Appendix B

Transit Supportive Documentation

COTA's TIP and Financial Plan
DCT Strategic Plan

SHORT RANGE *transit plan* 2023-2027

October 2023

COTA

TABLE OF CONTENTS

This report was created by HDR with support from Foursquare ITP

INTRODUCTION

The Central Ohio Transit Authority (COTA) is the primary provider of public transit services for the greater Columbus and Central Ohio region, serving over 1.1 million residents with more than 9 million trips annually. This Existing Conditions report gives an overview of current agency operations and trends of the COTA region using data and information provided by stakeholders and COTA. This will be used in the development of the Short Range Transit Plan (SRTP), which will combine the vision and guiding principles of COTA to create near-term service planning initiatives to guide COTA for the next 5 years. The SRTP will serve as a vital tool to assess COTA's current operations; describe future transit enhancements; and prioritize expenditures, service, and funding to serve the community's mobility needs.

In recent years, the landscape of transit and mobility has been severely impacted by COVID-19. The ramifications of the world-wide pandemic have impacted families, communities, and the status quo in Central Ohio. COTA was at the forefront of providing transit for essential workers and continued to provide service throughout the pandemic; however decreased service has created a new challenge for COTA in this post-pandemic era.

Amidst the COVID-19 pandemic, the Central Ohio region continues to see growth in population and employment. The Mid-Ohio Regional Planning Commission (MORPC) projects that Central Ohio will grow by 1.2 million people between 2010 and 2050— resulting in a total population of 3 million by 2050. These projections came before the announcement of the $20 billion Intel investment just north of Central Ohio and is projected to be higher. This rapid growth has created a turning point for the region that will require aligned resources and initiatives to support new industries. The SRTP will lay the foundation of how COTA will deliver quality transit services and bring mobility options to Central Ohio. This is imperative as COTA moves towards an increase of public financing and provides economic prosperity to those who rely on quality public transit.

BACKGROUND, VISION, AND GOALS

Background

The Short Range Transit Plan will analyze the existing transit market in Central Ohio and COTA's ability to serve that market in a 5-year time frame. The purpose of this Existing Conditions Report is to create a comprehensive catalog of current initiatives, challenges, and opportunities that will impact how COTA will continue to serve Central Ohio. The SRTP report serves as a foundation for further analysis and recommendations to guide COTA for the next 5 years. The SRTP will be completed in alignment with Ohio Department of Transportation (ODOT) and MORPC for the region's Transportation Improvement Program (TIP). The TIP is used to determine regional funding priorities. It is a staged four-year schedule of transportation improvements, and the next cycle will be Fiscal Year 2024-2027.

Vision and Goals

The SRTP will continue to articulate the direction of COTA's Strategic Plan, Moving Every Life Forward, with the lens of improving service operations to best meet the needs of Central Ohioans. The past few years were marked by the COVID-19 pandemic and the fight towards social justice throughout our communities. This heightened the need for measured, deliberate, and results-focused efforts among public transit initiatives to create a more inclusive and equitable system for all of Central Ohio.

Performance Metrics

COTA's performance metrics measure the performance of fixed-route bus service in relation to ridership or coverage to ensure that resources are allocated in the most effective manner. Service is analyzed by frequent (15 min), standard (30- to 60 minute), and rush hour. The service monitoring standards include minimum frequency, minimum span of all-day frequency (frequent, 30-minute, 60 minute, or trips during peak for Rush Hour), minimum total span for weekday, Saturday and Sunday, on-time performance goals, maximum load, average boardings per revenue hour, and percentage of population and jobs within the entire network.

Service is monitored and updated every two years with the update of the SRTP. Service found not performing well could be subject to modification. The SRTP will use annual statistics, operating characteristics, and on-time performance of each route to analyze route effectiveness. The existing metrics provided a base knowledge to discuss and identify route improvements with internal COTA staff. Further analysis will be completed for the SRTP, with each route having a detailed report showing these characteristics with trip distribution along the span of service. The existing conditions route reports are located in Appendix C.

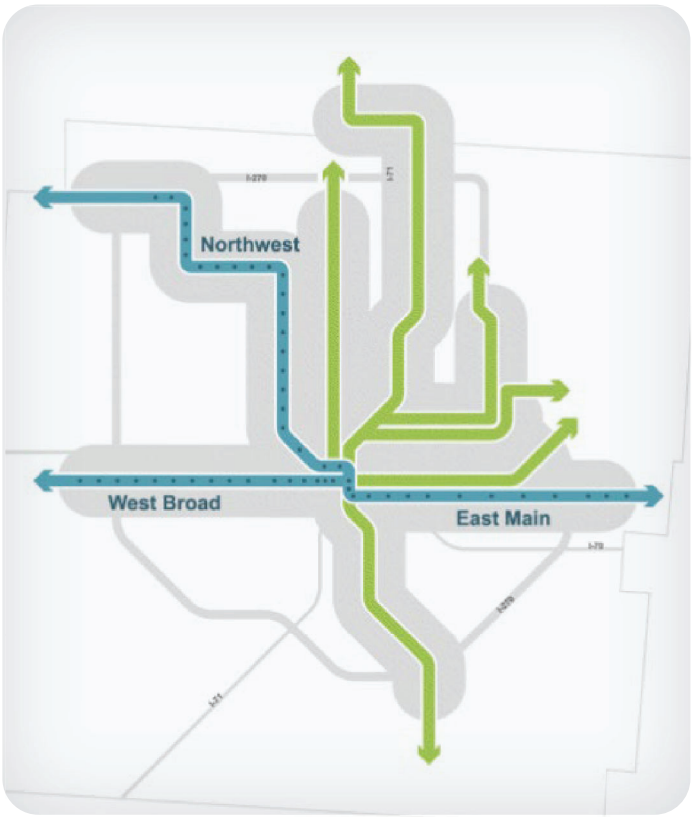
Recent Mobility Innovation at COTA

Mobility as an industry is evolving quickly, with a focus on innovation and technology to provide frequent, reliable, and direct connections. Mobility has been redefined by the global pandemic and revealed the need for equity to be at the center of service. Investment in innovation has created opportunities for transit agencies to evaluate new technologies and determine how to integrate within the community. COTA continues to invest in cutting-edge innovative mobility solutions. The advancement of LinkUS, COTA//Plus, and technology and sustainable advancements are representative of how COTA has continued to innovate.

LinkUS

LinkUS is Central Ohio's transformational and comprehensive mobility and growth initiative. As the region continues to grow, LinkUS emphasizes the need for aligned mobility investment. It builds on numerous previous regional planning efforts, including COTA's NextGen plan and MORPC's insight2050 Corridor Concepts study. From previous plans, the LinkUS initiative has set six priorities:

1. Equity
2. Affordability
3. Innovation
4. Economic Development
5. Sustainability
6. Workforce Advancement



LinkUS will move the region forward by creating aligned investments in innovations such as high-capacity and advanced rapid transit, bikeways, greenspace, complete streets, roadway safety, pedestrian improvements, and development along key regional corridors throughout Central Ohio.

