

Grey Area Mobility Enhancement and Expansion Study

Draft Plan 6.18.21

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1.0 INTRODUCTION

Established in 1958, Tri-County Regional Planning Commission (TCRPC) serves as the regional planning and coordination agency for Peoria, Tazewell, and Woodford Counties, located in Central Illinois. The agency serves an area of approximately 1,800 square miles, and nearly 350,000 residents. The primary function of TCRPC is to study the needs and conditions of the region and to develop strategies that enhance the region's communities. TCRPC created the Peoria-Pekin Urbanized Area Transportation Study (PPUATS) in 1976 to serve as the region's Metropolitan Planning Organization (MPO).

As the MPO, PPUATS carries out the federally-required continuing, cooperative, and comprehensive (3-C) transportation planning processes for the Peoria-Pekin Urbanized Area. PPUATS members include the three counties, numerous municipalities in the region, the Greater Peoria Mass Transit District, Illinois Department of Transportation (IDOT), the Metropolitan Airport Authority of Peoria, and TCRPC.

Within the Peoria-Pekin Urbanized Area, three municipalities belong to the Greater Peoria Mass Transit District (GPMTD), and two other communities contract with GPMTD to provide fixed route and complementary paratransit service for their citizens. This leaves a large, population-dense geographic space, the Grey Area, where it is difficult if not impossible for an individual to travel independently via transit for their basic needs and services both within the region and to other metropolitan hubs in the state. Nearly 87,000 people, one-third of the population of the Urbanized Area, live in this under-served territory. In the past, at least part of this Grey Area has been fortunate to receive service through urban transit formula grants such as FTA Section 5316 and 5317 (New Freedom, and Job Access and Reverse Commute, respectively), but those funds have run out and no permanent solution has emerged. The latest Illinois Region 5 Human Services Transportation Plan update recommended a further study into long-term, fiscally constrained mobility solutions for this area.

There are 12 municipalities located in the Grey Area (**Figure1.1**)

Table 1.1: Grey Area Population

Municipality	County	Population
Norwood	Peoria	430
Dunlap	Peoria	1,160
Rome	Peoria	1,664
Bellevue	Peoria	1,847
Chillicothe	Peoria	8,402
Bartonville	Peoria	6,316
Urbanized Unincorporated Peoria County	Peoria	13,950
Peoria County Total		33,769
North Pekin	Tazewell	1,384
Marquette Heights	Tazewell	2,553
Creve Coeur	Tazewell	5,493
Morton	Tazewell	17,054
Washington	Tazewell	16,556
Urbanized Unincorporated Tazewell County	Tazewell	3,845
Tazewell County Total		46,885
Germantown Hills	Woodford	3,478
Urbanized Unincorporated Woodford County	Woodford	2,730
Woodford County Total		6,208
TOTAL		86,862

Source: 2018 ACS 5-Year Estimates

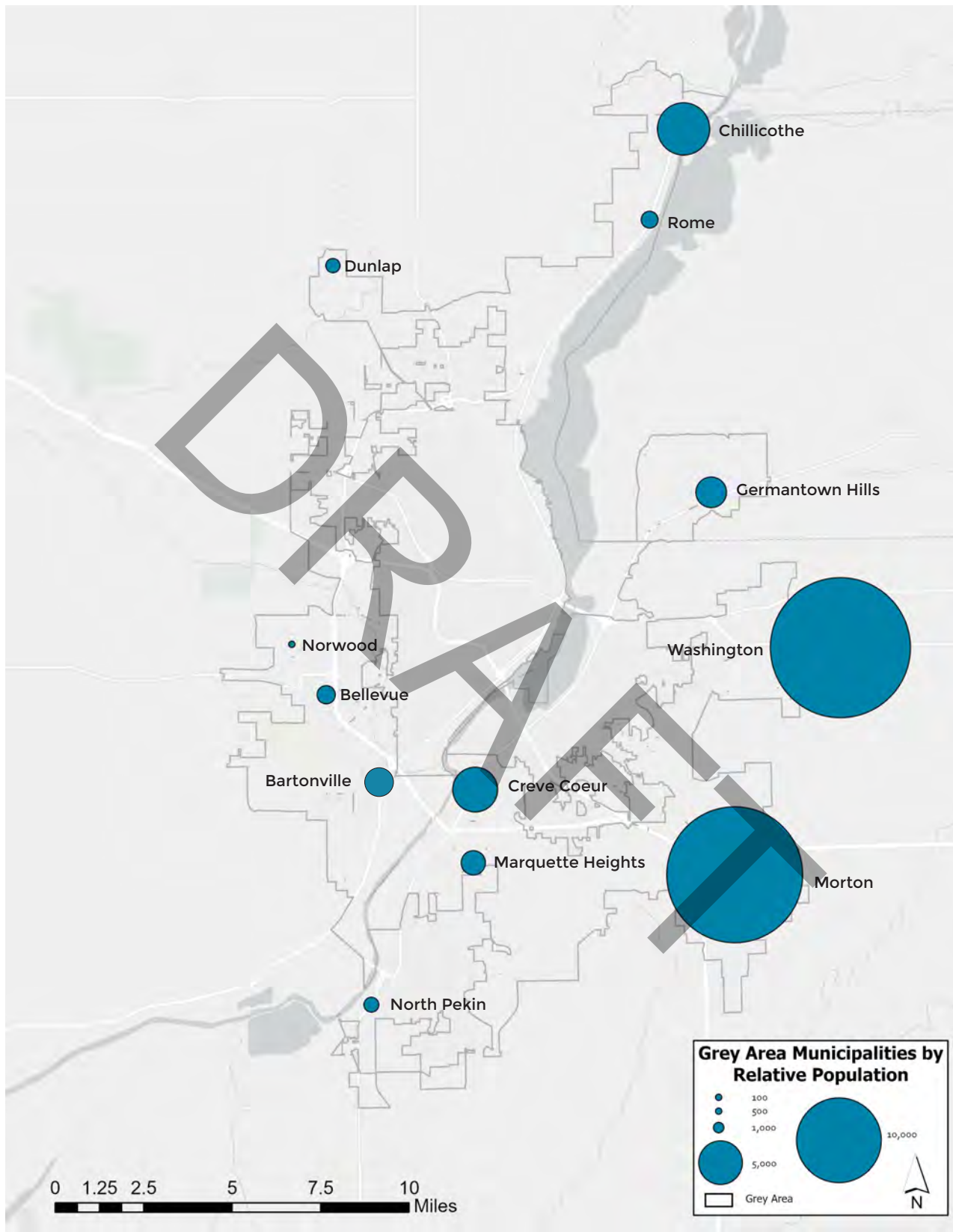


Figure 1.1: Municipalities in the Grey Area

2.0 OVERVIEW

In early 2020, TCRPC, with funding from IDOT's Statewide Planning and Research grant and coordination from its partner agency GPMTD, contracted with Lochmueller Group to conduct a Mobility Enhancement and Expansion Study for the "Grey Area." The purpose of the study was to prepare a document outlining mobility solutions specific to this geographic area based on transit needs and funding analysis. The results of this project will inform local, regional, and state officials on how to proceed with implementing, financing, and operating mobility solutions for the Grey Area.

This study outlines the goals and objectives for service enhancement and expansion, identifies and recommends transit service solutions, prioritizes the potential funding mechanisms, and advises on effective implementation strategies. The following document provides detailed demographic data, historic transit service data, and the results of an extensive public engagement process gathered to provide qualitative and quantitative evidence to support those recommendations.

The report is divided into seven sections.

- Existing Conditions
- Transit Needs Assessment
- Service Alternative Evaluations
- Funding Evaluation
- Recommendations
- Implementation
- Public Engagement

EXISTING CONDITIONS

The findings of the existing conditions chapter serve as the technical foundation for the recommendations of this study and are vital to quantify the mobility needs of the Grey Area.

TRANSIT NEEDS ASSESSMENT

To determine the appropriate level of service needed in the Grey Area, the study team conducted a transit needs assessment. Using data from the existing conditions, the team quantified the demand for programmed and non-programmed transit.

SERVICE ALTERNATIVES EVALUATION

Based on technical criteria, including the service area and operating cost, the study team evaluated service alternatives for the Grey Area.

FUNDING EVALUATION

The study team performed a comprehensive funding analysis to evaluate viable options for financing the operations of a mobility solution for the Grey Area.

RECOMMENDATIONS

This section provides recommendations for mobility service solutions and funding sources based on the findings of the previous sections.

IMPLEMENTATION

Based on industry best practices and case studies, the study team detailed a number of considerations for service implementation including administration, marketing, branding, and piloting a mobility service for the Grey Area.

PUBLIC ENGAGEMENT

Robust and meaningful public participation was an important component to the Study. The public was provided the opportunity to guide the study and provide feedback on the report's findings through multiple channels detailed in this section.

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3.0 EXISTING CONDITIONS

OVERVIEW

To prepare a meaningful and data-informed study, existing conditions must be understood and documented. The findings of the existing conditions chapter serve as the technical foundation for the recommendations of this study and are vital to quantify the mobility needs of the Grey Area.

This chapter details the existing conditions of the Grey Area and their relationship to the mobility needs of residents. Measures such as historic transit service, population characteristics, and more are detailed and discussed.

This section includes the following topics specific to the Grey Area:

- Evaluation of Previous Planning Efforts
- Historic Transit Service Analysis
- Service Area Demographic Profile
- Service Area Employment Profile
- Review of Transit Trip Generators

Additionally, this chapter includes qualitative insights gathered through the robust engagement process to validate and inform quantitative findings.

CONSISTENCY WITH OTHER AGENCY PLANS

It is important for the Grey Area Mobility Study to carefully analyze relevant implications of state, regional, and local plans for their impacts on and/or application to the study area. This Study's recommendations should be consistent with relevant policies, standards, and proposals.

This comprehensive review identifies relevant elements from each plan that would impact the Grey Area's current and future transportation and mobility plans and investments. In total, the study team reviewed five existing planning documents related to transportation planning and land use development in the Tri-County region.

Table 3.1 lists the title, author, and year of publication for the five plans, studies, and initiatives selected for review.

Table 3.1: Plans/Studies Reviewed

Plan/Study	Agency/ Entity	Date
State Plans		
1.Illinois Long-Range Transportation Plan	IDOT	2019
2.Illinois Statewide Public Transportation Plan	IDOT	2018
Regional Plans		
3.Long-Range Transportation Plan 2045	PPUATS	2020
4.Human Services Transportation Plan Region 5	PPUATS	2016
5.CityLink on the Move	GPMTD	2019



STATE PLANS

Illinois Long-Range Transportation Plan (2019)

The Illinois Long-Range Transportation Plan (LRTP) provides strategic direction for Illinois' transportation system. The LRTP vision in Illinois is for innovative, sustainable, and multimodal transportation solutions that support local goals and grow Illinois' economy. The LRTP provides the overarching framework for Illinois Department of Transportation (IDOT) programs and modal plans. It establishes policies to guide future system development, separate from the programming of specific improvements. The LRTP addresses Federal and State requirements and is updated every five years.

ALIGNMENT WITH THE GREY AREA MOBILITY STUDY

The LRTP did not provide specific input for the study area; however, it provides objectives and recommendations to be used as guiding principles. One of the LRTP's primary objectives is to "Enhance the effectiveness of the multimodal transportation system through better traveler information, utilizing technology where possible, to maximize efficiency of existing facilities and services."

As stated in the LRTP, the objective is to be supported by actions and strategies including:

- Better understand the need for and implement Intelligent Transportation Systems (ITS) statewide and invest in proven ITS strategies.
- Improve transit ridership levels and riders' experiences through the use of rider-oriented technology.
- Improve transit connectivity between service areas and providers.
- Identify and define regional multimodal demands and needs, and/or associated costs across the state.
- Work with Human Services Transportation Planning (HSTP) coordinators and adjacent transit providers to determine the feasible times and locations for transit transfers between providers.

Illinois Statewide Public Transportation Plan (2018)

The IDOT Office of Planning and Programming (OPP) and Office of Intermodal Project Implementation (OIPI) completed the first Statewide Public Transportation Plan in 2018. The focus of the Plan was "Downstate" Illinois, the area outside of the six-county Chicago metropolitan area. The Plan developed a vision for an integrated public transportation system that promotes mobility and access for people living, working, or visiting Illinois. The Plan identified goals, objectives, and strategies to meet the demand for services. The horizon year of the Statewide Public Transportation Plan is 2040, and the Plan has been integrated into Illinois' 2040 Long Range Transportation Plan.

ALIGNMENT WITH THE GREY AREA MOBILITY STUDY

According to the plan, two communities east of Peoria show commuter demand: Washington, with a population of about 16,556, and Morton, with a population of 17,054. Based on the plan's findings, Washington shows a projected demand of 160 riders to workplaces in East Peoria and Peoria. Similarly, the study reports that Morton has sufficient demand in both directions to warrant an all-day route; there are about 150 commuters projected to use to transit to access jobs in and around Morton (large employers in the community include a pumpkin canning factory operated by Nestle; Morton Buildings; Morton Industries; Matcor Metal Fabrication; and a Caterpillar parts warehouse). 180 commuters are projected to use the service in the "traditional" commute manner. Traditional commute manner means a trip to work in the morning peak period and a return trip home in the evening peak period. It should be noted that though the report cites that the demand is sufficient for a peak period express route, it is not clear if the trip ends are sufficiently concentrated to support this service.

REGIONAL PLANS

Long-Range Transportation Plan (2020-2045)

The primary purpose of the Long-Range Transportation Plan (2020-2045) is to provide strategic direction for the development of the Peoria-Pekin Urbanized Area's transportation system. The plan identifies needed improvements to the transportation network and provides a long-term investment framework to address current and future challenges. The LRTP vision for transportation in the urbanized area is to have a safe, balanced, regional, and multi-modal transportation system that creates an attainable and economically sustainable solution to connect communities to Areas of Opportunity, increase access, maintain infrastructure, and enhance environmental justice for current residents and future generations. The LRTP addresses Federal and State requirements and is updated every five years. The most recent iteration was adopted in June 2020.

ALIGNMENT WITH THE GREY AREA MOBILITY STUDY

The 2010 U.S. Census expanded the Peoria-Pekin Urbanized Area boundaries, adding Chillicothe, Dunlap, and Germantown Hills to the urbanized area. Prior to this expansion, Chillicothe and Dunlap were serviced by Peoria County's rural public transportation service, CountyLink; and Germantown Hills was serviced by Woodford County's rural public transportation service, WeCare. Federal Section 5311 regulations do not permit CountyLink and WeCare (rural service providers) to provide transportation service that both originates and terminates within an urban area. This left Germantown Hills, Dunlap, and Chillicothe without public transportation service. To temporarily resolve this issue, Greater Peoria Mass Transit District (GPMTD) has taken over transportation services within the expanded Urbanized Area. Currently, the service is only available in Peoria County. The service was funded in part through two federal grant programs, Section 5316 Job Access and Reverse Commute (JARC) and Section 5317 New

Freedom. Acquired funding from these programs was anticipated to last through FY 2016. Funds were fully exhausted in FY 2017; however, GPMTD continues to provide services.

The service, referred to as CAUSE Area (CityLink Area Urban Service Expansion) demand response, is currently available to anyone living or working within the grey urbanized area outside of complementary paratransit boundaries (See **Figure 3.2**). The service operates Monday through Saturday from 5:30 a.m. to 6:00 p.m. and is unavailable on Sundays. A one way passenger fare is \$6.00. Individuals are encouraged to schedule their rides at least 24 hours in advance; however, same-day reservations are sometimes accepted.



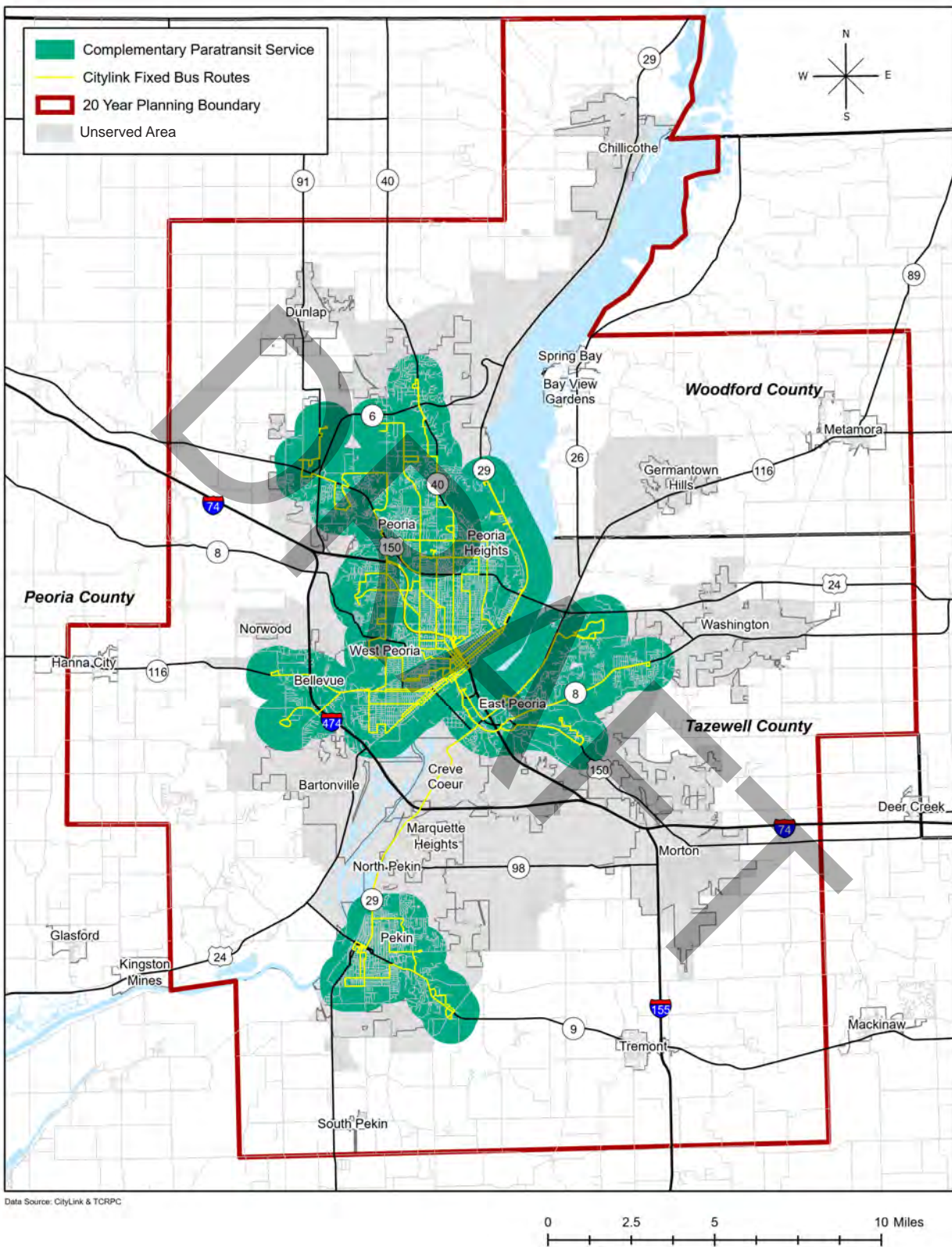


Figure 3.2. CityLink Fixed Route and Complimentary Paratransit Service

Heart of Illinois Human Services Transportation Plan Region 5 (2016)

The purpose of Heart of Illinois Human Services Transportation Plan (HSTP) for Region 5 is to evaluate existing transportation providers, the unmet needs and duplications in human service and public transportation services, and establish transportation related goals for Peoria, Tazewell, Woodford, Marshall, Stark, Knox, and Fulton Counties in Central Illinois. This documentation fulfills federal planning requirements, which requires that Section 5310 funding (for Enhanced Mobility of Seniors & Individuals with Disabilities) be included in a locally developed, coordinated public transit-human services transportation plan.

The goal of the HSTP is to increase the number of options and affordability of public transportation for people with low incomes, individuals with disabilities, older adults, and the public. The HSTP is intended to guide transit providers, planners, and state Department of Transportation personnel as they implement projects to better serve the regional transit system.

ALIGNMENT WITH THE GREY AREA MOBILITY STUDY

The HSTP defined a territory known as the “Grey Area.” The grey area refers to the portion of the Peoria-Pekin Urbanized area that lies outside of the Greater Peoria Mass Transit District. Parts of the Grey Area are currently served by CityLink under a temporary grant; however, much of the grey area is not served by any public transportation. The HSTP identified a need for additional service within the Grey Area. The plan recommended an evaluation of ridership trends of CityLink’s CAUSE. Area demand response pilot program to determine communities where demand is the greatest and prioritize future projects in these areas.

CityLink on the Move (2019)

The Greater Peoria Mass Transit District completed a comprehensive study of the CityLink bus system in November 2019. The primary objectives of the study are to identify the best approach for optimizing service, improving customer satisfaction, and increasing ridership. The study included data collection, market analysis, and community engagement. The final report includes key findings, community engagement activities, and recommendations.

ALIGNMENT WITH THE GREY AREA MOBILITY STUDY

The report identified a lack of transit access to employment in Bartonville and Morton. It also noted that changes to CityLink route alignments will result in changes to the CityLift service area, most notably a discontinuation of service in the Eastside neighborhood of East Peoria.

CURRENT SERVICES

The metropolitan planning area that lies outside the urbanized area is eligible for rural public transportation. Service to this area is provided by CountyLink (rural Peoria County) and WeCare (rural Tazewell and Woodford Counties). CountyLink provides demand-response service, which allows individuals to be picked up and dropped off at a pre-scheduled time and place. The service is available Monday through Friday from 5:30 a.m. to 6:00 p.m. and costs \$6.00 one way. In recent years, Peoria County has put an intergovernmental agreement (IGA) in place with GPMTD to operate this system. GPMTD uses a third-party contractor (TransDev) to provide CountyLink service. Because of the IGA, a coordinated dispatch effort has made both systems more productive. CountyLink and CityLift are using the same third-party contractor to provide the service, same ride scheduling software and equipment, and same dispatching office. Such improvements make it possible for more rides to be provided in more areas. This can be seen in the growing ridership since 2016 as reported to the National Transit Database and displayed in **Figure 3.3**.

WeCare, a not-for-profit organization, is the public transportation provider for rural Tazewell and Woodford Counties. Like CountyLink, WeCare provides demand-response service for the general public including senior citizens and those with disabilities. Transportation is available Monday through Friday from 6:00 a.m. to 5:00 p.m. and costs \$3.00 one-way. Seniors ride on a donation-only basis. In FY 2018, WeCare provided 57,361 one-way passenger trips; Woodford County accounted for 13,966 of those trips, and Tazewell County accounted for 43,395 trips. Since 2014, ridership has increased 8.9% in Woodford County, and 22.8% in Tazewell County.

Throughout the metropolitan planning area, several human services agencies provide client transportation. These services, while not available to the general public, greatly support the transportation needs of low-income individuals, the elderly, and individuals with disabilities. In the metropolitan planning area, a number of human services agencies have been granted vehicles through IDOT's Consolidated Vehicle Procurement (CVP) program to support their transportation services. **Table 3.2** lists these agencies and identifies their principal clients and

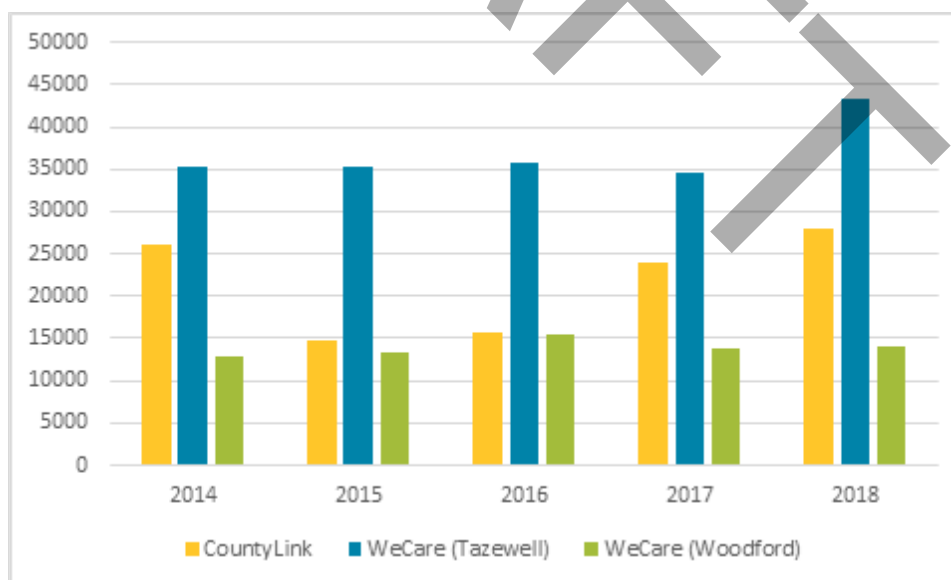


Figure 3.3. Rural Transit Ridership

nature of service. Please note that this table is not a comprehensive list of all human services agencies with client transportation programs. Many human services agencies fund transportation programs with private donations, fundraising, and other means. Often, the transportation programs of human services agencies are not enough to satisfy all transportation needs. In these cases, agencies have succeeded in coordinating with CityLink, CityLift, CountyLink, and WeCare to provide additional rides. This effort is one of the primary goals of the Heart of Illinois Human Services Transportation Plan (HSTP) committee.

