to take on the required tasks. For example, and as shown in Figure 7, more than a quarter of riders have cognitive difficulties; of that number, about 40% are identified as having Alzheimer's Disease or some other form of dementia. For many of these riders, the difficulties of coping with their primary conditions are exacerbated by additional concerns, ranging from other cognitive issues to physical conditions that create additional barriers or needs. These co-existing issues create a greater administrative burden for Connect Transit in addressing these riders' mobility needs.

Figure 8: Mobility User Trip Frequency



Mobility Service is statistically complex.

A primary finding is that use of the service is not evenly distributed among all Mobility riders. Figure 8 shows the percentage of total trips taken in a given period by riders who use the service at varying frequencies. “Trip” refers to each leg of the overall ride; going to the doctor and then returning home equals two trips, meaning that the range of trip frequencies should be divided by two to estimate the number of round trips.

More than a third of all trips are taken by riders who use the service infrequently, no more than 5 times per month. More than 25% of trips involve riders using the service between 6 and 15 times per month, perhaps as often as four times per week. However, nearly 10% of trips involve riders using mobility service at a rate of more than 40 times per month, or at least twenty round trips, the equivalent of a round trip on every weekday.

In addition to the potential for multiple constraints applying to the same rider discussed above, the substantial variance in trip frequency can create greater administrative burdens for Connect Mobility. At first glance it may seem that, presuming a monthly basis for the chart above, the finding that 36% of all riders only use the service a maximum of five times each month allows conclusions to be drawn regarding the cost of service. Looked at in greater depth, the distribution of trip frequency indicates that the 36% of riders account for just over 7% of all trips. At the other end of the distribution chart, less than 10% of riders account for nearly 28% of trips. These extremes offer an opportunity to assess how well the trip reservation and dispatch systems handle the disparity in use frequency, so that the needs of everyday users and those who ride only a few times each month are all properly managed and that resources are equitably applied. Further, it provides a more nuanced approach to projecting costs when analyzing the impact of demographic shifts.

The distribution of trip frequency indicates that the 36% of riders account for just over 7% of all trips. At the other end, less than 10% of riders account for nearly 28% of trips.

36%

use the service
1-5 times per month

28%

use the service
6-15 times per month

10%

use the service more
than 40 times per month

When considered with the fare structure for Mobility service, the disparate levels of usage are potentially even more significant for the rider and for Connect's cost to provide the service. Further investigation and analysis of these patterns of use is warranted in the near term. Given the highly customized services offered by the mobility program, any operational area in which these patterns may complicate the delivery of mobility services is likely to need a closer look over the next three to five years.

Figure 9: Cost Per Passenger Mile²

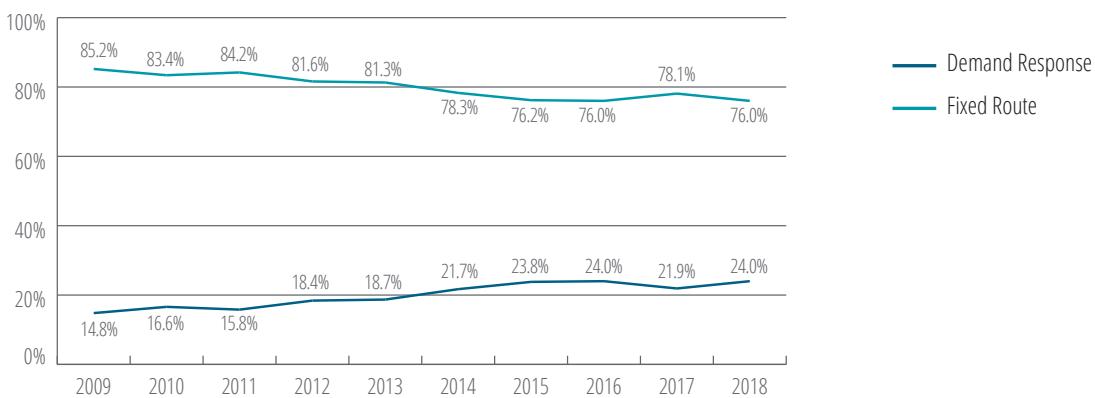


One unavoidable aspect of Mobility service is the high cost, attributable to the individualized level of service provided to riders. Although the vehicles used in Mobility service are far less expensive than fixed route buses, they can only carry between 12 and 20 passengers, depending on the number of riders using assistive devices. The many components of delivering a demand response service contribute to the disparity in cost per passenger mile illustrated in Figure 9, above.

Connect Transit's data is clear on the cost of this required service, but it also provides a window into likely future impacts on capital and operating costs. As the population of older Americans become a larger share of the overall population, there will be increased need for Mobility style services as a component of public transit. If the basic cost assumptions are reasonably consistent over time, providing Mobility service will require an expanding share of public transit resources.

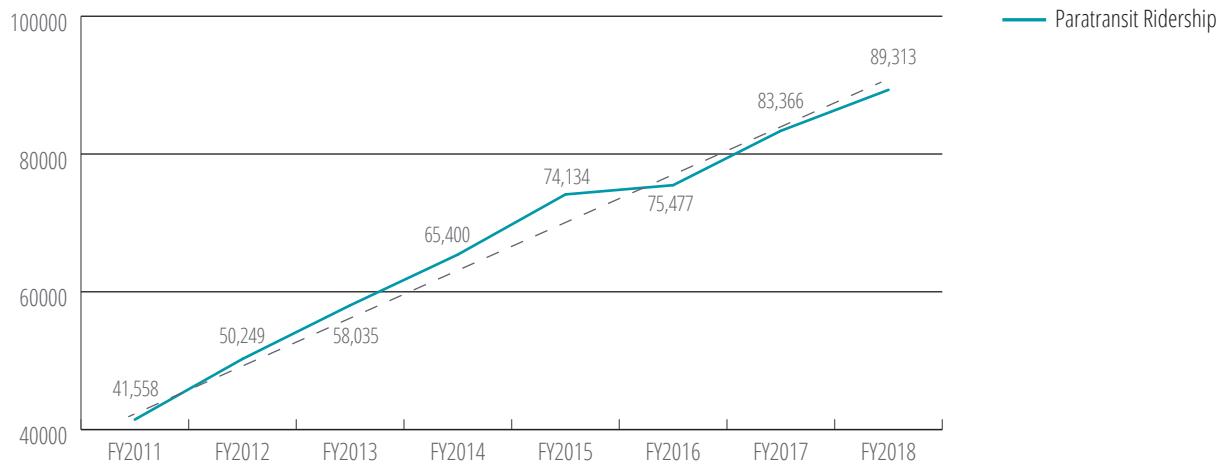
A show in Figure 10, this trend has already begun. Over the past decade, Mobility's share of operating expenses has increased, and the gap in needs between the two service types has narrowed. In the short-term this relatively slow phenomenon will continue, and Connect Transit should keep the changing distribution in mind for medium- and long-term planning.

Figure 10: Operating Expenses Share as Percent of Total²



² Source: FY 2018 Comprehensive Annual Financial Report

Figure 11: Mobility Projection³



Connect Facilities

Wylie Drive Campus

The Connect Transit (CT) Administration and Maintenance Department Garage, Fueling Station and Wash Bay are located at 351 Wylie Drive in Normal, Illinois. This facility also includes Connect Transit's offices, bus repair, fueling, washing, and storage. The garage facility features a repair facility, a wash bay, bus parking garage and a fueling station. The entire property is completely fenced and provides secure parking for all the revenue fleet and support vehicles Connect Transit operates. Connect Transit Facility Maintenance Plan, last updated in December 2017, dictates the maintenance of this facility.

Bus Stops

In summer 2014, Connect Transit began the process of converting from a "flag stop" system to a traditional "fixed" stop system. Currently there are 514 bus stops identified with flag poles. Connect Transit recently launched better bus stop campaign to improve the shelters and other facilities at these stops.



As part of the Better Bus Stops for Bloomington-Normal Campaign, Connect Transit has provided shelters for over 20 stops and taken several steps to improve infrastructure including adding Simmi-Seat units and solar powered lights at various stops around town. Simme-Seats are small benches made by attaching two seats to a bus stop sign, one on either side, creating more seating options for stops that may not warrant a full bench or shelter, but still have riders that will enjoy a place to sit.

Solar lights have been installed at stops that have low visibility around Bloomington-Normal. The lights are push activated and solar powered allowing for bursts of light when riders need it to improve the safety and comfort of riding transit. The guidelines for bus stops that will benefit

from the improvements such as Simme-Seat and solar lights are those that have between 5 and 15 daily riders as stated in the Better Bus Stops campaign.

The Connect Transit Facility Guide approved in March 2018 lays out the guidelines and the criteria for bus stop improvements.

³ Source: Connect Transit Fleet Management Plan, Revised July 2018

Downtown Bloomington Transfer Center Study

Connect Transit serves 1,500 passengers daily at the Front Street transfer point in Downtown Bloomington. This is Connect's second busiest transfer point after Uptown Normal. Several studies and plans, including the most recent Transit Strategic Plan approved by the Connect Transit Board in 2018, identified the need for a transfer center in Downtown Bloomington. Such a center would allow Connect Transit to reduce inefficiencies, allow buses to enter two ways, maximize on-time performance in and out of Downtown Bloomington, improving system performance across the entire system, and provide the ability to communicate real-time information to customers.

Connect Transit is currently undertaking a site needs analysis for a new Downtown Transfer Center.

Fleet Management

Connect Transit completed a Fleet Management Plan, most recently revised in July of 2018, meant to evaluate and plan for the next decade until FY2029. With 31.17% growth in Paratransit ridership and 17.35% growth in Fixed Route Ridership over the last 5 years, Connect began the careful evaluation and planning for their fleet with this Fleet management Plan. It is meant to have regular updates throughout its life in order to ensure proper management of the fleet as the demand continues to grow and resources are becoming scarcer for Connect Transit.

The planning process for the Fleet Management Plan was done as follows:

- Estimating passenger growth 12 years into the future,
- Establishing productivity standards, hours per vehicle year, rides per vehicle year, and resulting vehicles required of which the standards will be reevaluated by staff yearly
- Determining spare vehicles as recommended by staff
- Determining total vehicles needed measured by the sum of vehicles required to maintain current productivity standards as well as those required to respond to future demand
- Determining scheduled procurement and resulting fleet needs

This plan identifies Peak Vehicle Requirements (PVR) (as in the total number of vehicles needed in the peak periods to satisfy both passenger demand and productivity standards) as a base for the needs of Connect Transit. Fixed route PVR is 29 vehicles and paratransit PVR is 15 vehicles, which they currently exceed for both. The excess vehicles are necessary as part of the spare ratio that Connect has identified as a need. Having spare vehicles ensures system reliability and the spare vehicles are calculated by the difference between total fleet and peak demand. The goal Connect set is 30% for fixed route and 20% for paratransit. With 10 spare vehicles in fixed route and 2 for paratransit, they are currently at a 26% and 12% spare ratio respectively.

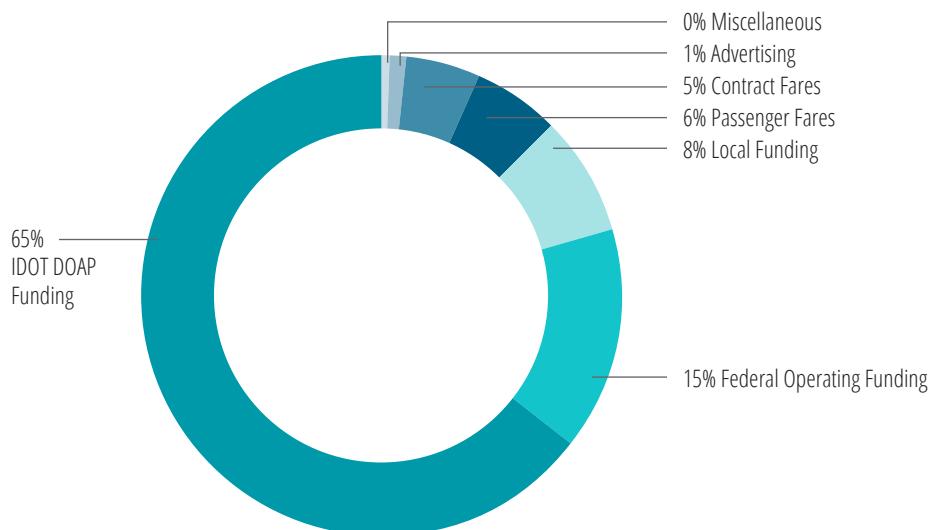
Connect believes the spare ratio for fixed route is nearly adequate as long as they are able to replace buses over the next few years. This is prioritized in part by a policy set by the Federal Transit Administration (FTA). The FTA issued a useful life policy for transit buses to establish a minimum number of years that transit vehicles must remain in service to ensure a sufficient return. Replacing them once they meet this goal becomes priority to ensure that breakdowns and unexpected repairs are avoided as well as maintaining the spare ratio. Connect has replaced twelve fixed route buses throughout 2015 and 2016 as well as ten in 2018, but still have a backlog of twelve vehicles past their useful life which will grow to seventeen in 2023. There are 13 paratransit vehicles that will need to be replaced from 2019–2021.

Connect Transit will continue this close and detailed overview of the fleet through the Fleet Management Plan.

Funding

Connect Transit relies on various program sources to support the operation of transit service. These transit programs are funded by the federal and state governments, funding support provided by the City of Bloomington and the Town of Normal, fare revenue directly from passengers as well as through universal access agreements, and a comparatively small amount of advertising revenue.

Figure 12: FY 2019 Projected Operating Revenue



With this funding, Connect Transit provides transit services which generate operating expenses.

To sustain the transit system and prepare it for future needs, Connect Transit also makes capital expenditures, such as the purchase of vehicles and facilities construction. Changes in how both the federal and state transit funding is allocated have posed challenges for this category of expenditures. Should there be a state capital grant program, transportation funding is expected to be a major component. Until the details of such a program become public, Connect and other transit systems in Illinois will have to ration spending on capital projects to ensure that operating costs can be met.

Connect Transit's profile of funding sourcing diverges somewhat from peer agency sourcing documented on the Connect Transit Funding Dashboard found on their website. As percentages of total funding, Connect's use of some funds is consistent with other transit agencies, such as state funding and "other" fund sources. However, in some instances, certain fund sources are stable across these agencies; Connect Transit is an outlier as compared to these peer agencies.

Connect Transit is more reliant on federal funds, using up to three times as much federal money than peer and regional transit agencies, expressed as a percentage of total funding. In contrast, Connect Transit receives only 8 percent of its funding from local sources.

Some of these discrepancies, particular with regard to local funding, may result from the peer agencies being established as mass transit district. There has been considerable discussion of this topic with respect to Connect Transit; potentially unsustainable funding outcomes may be a reason to continue that

conversation.

Operating revenue derives primarily from the following funding channels discussed below.

IDOT Funding

The Illinois Downstate Public Transportation Act (30 ILCS 740), usually referred to as the Downstate Operating Assistance Program (DOAP), reflects an effort to balance the transit investments made in northeastern Illinois with funding for urban and rural transit providers for the rest of the state. In FY 2015 through FY 2019, DOAP added more than \$1.5 billion dollars to downstate transit budgets, an average of over \$300 million annually.

Most transit agencies take considerable advantage from the allocation of DOAP funds. Over the last several years Connect has not been able to use the full DOAP Funds allocation, due to the lack of local matching funds. With an additional \$1,000,000 in local operating funds from the City of Bloomington and Town of Normal Connect could leverage \$2,000,000 of DOAP funds for operations. Connect Transit staff should continue to monitor the status of the DOAP program as Illinois moves to discharge some of its considerable debt. The State of Illinois reimburses 65% of all eligible operating expenses to Connect through the IDOT DOAP, a substantial portion of the overall revenue received.

Federal 5307 Funding

Transit agencies in urbanized areas with populations under 200,000 persons may receive Section 5307 (49 U.S.C. 53, §5307) program funds for operating assistance, where federal dollars can be allocated to a federal share of 50 percent of operating expenses. There is no cap on the amount that can be used for capital assistance.

Every year as expenses increase Connect uses more of this funding for operations, instead of using it for capital purchases. If additional operations funding cannot be found, by fiscal year 2024 Connect will be using nearly 100% of this funding on operations, lessening the ability to carry out capital projects.

Under the provisions of the FAST Act, the current omnibus federal transportation law, the Federal Transit Administration oversees a number of grant programs which can provide funding for specific types of capital projects, as well as an overall Capital Projects Grant (49 U.S.C. 53, §5309). Appropriate grants should continue to be pursued vigorously. In the past Connect Transit has obtained grants for buses under Low or No Emissions grant §5339B, and funds under the Bus and Bus Facilities grant, §5339. However, these grants are increasingly competitive, and not all are usable for transit systems in smaller cities. Major U.S. DOT transportation grants, such as the BUILD program that replaced TIGER grants in the FAST Act, are more competitive still, and sometimes require matching funds or other commitments that are unrealistic for Connect's use, but remain a potential funding source for specific capital projects.

In the 5 year Connect Transit estimated Operating Budget the anticipated use of federal transit funding is outlined. When examining the operating and capital budget the ratio of operating expenditures to capital expenditures consistently favor operating funding, with one project-related exception occurring in FY 2022.