COTA//Plus

COTA has complemented existing fixed-route and paratransit services by continuing to invest in COTA//Plus On-Demand Microtransit services. COTA became the first in the nation to scale on-demand microtransit technology to full-size transit vehicles, introducing COTA's Bus On-Demand in the Northeastern Zone. This was nationally recognized in 2021 as Best of Mobility on Demand by Intelligent Transportation Society of America. This service improves access to jobs where fixed transit service is not operationally efficient. As COTA//Plus continues, a systematic approach should be created in order to be equitable with available resources.

Figure 1 — Current COTA Plus Zones

Equitable Fares

COTA has made significant progress in expanding services and customer amenities through carefully planned technological enhancements and green initiatives. COTA launched a new way to pay, correcting a historical inequitable fare payment system. Cash is still accepted, but now customers can make fare purchases through the Transit app or the COTA Smartcard. This ensures customers pay no more than $4.50 a day or $62 a month. In addition, the new payment system successfully simplified transfers and child discounts and created a flat-rate fare.

NEW! Equitable Fares

Fare Capping
Customers pay no more than **$4.50** a day

Simplified Transfers
Two-Hour Accessibility

Simplified Child Discounts
4 & under: no fare
5-12 years: $1

Flat-rate Fare
Standard fare $2 on all lines

Sustainability

COTA is in the process of transitioning its fixed-route bus fleet from ultra-low sulfur diesel fuel to compressed natural gas. In addition, COTA purchased two electric vehicles in 2021 and will continue to explore zero emissions vehicles by creating a Zero Emissions Plan to guide the agency forward. This plan will include grant support, fleet optimization software support, a workforce development plan, route modeling, resiliency analysis and strategy, an internal and external engagement plan, equity analysis, and the consideration of hydrogen fuel cell technology in the near future.

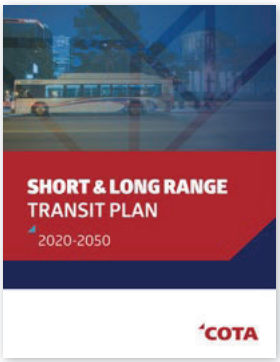
COTA is focused on ensuring residents and visitors have access to job opportunities, healthcare, education, arts, and entertainment, as well as helping to drive equitable economic growth and foster sustainability throughout the region. COTA has developed a strong partnership with the City of Columbus and other community and business stakeholders to make transit an integral part in Central Ohio.

COTA Vehicles (Early 2022)

COTA's Recent Plans

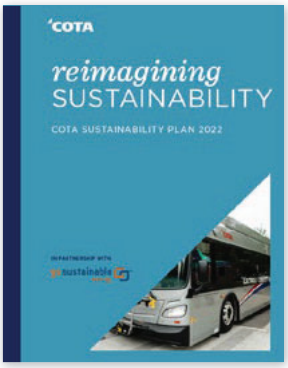
COTA is committed to continue to evolve to best serve Central Ohio. COTA has completed several transportation plans as part of a united strategy for the future. This SRTP update will enhance opportunities for alignment.

Short and Long Range Transit Plan (2020)



The Short and Long Range Transit Plan was informed by local and regional reports, plans, data, and input from stakeholders and the general public to create goals and objectives, as well as initiatives to promote COTA as the regions' leader in mobility. COTA submits the short-range and long-range transit proposed projects and budgets per Ohio Department of Transportation (ODOT) and MORPC budget schedules, which ultimately feed into funding transportation projects.

COTA Reimagining Sustainability (2022)



COTA's Reimagining Sustainability plan received the "Champion of the Challenge" recognition for the Sustainable Transit for a Healthy Planet Challenge. The sustainability plan is a living document to help achieve the sustainability goals and support regional initiatives. The framework of the document revolves around three main categories – performance categories, goals, and management areas. COTA has recognized the importance of being agile in a landscape of evolving sustainability technologies. The plan has identified opportunities for technology to be integrated and ultimately meet COTA's goal of net-zero Greenhouse gas (GHG) by 2045. Electric vehicle fueling strategies, alternate electric transmission, and distribution line upgrade options, on-site energy reduction, and on-site energy generation are opportunities for future technology integration.

County Connections (2022)

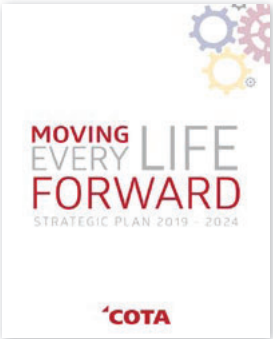
County Connections Playbook identifies potential viable near-term transit strategies between regional county stakeholders. This project positions transit providers, county leaders, community stakeholders, and major employers with the information needed to begin efforts to communicate, coordinate, and collaborate on regional transit priorities and funding opportunities to expand community access to jobs, education, and healthcare.

This playbook includes an assessment of existing conditions, technology, funding, and current governance structures. The playbook strategies include collaboration opportunities with transit service, partnerships, and funding.

Title VI Update (2022)

To ensure equal opportunities to all persons without regard to race, color, national origin, or income level, COTA submits their Title VI program to their FTA Regional Civil Rights Officer every three years. The most current program covers the June 2019 through May 2022 time period and is in compliance with Title VI of the 1964 Civil Rights Act regarding transit services and related benefits.

Strategic Plan (2019)



Moving every life forward is COTA's vision for developing and growing to best serve Central Ohio. With technological advancements and trends in transportation constantly developing, COTA is committed to evolving. The Strategic plan is a five year blue print which has developed four guiding principles to ensure success and the overall mission is at the forefront of all decisions:

- Improve the customer experience
- Achieve organizational excellence
- Provide access to mobility options
- Prioritize the use of data and analytics

insight2050 Corridor Concepts (2019)

The Insight 2050 Corridor Concepts inform decisions of where to grow and invest in valuable transit resources to balance community goals. It engaged stakeholders across Central Ohio and produced scenarios that measured the impact of accommodating expected growth and identified strategies to advance transit and corridor development. This plan identified several corridor concepts and set the framework for the LinkUS Mobility Initiative, the current long-term transportation initiative in Central Ohio.

COTA NextGen (2017)

In collaborating with MORPC, the City of Columbus, and community members, NextGen is the vision for the future of transit and a transformative effort to keep central Ohioans on the move for decades to come. It aimed to align people to their destinations more quickly and conveniently, connect residents with jobs, and support efforts to create communities where young and old alike want to live, work, and raise a family during unprecedented growth. NextGen focused on three components, high-capacity transit, smart mobility options, and enhanced bus service.

COVID-19 IMPACTS

COVID-19 Service Impacts

As with many transit providers in the U.S., COTA's service was impacted by the COVID-19 pandemic. In March 2020, COTA modified how operators were assigned work by dividing the network into two shifts, one A.M. and one P.M in order to protect employees and maintain a proper social distance of 6 feet. However, this division reduced operator availability which led to reduction in service levels. Service cuts began in March 2020 with some service restored in September 2020.

COTA has been slowly reintroducing key transit lines in order to get people back to work safely. The graph below shows the increase in vehicle revenue miles from 2020 to 2021 as service returns.

The pandemic has created a new normal, which has affected public transportation. On top of public health issues, almost all industries are struggling to find workforce to operate at pre-pandemic levels of service. As COTA continues to try to meet the demand for increased frequency and service, hiring and retaining transit operators continues to be a nation-wide issue for transit agencies.