Table 3.2: Section 5310 Human Services Agencies

Organization	Location	Principal Client	Nature of Service
Central Illinois Agency on Aging	Peoria, Washington	Seniors	To provide resources to help elderly persons and their caretakers
Central Illinois Center for the Blind and Visually Impaired (CICBVI)	Peoria	Blind and Visually Impaired	To provide services and support for the blind and visually impaired
Community Workshop Training Center (CWTC)	Peoria	People with Disabilities	To provide training for people with disabilities
EPIC	Peoria	People with Disabilities	To provide day training for people with disabilities
Snyder Village	Metamora	Seniors	Retirement community and nursing home
Tazewell County Resource Center (TCRC)	Tremont	People with Disabilities	To provide day training for people with disabilities

SERVICE AREA DEMOGRAPHIC PROFILE

The following pages include demographic profile summaries of the Grey Area, the Peoria Urbanized Area, and the State of Illinois. The primary source of demographic data used in this report is the American Community Survey (ACS). It is administered by the U.S. Census Bureau to collect a wide range of demographic data. As of the writing of this report, the 2018 ACS data are the most current information available. The ACS replaced the “long form” questionnaires formerly sent to a proportion of households during each decennial census. The ACS generally provides more current data than the decennial census because it is administered on an ongoing basis. The latest 5-year ACS (2014-2018) estimates were used in this report. These estimates average data over five consecutive years.

Figure 3.4 on the following page displays the population density for the Grey Area. A large proportion of the Grey Area has fewer than 1 person per acre; however, isolated locations in Washington, Morton, Chillicothe, and near the General Wayne A. Downing International Airport show higher density with more than 4 people per acre.

The age mix in the Grey Area is very similar to that in the Urbanized Area.

Table 3.3: Age of Population

Age	Total Population	Under 18	18-64	65+
Peoria Urbanized Area	254,886	22.7%	59.8%	17.6%
Grey Area	86,862	23.5%	59.9%	16.6%
State of Illinois	12,741,080	22.4%	62.0%	15.6%

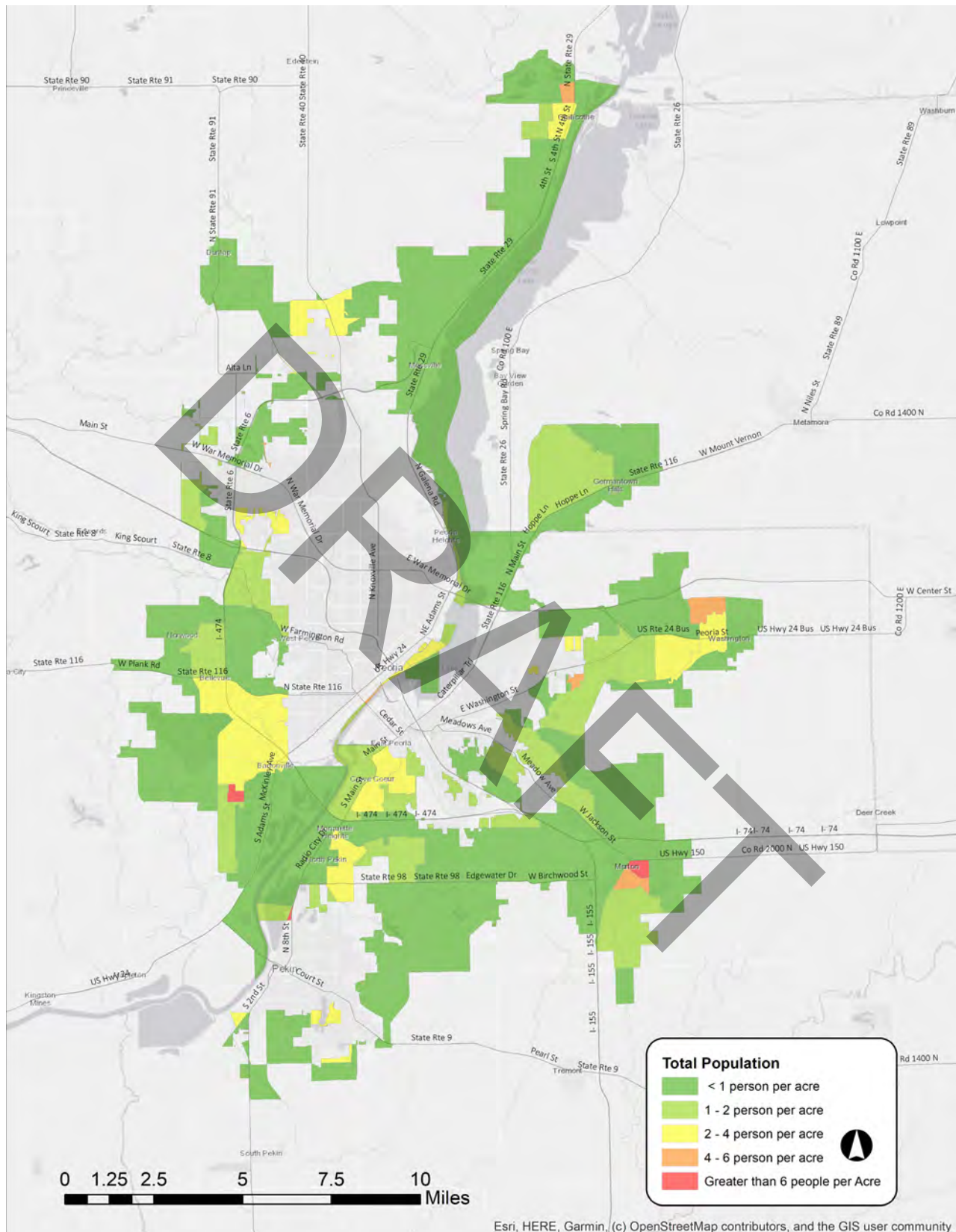


Figure 3.4: Grey Area Population Density

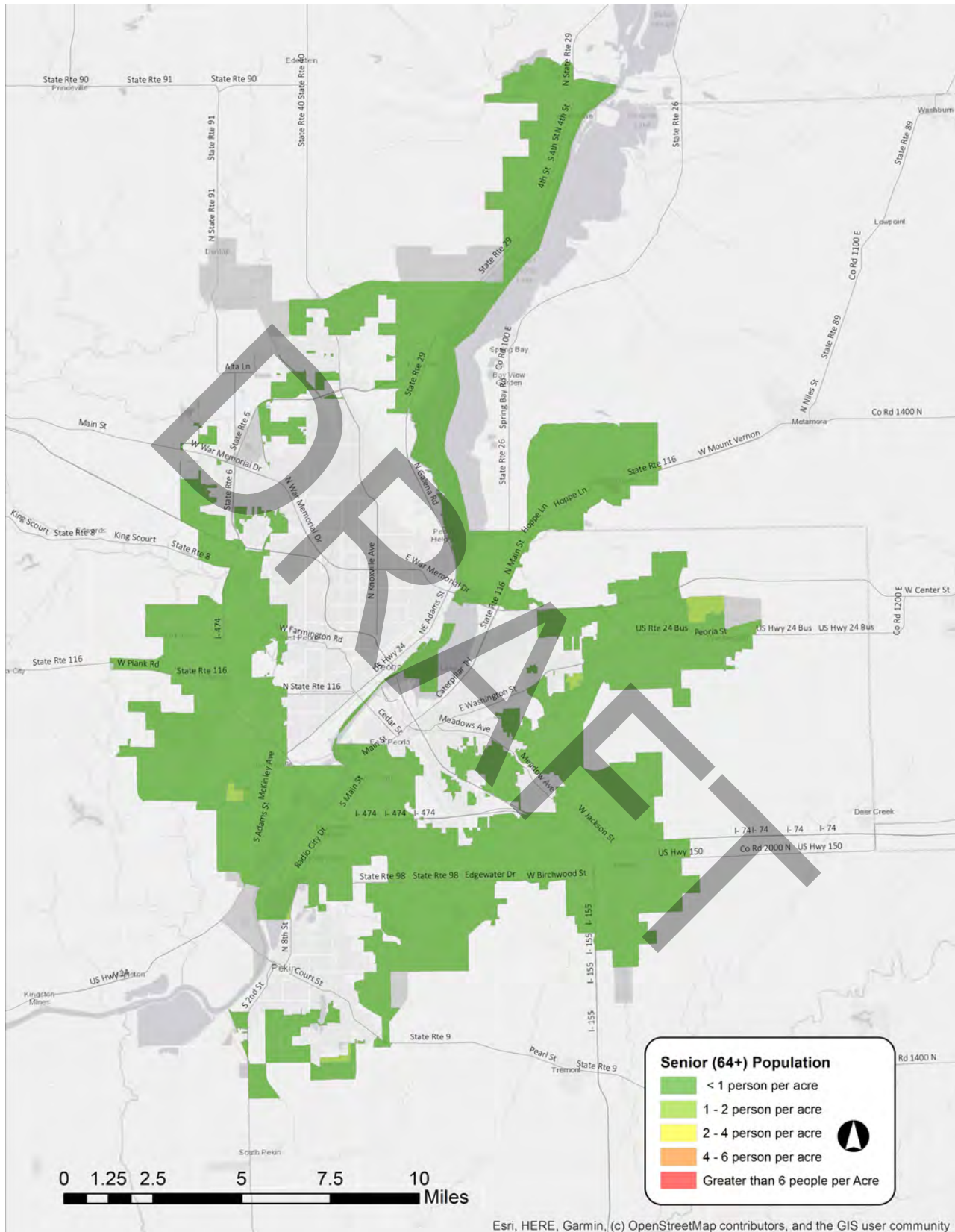


Figure 3.5: Grey Area Population Density Age 65+

Figure 3.5 on the previous page displayed the concentration of older adults age 64 and older residing in the Grey Area. In general, much of the area has is low density with fewer than 1 older adult per acre. Small concentrations of older adults are found near the edges of Washington, East Peoria, and west of Bartonville.

The percentage of non-white population in the Grey Area differs significantly from the Peoria Urbanized Area and the State of Illinois. A much lower percentage of the Grey Area's population is Black (3.7% compared with 13.8% for all of Illinois). Racial composition is shown in **Table 3.4**.

Table 2.4: Racial Composition

Race/Ethnicity	White	Black	Nat Am/ Alaska Nat	Asian	Haw Pac Islander	Other	2 or More Races	Hispanic/ Latino
Peoria Urbanized Area	77%	12.8%	0.2%	3.1%	0%	0.2%	2.8%	4.0%
Grey Area	91.9%	3.3%	0.2%	2.2%	0%	0.7%	1.7%	-
State of Illinois	60.9%	13.8%	0.1%	5.6%	0%	0.2%	2.0%	17.3%

The percentage of population with a bachelor's degree in the Grey Area is just below that of the Urbanized Area, and both are lower than the State of Illinois percentage. This can be attributed to the region's long history as a manufacturing hub and former world headquarters of Caterpillar Inc., a Fortune 100 company who produces large earth moving equipment. A comparison of educational attainment for the Grey Area, Peoria Urbanized Area, and Illinois is shown in **Table 3.5**.

Table 2.5: Educational Attainment

Educational Attainment*	No HS Diploma/ GED	HS Diploma/GED	Some College (no degree)	Bachelor's Degree	Graduate/ Professional Degree
Peoria Urbanized Area	8.9%	28.7%	33%	18.7%	10.7%
Grey Area	7.7%	29.6 %	23.3%	18.4%	9.4 %
State of Illinois	10.5%	26.1%	28.4%	21.1%	14.0%

*Highest level completed for those aged 25 and older

Labor force participation in the Grey Area is higher than in the Urbanized Area, but lower than Illinois as a whole as shown in **Table 3.6**.

Table 3.6: Labor Force Participation

	Total Workforce Population	In Labor Force	Not in Labor Force
Peoria Urbanized Area	122,151	59.9%	40.1%
Grey Area	68,863	62.5%	37.3%
State of Illinois	6,676,623	65.2%	34.6%

Unemployment rates in the Grey Area are similar to those in the Urbanized Area and statewide. See **Table 3.7** for details.

Table 3.7: Employment Status

Employment Status*	Employed	Unemployed
Peoria Urbanized Area	94.5%	5.7%
Grey Area	94.8%	5.1%
State of Illinois	94.3%	5.5%

**Includes only those in the labor force*

Household incomes in the Grey Area are somewhat higher than in the Urbanized Area. Both the Grey Area and Peoria Urbanized Area have a lower percent of households earning over \$100,000 than the state. This assessment indicated that Peoria Urbanized Area has the highest concentration of lower income households and the region is less affluent than the state overall as shown in **Table 3.8**.

Table 3.8: Household Income

Household Income	< \$50,000	\$50,000 - \$100,000	\$100,000 – \$200,000	>\$200,000
Peoria Urbanized Area	45.6%	33.2%	17.4%	3.9%
Grey Area	38.7%	33.8%	21.7%	5.9%
State of Illinois	39.1%	29.7%	22.9%	8.3%

A higher percentage of the Grey Area's population lives in owner occupied residences (75.5% compared with 66.0% for all of Illinois and 63.8% for the Urbanized Area). See **Table 3.9** for details.

Table 3.9: Housing Tenure

Households	Total Housing Units	Owner Occupied	Renter Occupied
Peoria Urbanized Area	119,733	63.8%	36.2%
Grey Area	34,698	76.0%	24.0%
State of Illinois	5,376,176	66.0%	34.0%

The percentage of the population in the Grey Area without access to a vehicle is lower than the state and urbanized area. This is consistent with most rural areas. Rural areas are heavily car dependent for travel, as other alternatives like transit and sidewalks are not available and/or practical. As shown in **Figure 3.6**, zero vehicle households appear to be concentrated closer to more urban development in Morton, Washington, and West of Peoria. Also, the higher percentages of 0 vehicle households statewide reflects in part auto ownership patterns in the City of Chicago and immediate environs.

Table 3.10: Vehicles Per Household

Vehicles Owned	0 Vehicle	1 Vehicle	2 Vehicle	3 Vehicle	4 Vehicle	5+ Vehicle
Peoria Urbanized Area	8.4%	38.6%	36.3%	12.1%	3.7%	0.8%
Grey Area	5.8%	31.7%	41.4%	15.0%	4.6%	1.6%
State of Illinois	10.8%	34.5%	36.4%	12.9%	4.0%	1.4%

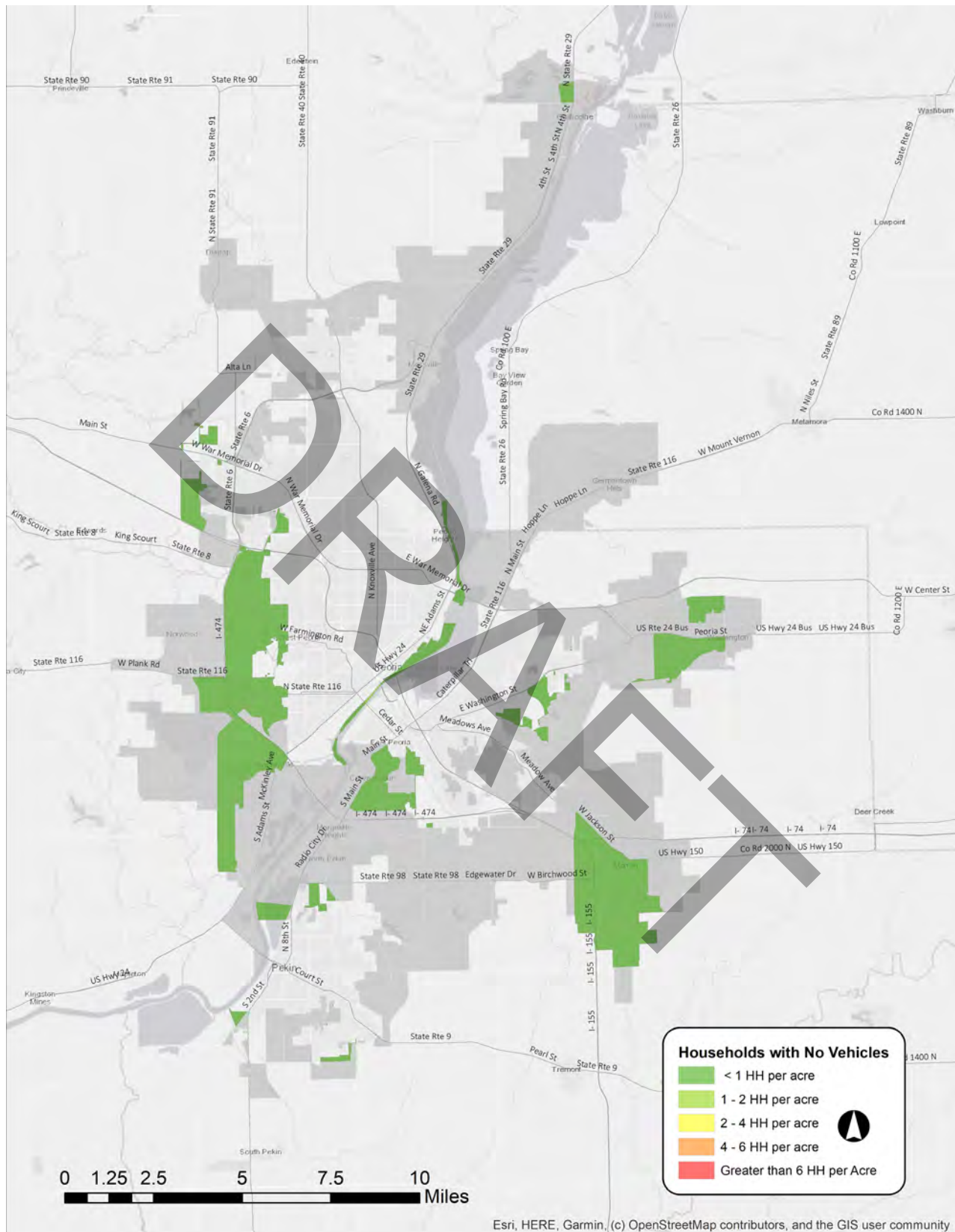


Figure 3.6: Density of Zero Vehicle Households

The percentage of the population in the Grey Area with a disability is significantly lower than average. This is likely a choice resulting from the rural environment and its distance from resources and support services. As shown in **Figure 3.11**, the concentration of disabled populations ranges throughout the Grey Area. It is likely that many of the disabilities are age-related and the result of rural residents who are aging in place.

Table 3.11: Disability Status

Employment	Total Civilian Non-Institutionalized Population	With a Disability	No Disability
Peoria Urbanized Area	250,612	12.5%	87.5%
Grey Area	85,124	8.6%	91.4%
State of Illinois	12,563,908	11.1%	88.9%

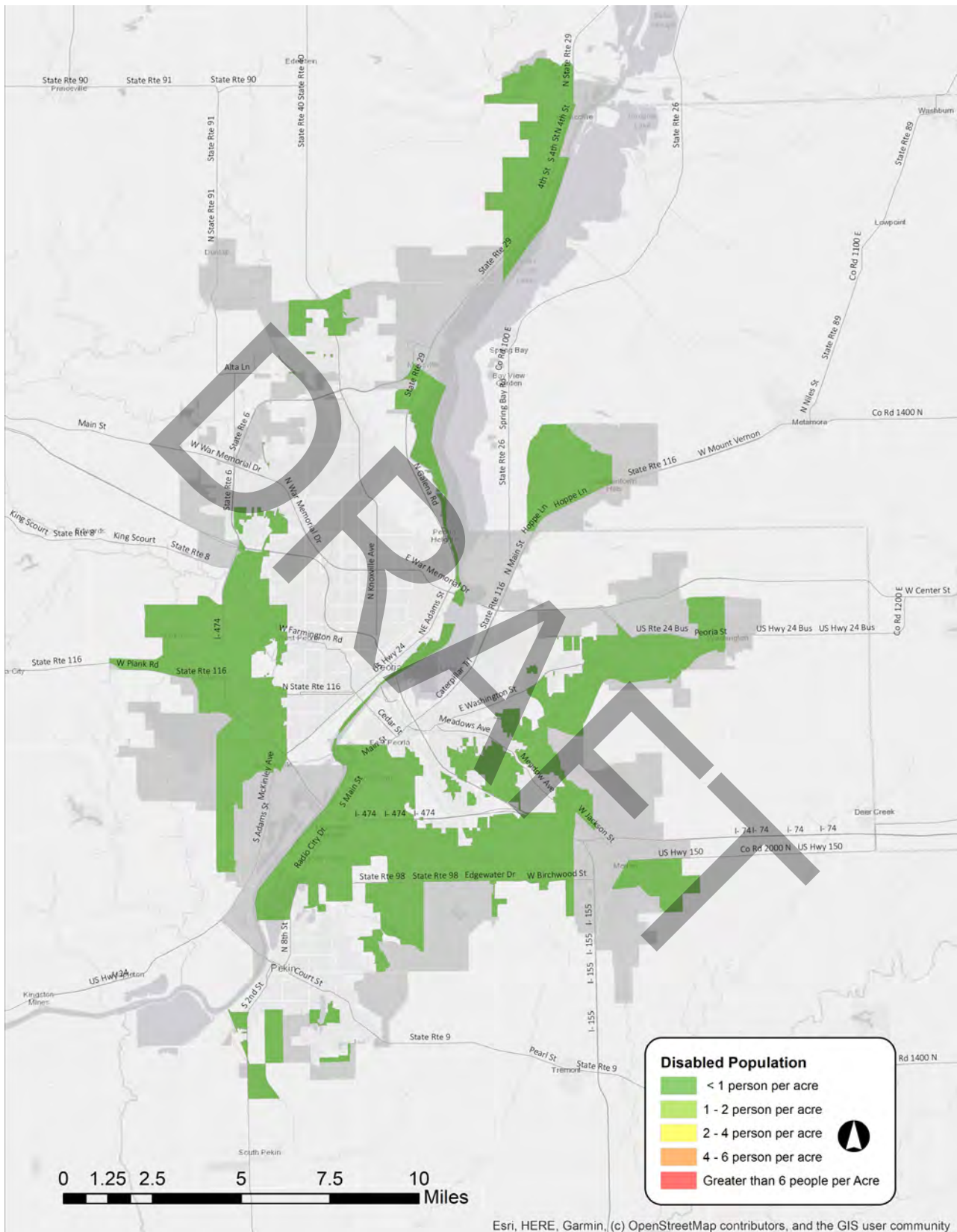


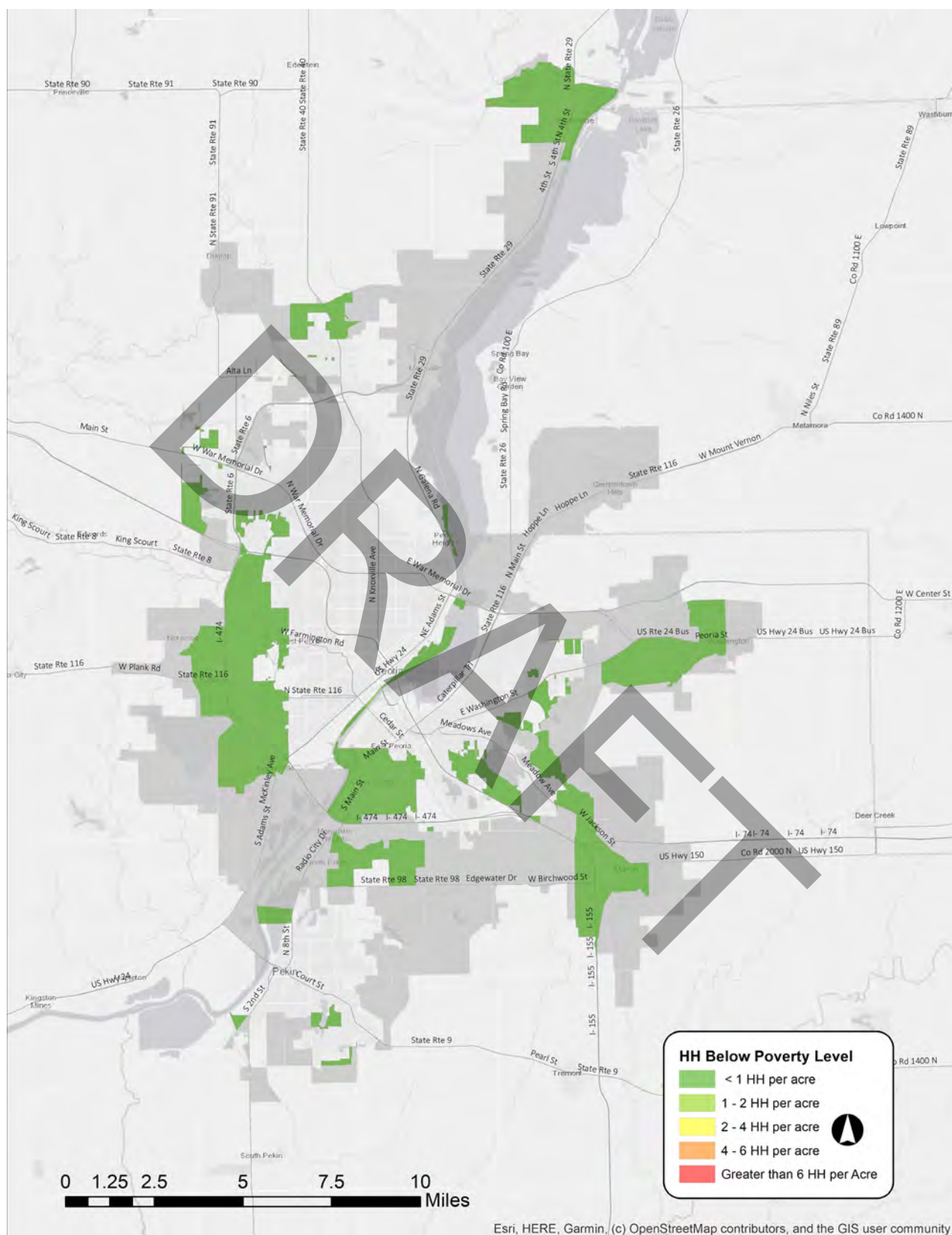
Figure 3.7: Density of Disabled Population

The percentage of the population in the Grey Area who live below poverty is significantly lower than state and regional average. As seen in **Figure 3.8**, the highest density of households below poverty are concentrated west of Peoria, south of East Peoria, and scattered throughout the larger municipalities in the Grey Area.