Local Sales Tax

Local funding provided by the City of Bloomington and the Town of Normal forms the backbone of the local funding for Connect Transit. The City of Bloomington provides \$610,000 per year and the Town of

Normal provides \$390,000 per year, for a total of \$1,000,000 per year, from Local Sales Tax Revenue. These funds are used to pay for operating expenses. This too is a potentially unsustainable approach to funding, as Bloomington and Normal each have many other calls for their tax revenue. The municipalities have demonstrated their commitment to supporting public transit, but it should be recognized that this is an unpredictable time for governments.

Fares and Contract Fares

Passenger fares are collected in a variety of ways, with an array of fare instruments riders can choose. In addition to paying a one-time fare, riders can also purchase multi-day passes for greater convenience and overall cost savings. People associated with certain institutions, including Illinois State University, Illinois Wesleyan University, and Heartland Community College, benefit from universal agreements that provide

Figure 13: 2019 Operating Budget and Projections

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
	Actual	Budget	Budget	Budget	Budget	Budget	Budget
Operating Revenue							
Passenger Fares	661,693.86	654,000.00	784,000.00	831,000.00	887,000.00	928,000.00	956,000.
ISU Contract Fares	535,809.96	545,000.00	559,000.00	573,000.00	587,000.00	601,000.00	615,000.
Other Contract Fares	105,635.16	190,000.00	141,000.00	148,000.00	155,000.00	163,000.00	171,000.
Advertising Revenue	70,251.00	172,500.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.
Miscellaneous Revenue	17,729.86	3,500.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.
Total Operating Revenue	1,391,119.84	1,565,000.00	1,637,000.00	1,705,000.00	1,782,000.00	1,845,000.00	1,895,000.
Operating Expenses							
Operations Wages	5,461,219.44	5,512,000.00	5,772,000.00	6,061,000.00	6,364,000.00	6,682,000.00	7,016,000.
Maintenance Wages	1,101,653.66	1,191,000.00	1,120,000.00	1,154,000.00	1,189,000.00	1,225,000.00	1,262,000.
Administration Wages	749,100.32	1,024,000.00	1,019,000.00	1,050,000.00	1,082,000.00	1,114,000.00	1,147,000.
Employer Payroll Tax Expense	575,580.51	633,000.00	648,000.00	667,000.00	687,000.00	708,000.00	729,000.
Retirement Plan	291,042.09	368,000.00	382,000.00	393,000.00	405,000.00	417,000.00	430,000.
Group Insurance	1,341,924.16	1,657,000.00	1,756,000.00	1,932,000.00	2,125,000.00	2,338,000.00	2,572,000.
Uniform Expense	32,252.19	36,000.00	37,000.00	38,000.00	39,000.00	40,000.00	41,000.
Professional Services	279,062.89	325,000.00	310,000.00	319,000.00	329,000.00	339,000.00	349,000.
Outside Repair - Labor	87,392.78	112,000.00	69,000.00	71,000.00	73,000.00	75,000.00	77,000.
Contract Maintenance Services	135,752.15	117,000.00	110,000.00	113,000.00	116,000.00	119,000.00	123,000.
Custodial Services	11,260.07	16,000.00	16,000.00	17,000.00	18,000.00	19,000.00	20,000.
Employment Expenses	16,049.97	12,000.00	16,000.00	17,000.00	18,000.00	19,000.00	20,000.
Fuel	724,662.09	897,000.00	1,039,000.00	1,070,000.00	1,102,000.00	1,135,000.00	1,169,000.
Lubricants	37,547.08	44,000.00	44,000.00	45,000.00	46,000.00	47,000.00	48,000.
Tires	80,865.99	91,000.00	90,000.00	93,000.00	96,000.00	99,000.00	102,000.
Bus Repair Parts	283,365.66	195,000.00	171,000.00	176,000.00	181,000.00	186,000.00	192,000.
Other Materials and Supplies	39,512.84	57,000.00	40,000.00	41,000.00	42,000.00	43,000.00	44,000.
Shelters/Signs/Shop Tools	6,723.23	10,000.00	10,000.00	10,000.00	11,000.00	11,000.00	12,000.
Computer and Office Supplies	138,893.19	159,000.00	199,000.00	205,000.00	211,000.00	217,000.00	224,000.
Utilities	106,113.34	139,000.00	139,000.00	143,000.00	147,000.00	151,000.00	156,000.
Corporate Insurance	249,678.48	268,000.00	400,000.00	412,000.00	424,000.00	437,000.00	450,000.
Dues/Subscriptions/Fees	48,624.08	50,000.00	52,000.00	54,000.00	56,000.00	58,000.00	60,000.
Printing/Marketing/Training	365,290.65	268,000.00	278,000.00	286,000.00	295,000.00	304,000.00	313,000.
Total Operating Expenses	12,163,566.86	13,181,000.00	13,717,000.00	14,367,000.00	15,056,000.00	15,783,000.00	16,556,000.
Operating Revenue							
Local Revenue	1,309,930.02	1,132,000.00	1,132,000.00	1,132,000.00	1,132,000.00	1,132,000.00	1,132,000.
State Support	7,719,588.00	8,482,000.00	8,830,000.00	9,253,000.00	9,701,000.00	10,173,000.00	10,676,000.
Federal Support	1,742,929.00	2,002,000.00	2,118,000.00	2,277,000.00	2,441,000.00	2,633,000.00	2,853,000.
Total Revenue and Support	12,163,566.86	13,181,000.00	13,717,000.00	14,367,000.00	15,056,000.00	15,783,000.00	16,556,000.

Figure 14: 2019 Capital Budget and Projections

	FY 2018 Actual	FY 2019 Budget	FY 2020 Budget	FY 2021 Estimated	FY 2022 Estimated	FY 2023 Estimated	FY 2024 Estimated
Capital Funding							
Beginning Capital Funds Balance	\$ 6,059,226	\$ 6,366,167	\$ 6,900,237	\$ 7,573,912	\$ 8,428,237	\$ 9,131,162	\$ 8,033,177
FTA Section 5307 Apportionment	1,233,333	-	262,300	90,000	157,000	6,000,000	1,700,000
FTA Section 5339 Bus & Bus Facilities	255,000	-	250,000	1,400,000	1,400,000	4,400,000	-
FTA Section 5316 Job Access and Reverse Commute	45,246	-	-	-	-	-	-
State of Illinois - Capital Program	3,360,000	-	-	-	-	3,000,000	-
State of Illinois - DOAP - Debt Service	-	-	1,153,100	3,014,050	3,134,650	2,758,340	3,141,090
City of Bloomington	441,353	504,780	534,655	534,655	534,655	534,655	534,655
Town of Normal	382,589	427,290	452,620	452,620	452,620	452,620	452,620
Total Budgeted Sources of Funds for Capital Items	11,776,747	7,298,237	9,552,912	13,065,237	14,107,162	26,276,777	13,861,542
Capital Expenditures							
Major Capital Projects							
Revenue Vehicle Purchase - 40' Diesel Buses	4,605,243	-	-	-	-	-	-
Revenue Vehicle Purchase - Light Duty LPG Buses	614,080	-	-	-	-	-	-
Solar Array and Electric Bus Charging Stations	-	-	1,200,000	-	-	-	-
Revenue Vehicle Purchase - 40' Electric Buses	-	-	-	4,000,000	4,120,000	4,243,600	4,370,908
Revenue Vehicle Engine/Transmission Rebuild	-	-	-	450,000	665,000	-	1,000,000
Downtown Transfer Center	-	-	-	-	-	14,000,000	-
Facilities, Maintenance and Support Equipment							
Maintenance Build-out for Showers	-	-	100,000	-	-	-	-
Replace Administration HVAC System	-	-	200,000	-	-	-	-
Automatic Farebox Collection	57,000	-	-	-	-	-	-
Security Cameras and Equipment	10,853	-	-	-	-	-	-
Passenger Amenities							
Bus Shelters, Pads, Seating, and Lighting	103,160	398,000	105,000	187,000	71,000	-	120,000
Customer Service Center in Uptown Station	-	-	250,000	-	-	-	-
Other Capital Expenditures							
Service Vehicles	20,244	-	124,000	-	120,000	-	-
Total Budgeted Capital Expenditures	5,410,580	398,000	1,979,000	4,637,000	4,976,000	18,243,600	5,490,908
Ending Funds Balance	\$ 6,366,167	\$ 6,900,237	\$ 7,573,912	\$ 8,428,237	\$ 9,131,162	\$ 8,033,177	\$ 8,370,634

In the Capital Budget, total funding and budgeted capital expenditures are delineated as shown in the 2019-2024 Capital Budget. Substantial levels of local funding are identified in connection with these projects.

Figure 15: Primary Sources of Transit Funding, Current and Potential

Federal	
49 U.S.C. §5307; Federal Transit Administration; Urbanized Area Formula Funding	This fund provides operating costs for public transit systems in communities under 200,000 in population. The granted funds are allocated under a population-based formula.
49 U.S.C. §5309; Federal Transit Administration; Capital Investment Grants	To obtain funding from the overall capital projects grant program, an application must be submitted and requirements met. Not all applicants receive grants. This fund is appropriate for larger-scale capital investments.
49 U.S.C. §5339; Federal Transit Administration; Bus and Bus Facilities Program	This capital program supports the acquisition of buses and bus facilities, including those using alternative energy sources.

49 U.S.C. §5310; Federal Transit Administration; Enhanced Mobility of Seniors & Individuals with Disabilities	The §5310 grants amalgamate earlier programs, including program funding and the New Freedom program enhanced support for persons with disabilities. The Job Access Reverse Commute sub-program has been eliminated.
Access and Mobility Partnership Grants	This competitive grant program supports innovative transit coordination projects that improve access to healthcare, to improve options for people with limited transportation choices, and bridge the gap between service providers in the transportation and health sectors; for recipients of §5310 funding.
Better Utilizing Investments to Leverage Development (BUILD)	Transportation grant program (formerly TIGER) for larger scale capital investments, i.e. Uptown Station; this program was targeted for support to build a Downtown Bloomington transfer center.
State	
30 ILCS 740; Downstate Operating Assistance Program (DOAP)	The Downstate Public Transportation Act, provides operating funds to assist in the development and operation of public transportation services statewide. DOAP pays up to 65% of eligible expenses and each eligible participant receives an annual appropriation from the general assembly.
Local and Other	
Local Government Subsidy	As the governmental entities controlling Connect Transit, Bloomington and Normal invest proportional amounts in the public transit system each year.
Rider Fares	Fares account for more than 10% of system revenues, through a wide variety of ticket and pass options and the universal access program.
Non-governmental Grants	In support of a variety of interests and stakeholders, foundations and other private entities occasionally extend grant opportunities for use by public transit providers, sometimes in cooperation with other community organizations.

unlimited access to the transit system, paid for by the institutions under the terms of the agreements. Revenue from passenger service is also collected through reimbursement for Medicaid-billed trips.

Advertising Revenue

In recent years Connect Transit began to sell advertising space on transit vehicles, under the terms of policies established by the Trustees. This includes revenue for selling advertising on fixed route and demand response buses. Some ads are of the conventional type, and some are in the form of bus wraps which cover the vehicle. Given the prevalence of students within the ridership, some advertising is directed quite specifically at student riders.



CONNECT TRANSIT SURVEY RESULTS

Connect Transit contracted ETC Institute, a company that specializes in conducting transportation surveys, to administer both an origin and destination survey as well as a satisfaction survey. These surveys were administered from April 10, 2018 through May 11, 2018. Connect Transit and ETC took great care to ensure a broad representation of the respondents. 1,170 valid surveys were collected.

Survey collection goals include 10% of average ridership:

- Morning, mid, afternoon, night, and late night
- Weekdays and weekends
- Both route directions

MCRPC utilized this survey data to inform this Short Range Transit Plan. MCRPC staff used a couple of different analyses to further validate accurate representation of the survey respondents to that of overall transit ridership. These included:

- a. Plotted the respondents origin and destination information on a map using GIS [see Figure 16]
- b. Compared percentage of respondents by route ridership [see Figure 107]

Figure 16: Location of Survey Respondents

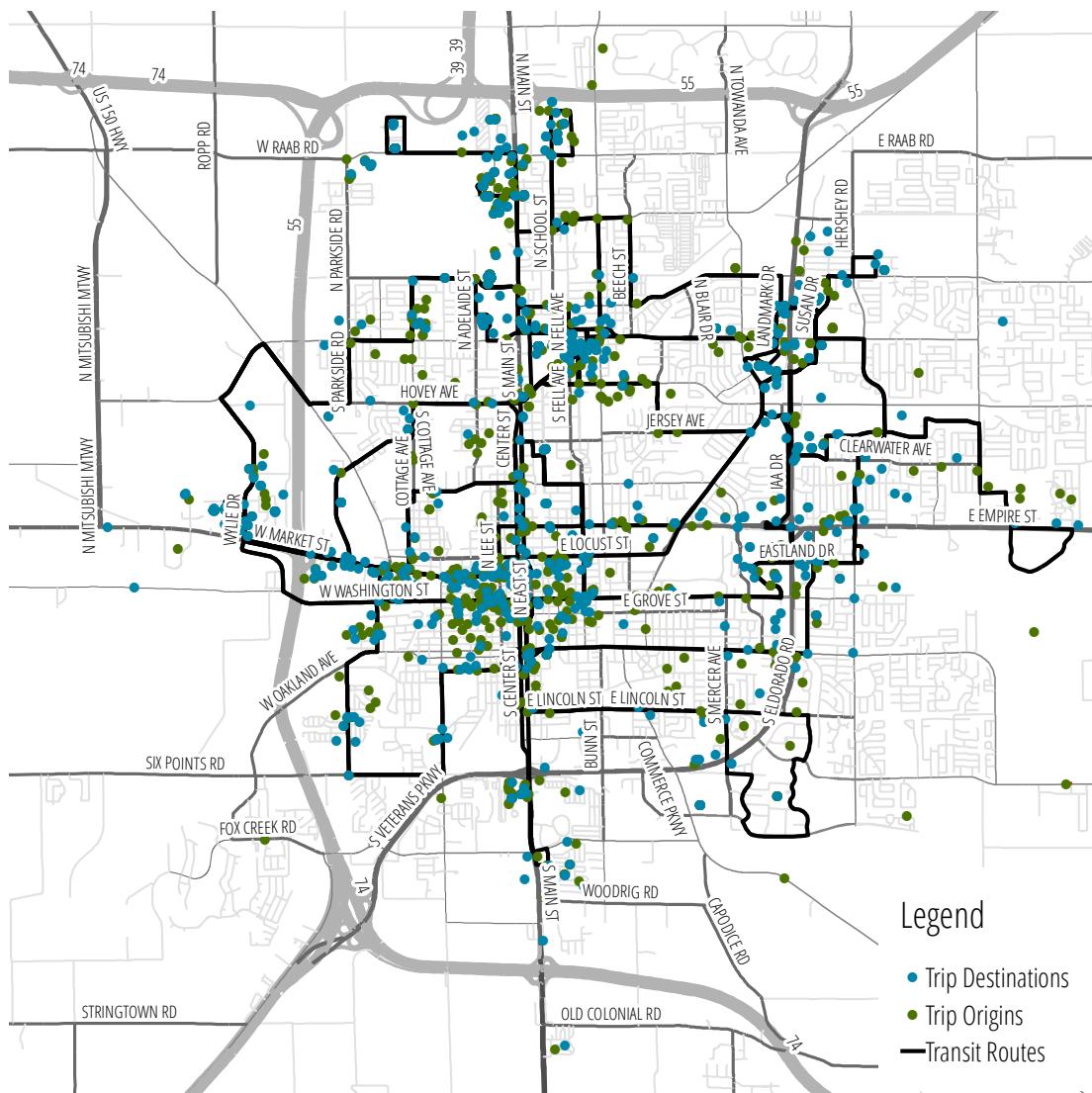
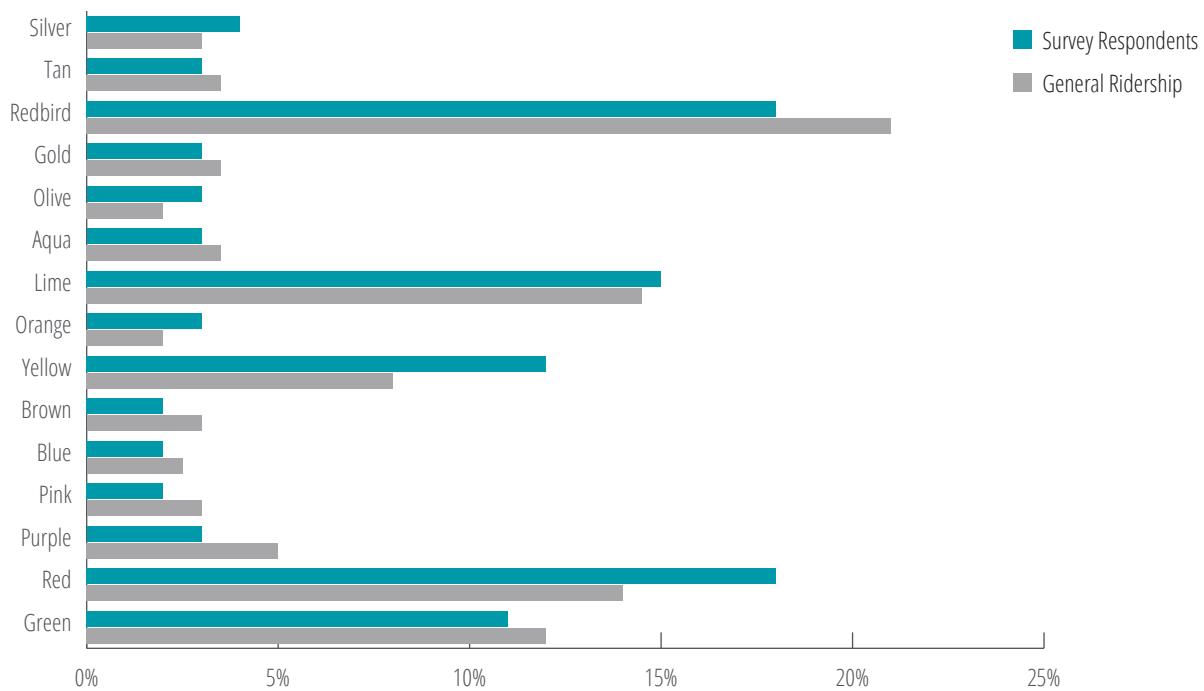