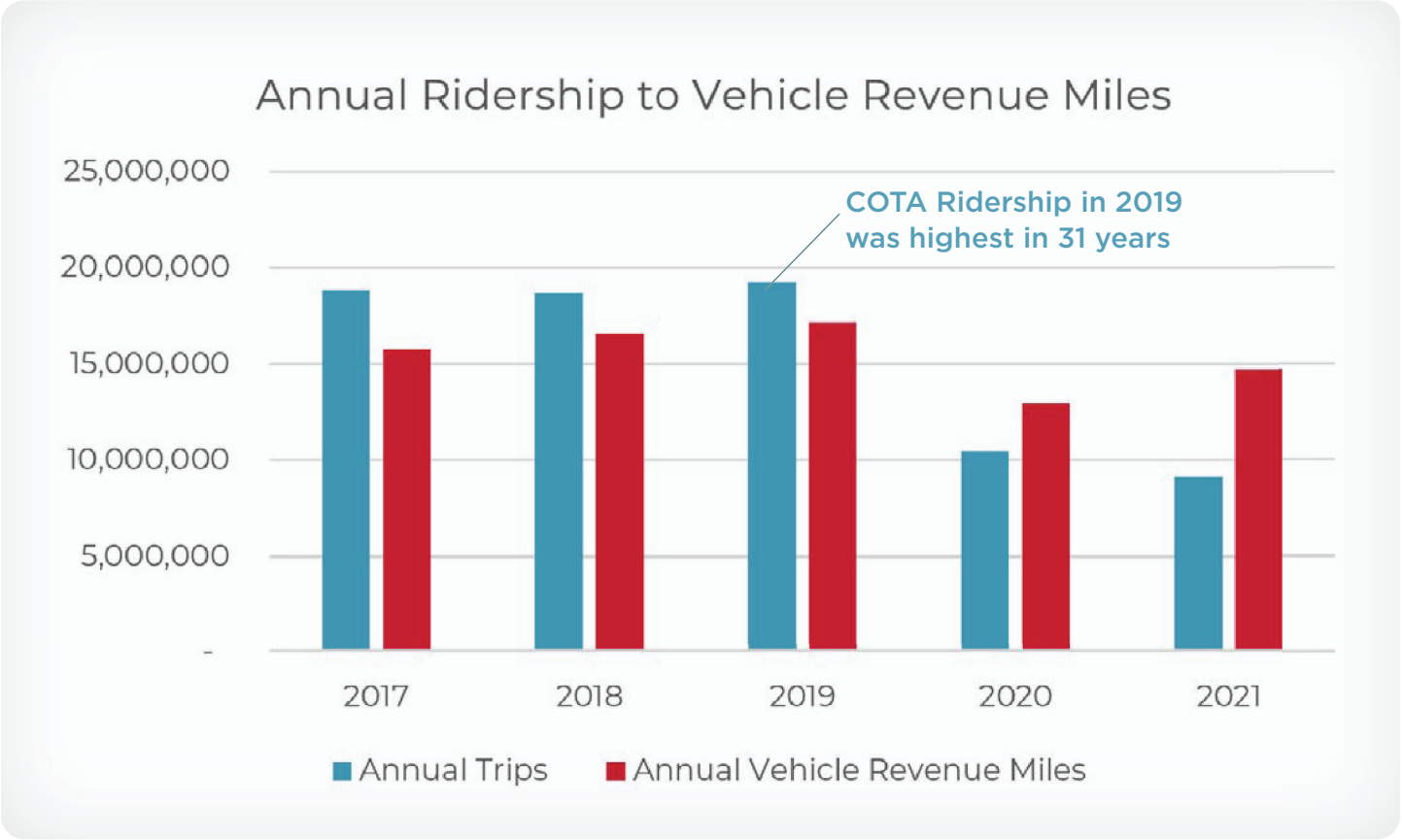


Figure 2 — Annual Ridership to Vehicle Revenue Miles

Essential Transit to Essential Services

The COVID-19 pandemic changed the public transportation landscape over the last few years and will continue to create waves of impact for years to come. In response to the pandemic, many jobs increased the teleworking environment. Now in a post-pandemic environment, while many non-essential sectors are returning to in-person workplaces, the job landscape has been altered indefinitely, trending towards a more flexible work environment and schedule. In Spring 2021, COTA reinstated 14 rush hour lines to help commuters comfortably return to the workplace.

As Columbus City Schools (CCS) students returned to the classroom for hybrid learning in Spring 2021, COTA partnered with the district to provide a Student Discount Pass Program. The district purchased more than 7,600 transit passes for eighth grade and high school students to use COTA for trips to school as well as beyond the classroom. This partnership reaches the next generation of transit users and is helping the economy to return to normalcy.

Transit agencies must prepare for the evolving landscape by creating more frequent, essential transit services to where essential jobs are located. In-person jobs in health care, supply chain, and restaurant industries have emerged as essential jobs during the COVID-19 pandemic. Another characteristic of these essential jobs is that they are challenging to serve due to multiple shifts in a 24/7 work environment and are typically not located in the downtown core.

Transit agencies can prepare for the evolving landscape by considering the locations of essential jobs. According to a study published in April 2020 by the National Bureau of Economic Research, 37 percent of US jobs can plausibly be performed at home[1]. According to the study's findings, within the Ohio job market, 44 percent of jobs can plausibly be performed at home. This is 4% higher than the average for the State of Ohio. Franklin County has 792,990 jobs, and of that, 39% of these jobs can work from home. The findings of this study that are relevant to COTA are summarized below.

Residents that can Work from Home (WFH) by Job Type and County

	Total Workers	% Essential Workers	% Workers who can WFH	% Essential Workers who can WFH	% Non-Essential Workers who can WFH
Franklin County	638,610	39%	45%	19%	60%
Central Ohio	970,978	39%	44%	18%	57%
Ohio	5,369,300	40%	40%	18%	51%

Figure 3 — Work from Home by Job Type and County

1. Dingel and Meiman, How Many Jobs Can Be Done At Home?, National Bureau of Economic Research, April 2020. https://www.nber.org/system/files/working_papers/w26948/w26948.pdf

COVID-19 Outreach and Innovation

During the COVID-19 pandemic, COTA saw changes in ridership and passenger experience to abide by public health orders and offer the highest quality service possible to the region. In order to maintain the 6 feet required for social distancing, COTA provided customers with a safe distance from the operator by offering free rides, instructing customers to enter from the rear of the bus, and installing operator barriers on the fixed-route fleet for protection. Additionally, the agency distributed more than 25,000 masks to customers and non-profit organizations so that everyone could ride safely.

Partnerships were formed with local organizations to successfully implement some of COTA's changes during the pandemic. COTA partnered with COSI on Wheels to provide student opportunities by creating large free hotspot zones near Columbus City School locations, parks, and libraries. This ensured access to a safe and accessible curbside location to participate in remote learning and created a solution for students who might not otherwise have consistent access to internet service. Additionally, COTA and their employees played a crucial part in the COVID-19 vaccination rollout. They partnered with Columbus Stand Up! to offer free rides to individuals to a mass vaccination site in the St. John Area. This program included COTA Mainstream On-Demand and COTA//Plus South Columbus services, which especially helped to improve transit access to those living in underserved and vulnerable communities. In addition, COTA distributed 10,000 one-day passes to almost 30 nonprofits to help community members access COVID-19 vaccines.