Table 3.12: Poverty Status

	Total Population with Income Below Poverty Levels (Last 12 Months)	Percent of Population with Income Below Poverty Levels (Last 12 Months)
Peoria Urbanized Area	39,185	15.8%
Grey Area	7,904	9.1%
State of Illinois	1,509,247	12.1%

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The definition of “broadband” has changed over the years to reflect the way Americans use the Internet. 25 Mbps (download) and 3 Mbps (upload) is a reasonable minimum standard for broadband in 2018. According to data provided by the Federal Communications Commission, at least one broadband internet service provider is available throughout the Grey Area. Areas east of the Illinois River have fewer providers available. Locations near Morton, Sunnyland, and rural Tazewell County appear to have the least access to high speed internet.

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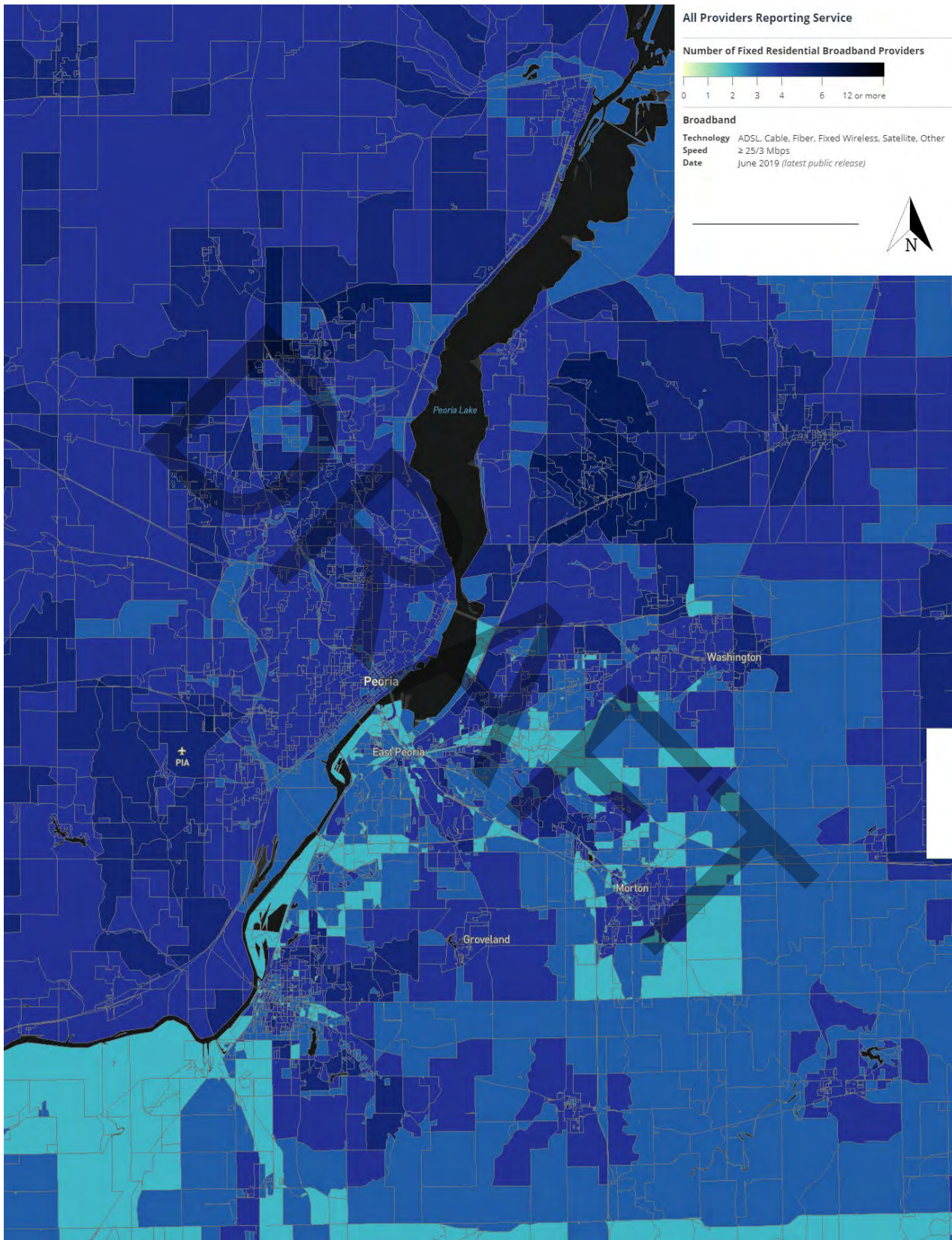


Figure 3.9: Access to Broadband Service

SERVICE AREA EMPLOYMENT PROFILE

Longitudinal Employer–Household Dynamics (LEHD) data are the product of a partnership between the Census Bureau and U.S. states to provide high quality local labor market information and to improve the Census Bureau's economic and demographic data programs. LEHD data are based on different administrative sources, primarily Unemployment Insurance (UI) earnings data and the Quarterly Census of Employment and Wages (QCEW), as well as censuses and surveys. Firm and worker information are combined to create job level quarterly earnings history data, data on where workers live and work, and data on firm characteristics, such as industry. OnTheMap is a web-based mapping and reporting application that enables access to the LEHD Origin-Destination Employment Statistics (LODES) dataset, showing where people work and where workers live. OnTheMap was designed to allow users to quickly revise and resubmit a new analysis. Using this resource, a “Work Area Profile Analysis,” and a “Home Area Profile Analysis” were performed on the study area to highlight the characteristics of the employees and residents. The “Work Area Profile Analysis” highlights workers employed in the Grey Area. Alternatively, the “Home Area Profile Analysis” highlights the employed persons who reside within the Grey Area.

Tables 3.13-15 compare the jobs, age, earning, gender, race, ethnicity, industry sector, and educational attainment for the work and home profiles of the Grey Area for the most recent year of available data (2017).

It is important to note that this data was collected Pre-COVID and will not reflect changes to employment, housing, or commute patterns that resulted from the social distancing orders of 2020-2021. It remains unclear if these shifts, like remote learning or large scale remote office work, will be permanent or alter the long term outlook for the region.

According to OnTheMap, 32,077 workers reside in the Grey Area and 42,906 jobs are present. The most common jobs available in the Grey Area include manufacturing, retail trade, education services, food services and accommodations, and transportation and warehousing. Workers who reside in the Grey Area are most likely to be employed in health care and social assistance, manufacturing, retail trades, educational services, and accommodations and food services. It is notable that there are more than twice as many African American workers as there are residents. It can be assumed this reflects local commuting patterns (workers commuting to where the jobs are located). This information may suggest that enhanced Grey Area transit service has potential to provide improved opportunities for minority workers.

Table 3.13: Grey Area Work and Home Area Profile

	Work Profile		Home Profile	
	Count	Percent	Count	Percent
TOTAL JOBS				
Total Jobs	32,077	100.0%	42,906	100.0%
JOBS BY WORKER AGE				
Age 29 or younger	7,009	21.9%	9,255	21.6%
Age 30 to 54	17,654	55.0%	23,450	54.7%
Age 55 or older	7,414	23.1%	10,201	23.8%



Table 3.14: Grey Area Work and Home Area Profile Part 1

	Work Profile		Home Profile	
	Count	Percent	Count	Percent
JOBS BY EARNINGS				
\$1,250 per month >	8,736	27.2%	10,875	25.3%
\$1,251 - \$3,333 per month	9,801	30.6%	13,104	30.5%
> \$3,333 per month	13,540	42.2%	18,927	44.1%
JOBS BY WORKER SEX	Count	Percent	Count	Percent
Male	18,198	56.7%	21,491	50.1%
Female	13,879	43.3%	21,415	49.9%
JOBS BY WORKER RACE	Count	Percent	Count	Percent
White Alone	29,109	90.7%	40,761	95.0%
Black or African American Alone	1,838	5.7%	889	2.1%
American Indian or Alaska Native Alone	69	0.2%	77	0.2%
Asian Alone	737	2.3%	767	1.8%
Native Hawaiian or Other Pacific Islander	14	0.0%	14	0.0%
Two or More Race Groups	310	1.0%	398	0.9%
JOBS BY WORKER ETHNICITY	Count	Percent	Count	Percent
Not Hispanic or Latino	30,964	96.5%	41,895	97.6%
Hispanic or Latino	1,113	3.5%	1,011	2.4%
JOBS BY WORKER EDUCATION	Count	Percent	Count	Percent
Less than high school	2,495	7.8%	2,885	6.7%
High school or equivalent, no college	7,806	24.3%	9,896	23.1%
Some college or Associate degree	8,417	26.2%	11,597	27.0%
Bachelor's degree or advanced degree	6,350	19.8%	9,273	21.6%
Educational attainment not available (workers aged 29 or younger)	7,009	21.9%	9,255	21.6%

Table 3.15: Grey Area Work and Home Area Profile Part 2

	Work Profile		Home Profile	
	Count	Percent	Count	Percent
Jobs by NAICS Industry Sector				
Agriculture, Forestry, Fishing and Hunting	28	0.1%	105	0.2%
Mining, Quarrying, and Oil and Gas Extraction	32	0.1%	30	0.1%
Utilities	64	0.2%	258	0.6%
Construction	1,818	5.7%	1,967	4.6%
Manufacturing	5,449	17.0%	5,167	12.0%
Wholesale Trade	1,159	3.6%	1,779	4.1%
Retail Trade	3,986	12.4%	4,632	10.8%
Transportation and Warehousing	2,682	8.4%	1,561	3.6%
Information	445	1.4%	664	1.5%
Finance and Insurance	648	2.0%	1,866	4.3%
Real Estate and Rental and Leasing	339	1.1%	493	1.1%
Professional, Scientific, and Technical Services	2,034	6.3%	2,117	4.9%
Management of Companies and Enterprises	1,039	3.2%	1,322	3.1%
Administration & Support, Waste Management and Remediation	1,646	5.1%	2,325	5.4%
Educational Services	3,519	11.0%	4,176	9.7%
Health Care and Social Assistance	2,174	6.8%	6,752	15.7%
Arts, Entertainment, and Recreation	635	2.0%	1,061	2.5%
Accommodation and Food Services	3,143	9.8%	3,792	8.8%
Other Services (excluding Public Administration)	735	2.3%	1,419	3.3%
Public Administration	502	1.6%	1,420	3.3%

The most prevalent jobs in the study area are in manufacturing, retail, educational services, and accommodations/food services. Residents and workers in the Grey Area generally have similar work characteristics; however, the largest number of residents (7,169) are employed in Health Care and Social Assistance, which is much greater than the available jobs (2,286) in the area.

Analysis of the relative size of employers revealed that the largest single employers are located in Morton, Mossville, and areas around the General Wayne A. Downing Peoria International Airport shown in **Figure 3.10**.

According to **Figure 3.11**, job opportunities in the Grey Area are concentrated in Morton, Washington, Chillicothe, and Bartonville.

Figure 3.12 shows residential clusters appear in Morton, Washington, Creve Coeur, Chillicothe, and Bartonville.

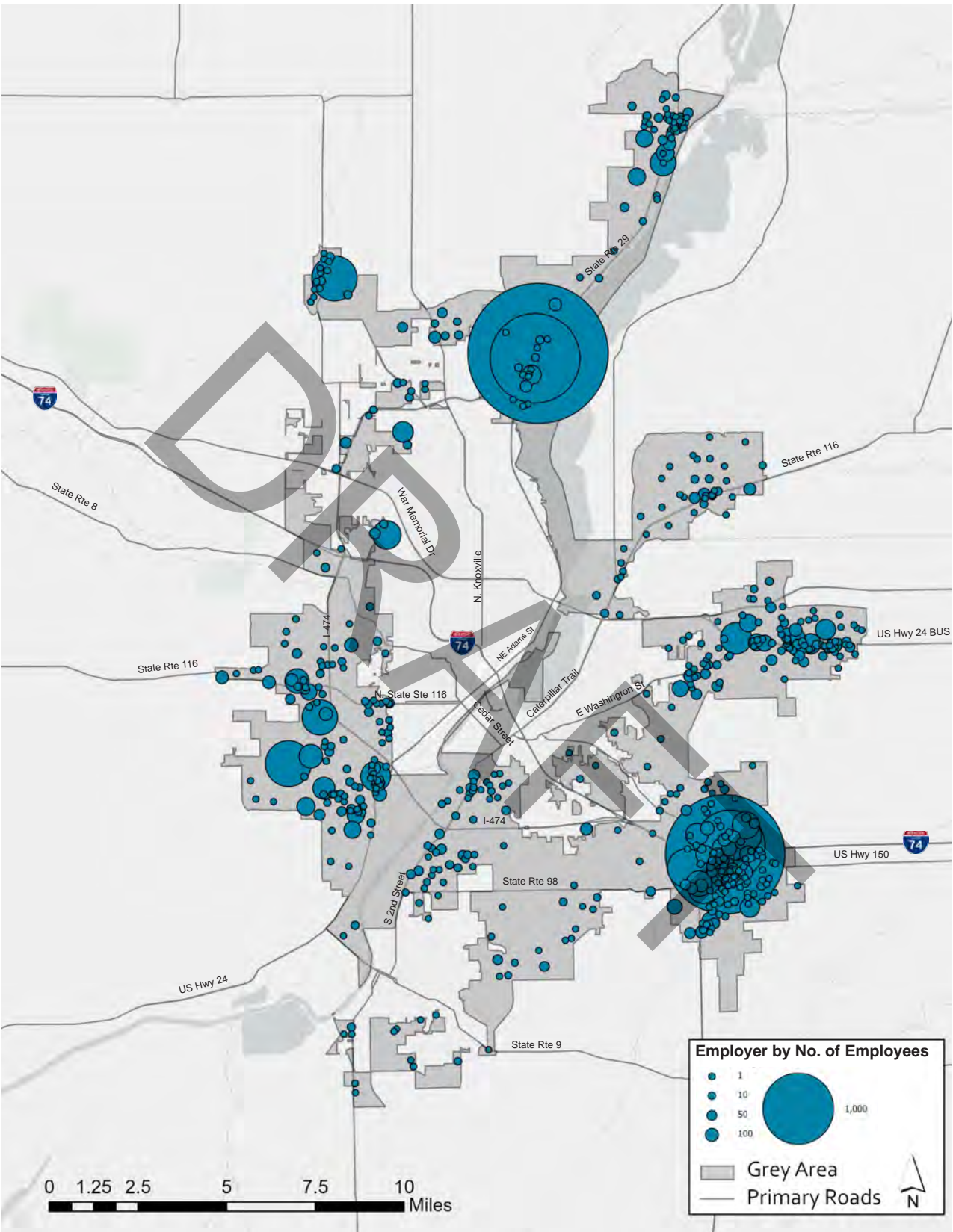


Figure 3.10: Employer Location by Size

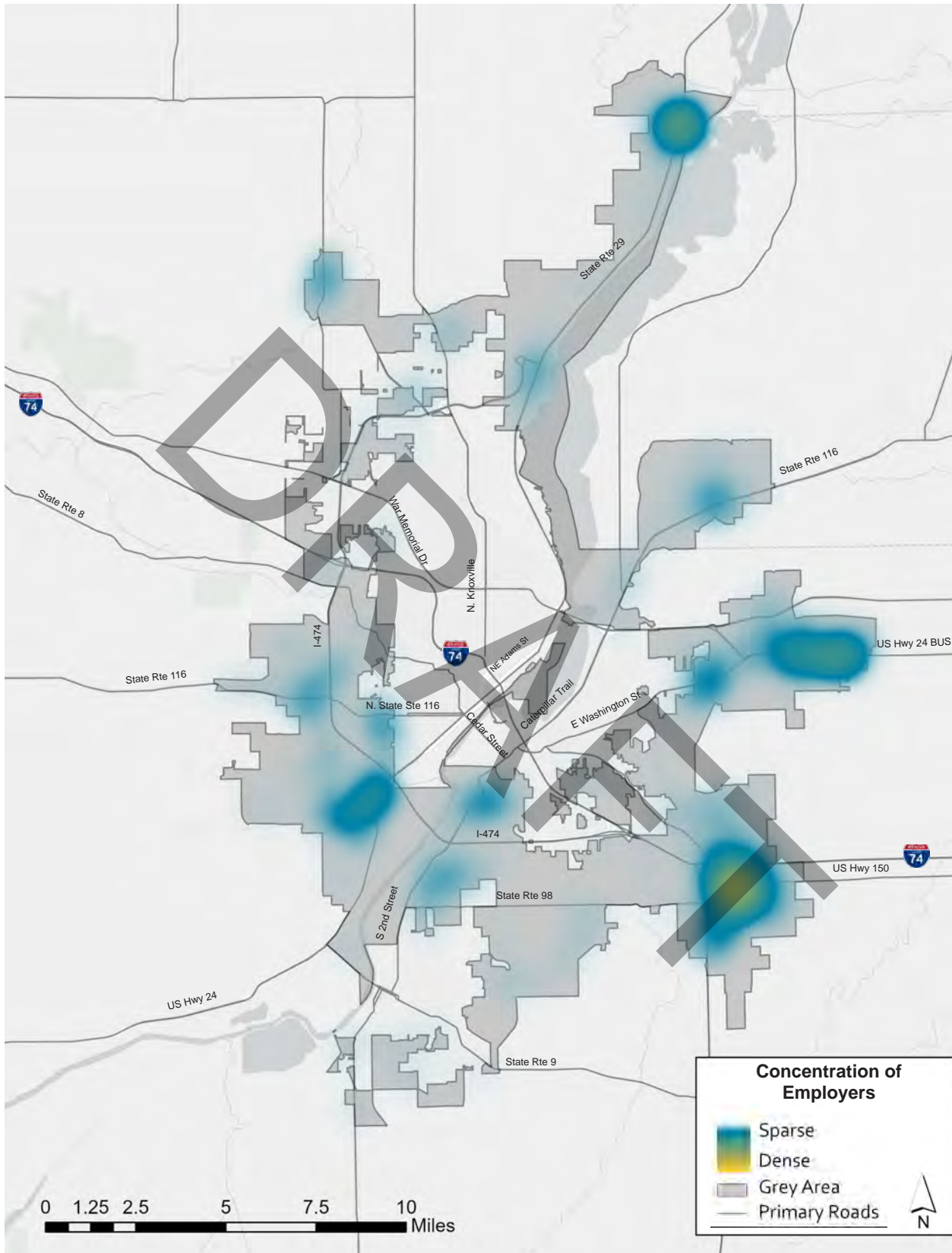


Figure 3.11: Concentration of Employment Opportunities

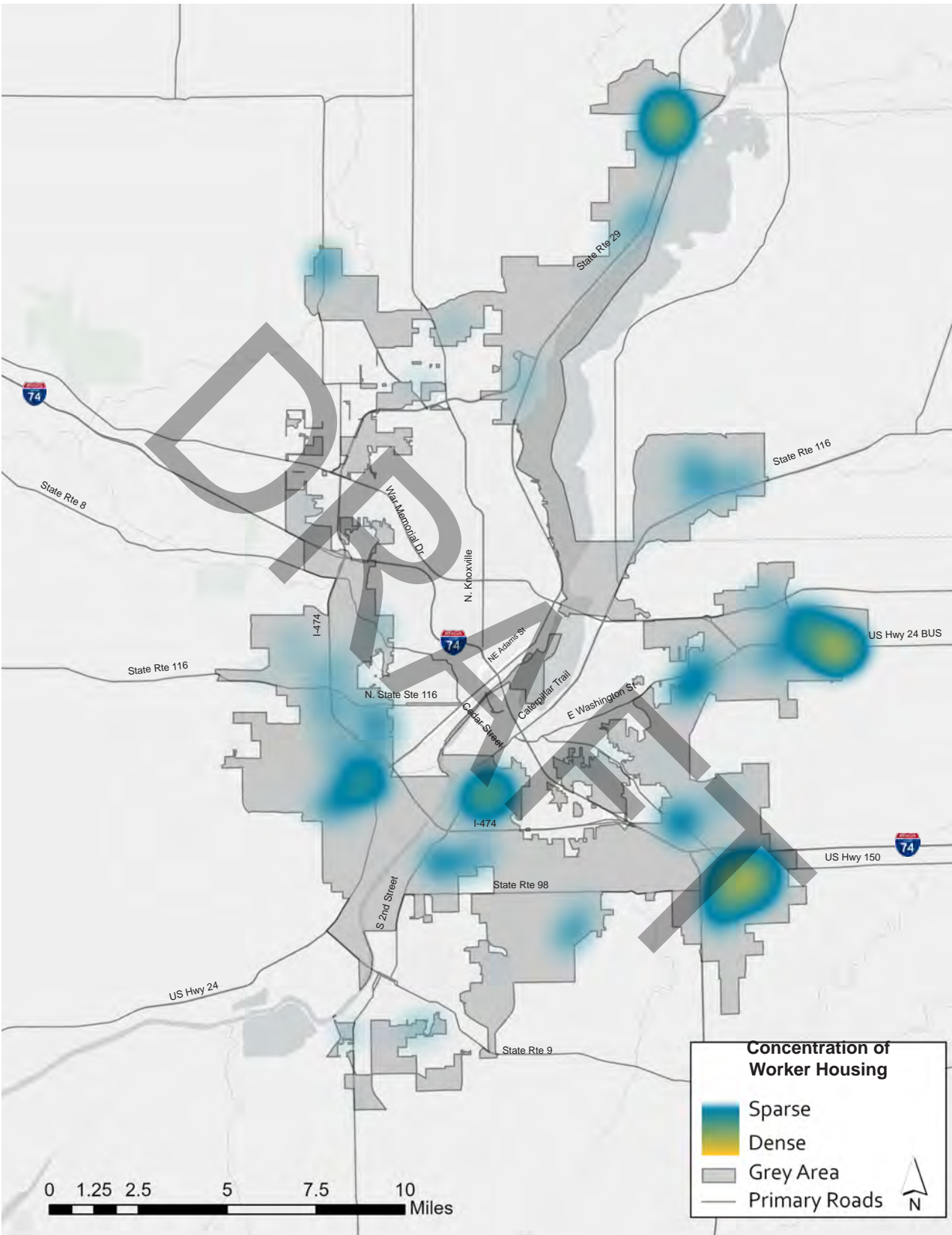


Figure 3.12: Concentration of Worker Housing

MAJOR TRIP GENERATORS

Shown in the following maps and their respective tables are major trip generators identified by the 2016 HSTP Region 5 and amended by the Grey Area Steering Committee during the planning process. The locations shown indicate population destinations where service providers take travelers once or more a week.