Figure 17: Percentage of Survey Respondents Compared to Route Ridership

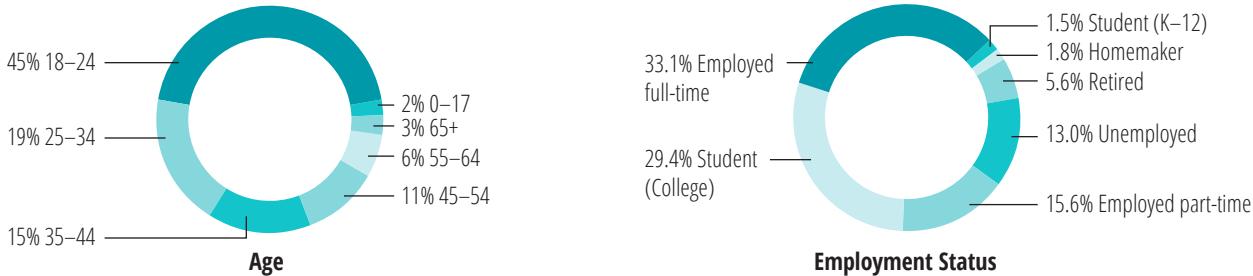


These methods gave MCRPC staff the confidence that the respondents are representative of the overall ridership. The following Fixed Route Rider Profile and Travel Characteristics are generalized from the survey results.

Fixed Route Rider Profile

Transit riders are younger.

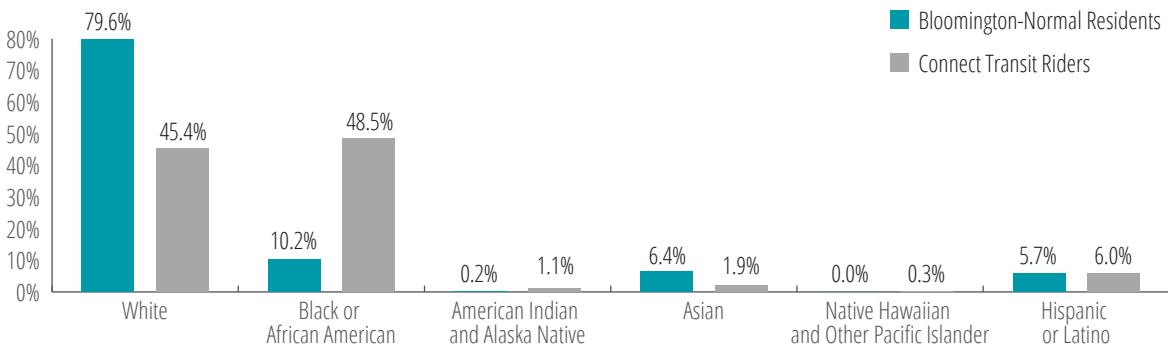
Approximately 47% of all respondents are under the age of 24 years. 31% of all respondents are students.



Communities of color make up the majority of transit ridership.

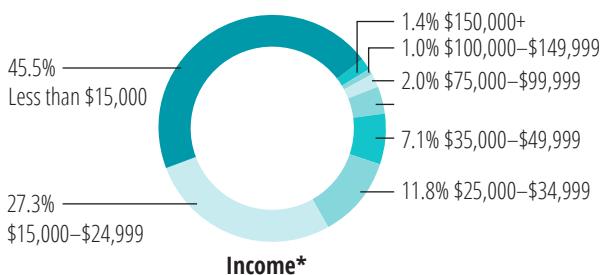
Of the respondents who provided this information, approximately 45% are White, 49% are African Americans, and other racial groups make up 3%. Comparing this to the general demographic profile of the community, which is nearly 80% white, 10% African American, and the remaining 10% split between other races, the racial disparity becomes very clear.

Race & Ethnicity



Transit riders are low income.

92% of all riders reported incomes under \$50,000. Of those, over 50% of them reported incomes under \$15,000. Given the median income of Bloomington-Normal is \$58,806, it is clear that Connect Transit serves those most in need.

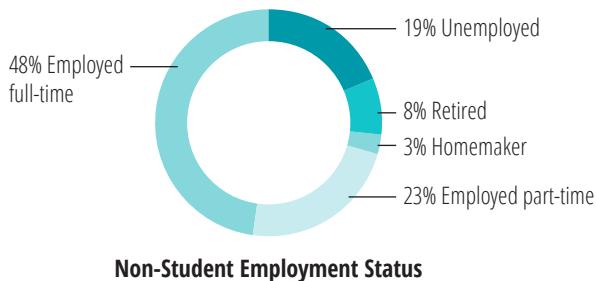


Nearly 67% of riders who are paying cash and disclosed their income bracket reported extremely low household incomes (under \$25,000/year). **This vulnerable population is paying more in transit charges by comparison to those whose income allows them to purchase a monthly bus pass.**

*Out of 798 who responded

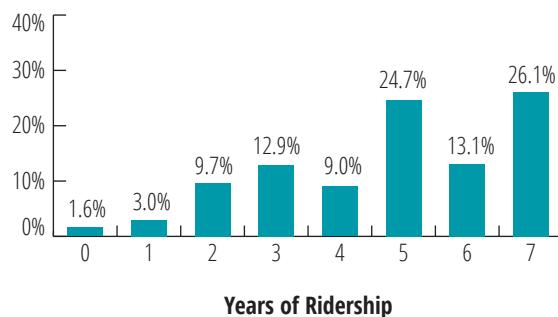
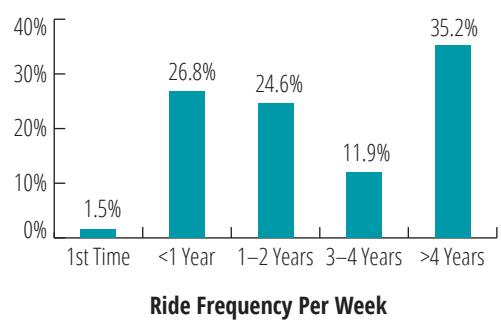
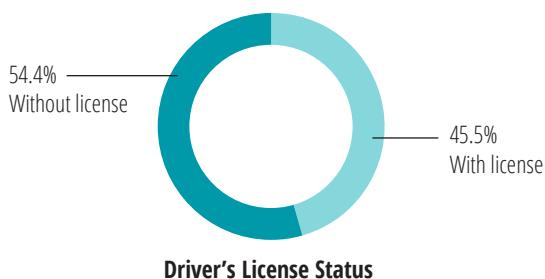
Majority of the non-student riders are employed.

Nearly 70% of respondents, who are not students, said they were either employed full or part time. 48% are employed full-time.



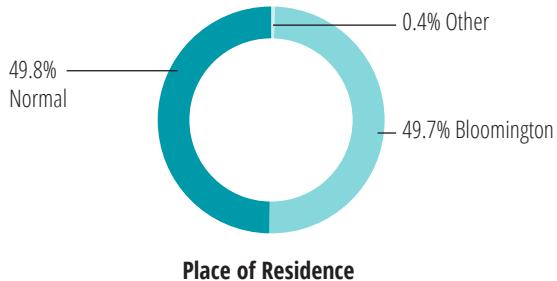
Current ridership is transit dependent.

Over 55% of all riders do not have a valid driver's license. 86% of them take the bus more than three times per week. Nearly half of all riders have been using transit for more than three years.



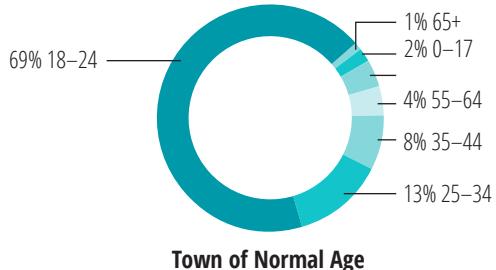
Bloomington and Normal riders are very different.

While the respondents of Bloomington and Normal are equally split, demographic characteristics of these groups are very different.

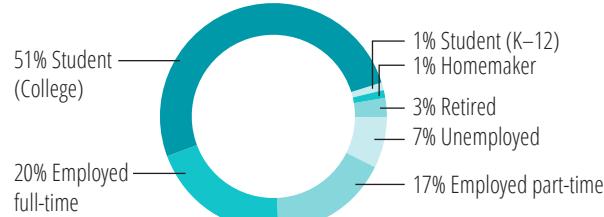


Normal riders are:

a. Students: Nearly 70% of them are under the age of 24. Majority of them are students (52%).



Town of Normal Age



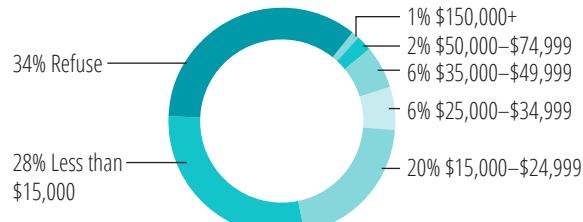
Town of Normal Employment Status

b. 64% of the non-student population riding the bus is employed, either full-time or part-time.

Over half of them make under \$24,000.



Town of Normal Non-Student Employment Status

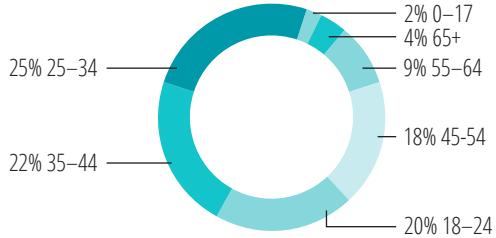


Town of Normal Non-Student Income

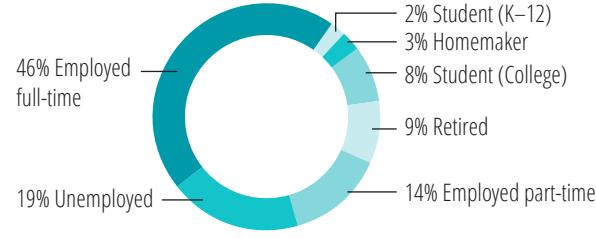
Bloomington riders are:

a. Employed full-time: 46% respondents are employed full-time and only 10% are students.

48% of respondents are 25-45 years old.

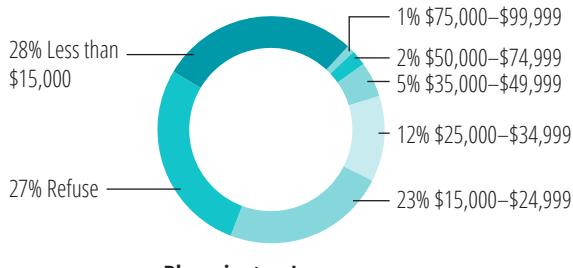


Bloomington Age



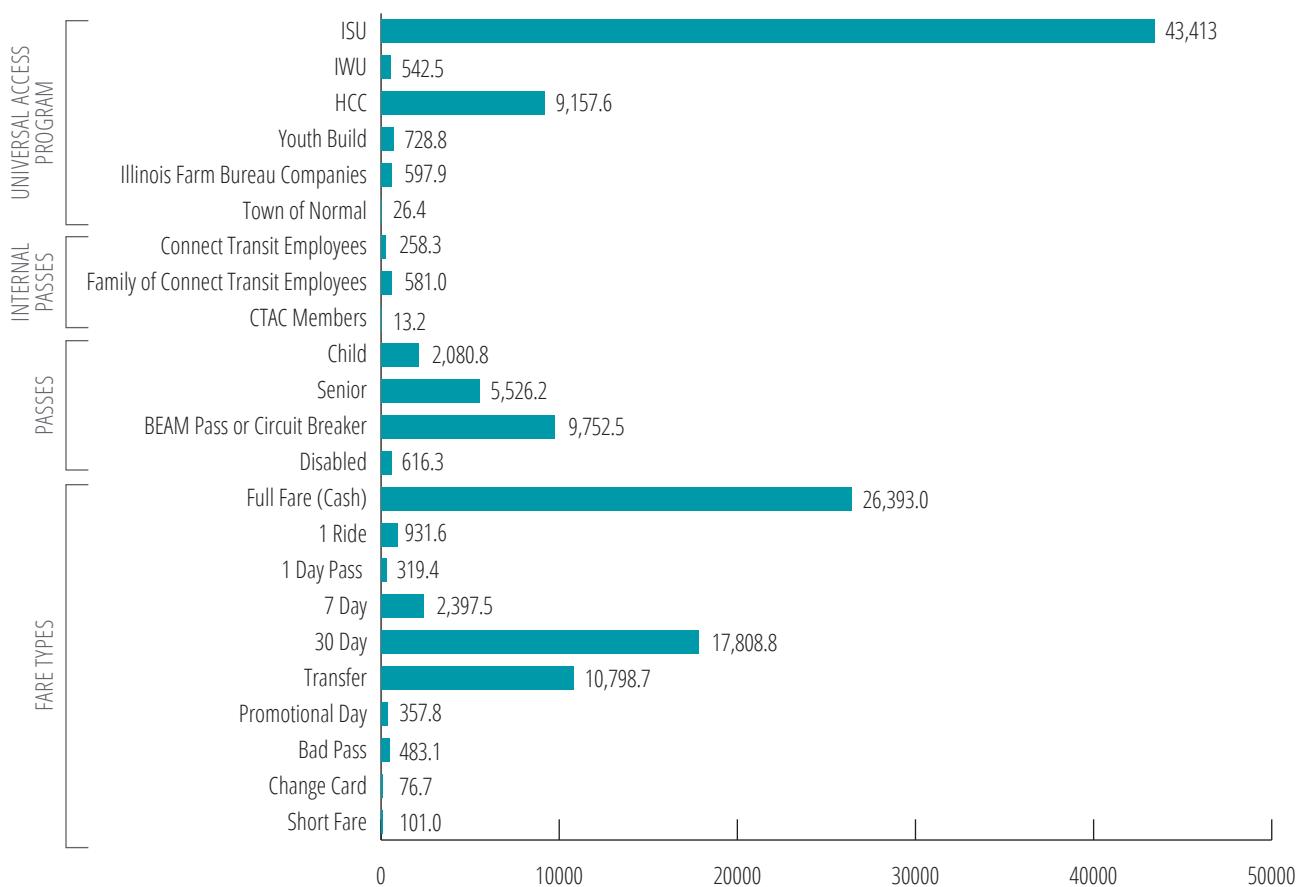
Bloomington Employment Status

b. 60% of respondents are employed either part-time or full-time (reference chart above). Similarly to Normal's non-student population, over half of them make under \$25,000.



Bloomington Income

Figure 18: ISU and Heartland are Taking Advantage of the Universal Access Program.