COTA FUNDING OVERVIEW

COTA, like most transit agencies of its size, relies on local taxes for much of its revenue stream, supplemented by passenger fares and a mix of federal and state funding sources. The purpose of this section is to review and understand current funding mechanisms for transit in Central Ohio.

Local Funding

COTA's local funding sources include a service area-wide sales tax and farebox revenue. There is a permanent sales tax of 0.25%, with an additional 10-year .25% sales tax that was passed by the voters in November 2016.[2] This 0.5% sales tax roughly makes up over 80% of operating funds before the COVID-19 Pandemic.[3] Despite COVID-19, passenger fares averaged around 17% of operating funds in the last 5 years.

Local funds only attributed 2.7% of the 2021 operating budget due to the one-time federal COVID relief for operating expenses. Local funds instead attributed to 79% of capital expenses in 2021.

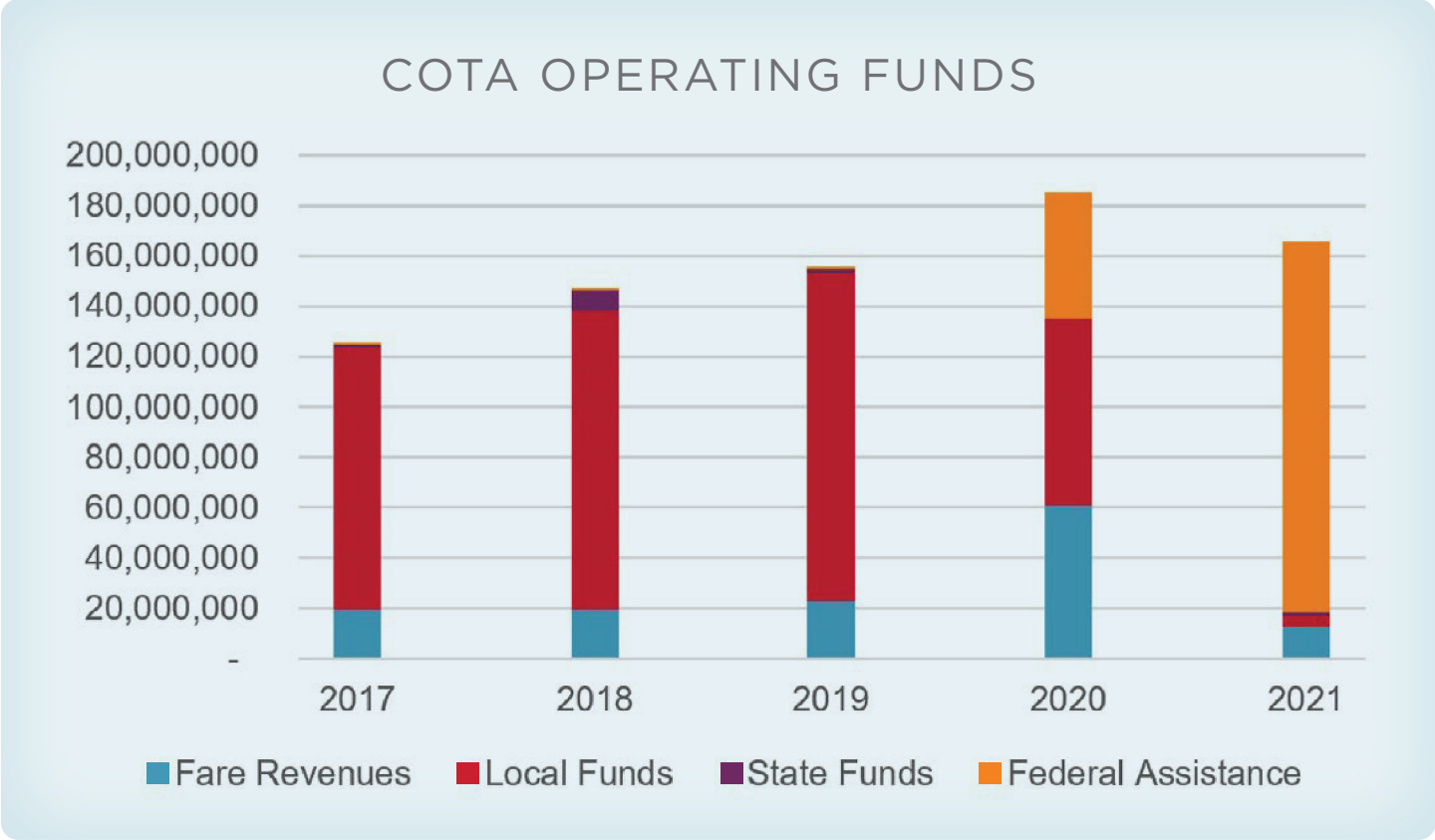


Figure 4 — COTA Operating Funds

2. Dispatch, Kimball Perry, The Columbus. "Voters opt to renew COTA's quarter-cent sales tax". The Columbus Dispatch. Archived from the original on 2020-07-27. Retrieved 2022-012-07.
3. NTD Agency Profiles 2016-2021

Federal Funding

The passage of the Bipartisan Infrastructure Law (BIL) in 2021 provided the largest investment for public transportation programs in the nation's history, including an increase of $31.5 billion dedicated for public transportation.

BIL appropriates funding for federal transit programs administered by the Federal Transit Administration (FTA), including $72.5 billion for federal transit formula programs, $8.0 billion for the Capital Investment Grant (CIG) Program, and $10.7 billion for other transit discretionary grant programs over a 5-year period.[4] The BIL is an opportunity for COTA to continue to drive the LinkUS initiative forward in the CIG program. In October 2021, the East Main Street and West Broad Street Bus Rapid Transit Projects entered project development phase with the FTA CIG program.

Federal Transit Program Funding ($ Millions)	5-Year Funding Total
Transit Formula Programs	
Urbanized Area Formula - Section 5307	$33,541
State of Good Repair Formula - Section 5337	$23,140
Rural Formula - Section 5311	$4,581
Bus and Bus Facilities Formula - Section 5339 (a)	$3,161
Elderly/Disabled Formula - Section 5310	$2,193
Fast-Growth State Supplement - Section 5340	$2,056
High-Density State Supplement - Section 5340	$1,823
Planning Programs - Section 5305	$966
Other Programs (FTA Administrative and other federal spending)	$1,028
Total Transit Formula Programs	$72,489
Capital Investment Grant Program - Section 5309	
New Starts	$4,400
Core Capacity	$1,600
Small Starts	$1,200
Expedited Project Delivery Pilot Program	$800
Additional authorized CIG funding (subject to annual appropriation)	$15,000
Total Capital Investment Grant Program	$23,000
Other Discretionary Grant Programs	
Low or No Emission Vehicle Program - Section 5339 ©	$5,625
Bus and Bus Facilities Competitive - Section 5339 (b)	$1,966
All Station Accessibility Program	$1,750
Ferry Service for Rural Communities	$2,000
Electric or Low-Emission Ferry Program	$500
Pilot Program for Transit Oriented Development Planning - Section 2005(b)	$69
Total Other Discretionary Grant Programs	$11,910
Other Authorized Funding (subject to annual appropriation)	
Washington Metropolitan Area Transit Authority Funding	$750
Total Federal Transit Program	$108,150

Figure 5 — Federal Transit Program Funding

4. Macek, N. (2022, February 25). Advisory services policy brief: Infrastructure Investment and Jobs Act - Transit and passenger rail provisions. HDR. from https://www.hdrinc.com/insights/advisory-services-policy-brief-iija-transit-passenger-rail-provisions

Transit Formula Grant Programs

Federal formula grant programs are federal resources available to transit agencies based on a variety of service and demographic characteristics. The federal funding for transit formula grant programs has increased 32 percent since the previous surface transportation authorization bill.