MEDICAL (NON-DIALYSIS)

The medical (non-dialysis) category includes clinics and hospitals. A clinic is any facility that provides limited diagnostic and outpatient care but is unable to provide prolonged in-house medical and surgical care. Clinics commonly have lab facilities, supporting pharmacies, and a wide range of services (compared to the medical office, which may only have specialized or individual physicians). A hospital is any institution where medical or surgical care and overnight accommodations are provided to non-ambulatory and ambulatory patients.

Table 3.16: Major Trip Generators - Medical (Non-Dialysis)

ID	Name	Address	County
1	Hopedale Medical Arts, Hopedale	107 Tremont Street, Hopedale, IL 61747	Tazewell
2	St. Francis Medical Center, Peoria	530 NE Glen Oak Ave, Peoria, IL 61637	Peoria
3	UnityPoint Health, Pekin	600 S. 13th Street, Pekin, IL 61554	Tazewell
4	Veterans Assistance Center, Peoria	3116 N. Dries Ln. #200, Peoria, IL 61604	Peoria
5	Tazwood Center for Wellness, Pekin	3248 Van De Ver Ave Ste A, Pekin IL 61554	Tazewell
6	OSF Rt 91 Peoria	8600 IL-91, Peoria IL 61615	Peoria
7	UnityPoint Health Methodist	221 NE Glen Oak Ave, Peoria, IL 61636	Peoria
8	IL Neurological Center, Peoria	530 NE Glen Oak Ave, Peoria, IL 61637	Peoria
9	Tazwood Center for Wellness, East Peoria	111 West Washington Street #230, East Peoria, IL 61611	Tazewell

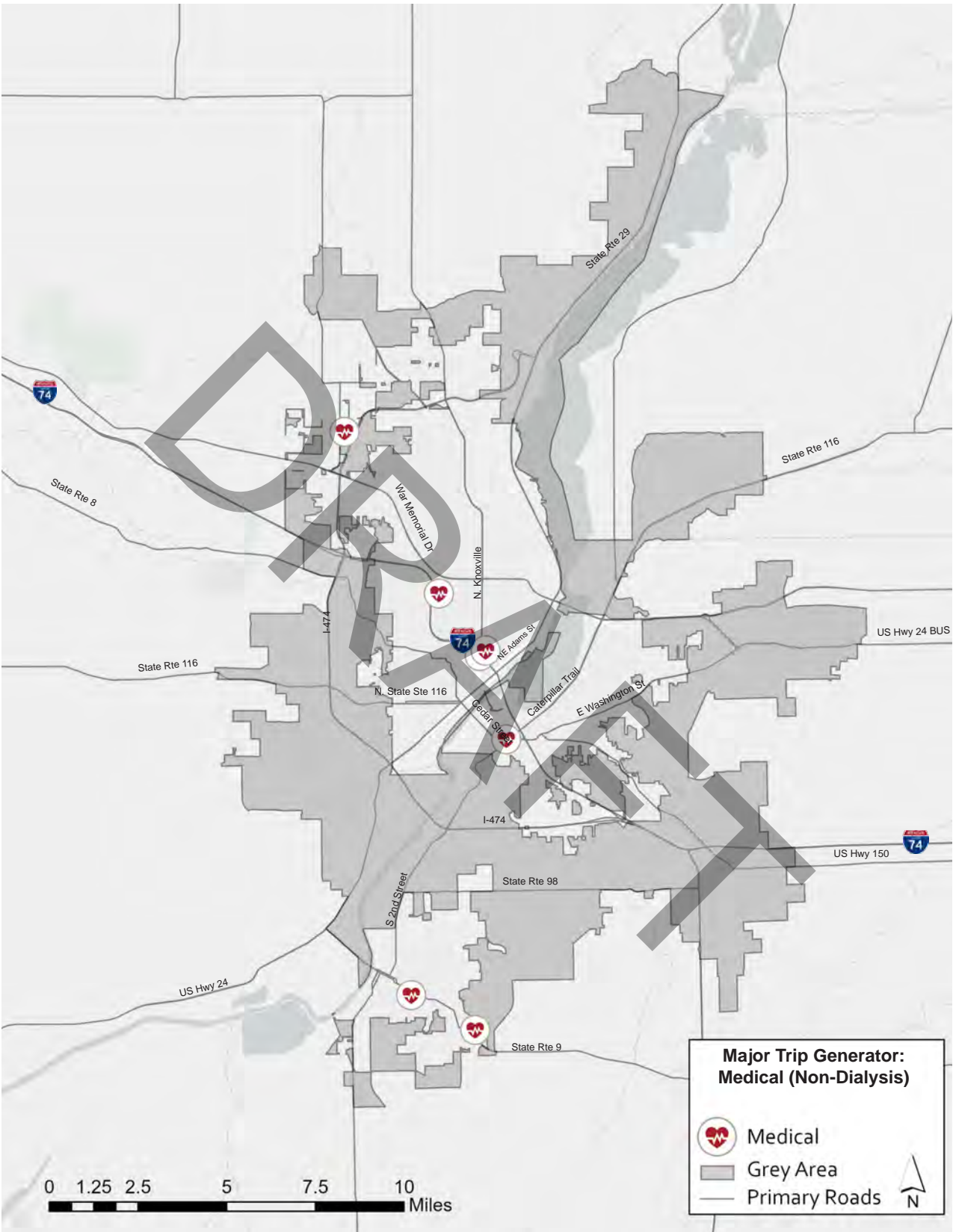


Figure 3.13: Major Trip Generators - Medical (Non-Dialysis)

DIALYSIS

A dialysis clinic is highly specialized out-patient medical service which provides treatment for patients with irreversible renal insufficiencies. Treatment procedures require professional supervision by staff experienced in renal pathophysiology. In-center treatment time is on average 3-5 hours, 3 times a week.

Table 3.17: Table 16: Major Trip Generators - Dialysis

ID	Name	Address	County
1	East Peoria Dialysis, East Peoria	3300 N. Main Street, East Peoria, IL 61611	Tazewell
2	Fresenius, East Peoria	415 Richland St. East Peoria, IL 61611	Tazewell
3	Fresenius (North City), Peoria	10405 North Juliet Court, Peoria, IL 61615	Peoria
4	Fresenius (Downtown), Peoria	401 W. Romeo B. Garrett Ave, Peoria, IL 61605	Peoria



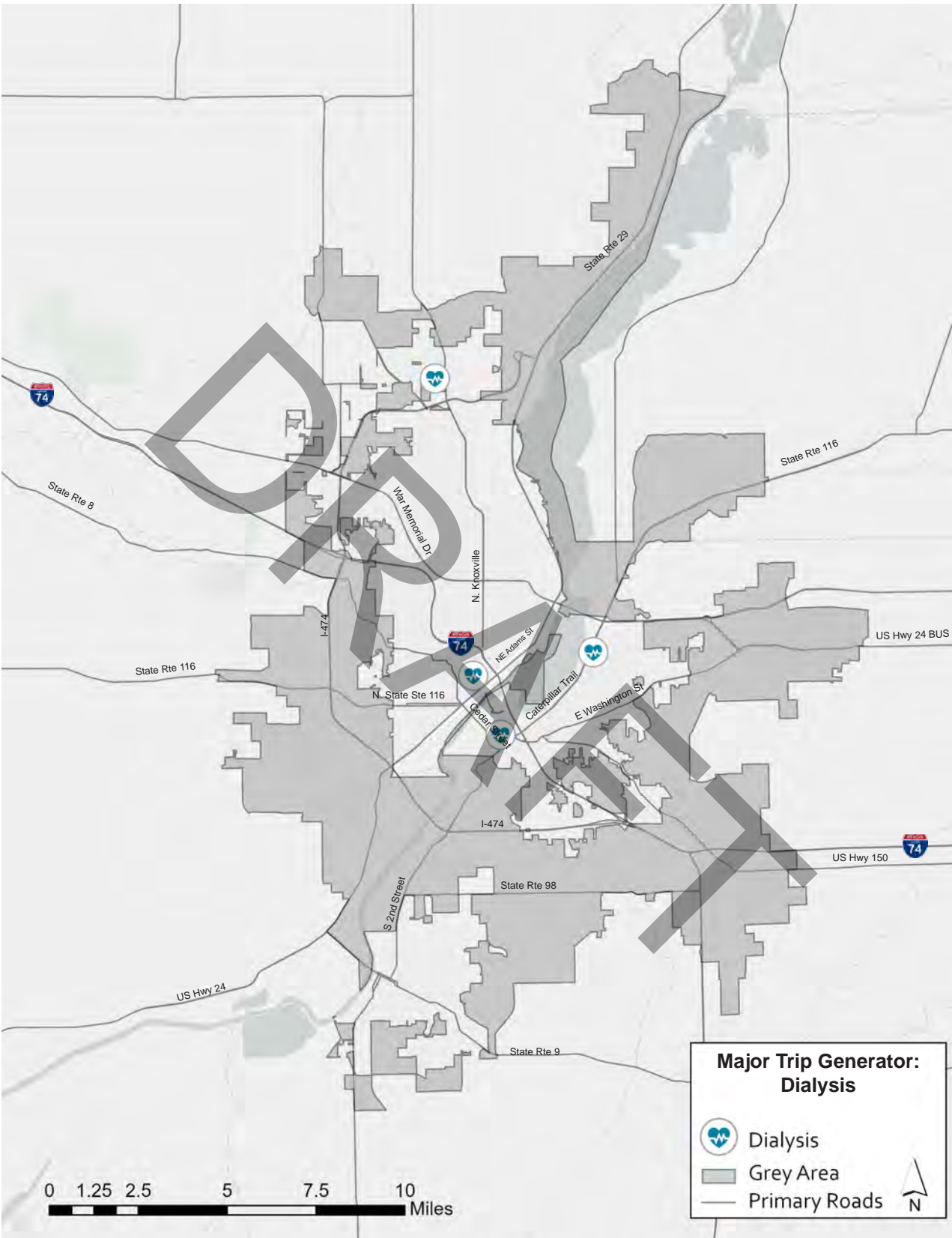


Figure 3.14: Major Trip Generators - Dialysis

EMPLOYMENT AND EDUCATION

For the purposes of this study, the place of employment means the worksite or primary physical location where a worker actually performs his or her work. An educational institution is identified as the school (including a technical, trade, or vocational school), junior college, college or university where the student physically attends classes.

Table 3.18: Major Trip Generators - Employment/Education

ID	Name	Address	County
1	EPIC, Peoria	1913 W. Townline Rd. Peoria, IL 61615	Peoria
2	ICC North, Peoria	5407 N. University Street, Peoria, IL 61635	Peoria
3	Community Workshop and Training Center, Peoria	3215 N. University Street, Peoria, IL 61604	Peoria
	Caterpillar, Mossville	14009 N. Old Galena Rd., Mossville, IL 61552	Peoria
4	Peoria Production Shop, Peoria	2029 W. Townline Rd. Peoria IL 61615	Peoria
5	Peoria Regional Learning Center	3826 N. Taylor Rd. Hanna City, IL 61536	Peoria
6	Tazewell County Resource Center, Tremont	21310 IL-9, Tremont, IL 61568	Tazewell
7	Caterpillar, Morton	500 N. Morton Ave, Morton, IL 61550	Tazewell
8	ADDWC, Eureka*	200 Moody St. Eureka, IL 61530	Woodford
9	Busy Corner Restaurant, Goodfield	302 Eureka St. Goodfield, IL 61742	Tazewell
10	ICC	1 College Drive, East Peoria, IL 61635	Tazewell
11	Nestle	216 N Morton Ave, Morton, IL 61550	Tazewell
12	Morton Buildings	380 Erie Ave, Morton, IL 61550	Tazewell
13	Morton Industries	70 Commerce Dr, Morton, IL 61550	Tazewell
14	Matcor Metal Fabrication	1021 W Birchwood St	Tazewell

**Located beyond the map boundaries*

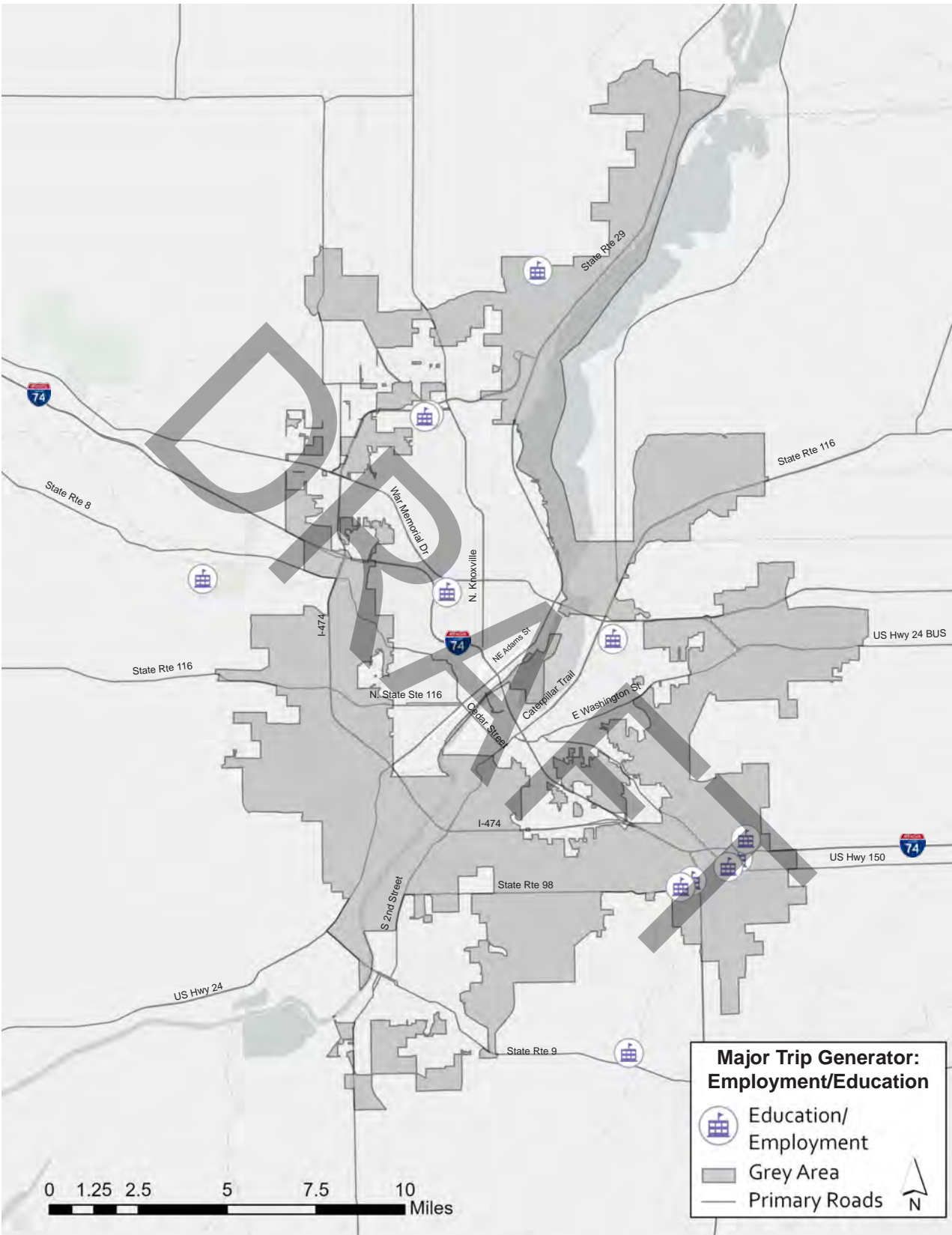


Figure 3.15: Major Trip Generators - Employment/Education

SHOPPING

The shopping category is defined as any retail establishment that provides goods or services. These destinations include grocery stores, departments stores, shopping centers, and independent retailers.

Table 3.19: Major Trip Generators - Shopping

ID	Name	Address	County
1	Northwoods Mall, Peoria	2200 W. War Memorial Drive	Peoria
2	Walmart (Allen Rd.) Peoria	8915 N. Allen Rd. Peoria IL 61615	Peoria
3	Kroger, Bartonville	1405 W. Garfield Ave, Bartonville, IL 61607	Peoria
4	OSF Senior World	719 N. William Kumpf Blvd #300, Peoria, IL 61605	Peoria
5	Walmart, East Peoria	401 River Road, East Peoria, IL 61611	Tazewell
6	Kroger, Peoria	9219 N. Lindbergh Dr. Peoria, IL 61615	Peoria
7	Kroger, Morton	1001 W. Jackson St., Morton, IL 61550	Tazewell
8	Walmart, Pekin	3320 Veterans Dr. Pekin, IL 61554	Tazewell
9	Aldi, Pekin	3475 Court St. Pekin, IL 61554	Tazewell
10	Walmart, Washington	1980 Freedom Pkwy, Washington, IL 61571	Tazewell
11	Walmart, Morton	155 E. Courtland St. Morton, IL 61550	Tazewell



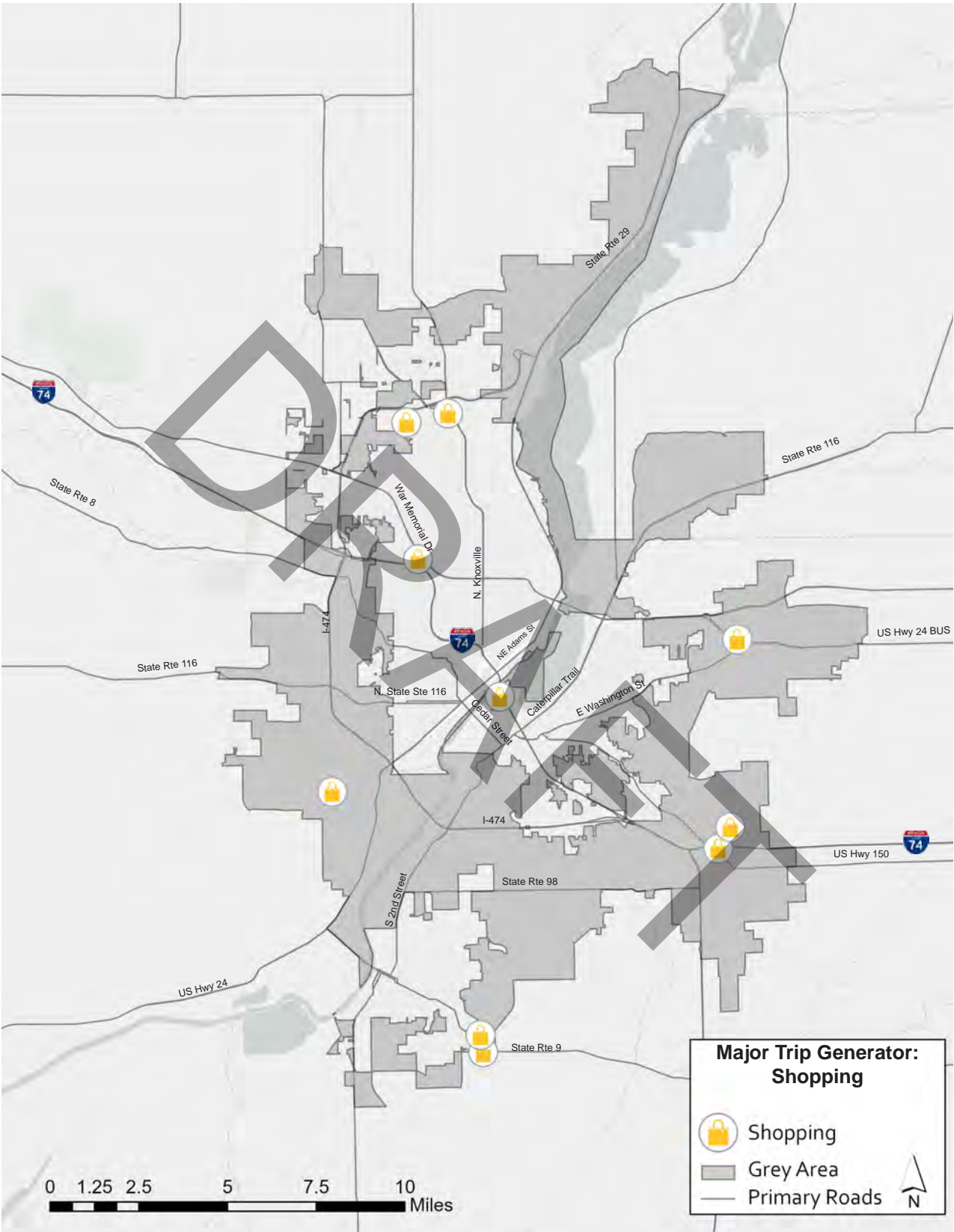


Figure 3.16: Major Trip Generators - Shopping

LEISURE AND RECREATION

Recreation and leisure are terms often used interchangeably. Both relate to what people choose to do in their free time; time that is not otherwise used for work, school, or other activities like appointments and chores. Recreational destinations are those that provide physical or social activities primarily for health and enjoyment.

Table 3.20: Major Trip Generators - Leisure/Recreation

ID	Name	Address	County
1	Pizza Ranch, Morton	903 W. Jackson St. Morton, IL 61550	Tazewell
2	Heart of Illinois Special Recreation Association, Peoria	8727 N. Pioneer Rd. Peoria IL, 61615	Peoria
3	Nail Professionals, Morton	1935 S. Main St. Morton, IL 61550	Tazewell
4	CityLink Transfer Center, Peoria	407 SW Adams St. Peoria, IL 61602	Peoria
5	Landmark Rec Center, Peoria	3225 N. Dries Ln, Peoria IL, 61604	Peoria
6	Riverplex, Peoria	600 Northeast Water St. Peoria IL 61603	Peoria
7	Super Nutrition Fitness Center, Bartonville	4503 W. Pfeiffer Rd. Bartonville, IL 61607	Peoria
8	Heart of Illinois Special Recreation Association, Peoria	8727 N. Pioneer Rd. Peoria IL, 61615	Peoria
9	OSF Senior World, Morton	730 W. Jefferson St. #200, Morton, IL 61550	Tazewell
10	OSF Senior World, Peoria	719 N. William Kumpf Blvd, ST. #300, Peoria, IL 61605	Peoria
11	Five Points, Washington	360 N Wilmor Rd, Washington, IL 61571	Tazewell



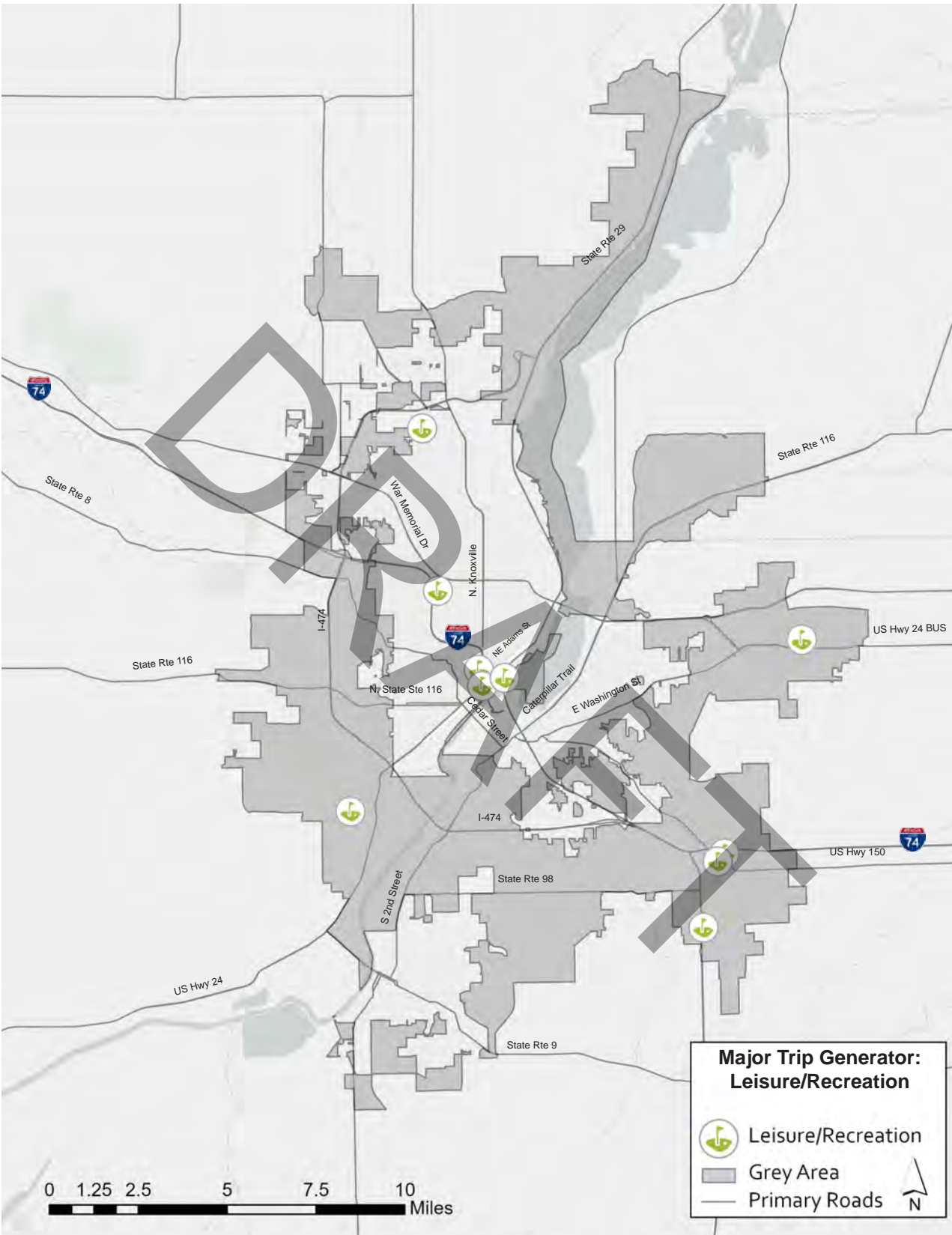


Figure 3.17: Major Trip Generators - Leisure/Recreation

OTHER

Other trip generators were identified as common destinations. These primarily included government institutions.