GAPS & OPPORTUNITIES ANALYSIS

Transit Propensity

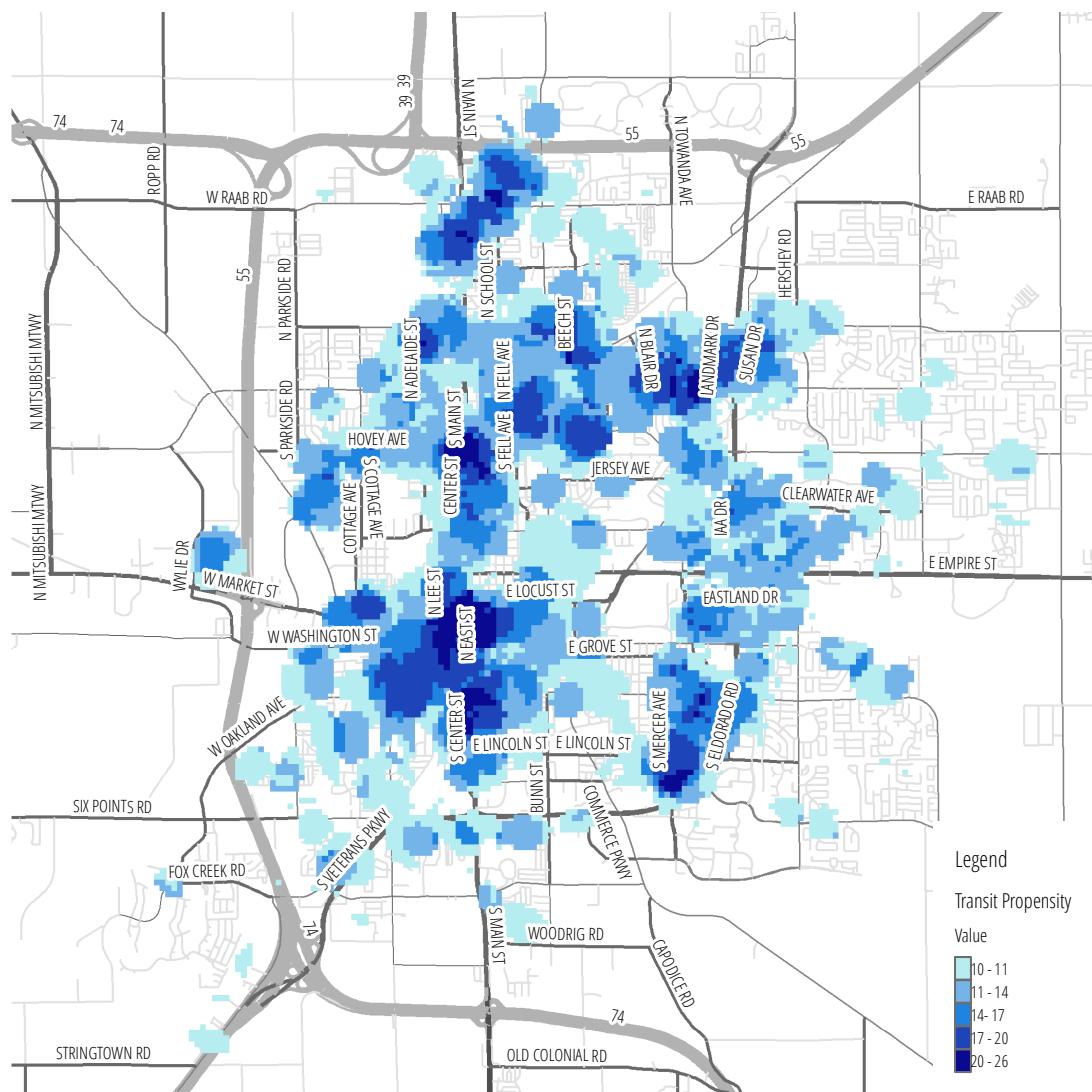
MCRPC staff conducted Transit Propensity analysis to identify gaps in transit service and opportunities for improvement. The purpose of this analysis is to identify geographical areas within Bloomington and Normal that have the potential to use transit service. This analysis relies on socioeconomic traits identified by national studies as indicators of populations with a higher than average likelihood to use public transit. To identify areas with higher than average transit markets, this analysis applied weights to ten variables obtained from a variety of local and national data sets. The resulting composite score is mapped to show areas with higher likelihood to use transit service and/or that may have a greater need for public transit service.

Unless otherwise noted, all attributes are measured by counting the instances of the attribute within a quarter-of-a-mile, of every 250 by 250 foot square (geographic cell) across Bloomington-Normal. These ten attributes are each ranked from 1-4, 1 being low number of instances and 4 being very high number of instances. The output sums these numbers and gives an overall score displayed between 10 and 40. 40 is the maximum score possible, but the highest score achieved was 26, found just west of Downtown Bloomington.

Table 3: Attributes Analyzed for Transit Propensity

ATTRIBUTE	WEIGHT
1. Student Apartments and Dormitories College students and college-age persons are a large user of Connect Transit Services. This population is not just using the Redbird Express and Yellow lines, but several others to move around Bloomington-Normal according to the Connect Survey results.	1-4
2 & 3. Subsidized Housing Units and Mobile Homes According to Connect Transit's 2018 survey, almost 85% of respondents who gave an answer to the income question made under \$35,000 annually. For this reason, subsidized housing units and mobile homes were weighted heavily in this model.	4
4. Assessed Value <\$40,000 Homes with assessed values under \$40,000 were accounted for as possible transit dependent locations.	1-4
5. Connect Mobility Drop-offs and Pickups It is clearly more expensive for Connect to send out mobility shuttles than to run fixed-routes. Hence the location of frequent mobility users was mapped and weighted heavily. Transit accessibility measured at 1/8 mile to the bus stop.	4
6. Housing Density A simple measure to identify existing locations of population densities	1-4
7. Senior Tax Exemptions Typically, seniors are unable to drive on their own and having more accessible transit would allow them to become independent of help from family.	1-4
8. Jobs Density 2015 Census Bureau's Longitudinal Employer-Household Dynamics program employment data at block level was used to measure job density.	1-4
9. Key Transit Destinations In future analysis, we hope to have a more comprehensive list of these locations, but in this model, hospitals and grocery stores were considered key transit destinations.	1-4
10. Medical Centers Medical Centers allow people to seek treatment before health declines too far or before it declines at all, saving expensive trips to the ER. These facilities include urgent cares, outpatient centers, behavioral health centers, and more.	1-4

Figure 19: Transit Propensity Map



Fixed Routes Analysis with Respect to Transit Propensity

Figure 20: Transit Routes, Bus Stop Daily Ridership in Conjunction with Transit Propensity

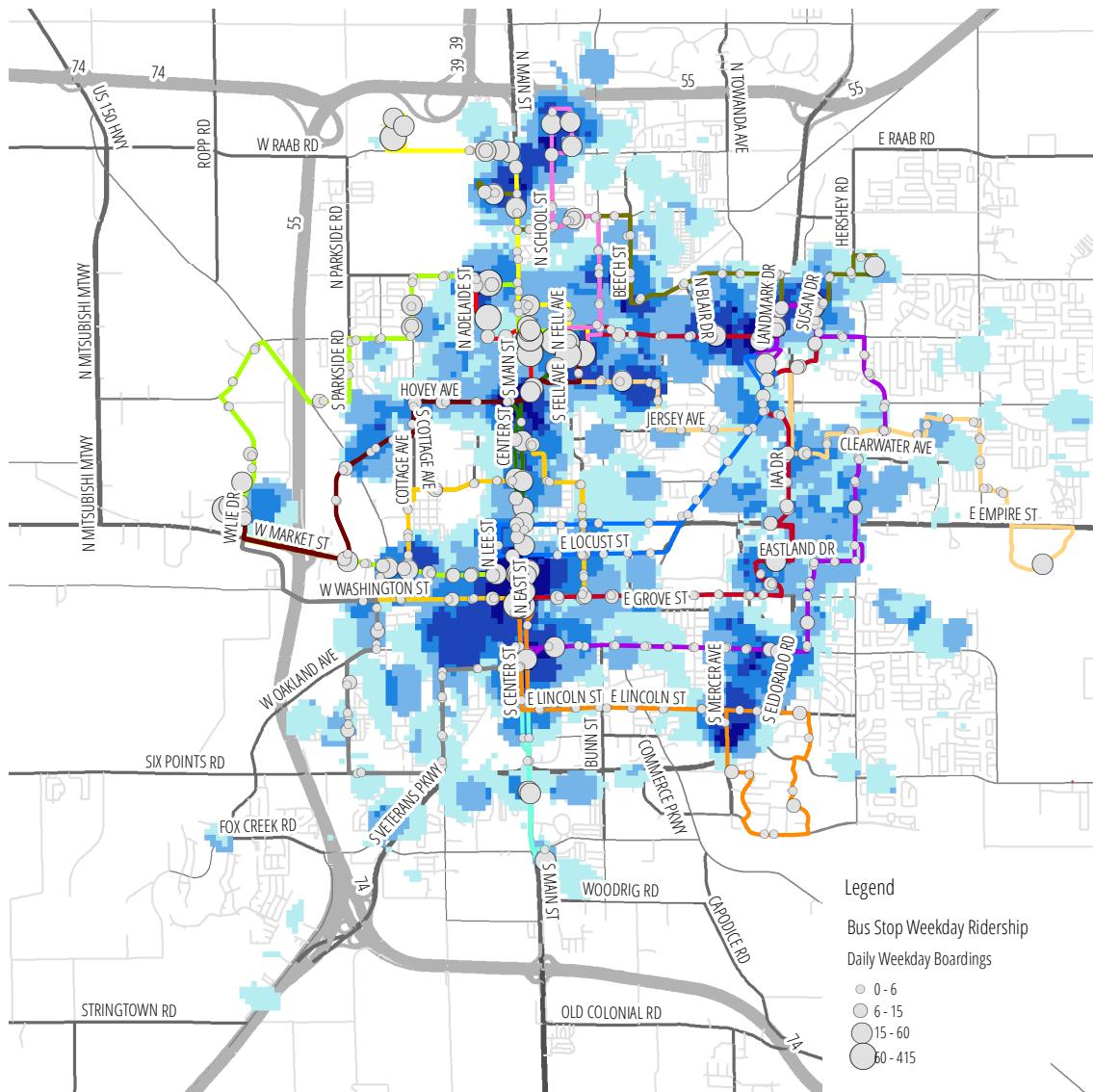
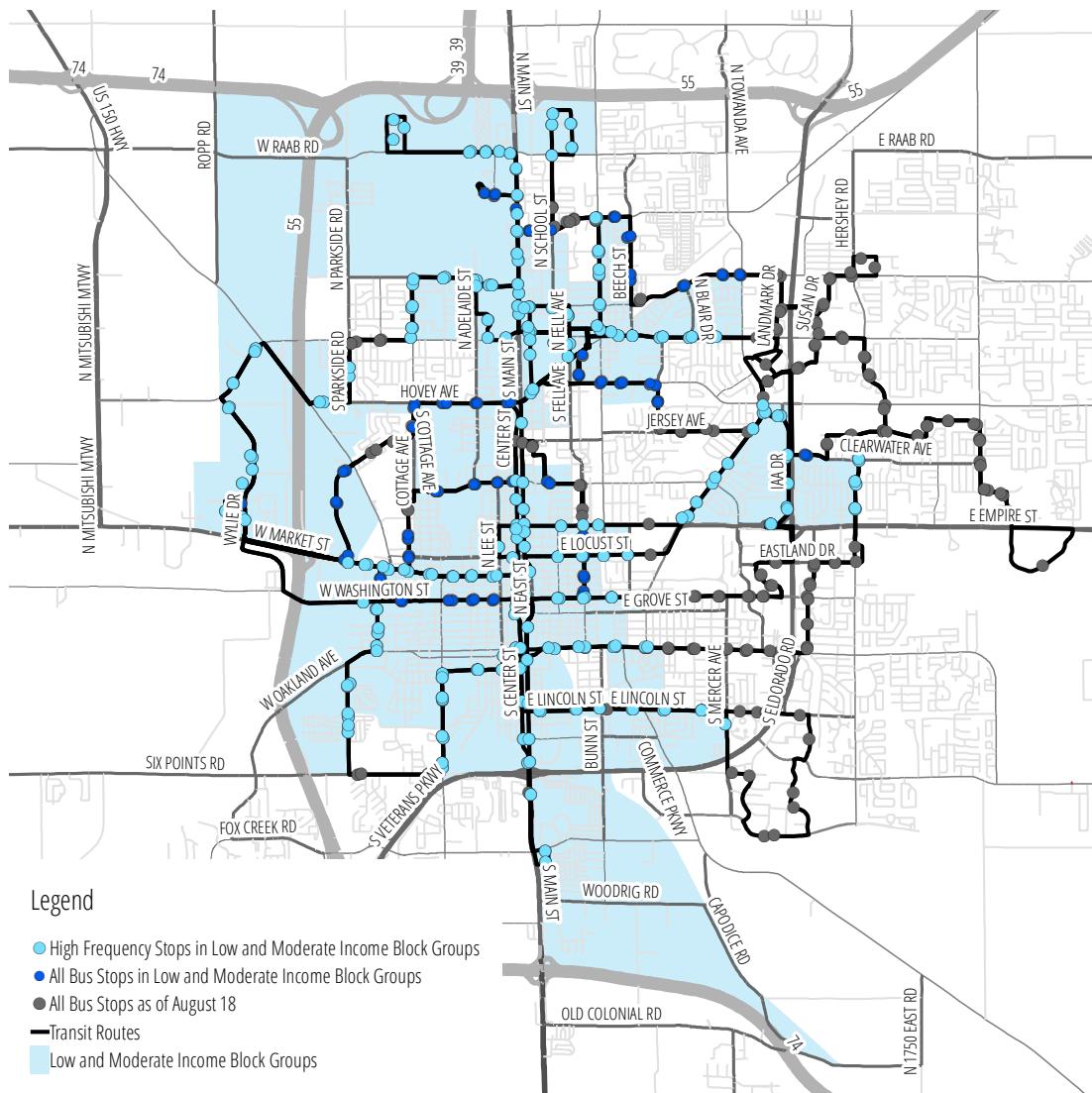


Figure 21: Bus Stop and Frequency of Service within Low and Moderate Income Census Blocks



56.96% of Census Block Groups in Bloomington-Normal are considered low and moderate income. 74.29% of all high frequency bus stops (stops that are serviced every 30 minutes for some or all of the day) are within these low and moderate income block groups while 66.46% of all bus stops fall within these block groups.

As shown in Figure 19, 20, and 21, Connect Transit routes are generally structured to best serve the community. The routes and bus stops seem to be fairly distributed by need, in proximity especially to those who rely on transit as well as to those who may not need it, but wish to utilize it. Careful analysis of route data in conjunction with the Transit Propensity model, route frequencies, and ridership averages revealed the following gaps.

- **The Silver and Purple Routes** do not have high ridership during the morning peak hours (approximately 5:15 AM to 10:30 AM). These routes pick more riders in the late morning and see their highest riders during afternoon peak . This could be because these routes are shopping oriented. The Purple route connects Downtown Bloomington to Shoppes at College Hills (both shopping areas) traveling North/South on Prospect and then Hershey road where several shopping centers are located. Along the east/west branch of the trip, Oakland Avenue, there are several medium and high density residential neighborhoods that are most likely using this route to get to shopping destinations. The Silver route connects Downtown Bloomington to the Walmart on West Side of Bloomington. Its increase in ridership during the morning off-peak hours and afternoon peak hours suggests that majority of these riders are using this route to shop at Walmart. Connect Transit should re-examine the frequency of these routes during morning peak and morning off-peak hours and consider changing the peak and off peak hours.
- **The Blue Route** has consistently low ridership per hour throughout the day regardless of frequency. This route connects Downtown Bloomington to the Shoppes at College Hills and is routed through low transit propensity areas. Connect should examine rerouting Blue through higher transit propensity areas, such as Vernon Avenue in Normal, to improve its ridership.
- **The Brown Route** has 60 minutes frequency and is among the routes with low ridership. Given the higher transit propensity along Brown Route, driven by a grocery store and several lower income apartments, change of frequency to 30 minutes or better could improve its ridership.
- **The Tan Route** has 60 minute frequency throughout the day. The majority of this route east of Veterans Parkway passes through low transit propensity areas to reach the Airport. However, the section between Broadway in Normal and Veterans Parkway has higher transit propensity. Connect Transit should investigate possibilities of splitting this route into two, using the Shoppes at College Hills as a minor transfer hub. This would allow for a higher frequency between Uptown and the Shoppes and quicker trips.
- The area South of Downtown Bloomington, bound by Washington on the North and Oakland on the South, Main Street on the East and Morris Ave on the West, indicates higher transit propensity with low coverage. Several routes run along Washington Street and Main Street. Connect should examine the possibility of expanding coverage in this area.

In addition, Connect Transit staff is currently working on restructuring the Olive, Red, and Lime Routes.

- **The Olive Route** gives access to destinations such as the Normal Community Activity Center, Baby Fold, the Activity and Recreation Center, Grossinger Motors, and Bridgestone/Firestone Co., though the stops in front of each of these locations have 0-3 daily total riders. High ridership stops are on Parkway Plaza in front of Walmart, on Shelbourne in front of the apartment communities at the intersections of Larry and Charlotte, off of Fort Jesse at the OSF Prompt Care, and on Orlando to serve Orlando Northbrook Estates.

Several locations along this route have very low ridership. Those include Fort Jesse Road, west of the Fort Jesse Road and Landmark Drive intersection to Beech Street, as well as Beech Street. The highest ridership bus stop along this stretch is in front of the Activity and Recreation Center and only has 2.96 daily total boardings while 4 of the 13 stops along this stretch have no ridership at all.

Based on ridership numbers and locations, Connect Transit staff is evaluating the possibility of eliminating the Olive Route and covering the high frequency stops with other routes. The Pink route has already been adjusted to serve the stops on Shelbourne at Larry and Charlotte which were averaging 10-15 daily riders with Olive alone. Residents closer to Main Street (such as Orlando Northbrook Estates) will be able to use the Yellow or Pink to transfer to the Red in order to get to Walmart. The Red would also be adjusted with a section running as Red Express and stretching further to cover the OSF facility on Fort Jesse. These changes are generally inline with the findings of the propensity analysis (Figure 19). The two high propensity areas (Orlando area and Beech & Fort Jesse intersection) along the Olive Route will still be within a quarter mile of other routes. Care should be taken to ensure infrastructure to these bus stops exist and is maintained in good condition.