There are several competitive and formula funding sources that drive COTA services. Since 2020, COTA has received $323,815,641 from State and Federal resources. Of that, $61,405,346 was competitive funding, and the remaining $262,410,295 was formula-based. The increase in federal funding has been a highlight for COTA over the past 3 years.

COTA Grant Awards 2020 - 2023	
Competitive	$61,405,346
Formula	$262,410,295
Total Awarded	**$ 323,815,641**

Urbanized Area Formula

The Urbanized Area Formula Funding Program (49 U.S.C. 5307) makes federal resources available to urbanized areas for transit capital and operating assistance and transportation-related planning.

COTA Section 5307		
FFY2020	5037 Formula Dollars	$18,407,128
FFY2021	5037 Formula Dollars	$18,632,500
FFY2022	5037 Formula Dollars	$23,998,844

Bus and Bus Facilities Formula and Competitive Program

The Bus and Bus Facilities Grant program (49 U.S.C. 5339(b)) makes federal resources available to states and direct recipients to replace, rehabilitate, and purchase buses and equipment, along with related bus facilities. This can include technological changes and innovations to modify to low or no emission vehicles or facilities. This program is provided through formula allocations and competitive grant and provides funds for up to 80 percent of the cost of capital projects.

Although the amount of formula-based funding has reduced since 2020, COTA successfully won a competitive grant from the FY22 Low - No Emissions grant that provided an additional $26 million to reduce emissions throughout Central Ohio.

COTA Section 5339		
FFY2020	5339 Formula Dollars	$2,327,728
FFY2021	5339 Formula Dollars	$2,175,906
FFY2022	5339 Formula Dollars	$2,088,539

Enhanced Mobility of Seniors & Individuals with Disabilities – Section 5310

This formula funding provides assistance for transportation needs of older adults and people with disabilities. This program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expand transportation mobility options. This apportionment is based

upon each states share of the population of these two groups. COTA receives Section 5310 funds as a direct recipient and provides ADA and paratransit services within the urbanized area. In FY 2022, COTA received $1.68 million in Section 5310 funds.

COTA Section 5310		
FFY2022	5310 Formula Dollars	$1,137,713
FFY2021	5310 Formula Dollars	$1,160,442
FFY2022	5310 Formula Dollars	$1,687,972

Competitive Funding Sources

COTA has been awarded competitive grants in the last 3 years. Some of the larger competitive grants that COTA will use to drive transit forward in Central Ohio are:

- **2020 Integrated Mobility Innovation Grant** ($1.7 mil) — traffic management data on a cloud-based solution and use artificial intelligence to enhance operations, improve safety and efficiency, develop new channels of communication, and improve the public's mobility experience across the 13-county region in the Columbus Metropolitan Statistical Area (the Region).
- **2022 BBF Lo or No Emission Grant** ($26 mil) — purchase electric buses and chargers
- **2022 Regional Infrastructure Accelerator Program** ($750K for the LinkUS mobility initiative)

These competitive grants help drive COTA forward by providing innovative solutions and are a critical step for Central Ohio's ability to partner with federal funding sources to implement transformational infrastructure for our region.

COVID-19 Relief Funding

Throughout the last six years, COTA has continued to provide transit services within its operating budget. Despite the loss of ridership and fare revenue that resulted from the COVID-19 pandemic, COTA was able to maintain the level of service it needed for customers while also maintaining the budget.

COVID-19 relief funding programs were the backbone of transit agencies' ability to continue to provide essential services. Three key one-time COVID-19 bills were:

- **American Rescue Plan Act of 2021**
  This included $30.5 billion in federal funding to support public transportation systems as they continue to respond to the COVID-19 pandemic and support vaccination efforts
- **Coronavirus Response and Relief Supplemental Appropriations Act 2021**
  This was a $14 billion allocation to support the transit industry that became law in December 2020.
- **Coronavirus Aid, Relief, and Economic Security (CARES) Act**
  CARES Act was signed into law in March 2020 to allocate $25 billion to recipients of the urbanized area and rural area formula funds.

State Funding

For the 2020-2021 biennium, the Ohio General Assembly provided $16.6 million of Ohio's General Revenue Funds for the Urban Transit Program (UTP) that is available to COTA to fund capital and operating initiatives.

Ohio Transit Partnership Program (OTP2)

In FY 2020, Ohio Department of Transportation (ODOT) established the Ohio Transit Partnerhip Program (OTP2) to provide $44 million annually in state funds to the rural and urban transit systems. The OTP2 is a discretionary program and projects are selected on a competitive basis for the two funding tiers described below.

Tier I: Projects that meet ODOT's definition of preservation, which is the process of working to maintain, sustain, or keep in a good sound state the transit systems in Ohio

Tier II: Projects focused on regionalization, coordination, technology, service expansion, workforce initiatives, and healthcare initiatives.

Funding from this grant opportunity can be used as part of the local match for federal grants, which will assist transit agencies for competitive applications for the IIJA.

Since 2020, COTA has been awarded $163,149,417. These competitive dollars will be used for vehicles purchases, on-demand operating expenses, healthcare initiatives, county connections, cashless payment systems, passenger counters, and corridor development.

Near Term Financial Considerations

This section provides an overview of some nearer term considerations that may have an impact on COTA future budget and operations.

Near Term Financial Considerations

Loss of one-time CARES and CRRSAA Funds

These funds provided relief over the last two budget cycles; however, federal funding will return to pre-pandemic levels in the near future.

Ridership losses and resulting decrease in federal funding share

The FTA formula funds that agencies receive each fiscal year are apportioned based on a variety of factors, including ridership. Generally speaking, lower ridership equates to lower federal funding levels. The unprecedented and historic funding levels for public transportation included in the IIJA are very positive for COTA, but specific effects on formula funds in a scenario where ridership continues to remain well below pre-COVID levels is another issue that merits careful attention.

State Funding

Historically, the State of Ohio has not provided the financial support that transit needs in order to operate at the level that residents demand. Ohio ranked 38th out of 51 States and Territories of transit spending per capita.[5] State funding continues to be an opportunity for COTA and other Ohio Transit agencies to continue to advocate for increased financial support.

5. Transit Needs Findings Snapshot, https://www.transportation.ohio.gov/programs/transit/transit-repository-publications/transit-needs-findings-summary

CURRENT FEDERAL, STATE, AND REGIONAL INITIATIVES

With the direction of the Federal government, new, sustainable initiatives have been placed on transit agencies in order to be competitive with various funding sources. The following are initiatives within the transit industry that are imperative for COTA to consider in the next five years.