Table 3.21: Major Trip Generators - Other

ID	Name	Address	County
1	CityLink Transfer Center, Peoria	407 SW Adams St. Peoria, IL 61602	Peoria
2	Tazewell County Courthouse, Pekin	342 Court St. Pekin, IL 61554	Tazewell County
3	Woodford County Courthouse, Eureka*	115 N. Main Street, Eureka, IL 61530	Woodford

**Located beyond the map boundaries*



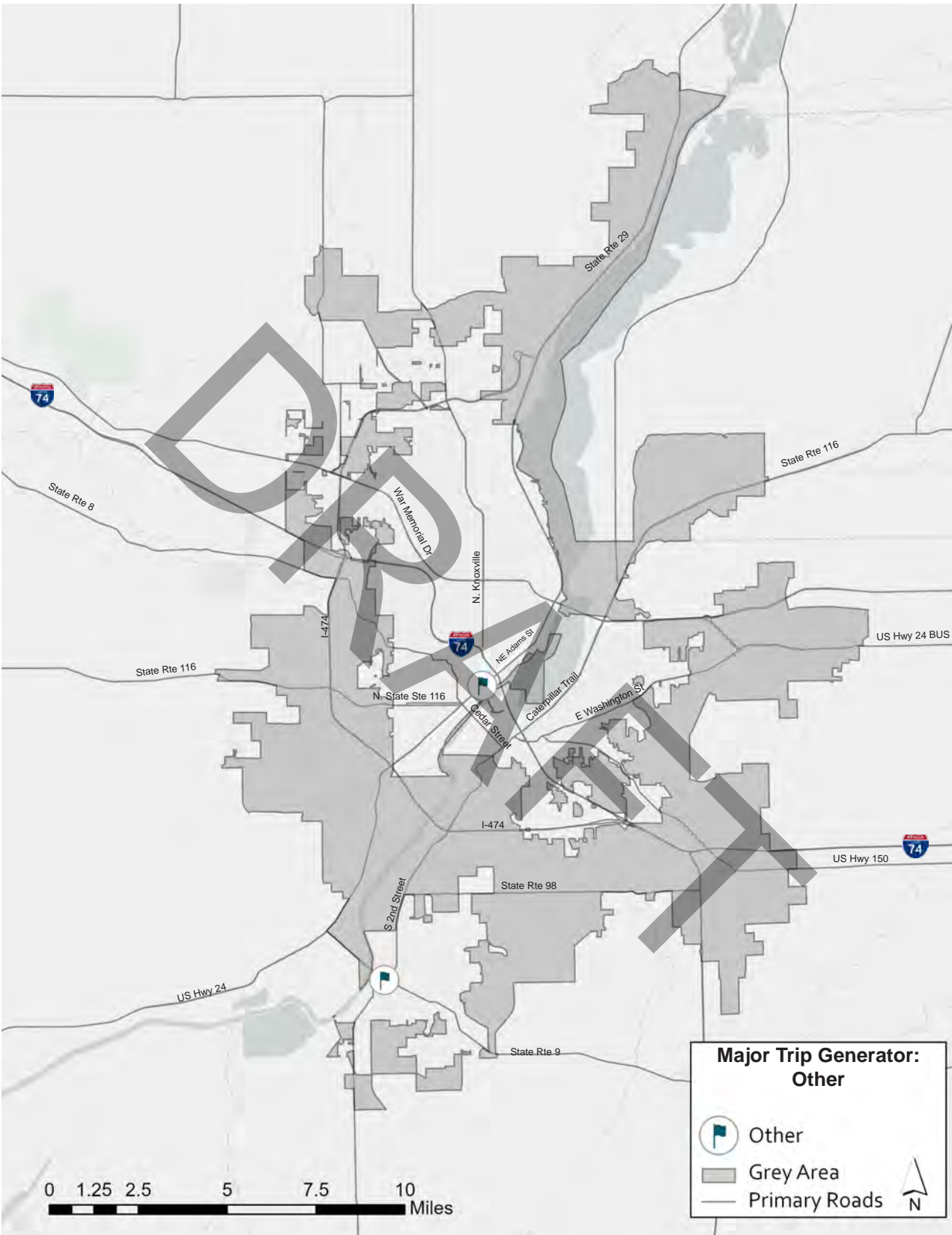


Figure 3.18: Major Trip Generators - Other

A compilation of the location of all major trip generators is shown in **Figure 3.19**. Destinations are concentrated in Downtown Peoria, N. Allen Rd. in Northern Peoria, Morton, N. Sterling Ave. in Central Peoria, E. Court St. in Pekin, and Camp St. in East Peoria.

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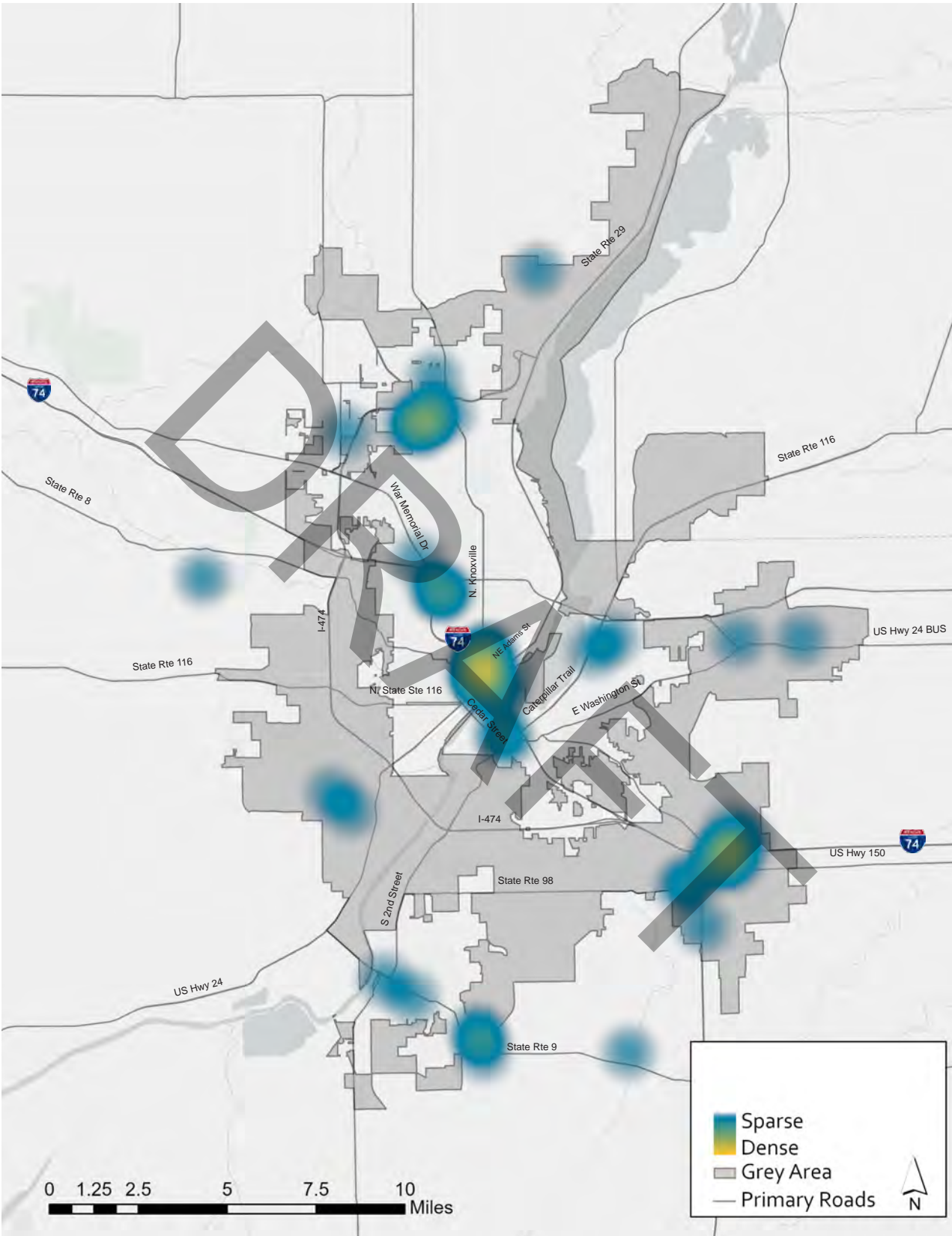


Figure 3.19: Concentration of Major Trip Generators

CONCLUSION

Strategic investments in transit can improve quality of life and health for thousands residents in the Grey Area and ease congestion and parking demand throughout the region. The following key takeaways surmise the findings of the existing conditions analysis for the Grey Area.

KEY TAKEAWAYS

- Residents of the Grey Area are older, more affluent, more likely to be White, and more likely to own a car than other residents of the Urbanized Area.
- A large concentration of Grey Area residents reside in Washington and Morton.
- People living in poverty in the Grey Area are more likely to live near denser, more urban areas.
- Though fewer people work in the Grey Area than reside within it, many of the region's largest employers are located here - particularly large employers in Morton and Mossville.
- Most major trip designation are located within areas already served by GPMTD.
- Major trip destinations in the Grey Area are concentrated in Morton and Dunlap.
- Residents in unincorporated Tazewell County have the least access to broadband; thus, making it more difficult to work or attend school remotely.

4.0 TRANSIT NEEDS ASSESSMENT

In order to determine the appropriate mobility solution for the Grey Area, it is necessary to first quantify the unmet transit needs. Without the ability to interview each and every resident to determine their mobility limitations, the study team had to rely on industry best practices for forecasting rural transit demand.

Important factors which determine the significant majority of demand for public transit service are:

- Elderly population
- Disabled population
- Persons in poverty
- Participation in social service programs
- Automobile Ownership

For the Grey Area, the special emphasis was placed on addressing the transit needs of the elderly and disabled as a result of feedback from participants in the stakeholder interviews and steering committee meetings.



Photo: APTA

CALCULATING TRANSIT DEMAND ESTIMATES

Over several decades, there has been a noteworthy amount of research into forecasting demand for transit services in rural/lower density areas. These typically are areas where fixed route service is not cost effective. These methodologies focus on forecasting latent demand. “Latent demand” is defined as the demand for trips for all purposes and at all times in the service area.

The concept of “latent demand” acknowledges vehicles, other capital assets, and operating funds are limited. Due to these limitations, latent demand represents an aspirational upper limit, and probably cannot be fully served in a cost-effective manner. The Illinois Statewide Public Transportation Plan: Service Needs and Gaps Report (2017) (Public Transportation Plan) states that latent transit demand for rural Illinois is 5.2 million annual rides in the year 2014 ¹. By comparison, 2.9 million rides were actually provided. The following demand calculations represent latent ridership demand for the Grey Area. They should be understood as a maximum “aspirational” ridership which is unlikely to be fully achieved.

Two categories of demand estimation methodologies are described below. The first is “Program Demand” (transit ridership associated with specific government or private sector programs). The other category is “Non-Program Demand” (transit ridership associated with a broad range of trip purposes, not affiliated with a specific program). In combination, these two methods provide latent demand estimates of approximately 155,000 trips per year or 500 trips per day. **Table 4.1** (at the conclusion of this section) tabulates the ridership estimates provided by all methods.

Two different methods were used to forecast latent demand for transit service in Grey Area, TCRP Demand Estimates and NCTR Model #1 Method. One of the

methods was used in the Public Transportation Plan. The methods use current population and demographic data to estimate latent demand for transit service in rural areas. These demand methodologies are explained in detail following this section.

Important factors which determine the significant majority of demand for public transit service are:

- Elderly population
- Disabled population
- Persons in poverty
- Participation in social service programs
- Automobile Ownership

TCRP DEMAND ESTIMATES

Transit Cooperative Research Program (TCRP) Report 161 – Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation: Final Workbook (2013) provides methods for estimating both Program Demand and Non-Program Demand. It defines Program Demand as service for subscription trips for clients to a social service agency or demand response service only open to certain populations. This type of service generally is funded under FTA Program Section 5310 (Enhanced Mobility of Seniors and Persons with Disabilities). Non-Program Demand (described by TCRP Report 161 as “Non-Program and Commuter Demand”) applies to general public demand response services, flex route services, and commuter services open to the general public. These can be funded either through FTA Programs Section 5307 (Urbanized Area Formula Grants) or Section 5311 (Formula Grants for Rural Areas).

Application of these methodologies is summarized here. Methodologies are quite detailed and use many data items which are incorporated into a hierarchy of analyses. Unlike other methods described in this section, these cannot be described by a single mathematical

¹ Calculations are based on data from American Community Survey 2010-2014 5-Year Estimates

formula.

PROGRAM AND NON-PROGRAM DEMAND METHODOLOGIES

To estimate demand for program and non-program demand response services, TCRP 161 modified methodologies first presented in Transit Cooperative Research Program (TCRP) Report 3 - Workbook for Estimating Demand for Rural Passenger Transportation (1995). The first methodology shown below uses inputs and formulas to calculate demand on an area-wide basis for program demand response services. The second computes the demand for non-program demand on an areawide basis for service available to the public. To estimate total demand for the area, the results of each methodology are added. That sum is total latent ridership demand.

Program Demand Inputs include the following for the study region:

- Population aged 16 and above
- Total Mobility Limited population
- Mobility Limited population from 18 to 64
- Population aged 16 to 64

The TCRP methodology estimates annual latent program

demand in the Grey Area at 82,868 trips.

NON-PROGRAM DEMAND METHODOLOGY

For public demand response services, TCRP 161 provides two methods applicable in both rural and small urban settings. One method compares the system analyzed to peer systems within the state. This method is applicable only in areas where some level of service already exists. In the absence of non-program demand response service in the Grey Area, the peer system comparison methodology is not applicable.

The other method is applicable regardless of current levels of service. It uses an equation based on an analysis of the 2009 Rural National Transit Database and workshops conducted by the National Transit Database. This equation uses data for three demographic groups who are most likely to use public transit. This second (demographic based) method was used to forecast latent non-program demand.

Non-Program Demand Inputs:

- Persons Age 60+
- Mobility Limited population from 18 to 64
- Persons Residing in Households With No Vehicle Available

This TCRP 161 methodology estimates annual latent non-program demand in Grey Area at 58,547 trips.

NCTR MODEL #1 METHOD

The National Center for Transit Research (NCTR) completed a study in 2016 with the objective to develop a model for estimating demand for rural demand-response transit services for the general public. Specific objectives to the report Estimating Ridership for Rural Transit Services for the General Public are to estimate the impacts of service characteristics (such as span of service, service coverage, fares, and reservation requirements) and service-area characteristics (such as population and demographic characteristics) on ridership.

NCTR developed two models. The first used data from the 2013 Rural National Transit Database (NTD) and the American Community Survey (ACS). Because data limitations of the Rural NTD restrict the number of variables that can be analyzed, a second model was developed using data collected from surveys of rural transit agencies. Both models estimate demand for non-program demand-response service. Neither of these methods provide an estimate for program demand. The project team used NCTR Model #1 to estimate demand for transit in the Grey Area.

In NCTR Model #1, ridership is a function of service area population; demographic characteristics of the service area; whether the transit agency provides a fixed-route service, has a service area that overlaps with that of another demand-response transit provider, operates only in a municipality, or is a tribal agency; the fare level; and the region of the country in which it operates. Population and demographic characteristics are expected to influence demand, fares represent the cost of the service, and the other variables represent characteristics of the service or service area that may impact ridership.

The model is estimated as follows:

Model #1 states that ridership can be estimated as follows¹ :

Natural log of ridership =

$0.83 \times \text{natural log of population}$

$+ 7.99 \times \text{percentage of population aged 65 or older}$

$+ 21.15 \times \text{percentage of population without access to a vehicle}$

$- 0.65$ if the agency also operates a fixed-route service

$- 0.41 \times \text{percentage of population that has access to other demand-response service}$

$+ 0.77$ if the agency operates strictly within a municipality

$- 0.24 \times \text{natural log of the fare}$

$- 0.56$ if agency operates in FTA region 3

$- 0.81$ if agency operates in FTA region 4

$+ 0.50$ if agency operates in FTA region 5

Model #1 Inputs are:

- Total Population
- Persons Age 65+
- Persons Residing in Households With No Vehicle Available
- Population with a Disability

The NCTR Model #1 methodology estimates annual latent demand in Grey Area at 85,953 trips when the fare is \$3.00, and 72,868 when the fare is \$6.00.

1 Since many of the input variables are natural logarithms, their coefficients provide implied elasticities of ridership with respect to continuous variables. For example, the coefficient of the natural logarithm of fare is -0.24. This implies that for every 10% increase in fare, ridership will decrease by 2.4%. Note that the coefficients cannot be used as elasticities for non-continuous variables (such as coefficients for FTA regions).

COMMUTER DEMAND ESTIMATES

Commuter routes are defined as buses running on fixed routes on fixed schedules with limited stops over a distance greater than ten miles. Most trips bring residents from suburban areas to nearby urban cores, but some serve demand along a “reverse commute” path as well. A reverse commute is a round trip, regularly taken, from an urban area to a suburban one in the morning, and returning in the evening. It is almost universally applied to trips to work in the suburbs from homes in the city. Major portions of these routes are non-stop, i.e. express service.

The Public Transportation Plan used the following analysis to forecast ridership demand for new commuter routes. For those counties with more than 2,000 projected daily trips to a nearby urban core, trip origin was ascertained first at the ZIP code level, and then at the community level to determine whether a fixed commuter route would be viable. If ridership from one of these municipalities to the urban core was projected to be at least 125, it was designated as a candidate for a potential new commuter route.

Two communities east of Peoria showed high commuter demand: Washington, with a population of about 16,556, and Morton, with a population of 17,054. Washington shows a projected demand of 160 riders to workplaces in East Peoria and Peoria, sufficient for a peak period express route. This could either be a new route, with limited stops all the way into Peoria (as shown in **Figure 4.1**). Alternatively, current CityLink Route 8 could be extended east from its present terminus at Sunnyland Plaza. Connections to other CityLink routes can be made at Sunnyland Plaza and at the Transit Center in Downtown Peoria.

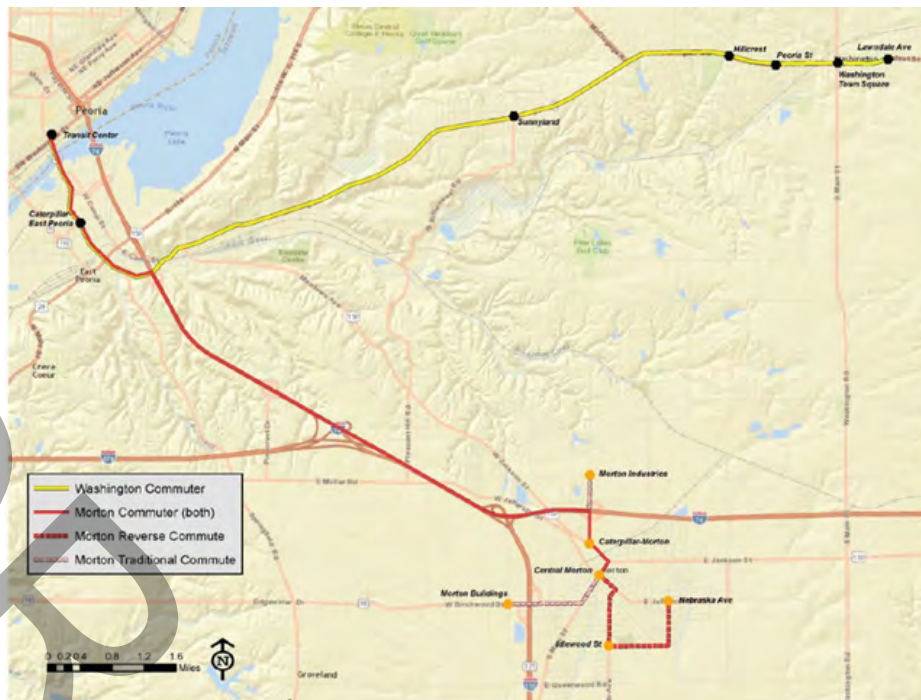


Figure 4.1: Proposed Fixed-Route Transit in Washington and Morton

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



CONCLUSION

Based on the calculations described above, Program Demand is estimated to be 276 riders per day while Non-Program Demand is estimated to be 242 riders per day. Together, these calculations show an overall latent demand for the Grey Area of 471 to 518 riders per day.

Table 4.1: Transit Demand Calculations

Transit Demand Type		Fare (\$)	Annual Ridership Demand	Daily Ridership Demand
Program Demand	Program Transit Demand (TRCP 161/IDOT Method)	N/A	82,868	276
Non-Program Demand	Flexible Transit Demand (TRCP 161/IDOT Method)	N/A	58,547	195
	Flexible Transit Demand (NCTR Model#1 Method)	\$3	85,953	287
	Flexible Transit Demand (NCTR Model#1 Method)	\$6	72,868	243
	Average Flexible Transit Demand	N/A	72,456	242

5.0 SERVICE ALTERNATIVES EVALUATION

The study team evaluated service alternatives for the Grey Area. These alternatives include:

- Point Deviated Demand Response Service
- Demand Response Service
- Microtransit Service
- Fixed-Route Transit Service for Morton and Washington

Evaluations were based on technical criteria, including the service area and operating cost. The project team, informed by the findings of the robust public engagement, also considered service flexibility and service reliability based on areawide needs and preferences.

For all of these service alternatives' evaluation, it was assumed that the GPMTD would be implementing the recommended commuter routes specified in the Illinois Statewide Public Transportation Plan for Cities of Washington and Morton. Therefore, the evaluation of fixed-route transit service is not included for recommended services at the conclusion of this section.

Additionally, to effectively employ these recommendations, the region would need to assign or establish a transit service administrator. That could be an existing service provider or a new regional coordinating agency such as a Regional Transportation Authority (RTA), which requires state enabling legislation.

POINT DEVIATED DEMAND RESPONSE SERVICE

This type of service typically operates between defined areas or zones, providing both demand response and scheduled service to a selected number of designated stops, without any fixed route between the stops. Such service can supplement/feed fixed route transit service.

DEMAND RESPONSE SERVICE

This service operates in a point-to-point fashion. It requires advance reservations, including same-day requests where feasible. Vehicles are dispatched to accommodate multiple riders with similar origins and/or destinations.

MICROTRANSIT SERVICE

It serves passengers using dynamically generated routes. It requires investment in IT resources and dispatching software. Either public or private agencies can provide such service. It provides transit-like service but on a smaller and flexible scale.