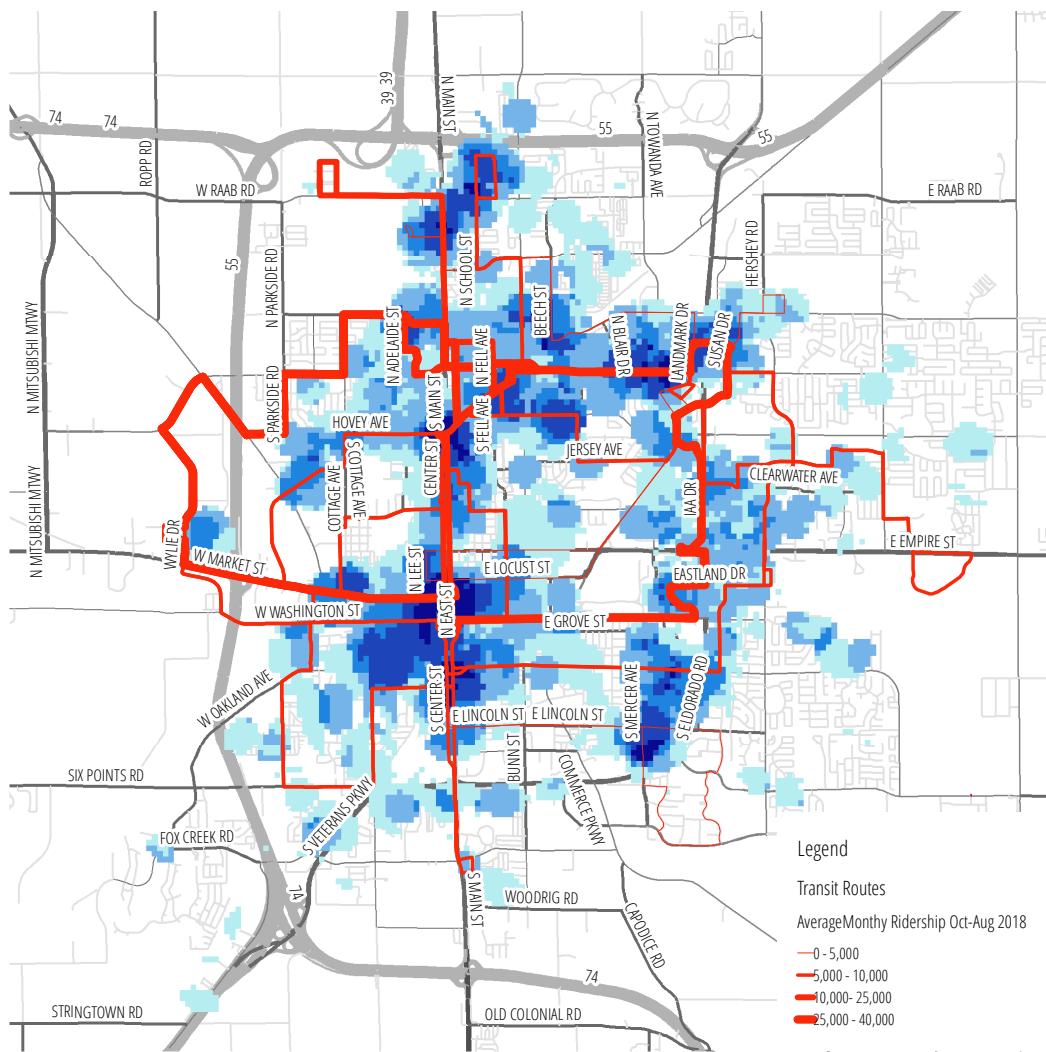
- **The Red Express** would run every 15 minutes during peak frequency along the College Avenue section of the regular Red Route. This route will run from Uptown Normal out to Walmart as usual and then extend further to the OSF Prompt Care on Fort Jesse currently served by the Olive. Currently, the Red route runs across Parkway Plaza and then moves south along Susan after stopping at Walmart. The proposed Red Express would go north on Susan to Fort Jesse and wrap around the OSF facility the same as the Olive currently does.
- This proposal would continue the mirrored service by adding a **Lime Express**. There would not be any route adjustments on the Lime Express, it would only be increased frequency (15 minutes) along West Market to offer quick service between Walmart and Downtown Bloomington.

Note: MCRPC conducted this analysis prior to public conversations regarding the Olive Route elimination. Additional analysis of the public feedback received on the proposed changes should continue to inform this and any route adjustments.

Major and Minor Transit Routes

Mapping the routes proportionally to ridership in conjunction with the Transit Propensity allows major and minor transit corridors to become evident. While ridership information was not available by each street segment, the map below reveals a very clear image of the major and minor corridors for transit.

Figure 22: High Intensity Transit Routes in Conjunction with Transit Propensity



Note: The route map shown below was created using the average monthly ridership from October 2017–August 2018 of each transit route. The routes changed slightly in September 2017, hence this six month average was used to ensure accuracy and consistency.

Table 4: Major and Minor Transit Corridors Recommendation

STREET	FROM SEGMENT-TO SEGMENT	CITY	TYPE
Main Street including its sections Center Street and East Street	Front Street in Bloomington to Gregory Street in Normal	BN	Major
Main Street	Gregory Street to Raab Road	Normal	Minor
Main Street	Front Street to Hamilton	Bloomington	Minor
West Market Street	From East Street to Wylie Drive	Bloomington	Major
East Washington Street	From Madison Street to Veterans Parkway	Bloomington	Major
Oakland Avenue	From Center Street to Hershey Road	Bloomington	Minor
Hershey Avenue	From Oakland Avenue in Bloomington to College Avenue in Normal	BN	Minor
College Avenue	From Hershey Avenue to White Oak Road	Normal	Major
Beaufort Avenue	From Main to Uptown Circle	Normal	Major
Raab Road	From Main Street to Community College Drive	Normal	Minor
Veterans Parkway Parallel²	From Washington Street to College Avenue	BN	Major

Considering the above data and information, Connect Transit should work closely with the City of Bloomington and the Town of Normal to designate the streets listed in Table 4 as Major and Minor Transit Corridors.

2 While Veterans Parkway could provide direct north south connection to several transit Routes. Its current layout, traffic flow, and connections to the surrounding land uses are not conducive to pedestrians, bicyclists or transit. In the short term, Connect uses roads laid out parallel to Veterans Parkway to serve major destinations along this route. In the long-term, Connect should continue to advocate for Veterans Parkway to be a complete street.



RECOMMENDATIONS

Group 1: Transit Service

As identified in the "Elements Needed to Create High Ridership Transit Systems" by the Transit Cooperative Research Program, Report 111 sponsored by the FTA and acknowledged by Connect Transit in its Fleet Management Plan, two internal modes effect ridership. Those are Price/Availability and Service.

Service quality factors

- Route design;
- Service schedules and frequency of service;
- Service reliability (perceived and actual);
- Accessibility features (for persons with disability);
- Parking availability (park and ride lots)
- Availability, ease of obtaining, and usefulness of information and customer assistance;
- Nature of passenger amenities (i.e., related to cleanliness, ascetics, and comfort of vehicles and stations/bus stops/shelters);
- Ease of fare payment (e.g., purchase of prepaid options and type and technology payment);
- Nature of integration (e.g., service/schedule and fare policies and payment) with other agencies in the region;
- Perception of agency safety and security;
- Public image of agency.

Price/availability factors

- Fare levels;
- Nature of subsidy programs (e.g., with employers, social service agencies, and education institutions);
- Amount (including service hours/days) and types of service available.

In 2015, Connect Transit hired Nelson/Nygaard to conduct a comprehensive operational analysis on its fixed route service. That analysis identified strengths and weaknesses using the above factors and made recommendations to improve routes and service options. Connect Transit implemented a new fixed route system in August 2016 based on those recommendations. As noted in the transit propensity analysis, the new fixed route system covers the community well. Below are a few additional opportunities to help improve service.

1. Make minor adjustments to the routes to better serve the community.

- a. Connect Transit should further examine and fill the gaps in service identified in Section 2 of the Gaps and Opportunities chapter. Some changes, like route frequency changes suggested for Silver and Purple, could be quick fixes while other suggested changes may need additional analysis.
- b. Connect should establish criteria for agencies, organizations and individuals to request for minor route modifications.

2. Institute fare capping.

See recommendations in the Innovative Solutions Group (Group 6).

3. First Mile and Last Mile Solutions

After carefully evaluating several first and last mile solutions for Connect, it is clear that traditional solutions, like feeder loops or utilizing ride sharing services, may not be financially feasible for communities like Bloomington and Normal. Solutions like autonomous shuttles may not be an option within the next 3 to 5 years. At this time, partnering with City of Bloomington, Town of Normal and other stakeholders to improve walk-ability and bike-ability to and from the bus stops in the community is the optimal solution. [See Group 2 recommendations for additional discussion.]

Group 2: Transit Supportive Development (TSD)

The term “Transit Supportive Development” (TSD) broadens the definition of a concept that has existed for years—that the utilization of effective and predictable transit encourages surrounding development, which, in turn, supports transit. The basic principle is that convenient access to transit can be a key attraction that fosters mixed-use development, and the increased density near transit stops not only supports transit but also may accomplish other goals, including reducing urban sprawl, reducing congestion, increasing pedestrian activity, increasing economic development potential, realizing environmental benefits, and building sustainable communities.

As identified in Appendix C, Comprehensive Plans for Bloomington and Normal, Regional Housing Study, and the Long Range Transportation Plan consistently call for three main elements that are important for communities to be transit-supportive. Those include: 1) coordinating land use and transportation, 2) supporting multimodal mobility, 3) connecting people to transit. The suggested actions below provide additional specifics to help forward those general ideas.

4. Designate major and minor transit corridors.

- a. Formally designate the street segments identified in Table 4 as Major and Minor Transit Corridors. This report includes suggested land use guidelines as a starting point. As the first step, Connect Transit should work closely with various stakeholders such as municipalities, health representatives, Illinois Department of Transportation and others to mutually agree upon the guidelines suggested in this document or expand them based on additional feedback. [Connect Transit in partnership with MCRPC]

5. Commit to improved transit service along major and minor corridors.

- a. Connect should commit to fixed routes and bus stop locations along these corridors to provide predictability to the community. Make capital improvements such as transfer centers, and bus shelter improvements along the transit corridors and identify them in the Transportation Improvement Plan (TIP). [Connect Transit]
- b. Connect should commit to higher frequencies of service along these routes. Suggested frequency is at least 15 minutes or better for major corridors and 30 minutes or better service along minor corridors during the peak hours. [Connect Transit]

6. Support multi-modal mobility.

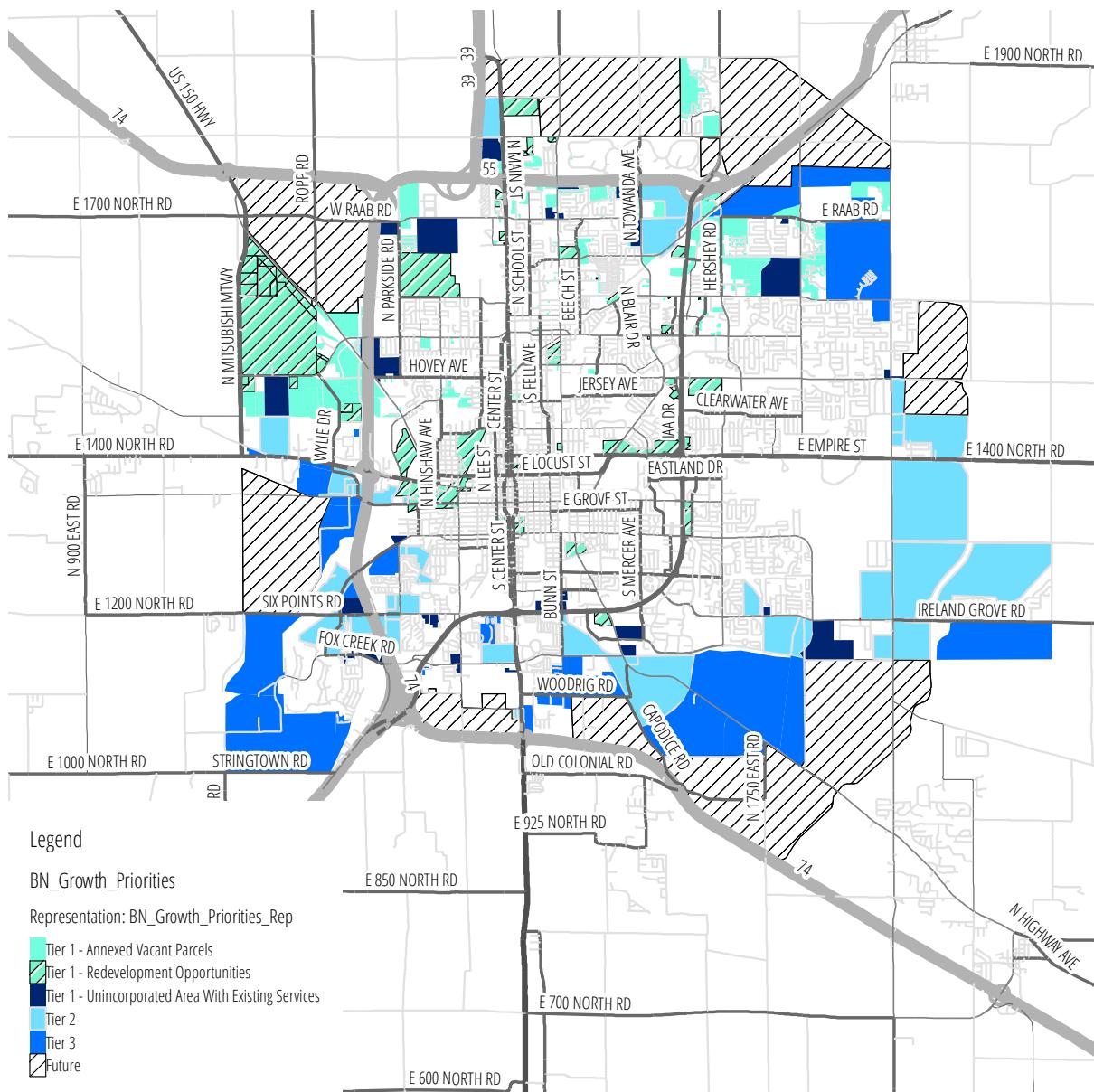
Connect Transit has and continues to be a key partner in advocating for multi-modal mobility planning. Recent examples include Connect's active partnership with MCRPC on projects like integrating health in corridor planning along Main Street. Connect actively promotes programs such as Good To Go Commuter challenge, Light The Night, Bike Share 309 and others that encourage alternatives to driving alone.

- a. Connect staff should continue to partner on programs, such as bike-share and vision zero, that help inculcate a culture of multi-modal mobility in the community. [Connect Transit]
- b. Support implementation of complete streets policies. Both Bloomington and Normal adopted Complete Streets Policies. MCRPC is currently working with Hoyle Consulting group to conduct a study that will help prioritize street segments for Complete Streets implementation. Pedestrian access to bus stops is one of the key considerations in prioritizing street segments. Connect Transit is an active participant in that study process. Connect should support implementation of that study by working with municipal partners to improve pedestrian and bicycle access to bus stops along these corridors. [Connect Transit in partnership with MCRPC]
- c. There are several plans to improve Main Street as a complete street dating back to 2005. However, since the facility is owned by the State, those plans did not come to fruition. Now, MCRPC received a grant to reexamine Main Street corridor from the health perspective. Main street corridor re-design is once again in the limelight of community conversations. Connect should be actively involved in these conversations as Main Street is identified as a major transit corridor. [Connect Transit]
- d. Connect Transit should closely monitor First Mile/Last Mile solutions (FMLM) as outlined in Group 6 of the Recommendations chapter.



Figure 23: Growth Priorities

Comprehensive Plans adopted by both Bloomington and Normal identifies priorities for future growth. Figure 23 shows those priorities. Many areas identified as Tier 1 growth priorities are conducive to Transit Supportive Development. Connect should work closely with the municipalities as development opportunities arise in these areas to ensure necessary infrastructure is being proposed to allow for transit supportive developments.



Transit Supportive Development Land Use Guidelines

I. Encourage a mix of uses and higher residential densities along major and minor transit corridors.

Transit Corridor	Low Density	Medium Density	High Density	Mixed Use
Immediately adjacent to the corridor	Discourage	Allow	Encourage	Encourage
Within a quarter mile of the bus stop	Discourage	Encourage	Encourage	Encourage

Definitions are based on guidelines from missingmiddlehousing.com:

Low Density Residential: Less than 6 DUs/acre (typically single family detached houses)

Medium Density Residential: 6–35 DUs/acre (typically single family attached houses such as row-houses, duplexes, condominiums, etc. or small apartments)

High Density Residential: 20–80 DUs/acre (typically multi-family apartments)

II. Encourage shared parking along transit corridors and within quarter mile of transit stops along the corridors.

Parking demands, like other transport demand patterns, operate on a peak and off-peak schedule depending on related land use. Distinct but complementary patterns, such as “office parking” that is generally empty in the evenings and on weekends and “residential parking” that is generally fuller in the evenings, offer an opportunity for cities to better satisfy residents and commuters without increasing supply. Shared parking is a land use/development strategy that optimizes parking capacity by allowing complementary land uses to share spaces, rather than producing separate spaces for separate uses.