Infrastructure Investment and Jobs Act (IIJA)

The Infrastructure Investment and Jobs Act (IIJA), also referred to as the Bipartisan Infrastructure Bill (BIL), provides funding to repair aging infrastructure through formula funds and discretionary grants. The discretionary program is administered by the U.S. Department of Transportation (USDOT) and provides $31.5 billion worth of funding to public transit, which is a significant increase in investment toward more sustainable transportation options. This funding source will continue to move transit agencies forward with a renewed focus on equity, sustainability, and justice initiatives.

Low – No Emissions Vehicle Program

This discretionary program provides annual funding to state and local governments for the purchase or lease of zero-emission and low-emission transit buses as well as the acquisition, construction, and leasing of support facilities. The IIJA provides an appropriation of more than $5.6 billion over five years, a 6-fold increase in funding. Applicants must prepare a zero-emission fleet transition plan that includes a workforce transition plan. This program aligns with COTA and its sustainability initiative to shift to zero-emission buses. COTA was a recipient of this competitive funding opportunity in FY2022.

Bus and Bus Facilities Competitive Program

The discretionary component of this program supports the rehabilitation and replacement of buses and bus-related equipment, as well as rehabilitation of existing or construction of new bus-related support facilities. The IIJA provides more than $2 billion over the next five years, with at least 25% of the program funds being in support of lower-emission buses and vehicles. This program requires COTA to prepare a zero-emission fleet transition plan, including a workforce transition plan to be eligible for these federal dollars.

Pilot Program for Transit Oriented Development Planning

This existing discretionary program provides funds to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. This program is important for COTA to consider with the LinkUS initiative to integrate the BRT systems in the region.

6. Macek, N. (2022, February 25). Advisory services policy brief: Infrastructure Investment and Jobs Act - Transit and passenger rail provisions. HDR. Retrieved from https://www.hdrinc.com/insights/advisory-services-policy-brief-iija-transit-passenger-rail-provisions

Justice40

The Justice40 Initiative is the first time in our nation's history that the Federal Government has made it a goal that 40 percent of overall benefits of certain federal investments must serve disadvantaged communities that are marginalized, underserved, and overburdened by pollution. These investments include climate change, clean energy and efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and the development of clean water and wastewater infrastructure.

This Federal initiative positively impacts public transit and COTA by transforming Federal programs and grant opportunities to ensure disadvantaged communities receive the support to confront the decades of underinvestment. This new initiative allows the Department of Transportation to identify and prioritize projects in communities that face barriers to affordable, equitable, reliable, and safe transportation. This program requires stakeholder consultation to ensure the community is involved in determining program benefits and how to capture data on the benefits directed to disadvantaged communities.

LinkUS

LinkUS will help to address growth, affordability, and opportunity gaps in our community by creating an integrated mobility system that will make it easier to walk, bike, or take public transit in our region's busiest areas. It will increase access to jobs, schools, and healthcare for all members of the community.

Currently, there are three corridors that are accepted into the Capital Investment Grant (CIG) Program by the U.S. Department of Transportation Federal Transit Administration in October 2021. The East Broad Corridor and the Northwest Corridor's Locally Preferred Alternatives were adopted by COTA's Board of Trustees in August 2021 and November 2022, respectively. COTA plans to request entry into Project Development for the Northwest Corridor initial segment in 2023 and continue the design work These corridor projects will lay the groundwork for an integrated 21st Century mobility system — but the success of the system will rely on strong interconnections between various modes and networks. LinkUS will continue to advance equitable regional mobility investments throughout Central Ohio.

FALL 2022 ENGAGEMENT OVERVIEW

Engagement is essential to COTA to enhance the outcome of all transportation planning activities. Community engagement is designed to increase public awareness about the planning process and obtain feedback to inform recommendations, including any scenario plans that will be developed as part of the COTA SRTP.

COTA met with municipalities, neighboring counties, and internal stakeholders during the development of the existing conditions to better understand opportunities to serve the community in the next five years. Meeting participants shared pertinent information informing COTA of transit needs, new developments, active infrastructure projects, and desires from the community. In addition, comments from COTA's customer service database were analyzed in order to consider the ideas, suggestions, and complaints from COTA riders. Engagement will continue throughout the SRTP process to receive feedback related to transit service recommendations. This engagement will target transit riders and community members.

Key Engagement Messages

The SRTP is an opportunity for COTA to connect with municipalities, stakeholders, customers, and the general public every two years to learn what the needs and desires are for transit. The key message used during this outreach is that COTA is interested in developing partnerships with communities to help customers better connect with transit

Customer Service Database

COTA connects with customers on multiple platforms. Through social media, by phone, in-person at the Customer Experience Center, and the Mobility Services on Fields Avenue, COTA has been available to aid customers and listen to their complaints, ideas, and suggestions. The database has over 22,000 recorded comments for the last three years.

Communication Tools

The SRTP relies heavily on successful communication and collaboration among stakeholders to collectively identify the appropriate path forward and create buy in. This planning process utilizes several ways to communicate, including:

- In-person meetings
- Virtual Meetings
- Public Meetings
- Formal Presentations
- Mentimeter software for measurable results
- Mural Board tools to create virtual collaboration

These tools will be used throughout the SRTP process in order to create a collaborative approach and to communicate with stakeholders and the public

Target Audiences

Engagement activities associated with the development of the SRTP are strategically designed to target the following audiences:

- Municipalities,
- Internal and External Stakeholders, and
- Customers

The study team engaged with all municipalities within Franklin County by conducting one-on-one meetings to have an open discussion about each City's current transit needs and desired areas of improvement. Through an interactive map activity, municipalities identified areas of growth and development. The following pages highlight key takeaways from each municipality and their ideas for improvement within their communities.

Dates of Engagement (2022):

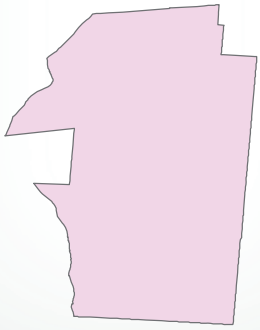
- September 8th – City of Hilliard, City of Upper Arlington
- September 30th – City of New Albany, Licking County
- September 30th – Grove City
- October 17th – City of Westerville
- October 17th – City of Worthington
- October 18th – City of Dublin
- October 18th – City of Whitehall, City of Reynoldsburg
- November 8th – Union County
- November 9th – City of Gahanna
- November 14th – City of Grandview Heights
- November 15th – City of Bexley
- December 14th – City of Columbus Department of Neighborhoods

MUNICIPALITY INPUT KEY FINDINGS

Bexley

Current Service Routes

1 2 10



Municipal Updates

- Creation of Southwest Bexley Plan and Livingston Corridor Plan, in response to Capital University and Resident needs.
- The City will be implementing Bike Boulevard Signage from College to Montrose.
- Creating pedestrian connections along Alum Creek and to North Columbus.