FIXED-ROUTE TRANSIT SERVICE

Illinois State Public Transportation Plan (2017) identified high commuter demand for Washington and Morton. The plan recommended a peak period express route for Washington. This express route could be a new route with limited stops all the way to the Transit Center in Peoria or the existing CityLink Route 8 extended east from its current terminus at Sunnyland Plaza. Morton's proposed fixed-route would be an all-day route with connections to other CityLink routes at the Transit Center in downtown Peoria.

VEHICLE TYPE

The type of transit vehicle used to provide service can play a significant role in the efficiency and cost-effectiveness of service operations. Due to the lower rate of demand and greater variety of origins and destinations, smaller vehicles are recommended for the three service alternatives evaluated.

The types of vehicles currently available to serve the needs of demand-based transit include the standard passenger van, minivans, and paratransit minibuses (also known as cutaway vans). The need of each service type, the project team assigned a vehicle based on the number and availability of seats and the vehicle's maneuverability.

For Demand Response and Microtransit service, the team assigned a wheelchair equipped minivan. A wheelchair minivan is one which has gone through an extensive after-factory conversion. The firms performing this after-factory work raise the roofs and literally drop the floor of the minivans about six inches, enabling them to use short wheelchair ramps, rather than wheelchair lifts. These vehicles usually hold two wheelchairs and one ambulatory passenger, in addition to the driver. The cost of such a vehicle averages about \$38,000.

For Point Deviated Demand Response Service, the team assigned paratransit vans. These vehicles have walk-in, front entry doors and a center aisle with interiors tall enough to allow a person to stand and four-across seating. When minibuses are equipped to handle wheelchairs, four seats are removed for the wheelchair lift assembly and four seats for each wheelchair tiedown. Therefore, a minibus designed to handle 20 ambulatory passengers would convert to a vehicle holding 12 ambulatory passengers and one wheelchair tiedown. A smaller minibus costs about \$38,000, while the larger one is about \$42,000. Retrofitting these vehicles with a wheelchair lift and related equipment adds about \$6,000.

The use of smaller, lighter vehicles to provide Microtransit and Demand Response Service as opposed to larger paratransit buses proposed for Point Deviated Demand Response is a significant advantage. Drivers do not need to acquire or maintain a commercial driver license (CDL) to operate a vehicles transporting 15 or fewer passengers or vehicles with a Gross Combination Weight Rating of 26,000lbs or less. Smaller and lighter vehicles reduce the barrier to entry for employment. This expands the pool of potential drivers. However, the reliance on smaller, lighter vehicles can pose a challenge to equity and accessibility for riders who use wheelchairs as the vehicle's capacity is more limited than a paratransit minibuses. Some paratransit minibuses do not require CDL licenses due to reduced size and/or weight, but traditional paratransit vehicles typically require a CDL.

The smaller and more navigable minivan could also allow for more flexibility in staffing and operations. Transit providers can more easily deploy additional vehicles during periods of high demand or provide service at non-traditional hours without significant additional costs. The cost of procurement, leasing, and maintenance is also higher for paratransit vehicles.

SERVICE AREA

Point deviated demand response service is proposed to supplement/feed fixed route transit service. It is assumed that point deviated demand response service would supplement the commuter route to Morton and Washington proposed in the IDOT Statewide Transit Plan.

Demand Response and Microtransit services would be operating throughout the Grey Area with the following service assumptions:

- Service within the same county (where CityLink service is not available) be served for all origin-destination pairs.
- Trips with one end within the CityLink service area would start/end at the downtown transit center.

OPERATING COSTS

In order to evaluate the cost of each service, the project team used the transit demand calculations combined with vehicle hour estimations to identify the operating cost for each alternative.

The previous section highlighted the methodologies followed for estimating program and non-program/flexible transit demand for the Grey Area following nationally recognized transit demand estimation procedures. “Program” demand refers to transportation for scheduled and reoccurring needs (such as sheltered workshops or senior citizen centers). Program demand also is characterized by a single or very limited number of destinations. “Non-program demand” is for general public travel between a large number of origins and destinations. **Table 5.1** shows the annual and daily program and non-program transit demand estimates for the Grey Area.

Vehicle hours estimates were used to provide a benchmark for determining the cost of providing service at different levels of demand. Annual Vehicle Revenue Hours (AVRH) is estimated based on transit demand shown in **Table 5.1**, based on a peer analysis of similar counties in Illinois. These counties were selected based on two criteria:

- Population density similar to the Grey Area
- Proximity to Census designated Urbanized Area

Table 5.2 shows demand response transit service related parameters for 5 peer counties in Illinois. All data was extracted from the Federal Transit Administration’s National Transit Database (NTD), 2019.

Table 5.1: Transit Demand Calculations

Transit Demand Type		Fare (\$)	Annual Ridership Demand	Daily Ridership Demand
Program Demand	Program Transit Demand (TRCP 161/IDOT Method)	N/A	82,868	276
Non-Program Demand	Flexible Transit Demand (TRCP 161/IDOT Method)	N/A	58,547	195
	Flexible Transit Demand (NCTR Model#1 Method)	\$3	85,953	287
	Flexible Transit Demand (NCTR Model#1 Method)	\$6	72,868	243
	Average Flexible Transit Demand	N/A	72,456	242

Table 5.2: Transit Parameters from the Peer Counties

Transit Parameters	Comparable Illinois Counties					Average	Median
	Boone	Henry	Kankakee	McLean	Champaign		
Annual Vehicle Revenue Miles	184,751	348,070	137,251	637,627	203,800	302,300	203,800
Annual Vehicle Revenue Hours	11,617	16,847	11,079	41,036	10,240	18,164	11,617
Annual Unlinked Trips	30,518	53,270	45,799	104,800	14,083	49,694	45,799
Operating Expense per unlinked passenger trip	\$19.67	\$11.90	\$14.73	\$20.73	\$22.29	\$17.86	\$19.67
Operating Expense per Vehicle Revenue Mile	\$3.25	\$1.82	\$2.71	\$3.41	\$1.54	\$2.55	\$2.71
Operating Expense per Vehicle Revenue Hour	\$51.67	\$37.61	\$33.54	\$52.94	\$30.66	\$41.28	\$37.61
Trips/Vehicle Revenue Hours (Utilization)	2.63	3.16	4.13	2.55	1.38	3	2.63

Median operational expense and utilization (trips/revenue vehicle hour) values from the peer counties were compared with the available demand response transit service operational data from the NTD database for Tazewell County. **Table 5.3** shows the peer counties' median operational costs and utilization and Tazewell County's existing demand response service operational costs and utilization.

Using the utilization value shown in **Table 5.3**, demand for Daily Vehicle Revenue Hours (DVRH) and Annual Vehicle Revenue Hours (AVRH) were estimated for the three transit alternatives and are shown in **Table 5.4**. Transit demand for Point Deviated Demand Response Service was adjusted for its reduced service area (operating only in Tazewell County. For the AVRH estimation, following assumptions were considered:

- Transit service alternatives would be operating on weekdays from 7AM to 7PM.
- Point Deviated transit service would be provided by paratransit vans.
- Demand Response and Microtransit service would be operated by minivans (e.g., Honda Odyssey, Toyota Sienna, etc.).

Table 5.3: Cost and Utilization Comparisons

Transit Parameters	Median Values from Peer Counties	Tazewell County
Operating Expense per unlinked passenger trip	\$19.67	\$20.78
Operating Expense per Vehicle Revenue Mile	\$2.71	\$1.73
Operating Expense Per Vehicle Revenue Hour	\$37.61	\$54.38
Trips/Vehicle Revenue Hours (Utilization)	2.63	2.62

Table 5.4: Vehicle Revenue Hours Estimation

Transit Alternative	Daily Vehicle Revenue Hours (DVRH)	Annual Vehicle Revenue Hours (AVRH)
Point Deviated Demand Response	171	44,460
Demand Response	228	59,280
Microtransit	228	59,280

Using the Cost estimates for the alternatives were based on the operational costs shown in **Table 5.5**.

To determine annual estimated operating costs, three cost scenarios were considered:

- High (100% of the demand would be fulfilled)
- Medium (60% of the demand would be fulfilled)
- Low (30% of the demand would be fulfilled)

Table 5.6 shows estimated operational cost (labor, fuel, and administration costs) for different transit alternatives.

Table 5.5: Operating Expenses for Transit Alternatives

Transit Alternative	Operating Expense per Vehicle Revenue Mile
Point Deviated Demand Response	\$54.38
Demand Response	\$37.61
Microtransit	\$37.61

Table 5.6: Annual Estimated Operational Costs

Transit Alternative	Annual Operational Cost for Different Supply Scenario		
	High	Medium	Low
Point Deviated Demand Response	\$2,418,000	\$1,451,000	\$725,000
Demand Response	\$2,230,000	\$1,338,000	\$669,000
Microtransit	\$2,230,000	\$1,338,000	\$669,000

FLEXIBILITY

In the context of transit, flexibility refers to the ability of a service to respond to new information and make route, capacity, or scheduling changes based on that information. The structure of flexible public transportation is dependent on the characteristics of the area served, varying between rural, small urban, and large urban regions. Each of the transit solutions evaluated provides flexibility advantages over fixed-route transit.

Microtransit service provides the highest level of flexibility of the evaluated options. The dynamic trip planning and routing capabilities allow a microtransit service to respond to new information and adapt in real time. When demand increases or decreases, the service can respond by deploying or recalling vehicles. Passengers can request a trip with limited notice and have their ride available potentially within minutes. Microtransit can also offer door-to-door service within a defined area, which allows high flexibility in origins and destinations.

Demand response service is the second most responsive service. Similar to microtransit, demand response service can respond to increased or decreased demand by deploying or recalling vehicles. Demand response service also has the capability of door-to-door service within a defined area which allows high flexibility in the location of trip origins and destinations. Due to the need to schedule and develop routes at least 24 hours in advance, this service option has more limited flexibility in responding to real time trip requests or spontaneous travel needs.

Point deviated demand response is the least flexible service. Though it can also deploy or recall vehicles in response to demand and has the potential to respond to same day requests, the service has the smallest service area. In addition, for each trip, either the origin or destination is a fixed unchanging location. This provides the fewest options for riders as to where they can travel. If designed to work as a feeder route for fixed route transit, that would mean that point-deviated service would have the most limited service hours of the three options.



RELIABILITY

Reliability primarily refers to the ability of a transit service to arrive at scheduled times and transport the rider to their destination within an anticipated time frame. It also includes factors that affect passengers such as availability of seating and space on the vehicle, anticipated wait time for scheduled rides, and availability of ADA accommodations. Reliability can be affected by predictable circumstances such as congestion, and unpredictable, non-recurring circumstances like staffing availability and vehicle breakdowns. Reliability can be critical for passengers who rely on transit to commute to work or travel to medical appointments.

The type of vehicle plays a role in the reliability of transit alternative. For deviated demand response, it was assumed that the vehicle used would be a paratransit van, while for demand response and microtransit it was assumed the vehicle would be a ADA equipped minivan. Paratransit vehicles provide more room and space for more riders than minivans and accommodations for multiple wheelchair riders; however, they also require a commercial drivers license (CDL) to operate making it more difficult to secure proper staffing. ADA equipped minivans are smaller and can navigate in more difficult locations, but provide fewer seats and less space for additional riders.

Traditional demand response transit relies on pre-scheduled rides often arranged 24 hours or more in advance. The service routes and pick-up windows are determined in advance of the travel date. Due to this, it is the most reliable alternative.

Microtransit relies on real-time dynamic trip planning and the availability of drivers and vehicles at the time of the ride request. These factors are subject to constantly changing conditions and can reduce reliability; however, microtransit also offers the opportunity to schedule trips in advance, similar to demand response transit.

For the purposes of this study, point-deviated demand response transit is assumed to coordinate service with fixed route transit. Like microtransit, point-deviated demand response service provides passengers the opportunity to schedule trips in advance or request a ride in real-time. To be reliable, the fixed route service for which the point-deviated demand response feeds into must also operate on schedule and adhere to headways. The fixed routes recommended based on this study would be commuter routes with very few opportunities to transfer demand response riders to fixed route transit. Those riders could potentially experience long wait times at a transit stop or station, or high demand for limited space during a short window of time. As a result, point-deviated demand response is the least reliable of the three transit alternatives.

ADDITIONAL CONSIDERATIONS

RELIANCE ON TECHNOLOGY

Though any service can incorporate a smartphone app or on-line booking software, Microtransit relies on it more heavily than other alternatives. In many ways this is a benefit as it provides the most flexibly for the rider by allowing the option to pre-book and request real-time dispatch. The use of a GPS informed app can improve access to people with difficult, confusing, or unmarked addresses. However, service does require at a minimum a smart phone with internet access and available cellular service to function properly. Another drawback to smart technology-based solutions requires a level of technological proficiency that is uncommon in the target Grey Area rider (older adults). Despite its benefits, if riders are not familiar with the technology or not comfortable using it, the effectiveness of a technology-based solution could be underwhelming. It may also require a credit card or other electronic payment method which some lower income residents may not have access to.

CONCLUSION

Each of the alternatives presented offers its own set of advantages and disadvantages as a Grey Area mobility solution. Generally, all transit solutions presented will offer another mobility option and be especially beneficial for individuals who don't own a car. All solutions can be operated and funded by a transit authority.

Based on the team's analysis, Microtransit and Demand Response Services provide significant benefits in the matter of service area, cost, flexibility, and reliability compared to Point Deviated Demand Responses. Point Deviated Demand Response is the least flexible and most costly of the alternatives. This solution also has the most restricted service area limited to Tazewell County.



6.0 FUNDING EVALUATION

The study team performed a comprehensive funding analysis to determine viable options for financing the operations of a mobility solution for the Grey Area. These state, federal, and private funding sources included but are not limited to:

- Illinois Downstate Operating Assistance Program (DOAP)
- Section 5307-FTA Urban Transit Funding
- Section 5310 Transportation for Seniors and the Mobility Limited
- Section 5311-FTA Rural Transit Funding
- Small Transit Intensive Cities (STIC) funding
- Adult Development Actives Program
- Community Service Block Grants
- Head Start
- Workforce Innovation and Opportunity Act (WOIC)
- Temporary Aid to Needy Families (TANIF)
- Title III B (Older American Act)
- Title XIX (Medicare Assistance)
- Title XX (Social Services Block Grant)
- Vocational Rehabilitation
- Federal Transportation Grants

For all of these funding alternatives, it was assumed that the Tri-County, GPMTD, or a Regional Transportation Authority would be administering the recommended mobility service and/or be the designated recipient for Federal Transit Administration funds.

Funding was evaluated based on a number of factors, with a primary focus on the ability of the fund to serve as a significant and sustaining source in the future for the recommended mobility solutions. Particular attention was paid to the amount of the funds available relative to the estimated cost for service operations. Grant awards were evaluated based on the overall likelihood of a successful application based on the merit criteria and the administrative demands to prepare a competitive application. Those sources that were identified as long-term viable funding options, as well as grant awards that could address significant capital costs, are described on the following pages. The funding sources have been categorized by federal, state, and local sources.

Preliminary evaluation indicated that the following programs could serve as potential supplemental funding sources for targeted user groups, but were not considered for further evaluation due to the limited amount of available funding for transit:

- Adult Development Actives Program
- Community Service Block Grants
- Head Start
- Workforce Innovation and Opportunity Act (WOIC)
- Temporary Aid to Needy Families (TANIF)
- Title III B (Older American Act)
- Title XIX (Medicare Assistance)
- Title XX (Social Services Block Grant)
- Vocational Rehabilitation

It is advisable that the designated transit service administrator coordinate with the local agencies who administer the programs listed above to provide (or in some instances continue to provide) contract services for the eligible recipients. For those programs, such as Medicare Assistance, where funds are distributed to individuals through direct payment or reimbursement, it is advised that the designated transit service administrator provide staff resources to assist riders in submitting the proper documentation.

Section 5311-FTA Rural Transit Funding was eliminated as a funding source because the Grey Area, being located within an urbanized area, is ineligible. It was further determined that reallocation of Section 5311 from rural areas to urban areas was not possible.

Though the Grey Area is more affluent than the urbanized area, concentrated and persistent areas of poverty exist. Persistent areas of poverty are designated as any Census Tract with a poverty rate of at least 20 percent as measured by the 2014–2018 5-year data series available from the American Community Survey of the Bureau of the Census. According to the United States Department of Transportation, the following Census Tracts in the Grey Area are designated as persistent areas of poverty and eligible for priority funding:

Table 6.1: Federal Priority Census Tracts

Census Tract	County
208	Tazewell
211.01	Tazewell
209	Tazewell

FEDERAL FORMULA FUNDS

5307

The Grey Area is located within the Urbanized Area. As a result, it is only eligible for 5307 federal formula funding at the exclusion of 5311 (rural) funding. The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. Greater Peoria Mass Transit District is the designated recipient of 5307 Funds in the Peoria-Pekin Urbanized Area and receives an annual allocation. The previous three years of disbursements of 5307 Funds are shown in **Table 6.2**.

Table 6.2: 5307 Funds Allocation GPMTD

Fiscal Year	Revenue
FY18	\$1,793,336.00
FY19	\$2,037,016.00
FY20	\$2,008,428.00
Average	\$1,946,260.00

Source: GPMTD Annual Financial Report

5310

The Section 5310 grant program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs that serve the special needs of these transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services.

Traditional Section 5310 project examples include:

- Buses and vans
- Wheelchair lifts, ramps, and securement devices
- Transit-related information technology systems, including scheduling/routing/one-call systems
- Mobility management programs
- Acquisition of transportation services under a contract, lease, or other arrangement

Nontraditional Section 5310 project examples include:

- Travel training
- Volunteer driver programs
- Building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- Improving signage, or way-finding technology
- Incremental cost of providing same day service or door-to-door service
- Purchasing vehicles to support new accessible taxi, ride sharing and/or vanpooling programs
- Mobility management programs

In Illinois, these funds are commonly used for capital purchases through the Consolidated Vehicle Procurement (CVP) Program, which grants ramp and lift-equipped paratransit vehicles to municipalities, mass transit districts, counties, and private non-profit organizations. These vehicles are paid for through 80 percent federal funding and 20 percent state or local funding.

In the Peoria/Pekin Urbanized Area, the 5310 Program funds are allocated between the co-designees as follows: PPUATS is responsible for programming not more than 45% of each year's allocation of Section 5310 funds. Furthermore, TCRPC will utilize 10% of the 45% of each year's allocation for administration, planning, and technical assistance. The remaining portion is programed by IDOT for capital expenditures through the Consolidated Vehicle Procurement Program.

The following organizations are eligible to apply for funding through the Section 5310 program:

- Private nonprofit corporations and associations organized for the specific purpose of assisting in providing transportation services to meet the special needs of elderly persons, persons with disabilities, and/or persons for whom mass transportation services are unavailable, insufficient, or inappropriate;
- Public bodies approved by IDOT as the local "Coordinated Service Provider" for elderly persons and persons with disabilities; and
- Public bodies which certify to IDOT that non-profit corporations or associations are readily available in an area to provide the service.

Table 6.3: 5310 Funds Allocation TCRPC

Fiscal Year	Traditional Projects (55%)	Non-Traditional Project (45%)	Total
FY19	\$135,027.20	\$110,476.80	\$245,504.00
FY20	\$139,125.80	\$113,830.20	\$252,956.00
FY21	\$140,369.35	\$114,847.65	\$255,217.00
Average	\$138,174.12	\$113,051.55	\$251,225.67

Source: TCRPC

FEDERAL GRANTS

RAISE

The Rebuilding American Infrastructure with Sustainability and Equity, or RAISE Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit, and port projects that promise to achieve national objectives. Congress has dedicated nearly \$8.9 billion for twelve rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.

Projects for RAISE funding are evaluated based on merit criteria that include safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. Within these criteria, the Department will prioritize projects that can demonstrate improvements to racial equity, reduction of impacts of climate change, and creation of good-paying jobs.

For the initial round of RAISE grants, the maximum grant award is \$25 million, and no more than \$100 million can be awarded to a single State, as specified in the appropriations act. To ensure that the advantages of infrastructure investments benefit communities large and small, the Department will award an equitable amount, not to exceed half of funding, to projects located in urban and rural areas respectively. For the purposes of the RAISE Grant, Peoria and the Grey Area are considered Urban.

The program is highly competitive with 680 projects funded out of over 9,700 applications. Though the RAISE grant program does not cover operating costs, it can be used for the purchase of capital needs including new

FEDERAL FUNDING CONSIDERATION

LOCAL MATCH

Any community that receives federal funds will need to provide a local match, which can range from 20%-50% of total project cost. Oftentimes, communities derive local match from their general revenue; however, there are some federal programs that provide funding that can serve as a local match or source of additional funding. The FTA outlines these programs in an electronically available FAQ¹. They include transportation assistance programs from the Older Americans Act and Temporary Assistance for Needy Families (TANF).

REIMBURSEMENT

Organizations that are recipients of federal funding must minimize the time federal funds are held in advances. Many grants are cost-reimbursement only, requiring the organization to spend money upfront. This grant structure can prove a challenge for agencies with large project costs relative to cash reserves. If advances are allowed, the organization should have controls in place to ensure that the funds are expended in a reasonable amount of time, generally 30 days. A grant may require that advance funds be placed in an interest-bearing account and the interest should either be paid back to the government or spent towards the program objective.

PRIORITY FUNDING

Though the Grey Area is more affluent than the urbanized area, concentrated and persistent areas of poverty exist within its bounds. Persistent areas of poverty are designated as any Census Tract with a poverty rate of at least 20 percent as measured by the 2014–2018 5-year data series available from the American Community Survey of the Bureau of the Census. Census Tracts 208, 209 and 211.1 in Tazewell County are designated as persistent areas of poverty and eligible for priority funding under the current Biden Administration.

¹ <https://www.transit.dot.gov/funding/procurement/third-party-procurement/local-matching-funds>

STATE FUNDS

DOAP

The Downstate Public Transportation Act, referred to as the Downstate Operating Assistance Program (DOAP), was established by the Illinois General Assembly to provide operating funds to assist in the development and operation of public transportation services statewide. Currently, DOAP pays up to 65% of eligible expenses and each eligible participant receives an annual appropriation from the general assembly. The program is administered by IDOT's Office of Intermodal Project Implementation (OIPI) who is responsible for reviewing grant applications, executing grant agreements, paying requisitions, monitoring the eligibility of incurred expenses by the participants, and ensuring grantee compliance with federal and state program regulations. According to data retrieved from the Illinois Rural Transit Assistance Center, Peoria, Tazewell and Woodford Counties receive DOAP funding, though only Peoria fully utilizes its allocation.

Table 6.3 below shows the appropriation, utilization, and difference for Tazewell and Woodford Counties.

Tazewell and Woodford Counties contract with WeCare for rural transit services. Based on evaluation and public engagement throughout the study, the project team estimates that actual usage falls far below state appropriated funds due to WeCare's operating practices which were noted as outdated and deviate from industry best practices.

Table 6.3: DOAP Funding FY18

Geography	DOAP Approp.	DOAP Actual	Difference of Approp and Actual
Tazewell County	\$990,000	\$385,387	\$604,613
Woodford County	\$434,600	\$249,656	\$184,944

STATE GRANTS

REBUILD ILLINOIS

The State of Illinois has allocated \$25,000,000 in Rebuild Illinois funds to the competitive Public Infrastructure component. A grant ceiling of \$5,000,000 per project has been established. Grants for less than \$250,000 will not be awarded. The objective of the Rebuild Illinois Public Infrastructure (RIPI) component of the Rebuild Illinois plan is to provide grants funding public infrastructure improvements that can provide an improved foundation for economic growth in Illinois communities. The initial grant submission process was June 2020, and it is anticipated that the grant will be made available annually through 2022 or until funds are exhausted. Though the Rebuild Illinois grant program does not cover operating costs, it can be used for the purchase of capital needs including new vehicles and scheduling software. To improve competitiveness, capital needs should be submitted to the annual transit capital needs assessment survey and be included in the most recently adopted local Long Range Transportation Plan.

LOCAL FUNDS

GENERAL REVENUE

The primary fund for financing local government operations, general revenue funds are typically comprised in Illinois of property and sales tax revenue as well as licensing and permit fees, fines, and interest income for a given jurisdiction. This fund is used for daily and long-term operations of a given agency which include administrative and overhead costs, staff salary and benefits, financial match for federal and state grants, and expenditures for various departments. There are a number of competing interests for general revenue and it is typical for only the high priority initiatives to be funded through this mechanism.