Examples of Illinois cities using shared parking as a sustainable community development strategy:

- Arlington Heights promotes and manages shared parking in public garages and encourages developers to provide shared parking in mixed-use developments
- Plainfield: shared parking is allowed for non-residential uses
- St. Charles parking policy

“The same off-street parking spaces may be shared between two (2) or more separate uses on the same lot, but only to the extent that the demand for such spaces by the separate uses will not occur at the same hours during the same days of the week. No shared parking shall be approved unless the Director of Community Development makes a finding that the use of shared parking spaces will not occur at the same hours during the same days of the week, based upon the type of uses and their hours of operation.”

- While Bloomington and Normal do not have written shared parking policies, both cities allow shared parking in their downtowns.

III. Design guidelines.

Establish sub-districts with specific design guidelines that support transit. These sub-districts can be designated based on multiple factors such as proximity, land-use mix, and intensity of activity. Some communities regulate the uses, form, street scape, parking, and other public places in these districts by ordinance. While this guideline is consistent with the Comprehensive Plans for both Bloomington and Normal, these communities may not be ready to implement these within the next three to five years.

Group 3: Better Bus Stops

According to the Connect Transit Facility Guide, the following guidelines were set forth for the designation of fixed stops:

1. Stop spacing would be approximately every quarter-mile
2. The ideal stop placement is on the far-side of an intersection, with some exceptions
3. Ideal length of a stop is 85 feet.
4. Stops are sited considering ADA compliance and the path towards accessibility.

The following are among the criteria laid out for providing shelters:

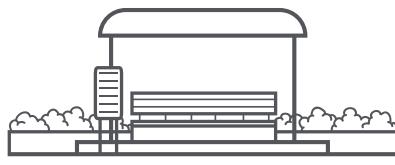
- A. Stops with the highest levels for average daily ridership will receive priority for shelters. A bus stop must have at least 15 passenger boardings per day to qualify for a shelter. Connect will review bus stops with at least 15 passenger boardings a day and prioritize to reflect the highest to lowest priority.
- B. Stops that have enough ridership to warrant a shelter must also have a site that can physically host a shelter and its dimensions. Issues that may prevent this include; not enough space in the right of way, grade issues, lack of connection to pedestrian infrastructure, and other reasonable factors preventing the placement of a shelter. All bus shelters will be installed with compliance to the standards set forth in Section 810 of the Americans with Disabilities Act Standards for Transportation Facilities.

There are 67 bus stops that have more than 15 passenger boardings per day. Of those, 21 of them have shelters either provided by Connect or otherwise. 46 locations that qualify for a shelter do not have shelters.

The facility guide also recognizes the need to install landing pads, benches, and other amenities at bus stops that do not qualify for a shelter. Passenger boardings must fall between 5 and 15 per day to qualify for those. There are about 100 stops that qualify under this guideline. Unfortunately, there is no good data available on number of stops with existing pads and other amenities.

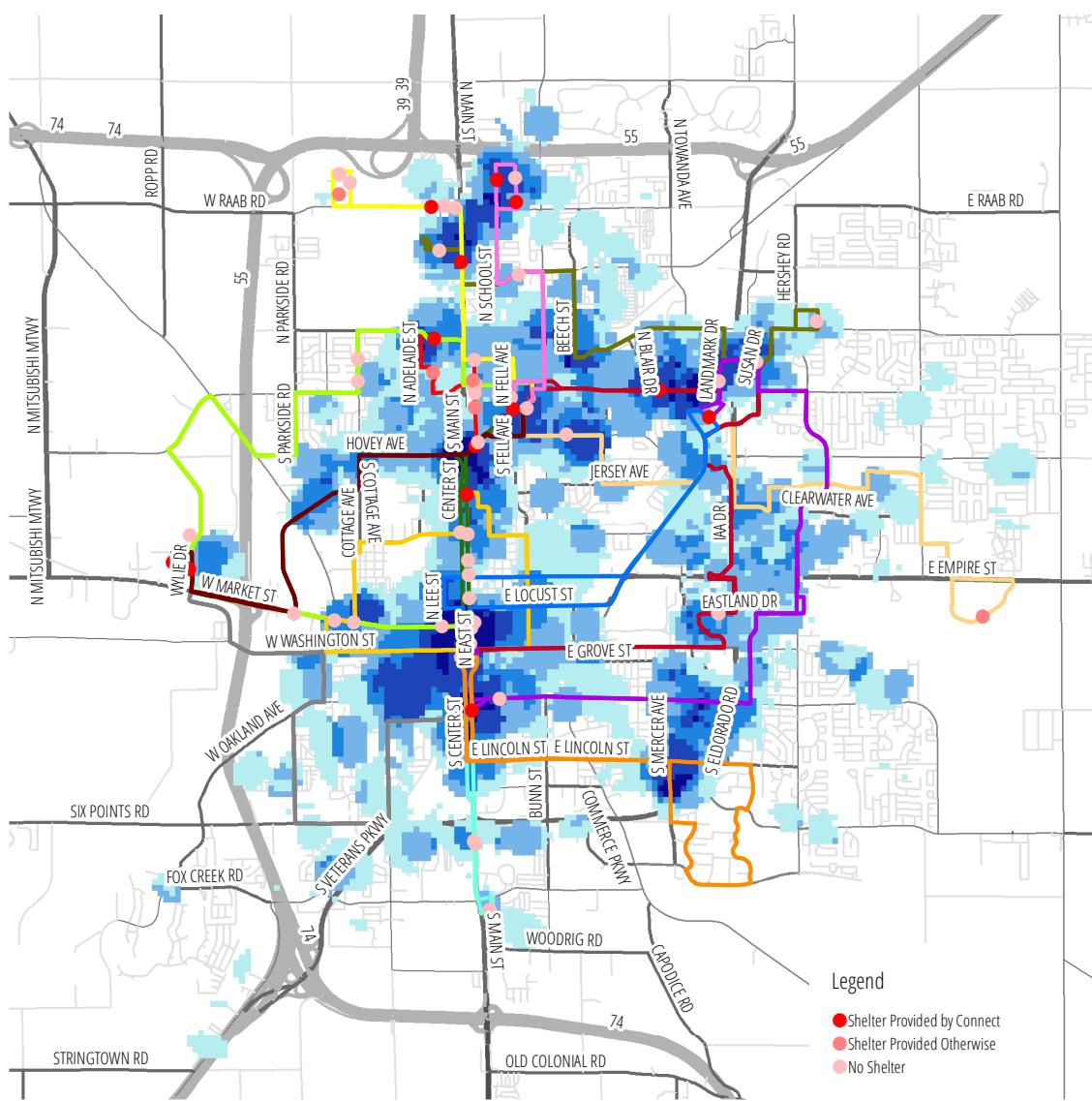
67 bus stops have more than 15 passenger boardings per day

21
bus stops
have shelters



46
bus stops don't
have shelters

Figure 24: Bus Stops with 15 or More Boardings Per Day



As shown in Figure 25, there are about 80 bus stops with no passenger boardings or alightings in the last 6 months. Many of them are in low transit propensity areas. Connect Transit should take these into consideration while investigating re-routing or frequency changes as suggested elsewhere in this document.

Per FY 2018–2023 Transportation Improvement Plan, Connect budgeted over \$800K for bus stop improvements over the next five years. However, access to pedestrian facilities and working with private property owners to build shelters continue to be areas of challenge. Based on these findings, short term actions include:

7. Maintain accurate data on bus stop facility improvements.

See recommendations in the Innovative Solutions Group (Group 6).

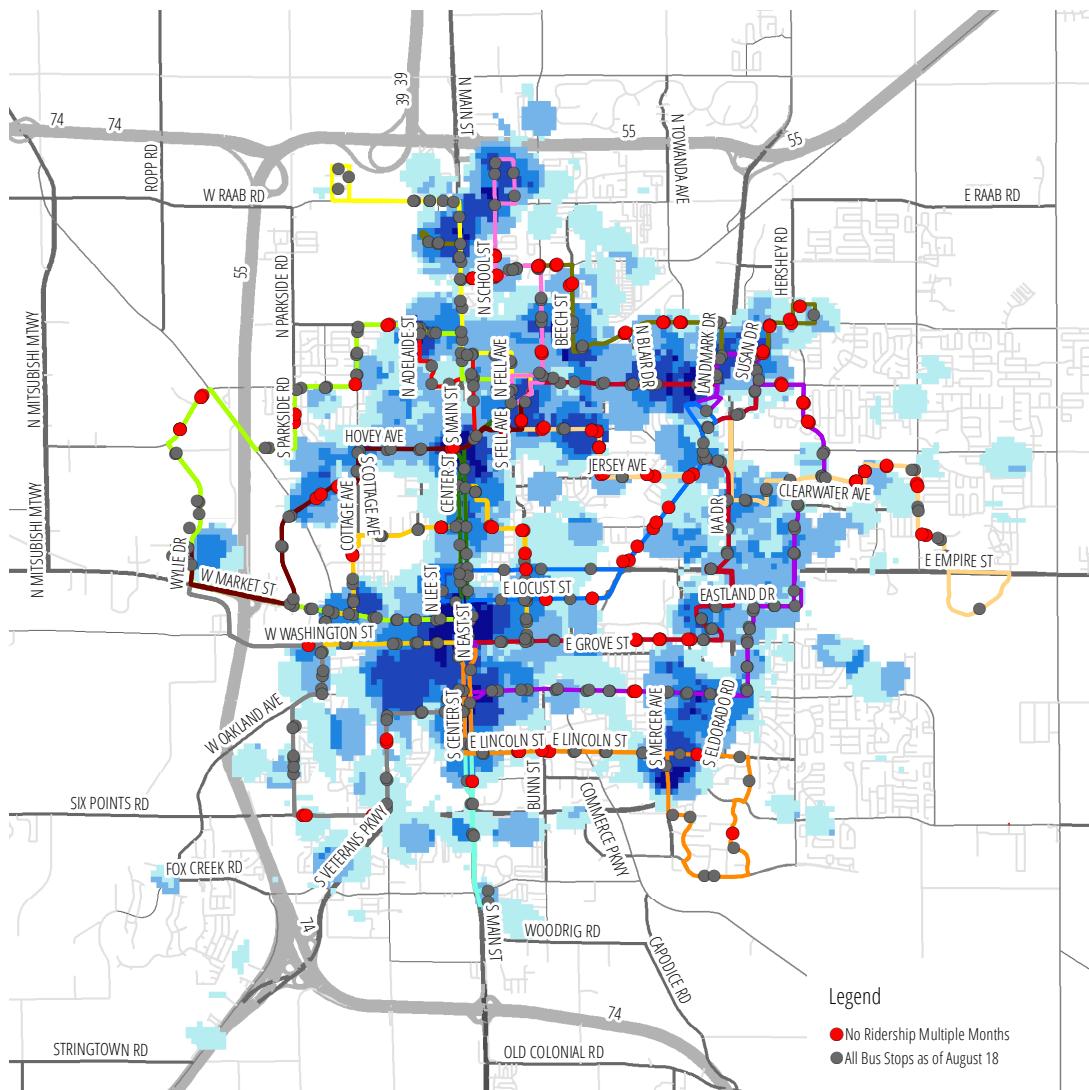
8. Create a detailed better bus stops plan.

- a. Create a comprehensive assessment of conditions at 46 stops that currently have over 15 boarding per day but do not have shelters. Such an assessment should include all aspects required to build a shelter. Per the guidelines those include, ADA accessibility at each stop, connections to existing sidewalks, off street paths, and other pedestrian facilities, and availability of easements to place ADA approved bus stop pad of 96 inches by 60 inches. Such assessment should be carefully coordinated with the City and the Town Capital Improvement Process (CIP). It should also include any potential partnership opportunities with nearby business or organizations. [Connect Transit in partnership with MCRPC, City of Bloomington, Town of Normal, and nearby businesses]
- b. Connect should work with the appropriate stakeholders to provide bus shelters at these locations prioritizing the major and minor corridors. [Connect Transit]
- c. Several of these stops can act as a nucleus for place making. Connect should work with the appropriate stakeholders to identify opportunities that improve the functionality of these stops. Many communities treat bus stops as opportunities for public art as well as co-locate other neighborhood needs such as little free libraries, fitness centers, urban gardens, charging stations, solar panels, and much more. Higher ridership from specific groups—such as the students—could warrant certain amenities like charging stations to be tailored to certain bus stops. [Connect Transit in partnership with MCRPC and Municipal staff]



This bus stop is a result of an initiative called "Transit: Creative Placemaking with Europe in Baltimore" in Baltimore, Maryland

Figure 25: Bus Stops With Zero Rides In 6 Months



Group 4: ADA/Para Transit

To support the current Connect Mobility service as well as anticipated future demand based on demographic and growth trends, in the short term Connect Transit may pursue the following:

9. Continue local and regional alliances.

Connect Transit can increase the benefits it derives from partnerships with local government and agencies through the continuation and expansion of ongoing cooperation, including in areas relating to Mobility service. Short-term actions include:

- a. Continuing regional cooperation with other providers through the MCRPC Transportation Advisory Committee to best leverage sharing of resources and response to needs.[Connect Transit with MCRPC]
- b. Continuing consultation regarding structural changes to Connect Transit organization to streamline program administration where possible. [Connect Transit and IDOT]
- c. Working with Illinois State University, Heartland Community College, Lincoln College, and Illinois Wesleyan University, investigate means to integrate institutional resources with Connect Mobility qualification procedures to ease access for the collegiate community; Seek a similar integration process with other large institutions, corporations and specifically medical facilities, to encourage and support a proactive approach to paratransit needs by these organizations. [Connect Transit]
- d. Understand the mobility passengers. Work with frequent mobility destinations, identified in Table 2 of the Connect System Profile chapter, to further understand the nature and type of individual mobility needs. These conversations could identify transit solutions that provide better transit choices for mobility passengers and are less expensive than mobility trips for Connect.

10. Fare

- a. Revise the structure of Mobility passes to allow their use on fixed route vehicles when possible for the Mobility rider. [Connect Transit]
- b. Investigate and analyze of patterns of use frequency to evaluate cost consequences. [Connect Transit]

11. ADA Requirements

Connect Transit works to maintain compliance with regulations, and will benefit from a strong and transparent program of documenting compliance and response to rider concerns. Short-term actions include:

- a. From Connect data resources and current regulatory information, develop and distribute a stand-alone periodic report on Connect Transit actions in support of ADA and related regulation, such as the compliance efforts with respect to new bus stop infrastructure. [Connect Transit and MCRPC]
- b. Proactively consult with FTA regional staff regarding potential issues in compliance, and report findings and results to the Board and public. [Connect Transit and FTA Regions]
- c. Work cooperatively with local governments and agencies to engage them in compliance actions as appropriate. Specifically, proposed bus stop locations and infrastructure installation should be carefully aligned with all ADA requirements, preferably in the form of published ADA compliance checklist for each infrastructure installation.[Connect Transit, City of Bloomington, Town of Normal, and MCRPC]

Group 5: Marketing and Community Engagement

Public image and perception of the agency affects its ridership. While Connect used several different ways of promoting its message, it was not consistent until recently. In FY 2018 Connect Transit began streamlining its message with a new hashtag campaign, #GetConnected with Connect Transit. Connect Transit's marketing programs are driven by the marketing plan approved by the board annually. Connect Transit rolled out the Community Bus, a multi-purpose room on wheels that feature a waiting room area, meeting rooms, TV and much more, in early 2018. The goal is to partner with various organizations in the community to help better serve different areas throughout Bloomington-Normal. Connect held voter registration drives, fresh food markets, reading literacy nights for children, mobile pop-up museums and much more. These efforts greatly enhanced the public image of transit in this community. The actions identified below will be complimentary to Connect's existing efforts while providing opportunities to expand its ridership.

12. Expand employer based bus pass program.

- a. Connect should work with McLean County Chamber Of Commerce to allow its membership, typically small businesses, to collectively take advantage of the employer based bus pass program. Such a program could allow many workers on hourly wage typically employed in service jobs to take advantage of lower transit costs. [Connect Transit with Chamber of Commerce]

Examples of such programs:

- Fort Collins, Colorado's TransFort program
 - Thurston County Chamber Buspass discount program for not-for-profit organizations
- b. As indicated by the ridership data, many employers who currently are part of Connect's Universal Access programs are not fully taking advantage of the program. Connect should partner with these employers to increase education and awareness about this benefit. [Connect Transit]

13. Continuously engage the community.

- a. Currently, riders or community members can go on the Connect Transit website to submit a comment or a complaint. Connect should investigate the possibility of expanding feedback opportunities through the current transit app. Such feedback loop should allow riders to provide feedback on bus stops along with routes, service, and other aspects related to transit. [Connect Transit]
- b. Educate the community on Transit Supportive Development. Emphasize the impact of land development patterns on Connect Transit's ability to provide high quality transit service. For example, developers should be mindful of transit proximity and service prior to siting developments that attract transit dependent populations, such as affordable housing or an assisted living facilities.