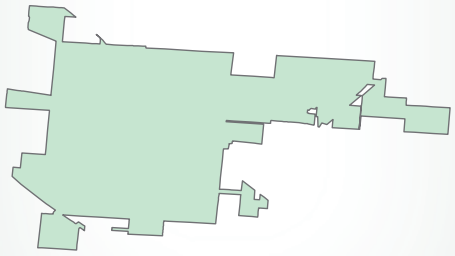
Transit Service Considerations

- Main Street and Livingston are the two streets that service Bexley residents with businesses, destinations, and services
- Mobility hub could be successful around community facilities, or Capital University, as seen by the usage of COGO stations

Canal Winchester

Current Service Routes

25 52



Municipal Updates

- In the process of completing a Comprehensive Master Plan
- Trail and pedestrian improvements are top priority
- There are plans for improvements along US 33, including new interchanges and lane widening

Transit Service Considerations

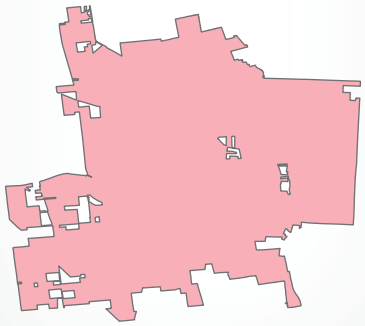
- Interested in increased fixed route services for workforce access
- Desire an increased frequency of Route 25 and extend this route to Groveport
- There has been a need for transit along Gender Road for many years.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Dublin

Current Service Routes

21 33 72 73



Municipal Updates

- Dublin is looking into modernizing the zoning code to create "mini-cities."
- City Council is doing an audit of the COTA bus stops to decide how to make improvements.
- Seeing a need for transit to access hospitals and fill jobs.

Transit Service Considerations

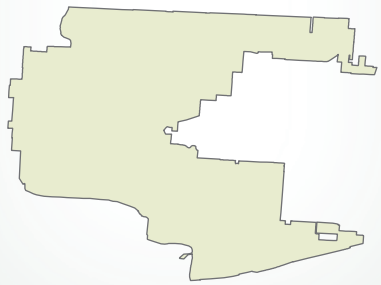
- Would like to see an active mobility hub with a LinkUS Connection that serves Ohio University Branch Campus
- Would support a COTA//Plus type circulator service
- Increase fixed route services for job access.
- Connection to Line 1 to connect to LinkUS
- There is an informal park and ride at US 33.

Gahanna

Current Service Routes

24 25 46

COTA//Plus



Municipal Updates

- City is continuing to work on creating trails and connecting to Rapid5
- Creekside area will continue to grow and require access
- City services including the police station moving in the upcoming year
- After school athletic events are moving to Jefferson Twp. which could be an opportunity for partnership

Transit Service Considerations

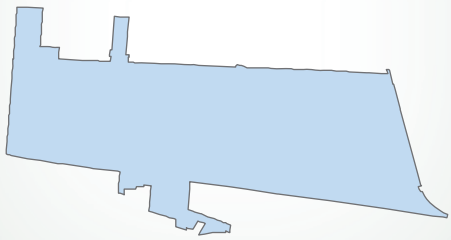
- Enhanced access between #10 and #25 along Taylor Station Road
- Interested in connecting trails to transit options
- Create access to the new library, along route 24 and 25.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Grandview Heights

Current Service Routes

75 3 5 22 31



Municipal Updates

- The Goodale Corridor will continue to become more walkable.
- Grandview Crossing Development will consist of apartments and businesses, including BMW.

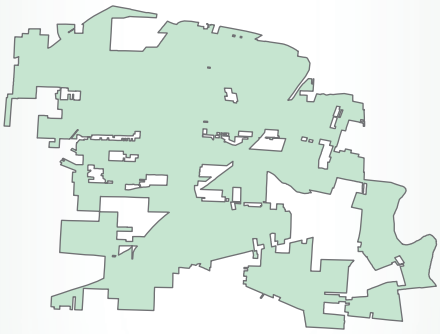
Transit Service Considerations

- Lack of connection to Franklinton Neighborhood
- Line 75 is very well utilized within the community, especially for school children

Grove City

Current Service Routes

3 61 COTA//Plus



Municipal Updates

- The City is continuing to improve pedestrian and bicycle access.
- Grove City is working to increase access to additional developable land by creating an overpass over I-71 in the next 5-7 years.
- Future redevelopment of Beulah Park.

Transit Service Considerations

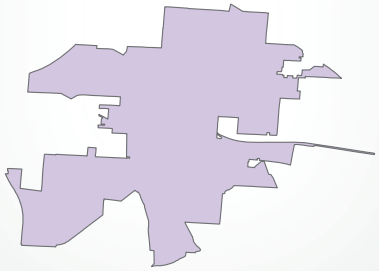
- Would like a LinkUS Connection in the future
- Would like an extension of COTA//Plus services
- Find transit solutions for workforce and medical patients. Specifically, Mt. Carmel Hospital, FedEx, and Walmart Distribution Center where entrances are not near fixed route services.
- Opportunity to improve ADA access on Parkway Center.
- Opportunity for bus service along Hoover Road, along the future overpass.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Groveport

Current Service Routes

22 24 52



Municipal Updates

- There is continued growth in the Rickenbacker Industrial Park Area
- There was a pilot program during the pandemic that connected east to west which was unsuccessful.

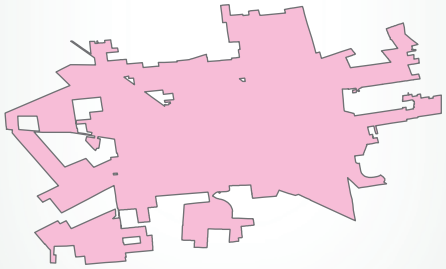
Transit Service Considerations

- Interested in COTA//Plus services or other transit options to serve the Rickenbacker Industrial Park area
- Service to Fairfield and Pickaway Counties
- Need to move workforce efficiently from north to south

Hilliard

Current Service Routes

5 21 32 71



Municipal Updates

- The City of Hilliard Comprehensive Plan will be adopted in Early 2023.
- Hilliard has changed its focus to bike and pedestrian prioritization – particularly around the Big Darby area.
- The City is questioning how to redevelop roadways that are not being used to the full capacity.

Transit Service Considerations

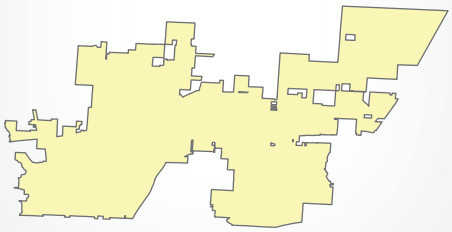
- Direct service to Ohio State through fixed route, frequent service
- COTA//Plus for residents to reduce parking demands
- Increase connections to shared use paths
- Cemetery Road Corridor will undergo redevelopment in the coming years

MUNICIPALITY INPUT KEY FINDINGS CONT.

New Albany

Current Service Routes

45 COTA//Plus



Municipal Updates

- New Albany is focused on the future of the Hamilton corridor.
- There is a need for transit in New Albany. Residents have requested more access to the Town Center.