BALLOT MEASURES

Transit ballot initiatives provide opportunities for local communities to raise dedicated funding for transportation through voter-approved sales or property tax increases. In 2019, over \$8B in new transit funding was approved in elections across 80 ballot measures, and in 2020 voters approved 13 out of 15 transit initiatives providing \$38B in transit funding. Ballot measures require political support and administrative costs to undertake. Depending on the ballot measure, the funding may be available for a limited period of time.

TRANSPORTATION BONDS

Transportation bonds are fixed-rate bonds issued by local, regional, state, and federal government agencies to fund projects in the transportation sector. Though not typically used to fund transit operations, these can include initiatives such as the construction and improvement of highways, bridges, ports, airports, rail lines, and capital purchases for public transit systems. Although jurisdictions can issue bonds, the transportation sector is unique in that projects may need to span across a vast region, such as a large metropolitan area. In these cases, special districts are often created to coordinate regional transportation needs. The structure of transportation bonds is like many municipal bonds, which are issued by local governments, and those issued by state governments. Bonds for states and government entities generally carry a higher credit rating than those issued by smaller cities and towns.

FARE REVENUE

Fare revenue is the total value of cash payments, tickets, and pass receipts given by passengers as payment for public transit rides. Fare revenue typically does not cover the full cost of transit service operations. For GPMTD, fare revenue comprised approximately 8% of total operating income.

OTHER

PUBLIC-PRIVATE PARTNERSHIP

In its broadest context, a public-private partnership (P3) is a contractual arrangement between a public or governmental agency and a private entity. This arrangement facilitates greater participation by the private entity in the delivery and operation of an infrastructure project, facility or service.

Within the commonly utilized context of financing and/or delivering projects, a public-private partnership is an approach or mechanism that is utilized to move the funding process from a single strategy of governmental aid through grants to regional and local authorities, to a more diversified approach involving increased utilization of private capital. Emerging business models include new forms of public-private partnership for provision of mobility and related information services. Public entities, including transit agencies and local transportation departments, already are engaging with private operators and using new technologies from the shared mobility world. Public agencies can look to many examples for insight. Key areas of collaboration include cross-modal trip planning, reservations, and payment application (app) integration; microtransit/dynamic demand response; private access to public rights-of-way; and service links and hand-offs.

Regardless of the precise definition, transit-related public-private partnerships all have in common one basic attribute: The contractual arrangement underlying a P3 transfers certain risks and confers certain financial opportunities to the private partner, in exchange for which the public partner realizes a defined blend of lowered cost for prescribed services, improved service quality, efficient deployment of new technologies, innovative or cost-effective business practices, reduction of financial risk, and increased management expertise and depth.

CONTRACT SERVICES

Contracting for transit services is an important aspect of the operation of a public transit system. Similar to the communities of East Peoria and Pekin, other jurisdictions within the Grey Area have the opportunity to contract with a provider, like GPMTD, for transit services. Revenue to support these contracts would come from the municipal general revenue, local transportation bonds, or special ballot measures. The communities of East Peoria and Pekin have a combined population of 55,697. Based on the average revenue for contract services provided by GPMTD shown in Table 9, the cost per resident for contract transit service is approximately \$15.69.

Table 9: Contract Service Revenue, GPMTD

Geography	FY18	FY19	FY20	Average
East Peoria and Pekin Mass Transit	\$1,341,214	\$641,952	\$639,315	\$874,160

Source: GPMTD Annual Financial Report

7.0 RECOMMENDATIONS

Using the input from the project steering committee, public engagement, the existing conditions, transit needs assessment, alternatives analysis, and funding analysis, the project team crafted a set of recommendations. The following pages include identified service recommendations as well as funding solutions for capital purchases and operations for those selected services.

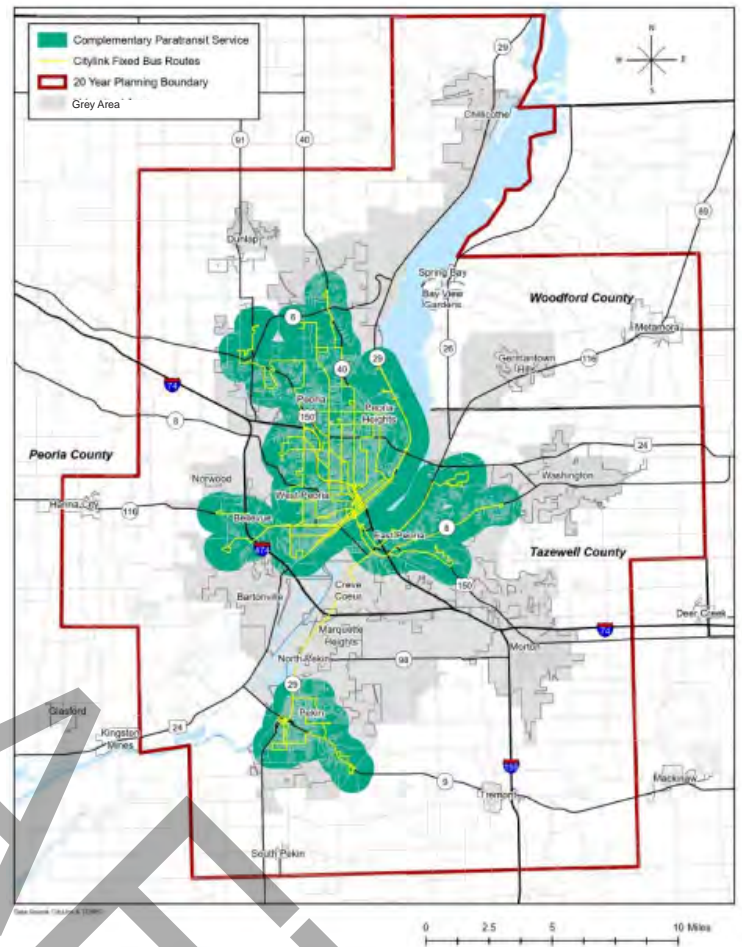


Figure 7.1. Grey Area

RECOMMENDED SERVICE

As noted in the conclusion of Section 5, each of the alternatives presented in this report offers its own set of advantages and disadvantages as a Grey Area mobility solution. All transit solutions evaluated will offer a more cost-efficient mobility option than fixed-route transit in the Grey Area.

Based on the team's analysis, Microtransit and Demand Response Services provide significant benefits in the matter of service area, cost, flexibility, and reliability. In combination with input from public engagement, the project team has further refined the recommendations.

MICROTRANSIT

When presented with the three mobility options in the public survey, members of the public overwhelmingly preferred Microtransit (60%), a demand response transit service that provides dynamically generated routes and provides the opportunity to book trips the day of travel. This finding was consistent with feedback from the public meeting and steering committee input. The responsiveness and flexibility of the service provided a clear advantage to riders. The service requires additional investment in IT resources and dispatching software above what is required for traditional demand response, but it also has the highest potential to attract new riders. As a completely new service, it would require the most investment in marketing and promotion to attract new riders and educate them on how to use the service. It would also require the most time and money invested in training staff and drivers.

DEMAND RESPONSE TRANSIT

Traditional Demand Response Transit is also recommended as a mobility solution for the Grey Area. This service provides riders the opportunity to book trips in advance with limited capabilities to provide trips within 24 hours. It ranked second in public preference, but significantly below Microtransit at (61% compared to 28%) in the public survey. The benefits of using

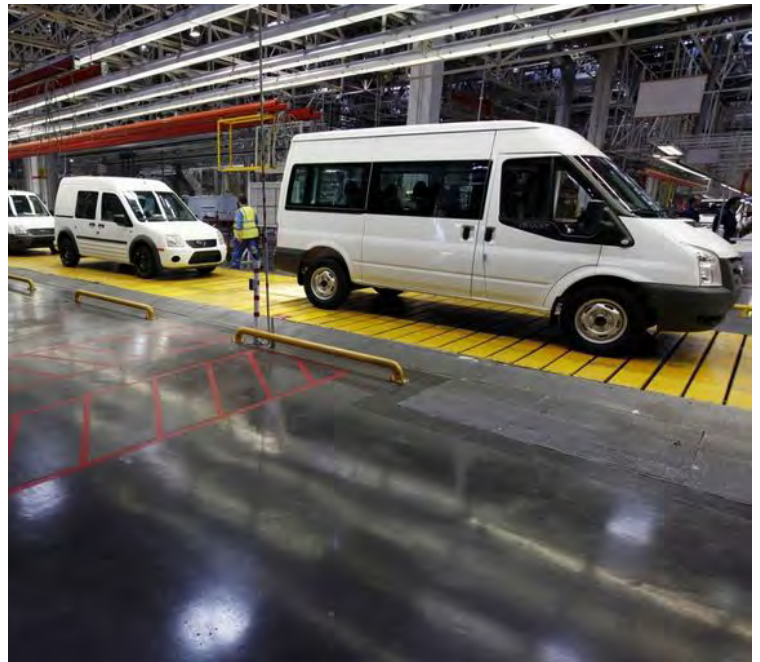


Photo: Murad Sezer/Reuters

transitional Demand Response transit stem from the fact that this service is already provided throughout the region. Existing service providers could, with a viable funding source, expand their service boundaries to new territory rather easily. No new training would be required for staff or drivers. Some investment would still be required to market and promote the service in new geographies to attract new riders. Traditional Demand Response Transit would be the more economical option, but would also be least likely to expand the pool of transit riders in the Grey Area.

RECOMMENDED FUNDING

Following the funding analysis, the study team performed an evaluation of the available funding resources to inform local, regional and state formula funding priorities. The aim of this effort was to build consensus across diverse partners with limited resources to pursue a targeted funding solution.

These funding sources were evaluated by the following criteria:

- Implementation Timing
- Political Feasibility
- Reliability of Revenue Source
- Competitiveness for Revenue Source
- Grant Competitiveness
- Administrative Capacity

For all of these funding considerations, it was assumed that the Tri-County, GPMTD, or a Regional Transportation Authority would be administering the recommended mobility service.

Given the context of the study area and strong opposition towards new property taxes, the team also took special consideration to evaluate new funding streams against the reallocation of existing funding streams. Recommendations were further divided by time frame in which the necessary funding could become available to launch a novel mobility solution in the Grey Area.



Photo: National Aging and Disability Transportation Center

CAPITAL FUNDING

Capital needs for implementing Demand Response or Microtransit encompass purchases of such items as vehicles, scheduling software, promotional materials, driver and operator training, and equipment. To address the capital needs of brining the recommended transit solutions on-line to serve the demand of the Grey Area, the project team recommends pursuing the following funding options:

5310 Federal Formula Funding

This funding source provides an opportunity to finance capital needs. A portion of 5310 designated for Traditional funding can be used for the purchase of technology for scheduling and routing services. Non-traditional 5310 funding could be utilized for the purchase of vehicles, signage, and mobility management services like a transit concierge. Tri-County Regional Planning receives an annual allocation of approximately \$250,000, of which 35% is available for programming. This amounts to approximately \$87,5000 available annually which over time could address the development, growth, and expansion of demand response or microtransit services in the Grey Area.

Rebuild Illinois Grant

Available until funds are exhausted, the Rebuild Illinois Grant program can address the capital needs of expanding transit service to the Grey Area. The minimum award for a Rebuild Grant is \$250,000 and the program requires a 25% local match. To improve competitiveness, capital needs should be submitted to the annual transit capital needs assessment survey and be included in the most recently adopted TCPRC Long Range Transportation Plan.

RAISE Grant

Though highly competitive, the Federal RAISE Grant can assist in the purchase of capital needs for demand response or microtransit services including vehicles, vehicle storage, and scheduling software. The minimum award size is \$1M and the maximum award is \$25M. The grant requires a 20% local match. If the capital needs of the recommended services do not meet the minimum award size, it may be possible to bundle other transit capital requests in the same application. To improve competitiveness, capital needs for service in the Grey Area should be included in the most recently adopted TCPRC Long Range Transportation Plan.

OPERATIONAL FUNDING

Operational needs for implementing Demand Response or Microtransit in the Grey Area include but are not limited to the wages for administrative staffing, drivers, vehicle maintenance workers, fuel, and overhead cost. The following pages provide recommendations for financing the long term operations of a Microtransit or Demand Response service in the Grey Area. The funding sources are separated into time frames based on the feasibility and administrative demands. Many of these recommendations can be used in concert with one another to provide a wider variety of funding support, reduce financial risk, and expand partnership opportunities.

In most instances, communities within the Grey Area have the option to purchase a contract for services from GPMTD using their general fund revenue at any time to address their localized needs.

5310 Federal Formula Funding (Short-Term, 1-2 Years)

This funding source provides an opportunity to finance not only capital needs but certain operational needs as well. A portion of 5310 designated for traditional funding can be used for the purchase of contract services in lieu of direct service operations. Tri-County Regional Planning receives an annual allocation of approximately \$138,000 of 5310 designated for traditional funding which could serve to cover a portion of operating cost for contract services for full operations, or serve to support a small pilot program to provide demand response or microtransit services in a portion of the Grey Area. Using the full allocation of 5310 traditional funding, approximately 10% of the demand in the Grey Area could be served.

Reallocate DOAP (Short-Term, 1-2 Years)

Peoria, Tazewell, and Woodford Counties each receive an allotment of Downstate Operating Assistance Program (DOAP) annually. Tazewell and Woodford counties have historically not utilized their entire rural DOAP allotment, either for lack of need or inability to provide the 35% financial match. Annually, these two counties leave approximately \$800,000 on the table.

After consultation with IDOT, the project team confirmed that the excess funds of approximately \$800,000 can be permanently reallocated to the urban service provider. Only after all of the local stakeholders (the counties and their existing rural transit providers) have agreed to the reallocation, and once an agency within the urbanized area, such as GPMTD, has to agree to be the recipient of the funds and provide services for the urbanized area of the county is this transfer of funds possible. Should all parties agree to a reallocation of funds (partially or in full), they would then need to engage IDOT. The process generally includes adjustments in the annual funding legislation and would permanently redistribute the funds.

The total amount, \$800,000, could provide service to Tazewell and Woodford Counties and meet 36% of the overall transit demand for the Grey Area.

Since these funds currently exist in excess to operational needs, there is no immediate negative impact to this approach. Currently utilized funding for rural services in Woodford and Tazewell Counties (approximately \$250,000 and \$385,000 respectively) would remain allocated. If, however, the rural service provider in Tazewell or Woodford Counties seeks to increase their operations in the future or suddenly find a need to use their full allocation, it is unlikely that the process of reallocation could be reversed.

A full or partial reallocation of DOAP combined with a full or partial reallocation of 5307 funds could provide enough operating revenue to serve up to 86% of the demand for Demand Response or Microtransit for the entire Grey Area.

Public-Private Partnership (Short-Term, 1-2 Years)

TCRPC and GPMTD should encourage the consideration of public-private partnerships (P3) in the development of mobility solutions for the Grey Area. Through contractual arrangement, agencies impacted either indirectly or directly by their clients' limited mobility could arrange to provide financial or staff support to address the financial needs of operations. Healthcare providers, major employers, and/or community foundations can serve as potential partners. P3s can also serve a vital role to support pilot services and proofs of concept.

Reallocate 5307 (Mid Range, 3-5 years)

FTA 5307 federal formula funding is intended to provide financial support for services throughout the Urbanized Area. At the time of this study, GPMTD utilized 5307 to support existing fixed route transit and complimentary paratransit services to the communities located within the transit district's boundaries (Peoria, Peoria Heights, and West Peoria). Within the Urbanized Area, 60% of

the land area and 34% of the population is unserved. The team proposes to reallocate FTA 5307 funds either by geography or population.

Based on the most recent 3-year average of FTA 5307 funds allocated to GPMTD, \$1,946,260.00, reallocation by geography would provide enough funding to support 50% of the demand for Demand Response or Microtransit Service. If the funds were reallocated by population, they would provide significant enough revenue to support 30% of the demand for Demand Response or Microtransit service within the Grey Area. Reallocation of FTA 5307 funds would result in a shortfall within the GPMTD's operating budget for fixed route and complimentary paratransit service that could range from \$660,000 to \$1.2M. This would likely result in a reduction of existing services or the addition of a new or increased revenue source.

Regional Transportation Authority (Long Range, 5+ years)

As previously mentioned in this study, the establishment of a Regional Transportation Authority (RTA) has been recommended by the two most recent Long Range Transportation Plans. The establishment of an RTA has the potential to address by administrative and funding needs for the implementation of a mobility solution for the Grey Area.

In Illinois, the Illinois General Assembly can through legislative action create a Regional Transportation Authority and grant it the power to levy sales or property tax. An RTA can act as the financial and oversight body for multiple transit agencies and serve several jurisdictions. Only one such authority, the Regional Transportation Authority of Chicago, currently exists.

With the ability to levy taxes, an RTA encompassing the Tri-County area could serve up to 100% of the demand for Demand Response or Microtransit. With financial and oversight abilities, an RTA could also address the complex

mobility limitations that result from urban and rural formula funding use restrictions.

The creation of an RTA would require significant political and public support. As there appears little appetite for new property or sales tax in the region, significant funds would be needed to lobby the legislature, perform the necessary public outreach, and market the benefits of the RTA. The project team strongly recommends that TCRPC conduct a RTA feasibility study to determine the viability of such an operation in the Greater Peoria Region prior to the next local LRTP update.

Ballot Measure (Long Range, 5+ years)

Local ballot referendum, or ballot measures, can be used to directly seek support from the area constituents to raise dedicated funding for mobility services in the Grey Area. Since the Grey Area is comprised of multiple municipalities, it would require multiple ballot measures to fully fund a service to meet the transit demand for this area. Depending on the results of various ballot measures, this could result in piecemeal funding and a patchwork of service areas. If a large scale ballot measure was successful, the option could fund up services up to 100% to meet the transit demand in the Grey Area.

As many ballot measures allow for temporary sales or property tax, this strategy may be effective to produce funding for a pilot service. Used in this manner, ballot measures can provide the necessary proof of concept to garner support for a long term financial strategy.

Similar to an RTA, ballot measures require significant political will and public support. As there appears little appetite for new property or sales tax in the region, significant funds would be needed to lobby the local governments, perform the necessary public outreach, and market the benefits of the mobility solution.

ADDITIONAL RECOMMENDATIONS

WECARE OPERATIONS

WeCare receives significant state and federal funding. Upon review of its operations as part of the existing services analysis, the team found shortfalls regarding basic transit business practices. These include:

- **Scheduling and Dispatching:** Computer-based scheduling and dispatching software has been a standard and necessary feature of demand-response operations for decades. WeCare continues to dispatch vehicles and assign passenger trips manually.
- **Inefficiencies in required reporting:** One important feature of computer based dispatching and scheduling is that it seamlessly accumulates data for federal and state reporting requirements. Data reporting by WeCare undoubtedly is burdened and inefficient due to the manual intensive nature of its operations.
- **COVID Related issues:** Automated systems have rapidly been modified to account for service needs related to the COVID pandemic. These include changes in vehicle capacity, assigning trips based upon differential vehicle seating layouts, assigning trips considering households of riders (not simply the number of riders), and extra non-revenue vehicle time for added cleaning.
- **Potentially Arbitrary Policies:** The WeCare web site states that its service area includes rural Tazewell County, Morton and Woodford County. The second largest community in rural Tazewell County (Washington) is not served by WeCare, even though significant state and federal operating assistance allocated to Tazewell County is provided to WeCare.

Additionally, there are financial and governance issues which require further investigation beyond the scope of this study. The project team recommends further evaluation of WeCare operations and administration.

WASHINGTON TRANSIT DISTRICT

The city of Washington Illinois has an established but unfunded transit district. The intent of the district is unclear, but its existence does not prevent other transit agencies from providing service to residents in the area. The Illinois Supreme Court ruled in 2011 that multiple districts could operate simultaneously in the same geography based on a case brought by Champaign-Urbana Mass Transit District (the primary service provider) against Southwest Mass Transit District (an unfunded transit district).

Based on this information, the project team recommends that the Washington Transit District either collect revenue to provide transit services to its residents or dissolve to avoid any potential legal action.

8.0 IMPLEMENTATION

Implementing a new service type or extending service into an undeserved area can have challenges, particularly in areas with limited resources or staff capacity. Based on industry best practices and case studies, the project team has detailed a number of considerations for service implementation including administration, marketing, and branding mobility service for the Grey Area.

Though demand response service is not new in the transit industry, new technologies that allow demand response transit to offer dynamic routing and scheduling have only emerged in recent years. Current guidance resources are limited, but a review of available literature and case studies can offer helpful insights into how to implement and manage a successful Microtransit program. In 2019 the Transit Cooperative Research Board produced the The Microtransit or General Public Demand Response Transit Services: State of the Practice (Figure 8.1). This document serves as the primary resource for the following considerations.



Figure 8.1. TCRB Report

ADMINISTRATION

Throughout this report, the project team has noted that assumptions were made that GPMTD or a RTA would ultimately administer the recommended service. With that in mind, the team has also provided a few additional considerations for service implementation.

SERVICE DELIVERY APPROACH

Based on the capital and operational needs of the administering body, a variety of partnership options are available to provide the recommended transit service. A service provider can partner to provide any or all of the technology, vehicles, drivers, maintenance, and other operations, according to the specific needs of the public agency. (The private partner's provision of technology is generally common to all these arrangements.)

Example partner strategies include:

- **Private sector technology;** public agency vehicles and drivers. An agency deploys the private partner's dispatch, routing, and/or user app technology on their agency-owned and operated vehicles.
- **Private sector technology;** public agency vehicles; non-profit agency drivers. A variation on the most basic arrangement above, more common to human services transportation.
- **Private sector technology and drivers;** public agency vehicles. The Seattle Via-to-Transit project is an example.
- **Turnkey solution.** A single private operator (or consortium) provides the entire microtransit transportation service for an agency, including technology, vehicles, and drivers. This type of partnership is common for agencies or jurisdictions that do not already have their own vehicles or structure appropriate to provide microtransit. The Arlington, TX microtransit service is an example of this type of public-private partnership.

SCALING SERVICE

According to a report titled the Delicate Balance of Microtransit by Passenger Transport¹ from August 2019, when launching a new service, it is better to saturate the a smaller area and provide quality service than attempt to serve the entire transit desert and provide bad or limited service that could turn away riders.

Most agencies begin with a pilot, knowing that those first six or 12 months will provide valuable information about what actually works for customers and the region. It should not be assumed that when launched, the pilot is the best and most effective approach to providing transit service. It is important to utilize a contracting mechanism that empowers those managing operations to make quick decisions outside of the standard processes, in order to be able to adapt and respond quickly to new information.

The success or failure of the pilot should be determined based on performance metrics that go beyond ridership changes and farebox recovery, such as improved mobility, increased safety, and enhanced customer experience. By establishing these goals up-front, agencies can better coordinate with potential technology vendors to design a microtransit project within those parameters.

Based on the results of numerous case studies, agencies seeking to test microtransit or dynamic, on-demand options need to prioritize customers' needs when designing a pilot. Agencies are encouraged to work with experienced service providers during the pilot phase to avoid start up delays. Over time, if the pilot proves successful, the transit agency can assume direct operations.

1 https://www.apta.com/wp-content/uploads/PT_081919_Microtransit-in-depth_reprint-002.pdf

SERVICE INTEGRATION

To ensure successful implementation, new transit services should be integrated into the existing suit of mobility offerings already provided. In order to do that, agencies are encouraged to use the same fare structure and fare media among all their offerings. In addition to fare structure, it is important that information about the available service offerings be provided through a single integrated source. To avoid unnecessary costs, agencies are encouraged to provide the new service offerings using vehicles already utilized for other services. This decreases the need for space to accommodate additional part inventories necessary to support unique fleet vehicles. It can also reduce the need for additional mechanic training.

Providing multiple booking options for customers is also critical, particularly when implementing Microtransit. Many target user groups may not be comfortable or have the ability to navigate apps on a smartphone; therefore, it is important to provide booking options through standard phone calls, smartphone, subscription boarding, and walk-on-boarding whenever possible. This multi-channel approach can also increase service productivity and reach more riders.

MARKETING & BRANDING

For microtransit to succeed, public transit systems must commit to significant communication and marketing efforts, as well as strategic branding and partnerships to spread the word about the new service. The more quickly customers try out microtransit, the better data agencies will receive sooner about how well it's working.

MARKETING

Marketing a service that is new and unfamiliar to people presents new challenges. Early adopters of these Demand Response/Microtransit services noted that marketing promotions for these offerings are more difficult than for fixed-route services. Reaching out through multiple communication channels numerous times is vital particularly in the early stages of implementation.