Group 6: Innovative Solutions

Many 21st century innovations are revolutionizing transit systems. These include electric vehicles, Automatic Vehicle Location (AVL), Intelligent Transportation Technology (ITL), self-driving vehicles, ride-sharing programs, big data and data analytics, and smart infrastructure systems. In many instances, these innovations are assisting transit agencies to do more with less. The following group of recommendations are innovative solutions that Connect can employ to improve its service efficiencies. These are short-term, low-cost or no-cost solutions.

14. Data Gathering, Management, and Analytics

Gathering, utilizing, and analyzing data can help improve service efficiencies. Connect Transit already compiles extensive data on its programs, but in the course of developing this short range plan, it was discovered that much of this information is contained in proprietary formats controlled by vendors, or in incompatible data structures created over time and sometimes not correlated. Managing transit service efficiently increasingly requires the support of extensive and current information regarding riders, level of demand, origin and destination, and multiple other factors. Connect Transit must develop an extensive data acquisition, analytics, management and dash boarding processes.

Short-term actions include:

- a. The ridership surveys conducted in 2018 regarding satisfaction and origin/destination data provided deep socio-economic insights about the riders. Connect Transit should commit to conducting these comprehensive ridership surveys at least once every two to three years utilizing the same survey instrument and distribution methodologies. Such consistent data will continue to provide much needed information that help improve the transit system both in short term and long term. [Connect Transit]
- b. Conduct a comprehensive assessment of existing data gathering tools and technologies. This could include bus stop related data, routing software, dash boarding software, real time route information, on the bus hardware such as Automatic Passenger Counter (APC) and fare box, Mobility management systems and other technologies currently in use by Connect Transit. Evaluate their effectiveness in providing detailed ridership information and ability to cross communicate with each other. Prioritize the standardization of existing data so that all existing data resources can be used for comprehensive system analysis, such as integrating the Mobility data produced by LIFE-CIL with other data collected directly from Connect Transit resources on a continuing basis. [Connect Transit in partnership with MCRPC]
- c. Enhance data analytics capabilities. Utilize the performance metrics and targets/trends identified in the Performance Metrics Chapter to regularly evaluate and report on the system efficiency. [Connect Transit in partnership with MCRPC and local universities]
- d. Adopt an open data policy. Perhaps the key to transit-oriented innovation and development is to have an open data policy. Partnerships with both the public and private sector generally require some level of data sharing. The more willing and able transit agencies are to share data, the better the results could be that arise from partnerships. There is vast information about a community that can be deduced from transit data, ranging from ridership characteristics, route characteristics, to economic development insights. [Connect Transit in partnership with MCRPC]

- e. Improve data gathering capabilities. Example: Currently Connect Transit does not have information on origin destination data or ridership data by route segments. Route ridership data is gathered for the entire route. Detailed ridership data will better assist in identifying intensity of ridership per street segment. [Connect Transit]
- f. Attempt to link Mobility service data to demographic information in compliance with HIPPA regulations. [Connect Transit]
- g. Identify data management systems and sources that are optimized for demand-response service for Connect Mobility. [Connect Transit]
- h. Maintain an accurate spatial GIS dataset on bus stops. Attributes should include the type of improvements at each stop and other factors like sidewalk connectivity that affect stop accessibility. [Connect Transit in partnership with MCRPC and McGIS]

15. Fare Capping and Digital Passes

Connect should implement a fare capping program to benefit low income transit riders. Fare capping programs cap payments riders make at the amount it would cost to buy a daily, weekly or monthly pass. Many low-income residents cannot afford the upfront cost each week or month to buy a pass, even if in the long run the pass is a better deal. Connect Transit's data shows that this is true here in Bloomington-Normal. The goal with fare capping is to save the rider money, and to make it easier and more appealing for them to take transit as much as possible. Consumers who reach the threshold of the cost of a weekly or monthly pass no longer have to continue paying for rides, which in turn allows those frequent riders who tend to pay for each ride individually to use less of their income on rides. Until now, upfront cost of implementing such systems was a major barrier for small transit agencies to implement such programs. Thanks to the advent of technology, new apps are proliferating the market to address this issue. MCRPC investigated one such application called Token Transit. This application allows smaller transit agencies like Connect, to implement fare capping with no additional cost. It also allows Connect to enhance data gathering capabilities like origin and destination data with minimal additional cost. Refer to the callout for additional details.

Deeper discussion: As readers will note, riders on the low income spectrum may not have access to a smart phone. Some communities and States have programs that distribute smart phones to deliver social services effectively. These programs are not without controversies. However, communities should not shy away from assessing the costs and benefits of such programs. In many cases, cell phone distribution projects are done through public private partnerships. Municipalities and Counties, Health departments, Social Service agencies, and Transit authorities all have a stake in such a program. Such a program can be a great pilot project for Smart City initiatives. Connect Transit could greatly benefit from a program like that in Bloomington-Normal and hence should not shy away from initiating those conversations.

TOKEN TRANSIT

Token Transit is a software company that provides mobile ticketing platforms and related solutions to transit agencies nationwide. Riders download the Token Transit (TT) app on their smart phones and purchase bus passes through the app. When the rider boards the bus they simply show the bus driver the validated ticket. TT's mobile ticketing platform does not require additional hardware on buses and the product can be adopted quickly, usually in about one week. Some key features of TT's mobile ticketing platform include:

- Works in addition to traditional ticketing such as paying for rides with cash or using traditional paper tickets. TT is considered an extension to allow for mobile ticketing, but does not replace traditional ticketing.
- Works with any fare type: Adult, Youth, month pass, day pass, etc. Transit agency inputs each fare type available for purchase into the program. Transit agencies can easily modify fare structures in the backend.
- Anyone can send a pass to anyone. Users simply need to know the recipient's phone number and can use the TT website or app to send a pass. This feature is typically used by parents sending passes to children, or by social service agencies sending vouchers to clients.
- Pass Programs: Universities, employers and schools can distribute passes to students or employees in large or small quantities.
- TT app integrates with other MaaS (Mobility as a Service) mobile apps for trip planning.
- App is ADA Compliant and translates into Spanish and other languages.
- Product allows for fare capping using the app and offers a fare capping solution for traditional ticketed riders, which requires hardware on bus.

Basic Package

The basic TT package requires no hardware on buses and is entirely digital. Token transit uses visual verification tickets on the app, whereby riders show the driver their ticket when boarding.

At the start of each shift, drivers are notified what the appropriate photo and ticket color is for the day. Minimal data is collected at the basic level, in an effort to make purchasing passes and boarding easy and efficient for riders.

Optional Hardware

Optional hardware is available, which allows for more data collection. Validators are available and can be easily installed on any fare box. Riders tap the validator with their mobile phone which beeps and flashes green. The benefits of the box are to eliminate need for drivers to verify tickets and an increased level of ridership data, such as boarding locations and times of day. When riders de-board, beacons detect which stop they departed at and their trip data is recorded.

Data Collection

Token Transit, by design, collects minimal rider data. However, in addition to the optional bus hardware, surveys or questions can be pushed out to users in the app, such as an optional prompt to input demographic information before a user arrives at the purchase pass screen. The transit agency can run reports and download data by logging into the backend TT website.

Cost Structure

TT retains a percentage of transaction proceeds processed through the app. The basic package requires no start-up costs. However, should optional hardware be chosen, cost structure would change accordingly.

Example Agencies

TT is currently being used by 59+ transit agencies nationwide, typically in small to mid-sized cities. Agencies include Champaign Urbana MTD; Madison County, Illinois; Springfield, Missouri; Cedar Rapids, Iowa.

Challenges

Users without smart phones cannot take advantage of this system.

16. Be informed of rapid technological innovations.

Three to five years (the horizon period of this plan) is a long time in terms of technological advancements. MCRPC investigated many innovative programs and projects currently being piloted or implemented by transit agencies across the globe. Some of these programs may not be feasible for implementation by Connect yet, but that sentiment might change quickly with technology advancements during the horizon period of this plan. Connect Transit should follow the innovations identified below closely to determine optimal time for implementation.

a. Autonomous and Electric

Likely the most disruptive transit-oriented innovation that will occur within the next 7–10 years will be the very first real deployments of autonomous buses. However, within the next 3–5 years these AV buses and shuttles will continue pilot testing in cities across the globe. AV deployments will start out in larger cities which are leading the charge in AVs such as New York City, Detroit, Pittsburgh, Austin, and Phoenix. The first AV routes will likely be simple and short loops in downtown core areas and are already being tested. AV shuttle company May Mobility is already testing a route in the downtown core of Detroit. Navya, another AV shuttle company, has been running test routes at the University of Michigan, in Lincoln, Nebraska and in Las Vegas. Pilot projects are continuing to pop up in cities across the country. Each pilot project provides valuable information for the market. Several AV companies believe they will be able to launch the first level 5, fully-autonomous vehicles within the next five years but whether or not the roads will be ready for them is still undetermined.

These buses will also likely be electric only, which means ample charging stations will need to be installed, though many bus lines are already entirely or almost entirely electric, or at least hybrid. Going forward, all-electric fleets will be the norm as we work to decrease CO₂ emissions.

b. First Mile/Last Mile (FMLM)

First and last mile (FMLM) solutions are a continuous challenge for transit agencies, but new solutions are arising with the development of innovative new technologies and creative collaborations. Cities of many sizes are increasingly partnering with Uber and Lyft to provide short trips to and from transit stops, but in a community the size of Bloomington-Normal, this type of partnership may not make sense as it does in larger cities with greater demand for rides. Other solutions are alternative modes of transportation such as electric scooters and dockless bikes which are now a typical piece of the landscape in major cities in the United States and are creeping into medium-sized cities as well. These could work particularly well on and around college campuses, where ridership is heavier and generally the ridership is a younger population adept to the smartphone technology necessary to hail these types of mobility. Other FMLM solutions would likely be more efficient in neighborhoods, such as reservation-based on-demand car/shuttle service provided by the transit agency or a third party. Salem, Oregon, more comparable in size to Bloomington-Normal than those large metro areas, uses a reservation-based, shared-ride 14-passenger connector shuttle to connect riders to fixed-route buses. The booking software for the connector bus automatically generates the most efficient route and displays them on a GPS platform for the driver. Further on the horizon, some cities are piloting the usage of autonomous shuttles to help solve these FMLM issues. However, Illinois regulatory environment is not conducive to fully autonomous vehicles yet.

Tying many mobility options together, more and more transit agencies are exploring Mobility as a Service (MaaS) as an innovative new approach to transport. MaaS platforms integrate different transit options into one app to provide journey planning and convenient payment options to choose the most suitable and efficient mode of transport for their journey on one platform. Successful MaaS platforms are still a few years off, as technology advances will be required for passengers to be able to seamlessly plan multi-modal trips using real time data. However, companies like Whim are already designing platforms which will only continue to improve.

c. Demand Responsive Public Transit (Microtransit)

Demand responsive transit enables flexible routing and dynamic scheduling of routes, particularly during low-ridership hours or on low-density routes. This type of routing is often associated with microtransit because based on ridership needs, transit systems can deploy smaller vehicles like minibuses or vans instead of full-sized buses. Some transit agencies are partnering with private companies like Chariot, Via and Transloc to provide these services, with the goal to provide a cost-effective way to expand service to individuals over fixed-route buses. In Singapore, the Beeline mobility platform provides data-driven shuttle bus services for commuters. The software creates adaptive bus routes based on commuters' demands. The keys to success for demand responsive solutions are often effective partnerships, ridership awareness, and potentially for the transit system to provide the services themselves based on the feasibility of a cost-effective partnership with the private sector. Some companies provide the technology only, not the ride service, which can be provided by the transit agency.

Belleville, Ontario Dynamic Scheduling

Belleville, Ontario, population 50,000, used tech company Pantonium to develop a ride hailing app to be used during the transit system's late night route. At the core of the app is a route optimization engine, which processes the bus location, traffic conditions, and user requested pick up and drop off locations. All of this data is processed in real time to create the optimal route for the scenario. Belleville launched the program in late summer 2018 and plans to pilot it on the late night route for one-year. This type of dynamic scheduling could increase efficiency on late night or low-ridership routes by eliminating fixed-routes at certain times of day while still providing the service.

Detroit and Lyft

Cities have been partnering with ride-hailing apps like Uber and Lyft to get riders to late night jobs or to supplement low-income riders. Detroit Department of Transportation has been piloting a program called "Woodward 2 Work" which offers Lyft credit to transit riders who use certain stops on the Woodward bus route on weekdays between midnight and 5 a.m. The goal is to compliment fixed route service with private providers to expand the mobility of residents.

d. Public-Private Partnerships (P3)

Expensive and ever-changing infrastructure needs, mixed with unpredictable financing from state and federal dollars, this financing form is becoming more popular in the arena of smart innovation. The public sector will never be able to compete with the private sector when it comes to innovation. Effective and innovative P3s can drive the public sector's capabilities. These partnerships can come in many different shapes and forms—such as first mile/last mile solutions or in the form of investments. P3s require creative thinking, adaptability to ever changing needs, and mutual trust. A well-structured P3 can be a win-win-win for the public sector, private sector and the user, but a poorly structured P3 can be very risky and ineffective. How can a cash-strapped transit agency pay for some of these partnerships? Examples include advertisement space (bus wraps, bus stops, inside bus advertisements) and data ownership. These partnerships can be creatively structured.

e. Dynamic Public Transit Flash Briefings

Transit and map applications have already been calculating routes to give riders information for their morning commute. But do they always calculate in traffic conditions or other delays and give alternate routes? In New York City, Alexa can now learn a flash briefing skill which contains dynamic content—which means it is updated in real-time based on various inputs. As weather tracking and traffic tracking sensor technologies improve and become more prevalent, dynamic content will likely become the new norm.

PERFORMANCE INDICATORS, TARGETS, & REPORTING

Fixed Route Ridership Measures

Focus on the riders using fixed route services provided by Connect.

1. Total ridership
2. Passenger miles
3. Passengers per capita
4. Ratio of ridership growth to population growth
5. Annual trips
6. Average trip time

Connect Mobility Measures

Focus on the riders using para-transit services provided by Connect.

7. Total ridership
8. Passenger miles
9. Passengers per capita
10. Ratio of ridership growth to population growth
11. Annual trips
12. Cancellation rate
13. Average wait time (vehicle for passenger)
14. Popular destinations

Better Bus Stop Measures

Address the quality and comfort of using transit facilities.

15. Transfer center with designed facilities
16. Number of stops
17. Percentage of stops with more than 15 boardings
18. Stops with shelters broken down by: a) stops with more than 15 boardings, b) on Major Corridors, and c) Minor Corridors
19. Stops with pads
20. Percentage of stops with sidewalks

Quality Measures

Address factors that affect the quality of service experienced by transit riders, which encompasses speed, safety, reliability, and comfort.

21. On-time performance
22. Route frequency

23. Service days and hours
24. Rate of injuries and/or fatalities involving transit vehicles
25. Incidents of vandalism
26. Complaint rate
27. Crime rate on vehicles

Internal Measures

Focus on internal utilization of resources, cost, and other measures of efficiency.

28. Funding by source
29. Revenue miles
30. Fixed route operating expense per passenger mile
31. Mobility operating expense per passenger mile
32. Passengers per vehicle mile

Fleet Management Measures

Address the maintenance of the physical components of the public transportation agency.

33. Age of fleet by vehicle type
34. Percent of vehicle useful life remaining
35. Number of vehicle failures while in service

Community Measures

Focus on impacts, both economic and environmental, to the community.