Extensive customer outreach and substantial coordination with the communities affected is necessary to make service successful. Service providers reported that the greatest challenges to new service adoption is teaching riders how to use the service. Attracting riders to the new service can be difficult for current and potential customers when they cannot translate the description of service offerings into a positive experience.

Suggested marketing approaches include:

- Offering free travel training.
- Distributing brochures, flyers, seat drops, and car cards.
- Placing ads at rail stations and transit centers that serve as transit terminals.
- Putting ads on bus exteriors and bus shelters.
- Advertising on digital media.
- Placing information on the transit agency website, including a new carousel image, social media, and eNews.
- Placing at-stop signage, including pole case inserts and Flex service signs.
- Distributing copies of Guides to Proposed Mobility Plan Changes at outreach sessions and on transit vehicles.

Agencies noted that public outreach efforts should occur before, during, and after implementation of the service, because adjustments are anticipated due to changing demand as people become more familiar with the service. Many transit agencies approach the initial provision of new Demand Response transit or Microtransit as a pilot project to last approximately 1 year or less, with a review of performance after that time to determine if they should continue, be modified, or ended. Approaching the provision of new service as a pilot or as an experiment brings some added interest to the service, and this approach might also help those who are skeptical to more readily give the service a chance.



Photo: CATA Fleet Branding

BRANDING

Nearly all agencies who reported adopting new Demand Response or Microtransit services in the State of Practices report did so by incorporating it into the existing suite of service offerings. By far, the most popular name given to the new service was adding “Flex” to the name of their fixed-route offering (e.g. CityLink Flex). Using such names to help identify the service is no different from transit systems providing a distinct brand name for bus rapid transit service, light rail service, paratransit service, or express service. Although the demand response service may be given a particular brand name to draw attention to it and distinguish it from other modes, the service is still regarded as an integral part of the transit agency’s services, whether provided with their own personnel and equipment or through a contracted service. The vehicles used might have a distinct branding or logo, but they are also clearly marked as being part of the transit agency that is funding the service.

In preparation for a new service, the transit agency is encouraged to create all new integrated branding, which can include elements like shuttle bus wraps to allow customers to easily identify the service vehicles. Creating a design in colors that grab the attention of not only a customer but also the general public to pique interest in the new service. Coordinate the vehicle design with artwork replicated on supporting materials to further promote the service and branding.

CASE STUDY EXAMPLES

Examples of agencies who provide similar transit alternatives to address transit deserts and/or low ridership areas similar to the Grey Area include:

- **AC Flex:** AC Transit is a major bus system serving the western side of Contra Costa and Alameda counties in California. It serves the cities of Oakland, Alameda, Albany, Berkeley, El Cerrito, Emeryville, Fremont, Hayward, Newark, Piedmont, Richmond, San Pablo, San Leandro and Union City. AC Flex is operated by AC Transit in Contra Costa County, California, using DemandTrans Solutions technology. It provides 30 minute responsive service to bus stops in low-density, low-income neighborhoods.
- **Wheels2U:** The Norwalk Transit District, together with the City of Norwalk, the State of Connecticut Department of Transportation, the Norwalk Redevelopment Agency, and Ford Smart Mobility microtransit technology provider, TransLoc, have launched Wheels2U – a six-month microtransit pilot program. Through this pilot, free on-demand rides are available to residents via TransLoc’s Microtransit mobile app. The app enables riders to request and monitor their trip to/from locations within the designated service area and offers navigation for drivers. Wheels2U runs using off-peak Norwalk Transit District paratransit vehicles from 5pm to 12am Thursday, Friday and Saturday, and from 12pm to 9pm on Sundays. The program aims to offer an innovative transit option. The transit agency and the city partnered with Transloc to provide the technology to fulfill after-hours requests in its downtown entertainment district and several adjacent neighborhoods.
- **SW Prime:** SouthWest Transit is a public transportation agency that is based in Eden Prairie, Minnesota and services the communities of Chaska, Chanhassen, and Eden Prairie, as well as Carver. SW Prime provides a suburban first-and-last mile curb-to-curb on-demand service. Users can request a ride through the app or over the phone and the vehicles are ADA compliant. The average wait time is 18.5 minutes and the service averages 355 daily rides. There were 3.4 passengers per in-service hour is with an average subsidy per passenger of \$8.00. The service operates Monday-Friday 6:30 am – 7:00 pm and Saturday 10:00 am to 4:00 pm.



Photo: SW Prime Transit

9.0 PUBLIC ENGAGEMENT

Robust and meaningful public participation was an important component to the Grey Area Mobility Enhancement and Expansion Study. An effective engagement process should both communicate information about the study to the general public and enable residents to provide input and meaningful feedback. Successful public participation builds trust and buy-in from area residents, resulting in a better plan and a plan that is more likely to be embraced by the region.

Some of the most useful methods of public participation involve in-person, face-to-face encounters. In previous years, the project team has been able to utilize in-person open houses and community events to receive vital feedback from the public on local priorities and necessary improvements. During the course of the study, a global outbreak of the COVID-19 virus made large in-person gatherings unfeasible. Various stages of social restrictions were in place throughout the project period, ranging from total lockdown, crowd size limits, and mandatory mask requirements. As a result, the project team used all reasonably available means to engage the public virtually.

To effectively engage the public remotely, the project team used a variety of outreach methods to maximize the number and type of opportunities for residents to become involved in the process. The public was provided the opportunity to guide the study and provide feedback on the report's findings through multiple channels. The project team was guided by a Steering Committee comprised of members representing agencies and advocates from across the study area. In addition, the project team conducted 11 stakeholder interviews, hosted two virtual community workshops, and provided a public survey. The following section provides detail on the engagement activities and their findings.



Figure 9.1: Traditional in-person public engagement activities.

STAKEHOLDER INTERVIEWS

Eleven stakeholder meetings were conducted virtually during August and September of 2020. Each stakeholder meeting was up to an hour in length and formatted as a guided conversation with set questions prepared in advance. These questions were altered to fit the role or area of expertise each interviewee holds in the Grey Area, whether that be a service provider, user, or community leader. Stakeholders were chosen to participate in the interviews to have representation from the following: public officials, healthcare/social service organizations, users, service providers, and public agencies. The following is a summary of key findings by topic.

SERVICES AVAILABLE

The reported transportation services available varied greatly depending on the service provider and the location of the potential client/user. CountyLink provides service for the greater Peoria area, provided the trip begins or ends in the rural part of the County. CityLift paratransit provides service to those unable to use the fixed route system, but its service area is limited to areas served by fixed route service. WeCare serves the residents of Morton and rural parts of Tazewell County. Woodford County pays WeCare to serve Germantown Hills, and the Central Illinois Agency on Aging (CIAOA) subsidizes WeCare to provide transportation in Woodford County. The CIAOA operates a single vehicle to serve areas with no transportation services in northern Tazewell County, City of East Peoria, Washington, Creve Coeur, Marquette Heights, Pekin, and North Pekin. The Chillicothe Township operates Chillicothe Transportation, a volunteer-based service for medical appointments.

TYPICAL CLIENTS

The majority of users and target clients of service providers are the elderly, disabled, or both. Elderly users are most often in need of transportation to medical appointments, whereas disabled users often rely on transportation services to get to appointments as well

as work. Other users include residents who are unable to drive, such as those who have lost their driving privileges, who most often need to get to work.

Grey Area users typically reside in portions of the Tri-County area that are not well served by CityLink, CountyLink, or the rural designated services such as WeCare. Stakeholders reported that needs in Woodford County are growing and that Pekin is a particularly hard area to serve.

TRANSPORTATION CHALLENGES

Stakeholders overwhelmingly reported transportation in the Grey Area as a major challenge. Concerns ranged from a complete lack of available transportation options, especially for the elderly and disabled, to insufficient and unreliable service times. Cost to provide service and inadequate transportation as a barrier to social services and job entry were also major concerns.

Funding and payment for services range from free-of-charge, to \$12 (roundtrip) for CountyLink. Some stakeholders stated the cost of service and funding were not issues; rather, an unwillingness to alter current services is the root of the problem. A majority of service providers reported the cost of providing service as a major factor to considering expansion. Agencies and social services often stated connecting clients to transportation services is their primary challenge, with funding transportation services as a close second. Some fares are prohibitively high for many users and for agencies trying to cover the cost of their clients' transportation. Multiple agencies pointed to transportation costs as the issues preventing them from expanding their social services.

Operating hours for transportation services are a challenge for many users and agencies coordinating transportation services for their clients. Many services

only operate weekdays from early morning to late afternoon or early evening. These operating hours leave workers stranded who may have to work late or come in early. According to multiple stakeholders, people will turn down a job offer if it has hours outside of the transportation operating hours available to them.

Larger organizations and service providers stated scheduling, reliable dispatch, and communication with clients as additional obstacles to providing better service. Reduced turnover in the pool of drivers by increasing wages was suggested to support more reliable and better service.

DESIRED SERVICES

Stakeholders reported a desire to see operating hours expanded during the weekday and potentially to the weekend as well. A user of CountyLink and CityLift would like to see an app to receive notifications of driver departures to better coordinate timings for pick-up. Some services are restricted to medical-appointment trips and transportation service for non-medical appointments is not available in some locations. More than one stakeholder expressed the inability to provide service for daily medical appointment needs such as dialysis or physical therapy.

AGENCY COORDINATION

Stakeholders reported large amounts of coordination between agencies. Some partner agencies mentioned include:

- Central Illinois Agency on Aging
- EP!C
- WeCare
- Unity Place
- Advocates for Access
- Illinois Department of Human Services
- CWTC

More than one stakeholder stated there is duplication of services provided between agencies and streamlining services would greatly enhance the ability of the area to meet transportation needs. Communication and coordination between service providers and agencies was generally reported as a weak point. There were several requests for a centralized source for information and service coordination.

COMMUNICATION

Users are often elderly or disabled and may not have proficiency using cell phones or the internet. Many stakeholders reported phone calls or paper mail as the best way to communicate with clients. Few stakeholders stated email is a primary method of communication with users. One social service agency reported mass text messages as a reliable method of communication.

The majority of service providers schedule rides via phone calls. These phone calls must be made anywhere from a few days to a week in advance of the required ride. One stakeholder reported that quick turn-around scheduling for pressing medical appointments is lacking for those who do not have other modes of transportation.

COMMUNITY WORKSHOP

A virtual community workshop was hosted October 21, 2020 to gather information from the public about the region's mobility needs, refine project priorities, and review the findings from the existing conditions report. The community was presented with two opportunities to participate in the on-line event to encourage attendance and promote inclusivity.

Identical presentations were hosted at noon and 6:00 pm, and a recording of the presentation was made available on Tri-County's website via YouTube link. Approximately 42 members of the public registered to attend the meeting and provided feedback, and an additional 23 accessed the recording.

Participants at the workshop identified mobility for the elderly and disabled as the highest priority. Their feedback further indicated a need for the study to address service area restrictions for existing transit and improve the availability of information regarding those services. The participants expressed strong desire to help connect people to work and social services. Participants encouraged the project team address inter-agency coordination and provide extended service hours prior to incorporating a new mobility solution.

As a result of the public meeting, the project team developed a transit matrix (included in **Appendix A**). The goal of the matrix is to assist residents in determining which transit options are available to them and what destinations they could reach from their residence based on their location within the Region.



Figure 9.2: Screen Capture from the Virtual Community Workshop

COMMUNITY SURVEY

A community survey took place November 10, 2020 through March 12, 2021. The community survey served as an important tool to assist the project team in determining if there is public support for the various recommendations and provides alignment between project staff and the public’s opinion on how the mobility solutions and funding should be prioritized.

The survey was provided to the Steering Committee and project stakeholders and made available to the public through a link on various agencies’ websites and via social media. A paper version of the survey was also made available for submittal at the offices of Tri-County Regional Planning and Greater Peoria Mass Transit District. The aim of the survey was to capture the sentiment of residents in the Grey Area toward the three primary service alternatives. The survey included

13 multiple choice, ranking, and open ended questions, including a selection of demographic questions.

Thirty-nine respondents from the Grey Area completed the survey by the closing date. The survey revealed a strong preference for microtransit over traditional demand response and point-deviated demand response, and 25% indicated that the availability of microtransit would increase their transit usage. The majority of respondents indicated they would expect their ride to arrive within an hour of booking a trip and nearly 79% of survey takers reported they would be willing to walk for at least 5 minutes to meet their ride. Respondents also indicated a preference to book trips via smart phones and to pay using credit card. Detailed survey results can be found in **Appendix B**.

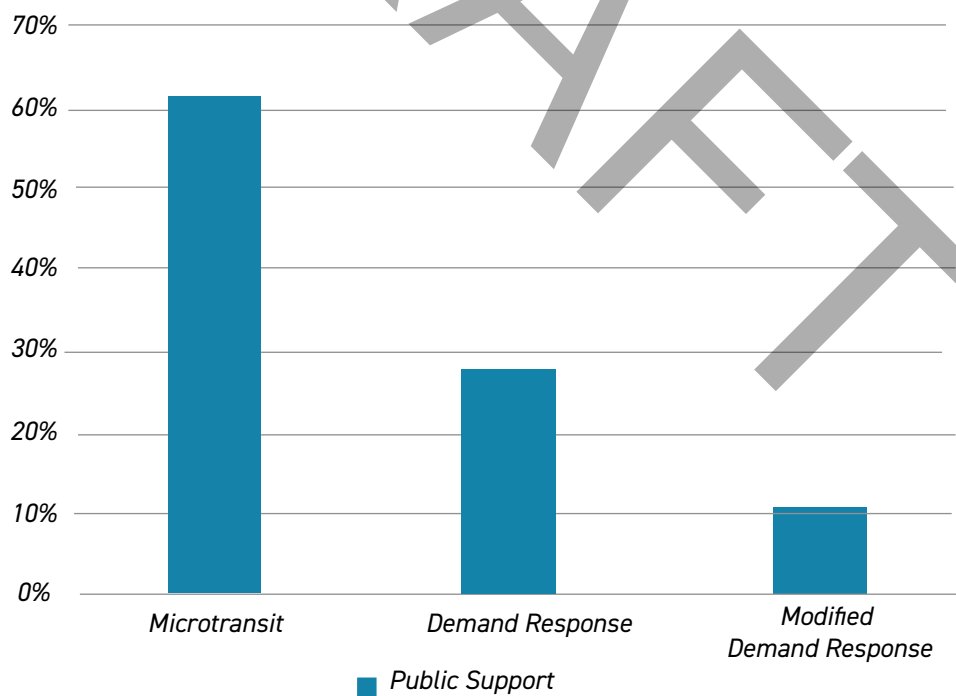


Figure 9.3. Survey Response Mobility Service Preference

COMMUNITY OPEN HOUSE

A virtual community open house was hosted March 23, 2021 to gather feedback and answer questions from the public regarding the recommended mobility solutions and funding priorities. The community was presented with two opportunities to participate in the on-line event to encourage attendance and promote inclusion.

Identical presentations were hosted at noon and 6:30 pm and a recording of the presentation was made available on Tri-County's website via a YouTube link. Approximately 23 members of the public registered to attend the meeting and provided feedback and an additional 16 accessed the recording.

Participants at the open houses expressed their support for the recommendation. The public showed a preference for micro-transit solutions over traditional demand response; however, it was noted that addressing service gaps remains a priority to expanding service options in areas already served by transit. The public showed support for the funding strategies recommended, the suggested service administration, and the options provided to reallocate funding from existing sources. The public showed no support for funding the service through new taxes. Questions were posed to the project team about what the likelihood was that the recommendation could be implemented and how quickly a service solution could be available.

The meeting validated the findings of the project team regarding their evaluation and confirmed the recommendations of the study.



Figure 9.3: Screen Capture from the Virtual Community Open House

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Appendix A

Transit Matrix



Ridership Matrix

CityLift \$6 Urbanized Service		CityLift \$2 ADA	
WeCare		CityLink	

[illegible]



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Appendix B

Community Survey Results



Illinois Department
of Transportation

Grey Area Survey

Within the Peoria-Pekin Urbanized Area, there are twelve municipalities and over 87,000 people do not have reliable access to public transportation service. This large unserved area is termed as the Grey Area. The Grey Area Mobility Enhancement and Expansion Study is currently underway to explore how to provide service to these residents. Three potential service options have been identified to help solve this challenge. The following brief survey is designed to help us determine which is the best alternatives.

Service Alternatives

For all three options described, the service area would be anywhere within a 10-mile radius of the rider's residence.

Passengers access **Microtransit** service using smartphone apps to request rides on minibuses or vans. Dispatching software schedules trips in real-time. Trips also can be scheduled in advance. Passengers share rides with others making similar trips. Service typically is door-to-door, although passengers may need to access service at a common point at major destinations (such as a shopping mall).

Demand Response service operates in a door-to-door fashion. It requires advance reservations (typically a day or more in advance). It accommodates same-day requests where feasible. Passengers share rides with those having similar origins and destinations.

Modified Demand Response service is similar to demand response. However, the service is not always door-to-door. Passengers can be asked to board or alight from vehicles at points near to their actual destination, rather than receiving door-to-door service.

Survey Questions

1. Of the services described, which do you prefer?

- ☐ Microtransit
- ☐ Demand Response
- ☐ Modified Demand Response

2. Would you start to use or increase your use of transit if the service described was offered?

- ☐ Yes
- ☐ No
- ☐ Maybe (please specify)

3. If a service was offered, please rank your preferred way to schedule a trip. "1" indicates your most preferred way, and "4" indicates your least preferred way

- ☐ Smart Phone
- ☐ Phone Call
- ☐ Text Message
- ☐ Website

4. How far in advance of making your trip are you comfortable scheduling a ride?

- ☐ Less than 1 hour
- ☐ 1 to 3 hours
- ☐ 4 to 12 hours
- ☐ 12 to 24 hours
- ☐ 24 hours

OVER FOR MORE QUESTIONS

5. Once you requested a trip, you will have to wait for a vehicle to pick you up. What is the longest time you will be willing to wait? I would not accept a wait time longer than:

- ☐ Less than 15 minutes
☐ 15 to 30 minutes
☐ 30 minutes to 1 hour
☐ More than 1 hour

6. If you have the option to reserve a ride on a recurring basis (same time- same place) would you?

- ☐ Yes
☐ No
☐ Maybe (please describe)

Any questions, comments, or concerns:

7. Once you request a trip, you may have to walk to meet the vehicle at a nearby location. What is the longest distance you would be willing to walk to meet the vehicle? I would not walk more than

- ☐ 0 minutes (I would not walk)
☐ 1 to 5 minutes
☐ 6 to 10 minutes

8. How much would you be willing to pay for a one-way trip to travel in the area?

9. Please rank your preferred way to pay for your trip. "1" indicates your most preferred way, and "6" indicates your least preferred way.

- ☐ Cash
☐ Credit Card
☐ Debit Card
☐ Check
☐ Digital Wallet (Paypal/Venmo/etc)
☐ Pre-Paid Card

10. What is your age?

- ☐ Under 18
☐ 18 to 24
☐ 25 to 34
☐ 35 to 44
☐ 45 to 54
☐ 55 to 64
☐ 65 to 74
☐ 75+

11. What is your current primary mode of transportation?

- ☐ Personal Vehicle
☐ Carpool
☐ Public Transit
☐ Bicycle
☐ Walking
☐ Other (please specify)

13. Do you have a disability? If so, does this disability require you to use a wheelchair?

- ☐ Yes, does not require wheelchair
☐ Yes, requires wheelchair
☐ No

12. What is your home zip code? _____

Completed surveys will be accepted until February 20, 2021. You can mail or drop off your survey at Tri-County Regional Planning Commission, 456 Fulton Street, Ste 401, Peoria, IL 61602 OR the Customer Service Desk at the CityLink Transit Center 407 SW Adams St, Peoria, IL 61602. You can also scan and email your



COMMUNITY SURVEY RESULTS

Question 1:

Of the services described, which do you prefer?

Answer Choices	Responses	
Microtransit	61%	22
Demand Response	28%	10
Modified Demand Response	11%	4

Question 2:

Would you start to use or increase your use of transit if the service described was offered?

Answer Choices	Responses	
Yes	25.64%	10
No	38.46%	15
Maybe (please specify)	35.90%	14

Question 3:

If a service was offered, please rank your preferred way to schedule a trip. "1" indicates your most preferred way, and "4" indicates your least preferred way.

	1		2		3		4		Total	Score
Smart Phone	57.89%	22	15.79%	6	18.42%	7	7.89%	3	38	3.24
Phone Call	16.22%	6	8.11%	3	24.32%	9	51.35%	19	37	1.89
Text Message	15.79%	6	36.84%	14	31.58%	12	15.79%	6	38	2.53
Website	10.81%	4	40.54%	15	24.32%	9	24.32%	9	37	2.38

Question 4:

How far in advance of making your trip are you comfortable scheduling a ride?

Answer Choices	Responses	
Less than 1 hour	13.16%	5
1 to 3 hours	15.79%	6
4-12 hours	21.05%	8
12-24 hours	23.68%	9
24 hours	10.53%	4
More than 24 hours	15.79%	6

Question 5:

Once you request a trip, you will have to wait for a vehicle to pick you up. What is the longest time you would be willing to wait? I would not accept a wait time longer than:

Answer Choices	Responses	
Less than 15 minutes	8.11%	3
15-30 minutes	45.95%	17
30 minutes to 1 hour	40.54%	15
More than 1 hour	5.41%	2
24 hours	10.53%	4
More than 24 hours	15.79%	6

Question 6:

If you have the option to reserve a ride on a recurring basis (same time- same place) would you?

Answer Choices	Responses	
Yes	46.15%	18
No	30.77%	12
Maybe (please describe)	23.08%	9

Question 7:

Once you request a trip, you may have to walk to meet the vehicle at a nearby location. What is the longest distance you would be willing to walk to meet the vehicle? I would not walk more than:

Answer Choices	Responses	
0 minutes (I would not walk)	21.05%	8
1-5 minutes	57.89%	22
6-10 minutes	21.05%	8

Question 8:

How much would you be willing to pay for a one-way trip to travel in the area?

Submissions	Responses	
30	1	2.70%
20	2	5.40%
15	2	5.40%
10	8	21.62%
5	11	29.72%
3	1	2.70%
2	8	21.62%
1	1	2.70%
Don't Know/No Response	3	8.10%

Question 9:

Please rank your preferred way to pay for your trip.

“1” indicates your most preferred way, and “6” indicates your least preferred way.

	1		2		3		4		5		6		Total	Score
Cash	22.22%	8	25.00%	9	19.44%	7	27.78%	10	5.56%	2	0.00%	0	36	4.31
Credit Card	45.95%	17	24.32%	9	16.22%	6	10.81%	4	2.70%	1	0.00%	0	37	5
Debit Card	11.11%	4	22.22%	8	33.33%	12	13.89%	5	13.89%	5	5.56%	2	36	3.86
Check	0.00%	0	2.78%	1	5.56%	2	13.89%	5	25.00%	9	52.78%	19	36	1.81
Digital Wallet (Paypal/Venmo/ CashApp)	8.33%	3	22.22%	8	13.89%	5	13.89%	5	19.44%	7	22.22%	8	36	3.19
Pre-Paid Card	11.11%	4	5.56%	2	11.11%	4	19.44%	7	33.33%	12	19.44%	7	36	2.83

Question 10:

What is your age?

Answer Choices	Responses	
Under 18	2.56%	1
18-24	2.56%	1
25-34	7.69%	3
35-44	17.95%	7
45-54	17.95%	7
55-64	15.38%	6
65-74	23.08%	9
75+	12.82%	5

Question 11:

What is your current primary mode of transportation?

Answer Choices	Responses	
Personal Vehicle	92.11%	35
Carpool	0.00%	0
Public Transit	2.63%	1
Bicycle	0.00%	0
Walking	0.00%	0
Other (please specify)	5.26%	2

Other:

1. I call whoever is available to drive me
2. I am answering on behalf of my students. They rely on parents to get to and from school once they graduate.

Question 12:
What is your home zip code

Submissions	Responses	
61523	1	2.56%
61525	2	5.13%
61535	1	2.56%
61550	2	5.13%
61571	25	64.10%
61604	2	5.13%
61605	1	2.56%
61607	1	2.56%
61611	2	5.13%
61614	2	5.13%

Question 13:
Do you have a disability? If so, does this disability
require you to use a wheelchair?

Answer Choices	Responses	
Yes, does not require wheelchair	7.69%	3
Yes, requires wheelchair	2.56%	1
No	89.74%	35





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