36. Transit score, walk score and bike score
37. Service area coverage for 30 minute or better service
38. Ratio of service area to total community area
39. Residential density per acre within the service area
40. Percent of non-single-occupant vehicle commuters
41. Energy savings
42. Percentage of fleet vehicles transitioned to clean or alternative fuels



APPENDICES

APPENDIX A

ROUTE DESCRIPTIONS

		SERVICE SPAN		FREQUENCY		DAILY TRIPS			
Route	Operation	Weekdays	Weekend	Weekdays	Weekends	Weekday	Weekend	AR*	AMR*
Green	Daily with extra services when ISU is in session	6:00 AM–9:56 PM 6:00 AM–11:56 PM Thursday & Friday when ISU is in session 6:00 AM–2:26 AM Friday when ISU is in session	7:00 AM–6:56 PM 7:00 AM–9:56 PM Saturday only 7:00 AM–2:26 AM Saturday only when ISU is in session	15 minutes	30 minutes	124 132 Thursday & Friday when ISU is in session 142 Friday when ISU is in session	48 60 Saturday 78 Saturdays when ISU is in session	196,827	21,870
Red	Daily	5:45 AM–10:09 PM	6:45 AM–7:09 PM 6:45 AM–10:09 PM on Saturday	30 minutes	30 minutes	64	48 60 Saturday	241,462	26,829
Purple	Daily	5:30 AM–8:22 PM	6:50 AM–6:22 PM 6:50 AM–8:22 PM on Saturday	30 minutes peak (5:30 AM–9:59 AM & 2:30 PM–6:22 PM) 60 minutes off-peak (10:30 AM–2:22 PM & 6:30 PM–8:22 PM)	60 minutes	44	23 27 Saturday	89,147	9,905
Pink	Daily	6:15 AM–8:40 PM	6:45 AM–6:10 PM 6:45 AM–8:40 PM on Saturday	30 minutes	30 minutes Saturday 60 minutes Sunday	48	24 56 Saturday	51,234	5,693
Blue	Daily	6:10 AM–8:45 PM	6:30 AM–6:45 PM 6:30 AM–8:45 PM Saturday	30 minutes peak (6:10 AM–10:25 AM & 2:30 PM–6:25 PM) 60 minutes off-peak (10:30 AM–2:25 PM & 6:30 PM–8:45 PM)	60 minutes	43	25 29 Saturday	39,241	4,360
Brown	Daily	6:00 AM–8:53 PM	7:00 AM–6:53 PM 7:00 AM–8:53 PM Saturday	60 minutes	60 minutes	30	24 28 Saturday	45,725	5,081
Yellow	Daily with extra services when HCC is in session	5:45 AM–9:12 PM 5:45 AM–10:12 PM when HCC is in session (August–May Including breaks) 5:45 AM–12:12 AM Thursday & Friday when HCC is in session (August–May NOT including breaks) 5:45 AM–2:58 AM Friday when HCC is in session (August–May NOT including breaks)	7:15 AM–6:42 PM 7:15 AM–9:12 PM Saturday (August–May) 7:15 AM–10:12 PM Saturday when HCC is in session (August–May Including breaks) 7:15 AM–2:58 AM Saturday when HCC is in session (August–May NOT Including breaks)	15 minutes peak (7:15 AM–11:42 AM & 2:15 PM–5:42 PM) 30 minutes off-peak (5:45 AM–7:12 AM & 11:45 AM–2:12 PM & 5:45 PM–2:58 AM)	30 minutes Saturday 60 minutes Sunday	90 94 when HCC is in session 102 Thursdays & Fridays when HCC is in session not including breaks 114 Fridays when HCC is in session not including breaks	12 28 Saturday (August–May) 30 Saturday when HCC is in session 40 Saturday when HCC is in session NOT including breaks	128,088	14,232

*Annual Ridership (AR) and Average Monthly Ridership (AMR) measured from October 2017 to August 2018

APPENDIX A

ROUTE DESCRIPTIONS

		SERVICE SPAN		FREQUENCY		DAILY TRIPS			
Route	Operation	Weekdays	Weekend	Weekdays	Weekends	Weekday	Weekend	AR*	AMR*
Orange	Daily	5:50 AM–8:26 PM	6:50 AM–6:26 PM 6:50 AM–8:26 PM Saturday	30 minutes peak (5:50 AM–9:26 AM & 2:50 PM–6:26 PM) 60 minutes off-peak (9:50 AM–2:26 PM & 6:50 PM–8:26 PM)	60 minutes	42	24 28 Saturday	33,010	3,668
Lime	Daily	5:35 AM–10:23 PM	6:35 AM–6:53 PM 6:35 AM–10:23 PM Saturday	30 minutes	30 minutes	66	50 60 Saturday	244,776	27,197
Aqua	Daily	5:40 AM–8:49 PM	6:40 AM–6:49 PM 6:40 AM–8:49 PM Saturday	30 minutes peak (5:40 AM–9:49 AM & 3:30 PM–6:49 PM) 60 minutes off-peak (10:30 AM–2:49 PM & 7:30 PM–8:49 PM)	60 minutes	45	25 29 Saturday	56,303	6,256
Olive	Daily	6:00 AM–8:47 PM	7:00 AM–6:47 PM 7:00 AM–8:47 PM Saturday	60 minutes	60 minutes	30	24 28 Saturday	31,782	3,531
Gold	Daily	6:00 AM–8:54 PM	7:00 AM–6:54 PM 7:00 AM–8:54 PM Saturday	60 minutes	60 minutes	30	24 28 Saturday	48,478	5,386
Redbird	Daily with extra services when ISU is in session, NOT including breaks	7:00 AM–9:00 PM 7:00 AM–12:00 AM when ISU is in session NOT including breaks 7:00 AM–3:00 AM Fridays when ISU is in session NOT including breaks	7:00 AM–7:00 PM 7:00 AM–9:00 PM Saturdays August–May Including breaks 7:00 AM–3:00 AM Saturdays when ISU is in session NOT including breaks	5–7 minutes peak (when ISU is in session NOT including breaks) (8:20 AM–1:20 PM) 20 minutes off-peak (7:00 AM–8:20 AM & 1:20 PM–3:00 AM)	20 minutes	42 81 when ISU is in session NOT including breaks 90 Friday when ISU is in session NOT Including breaks	35 41 Saturday August–May 59 Saturday when ISU is in session NOT including breaks	353,442	39,271
Tan	Daily	6:25 AM–9:28 PM	7:00 AM–7:28 PM 7:00 AM–9:28 PM Saturday	60 minutes	60 minutes	30	26 30 Saturday	53,705	5,967
Silver	Daily	5:45 AM–8:34 PM	6:45 AM–6:34 PM 6:45 AM–8:34 PM Saturday	30 minutes peak (5:45 AM–10:34 AM & 2:45 PM–6:34 PM) 60 minutes off-peak (10:45 AM–2:34 PM & 6:45–8:34 PM)	60 minutes	44	24 28 Saturday	55,710	6,190

*Annual Ridership (AR) and Average Monthly Ridership (AMR) measured from October 2017 to August 2018

APPENDIX B

FREQUENT LOCATION STOPS

	GREEN	RED	PURPLE	PINK	BLUE	BROWN	YELLOW	ORANGE	LIME	AQUA	GOLD	TAN	OLIVE	SILVER
Downtown Bloomington	X	X	X		X			X	X	X	X			
CIRA													X	
Uptown Normal	X	X		X		X	X		X			X		
EMPLOYMENT														
State Farm South Campus								X						
State Farm Headquarters														
Country Financial			X											
Country Financial—Hershey Road				X										
Vuteq														
Bridgestone												X		
Baby Fold													X	
Grossinger Motors														X
Afni							X							
HEALTH AND WELLNESS														
Westminster Village								X						
OSF St. Joseph Medical Center		X												
Advocate BroMenn Medical Center											X			
Community Cancer Center													X	
Heritage Manor											X			
McLean County Nursing Home							X							X
OSF—Fort Jesse														
OSF—College														
Activity and Recreation Center													X	
YMCA			X					X						
Normal Community Activity Center														X
Anglers Manor								X						
Life Center-Independent Living			X											
Sugar Creek Alzheimer's Special Care Center												X		
Evergreen Place									X					
SHOPPING														
Dollar General—Oakland Avenue			X											
Dollar General—Towanda Avenue					X									
Dollar General—Main Street							X							X
Dollar General—Cottage Avenue							X							
Walmart—Bloomington						X			X					X
Walmart—Normal		X	X											X
Shoppes at College Hills	X	X			X							X		
Eastland Mall		X												
Empire Plaza Shopping Center		X												
Eastland Commons Shopping Center			X											
ReStore Habitat for Humanity														X

	GREEN	RED	PURPLE	PINK	BLUE	BROWN	YELLOW	ORANGE	LIME	AQUA	GOLD	TAN	OLIVE	SILVER
ENTERTAINMENT														
Corn Crib							X							
Starplex Cinemas				X										
Marcus Bloomington Cinema									X					
Grossinger Motors	X												X	
The Castle Theater	X	X	X		X			X	X	X	X			X
Fairview Family Aquatic Center							X							
Skate 'n' Place														X
Bloomington Center for the Performing Arts	X													
McLean County Museum of History	X				X				X					
COMMUNITIES														
Wood Hill Towers								X		X				X
Southgate Estates										X				
Willow Creek Village														X
Alexander and Grandview Estates														X
Lakeside Country Club								X						
Arbors at Eastland Apartments			X											
Lancaster Heights Apartments		X												
Amanda Brooke Apartments		X												
Blair House		X												
Phoenix Towers					X									
Royal Acres													X	
Shelbourne Drive Apartments													X	
Bayberry Village													X	
Summertree Rental Residence													X	
Orlando Northbrook Estates													X	
Northmeadow Village							X							
Cardinal Court									X					
Traditions Bloomington Apartments									X					
Cottage Apartments							X							
Turnberry Square Apartments							X							
The Edge on Hovey Apartments	X						X							
Fox Hill Apartments														X
L & W Apartments					X									
Lincoln Square Apartments				X										
Briarwood Apartments				X										
GOVERNMENT														
McLean County Courthouse			X	X					X		X			X
McLean County Government Building	X	X	X			X				X		X		X
City of Bloomington City Hall				X					X		X			X
Town of Normal Town Hall	X	X			X		X	X		X		X		
SOCIAL SERVICES														
Mission Mart				X										
YWCA				X										
Home Sweet Home Ministries				X										
Center for Hope Food Pantry						X								
Youthbuild									X					
Children and Family Services												X		
Family Community Resource Center												X		
Salvation Army											X			
West BLM Revitalization Project/Tool Library											X			
Boys and Girls Club														X

	GREEN	RED	PURPLE	PINK	BLUE	BROWN	YELLOW	ORANGE	LIME	AQUA	GOLD	TAN	OLIVE	SILVER
PARKS														
Miller Park														X
Forrest Park														X
General Electric Park			X											
Withers Park		X												
Hedgewood Park			X											
Ewing Park 1					X									
McGraw Park											X			
Clearwater Park												X		
One Normal Plaza														X
O'Neil Park											X			
Evergreen Park											X			
Fell Park					X									
Rosa Parks Commons				X										
Anderson Park			X											
SCHOOLS														
Oakland Elementary School				X										
Stevenson Elementary School				X										
Washington Elementary School			X											
Bloomington High School						X								
Illinois Wesleyan University	X					X						X		
Central Catholic High School													X	
Heartland Community College							X							
Illinois State University	X						X	X						
Fairview Elementary School							X							X
University High School							X							
Sheridan Elementary School											X			
GROCERY														
Aldi								X			X			X
Jewel-Osco—Oakland Avenue				X										
Jewel-Osco—Veterans Parkway		X												
Jewel-Osco—Cottage Avenue														
Kroger—Oakland Avenue			X											
Meijer			X											
Kroger—Main Street	X											X		
Kroger—College Avenue		X	X											
RK Grocery			X											
Hy-Vee													X	
Lupita's Mexican American Grocery Store												X		
Shnucks—Raab Road				X										
Common Ground Grocery	X													

APPENDIX C

RELEVANT PLANS & STUDIES

BN Mobile—Long-Range Transportation Plan 2045

Section 2: Mobility, Access and Choice

Goal 2: Improved mobility and accessibility for all is founded on a transportation system that offers choices among multiple modes of transportation and operates sustainably and reliably.

Engineering Strategies

- 2.4 Improve and expand public transit service using innovative technologies and engineering strategies
- 2.5 Focus land use and transit planning efforts to incorporate Transit Oriented Development (TOD) as opportunities arise.
 - 2.5 Expand coordination with Connect Transit regarding transit-supportive characteristics in redevelopment or new development.
- 2.10 Expand transit training to increase transit use
 - 2.10 Expand transit training programs in cooperation with LIFE-CIL, Marcfirst and other Transportation Advisory Committee participants; document for annual report

Equity Strategies

- 2.13 Affirmatively include people protected under local, State and Federal civil rights and disability rights laws in all transportation planning and implementation outreach and implementation.
- 2.12b Emphasizing Title VI in public transit service accessibility as decisions are made regarding fixed route, paratransit and non-emergency medical transport services
 - i. Request the input of people protected under civil rights laws, and advocacy groups which represent their interests, early in the decision-making process.
 - ii. Create partnerships with advocacy organizations to provide a path for continued discussion and outreach.
- 2.12c Support access to active transportation for areas with greater than average populations of people protected under Title VI of the Civil Rights Act and related laws

Section 3: Health and Safety

Goal 3: Our transportation system will be safe for everyone regardless of where they go or how they get there, as the implementation of Vision Zero takes effect.

BN Home—Regional Housing Study

Recommendation 3.1: Limit sprawl and encourage urban residential densities.

Recommendation 3.2: Promote the development of denser, transit supportive housing.

Recommendation 4.4: Create additional multi-family housing for very low-income families

Multi-family residential infill housing opportunities near transit and shopping can support smaller households and increase Millennial and Empty-nester future demand.

Town of Normal Comprehensive Plan

Neighborhoods

- **Old Neighborhoods**

4c—Given the high concentration of seniors in the Old Neighborhood 3, and given the proximity of this area to several routes, Town should add this area to the list of places to be further investigated by Connect Transit for route expansion in the future.

- **Early Suburban Neighborhoods**

2d—Partner with Connect Transit, YWCA, or other not-for-profit organizations to increase door-to-door and door-through-door transportation services to access medical and other services. The availability of this service determines some seniors' ability to live in their homes.

- **New Suburban**

1—To the extent feasible, the Town should direct growth away from the Future Neighborhoods and more toward infill, redevelopment, and transit-oriented developments.

3c—Review the Town's development regulations against adopted policies such as Complete Streets and national standards such as LEED ND that are geared towards mixed-use, multimodal, equitable, and environmentally sustainable developments. Make necessary revisions to facilitate desired development patterns and streets in the future

Centers

- 1d—Reduce parking minimums in Centers with good access to transit, walking, and biking.
- 2a—Revise the Town's Design Standards to promote human-scale developments and enhance bicycle and pedestrian connectivity in all commercial developments.
- 3c—Make improvements that prioritize pedestrians, bicyclists, and transit riders along with promoting pedestrian-scale developments in Neighborhood Centers. Such place-based improvements are incentives to help sustain existing and attract new commercial to the area.

Corridors

- **Recommendation #3—Focus Efforts on Transit Oriented Development**

This recommendations calls for the Town to partner with Connect Transit to establish Transit Supportive Densities for residential developments responsive to its place types.

- **Recommendation #4—Codify the Complete Streets Policy Adopted by the Council in 2017**

Housing

- H1.3e—Improve Transit Access to Neighborhoods with a Higher Concentration of Seniors to Further Promote Independent Lifestyles

Economic Vitality

- EV1.2—Create an Innovation District
 - Prioritize bike, pedestrian, and transit improvements in this district;
 - Explore opportunities for making transit stops multi-functional—potentially works of art, icons for sustainability, charging stations, Wi-Fi hotspots, and digital signage.

Town and Gown

- TG2.2b—Work Closely with ISU to Enhance Multimodal Transportation Options and Experiences on Campus

Infrastructure

- IP1.5c—Partner with Connect Transit to Provide Free Wi-Fi Near Transit Stops
- IP1.1d—Embrace Density in Land Development Practices to Accommodate More Intense Development Along Existing Corridors of Infrastructure

Prioritize new development projects in areas that are currently served by existing infrastructure or can be extended efficiently and economically. Consider infrastructure managed by other utilities/entities in the area, such as transit, while reviewing development proposals.

Community Identity and Public Places

- CP1.2a—Facilitate Creation of Unique Places (Enhance bike, pedestrian, and transit connections to the HCC campus.)

City of Bloomington Comprehensive Plan

Core Value

Healthy Community—a small footprint of the City that fosters multimodal transportation and preserves the natural environment

Neighborhoods

- N-1.4b—Improve connections and promote opportunities for bike trails, bus routes, road diets, and on-street bike lanes to make the neighborhoods safer and more pedestrian friendly.
- H-2.1g—Coordinate land use and transportation planning to ensure that new housing is easily accessible to multiple transportation options, including walking, bicycling, and public transportation.

Economic Development

- D-5—Continue to develop a multi-modal transportation network in Downtown.
 - D-5.3—Enhance the public transit access to Downtown.
 - D-5.3a Upgrade Front Street transfer location.
 - D-5.3b Include transit signage and transit stop information in wayfinding installations.

Healthy Community

- NE-3.1—Identify and reduce air pollutants.
 - NE-3.1b—Expand and improve the City's public transportation network.
- CWB-2.1—Promote the welfare of older adults and persons with disabilities to foster maximum independence so they can continue to be an integral part of the community
 - CWB-2.1a—Ensure that affordable and safe transportation services are available, especially for older adults and persons with disabilities.
- CWB-3.1—Coordinate access to social services
 - CWB-3.1a—Enhance public transportation access to the social service sites. Identify and remove any public transportation barriers to those sites.

Infrastructure

- TAQ-2.1—Expanded urban transit system to provide improved route coverage, more frequent route service (headways), extended service hours and schedules, accessible for transit-dependent riders and those with special needs and challenges, including the economically disadvantaged, persons without access to automobiles, the elderly, people with disabilities and regional access to urban area services. [13 specific action items related to transit are identified under this objective]

Future Growth and Land Use

Neighborhoods

- Transit Oriented Development (TOD) was recognized as a best practice in neighborhood development.
- Neighborhood Principles:
 - Connectivity: Have a walkable layout with streets that connect in a logical manner throughout the neighborhood, to adjacent developments and other key destinations for seamless transitions. Maintain a connected street network that accommodates the needs of users of all modes of transportation and connects to all land uses.
- New Commercial Activity Centers and Employment Centers principles
 - Multimodal access: Include transit facilities and a transit hub where demand shows that it is needed. Ensure sidewalk/bike path connections between buildings on campus and through parking lots to surrounding neighborhoods and commercial areas. Ensure a variety of housing options within a mile.

Complete Streets Implementation Study for Bloomington and Normal

This study, led by MCRPC, is currently underway.



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