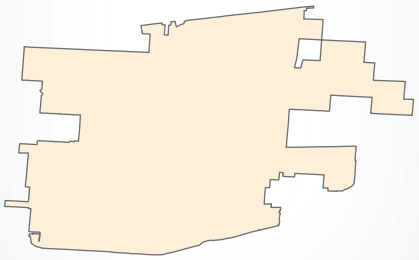
Transit Service Considerations

- Restore Smart Ride Program as it was a past success prior to COVID-19
- Increase frequency to existing Park and Ride
- Increased transit options for workers, easy to understand and transfer

Reynoldsburg

Current Service Routes

1 2 10 25 51



Municipal Updates

- Development will occur toward the east side of Reynoldsburg.
- As part of LinkUS network, the City hopes to reduce traffic speeds.
- Future development opportunities along Brice Road.

Transit Service Considerations

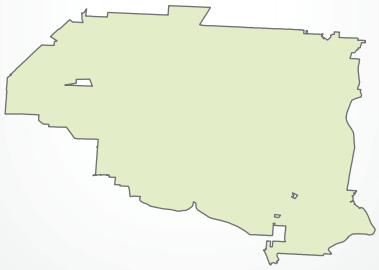
- Would like to see increased fixed route service.
- Opportunity for new services to Intel and Licking County
- Desire to have more routes from North to South.
- Need for transit connections to the east.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Westerville

Current Service Routes

43 102 CMAX COTA//Plus



Municipal Updates

- Discussions with Metro Parks for a trail system extension near I-270
- The City is building a new courthouse off of Tradewind Drive.
- Desire more east-west connections across central Ohio.

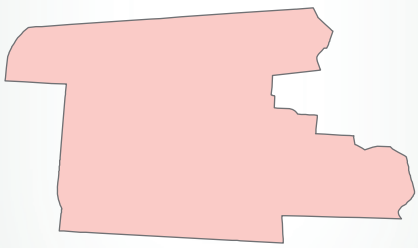
Transit Service Considerations

- Interested in increased COTA//Plus services to and from schools in Westerville and Linden Township
- Discussed adding a park and ride on the east side of the City.

Whitehall

Current Service Routes

2 10 24



Municipal Updates

- Greenways are important to the Whitehall community.
- Multiple affordable housing developments in the area along transit routes.

Transit Service Considerations

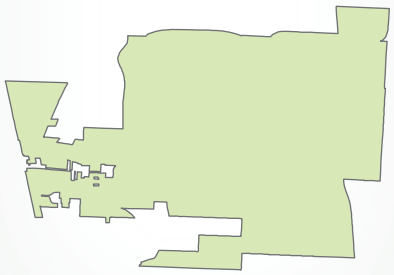
- Interested in increased economic development opportunities along East Main Street with the BRT implementation
- Challenge with school transportation.
- Suggested a route on Yearling Road, North to South.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Worthington

Current Service Routes

74 102



Municipal Updates

- Worthington Mile – A connector from historic downtown to more dense areas.
- Many new developments involving mixed use buildings.

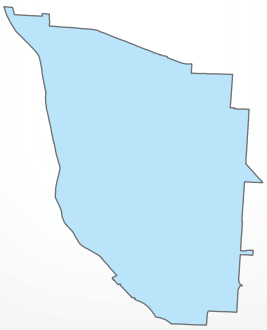
Transit Service Considerations

- Desired to increase frequency on Line 102.
- Services are needed along Huntley Road.
- Discussed the need for transit circulation within the City.
- Commuter bus along Smokey Road from the park and ride.

Upper Arlington

Current Service Routes

1 3 31 32 33 73 75



Municipal Updates

- The City received a large grant to rebuild Fishinger Road. This will add a new side path to the north, and a sidewalk to the south.
- Kingsdale Shopping Center is adding a community center, senior housing and 325 apartment units over the next 4-5 years.
- The next corridor to see redevelopment will be Henderson Road.

Transit Service Considerations

- Transit service along Lane Avenue
- Fishinger Road could be served by transit
- The City would like to connect LinkUs to Lane Avenue from Olentangy River Road.
- Griggs Park and Ride pedestrian connection could be enhanced for UA and Hilliard communities.

MUNICIPALITY INPUT KEY FINDINGS CONT.

Columbus

1 2 8 10
3 4 5 6
7 9 11 12
21 22 23 24
25 31 32 33
34 35 102 152
41 42 43 44
45 46 51 52
61 71 72 73
74 75 141

AirConnect

CMAX

COTA//Plus

ZooBus

Municipal Updates

- There are 21 area commissions and 3 civic associations. There are an additional 5 historical divisions that are not part of this department.
- The Department of Neighborhoods has 8 neighborhood liaisons to help orchestrate outreach
- Recently underwent a large community engagement effort for the Zoning Code update.

Transit Service Requests

- Residents have been negatively impacted by service reductions
- Franklinton wants access to other parts of Columbus without going through Downtown to transfer first
- Large Multi-family large developments will be coming online on large transit corridors.

Internal and External Stakeholders

During Fall 2022, project stakeholders were identified as key voices to the SRTP. Throughout the fall, COTA met with some of these stakeholders, including COTA's internal stakeholders. The internal stakeholders are comprised of a variety of staff from different departments of the agency. In addition, COTA identified several key external stakeholders that include business, civic, and political representatives who will be engaged during the SRTP planning process.

Internal Engagement to Date:

- November 18th — 2022 Internal Stakeholder Meeting

The first internal stakeholder meeting was virtual and was attended by 49 online participants. The purpose of this meeting was for COTA to share an overview of the Short Range Transit Plan development process, current COTA service, Central Ohio's transit need and market analysis for transit, and how this plan will influence the operational and capital budget. Participants were then asked about strengths, opportunities, and challenges within COTA. This interactive virtual meeting allowed internal stakeholders to answer a variety of questions to quantitatively measure the directional future of COTA. Participants used two tools to engage: Mentimeter and Mural Board. From these tools, the SRTP project team used the results to solidify the direction and values for the SRTP report.

The Internal Stakeholders defined transit as mobility, access, and service. These stakeholders believed that access, customer experience, and equity should be the goals for COTA in the community. The biggest challenges customers currently experience is reduced service hours and frequency. 82% of the participants believe that COTA should focus on improving this service instead of expanding coverage of service.

Internal Service Planning Meetings

This engagement group consists of members of the COTA Development and Operations Teams. These stakeholders will review service monitoring metrics. Each fixed route line and COTA//Plus service will be analyzed and the data resulting from this engagement with COTA's internal service planning operations will feed into the SRTP service recommendations.

Internal Service Planning Meetings to Date (2022):

- November 17th — Virtual Service Planning Overview Workshop
- December 8th — Review of Lines 2, 12, 21, 22
- December 15th — Review of Lines 3, 4, 5
- December 19th — Review of Lines 6, 23, 24, 25
- December 21st — Review of Lines 7, 8, 31, 32
- December 27th — Review of Lines 9, 10, 11, 33

Customer Service Database

The database has over 22,000 recorded comments for the last three years. This was evaluated and used while reviewing fixed route services to make improvements based on customer feedback.

In the initial review of the database, the top complaint/feedback category was that the customer was passed by on the street. The other top categories are listed in the chart to the right.

It is also important to recognize the top 3 routes where customers provided the most feedback is Line 8, Line 2, and Line 1. These three routes make up over 30% of the data and are all frequent routes, with Line 2 having the highest ridership of the system..

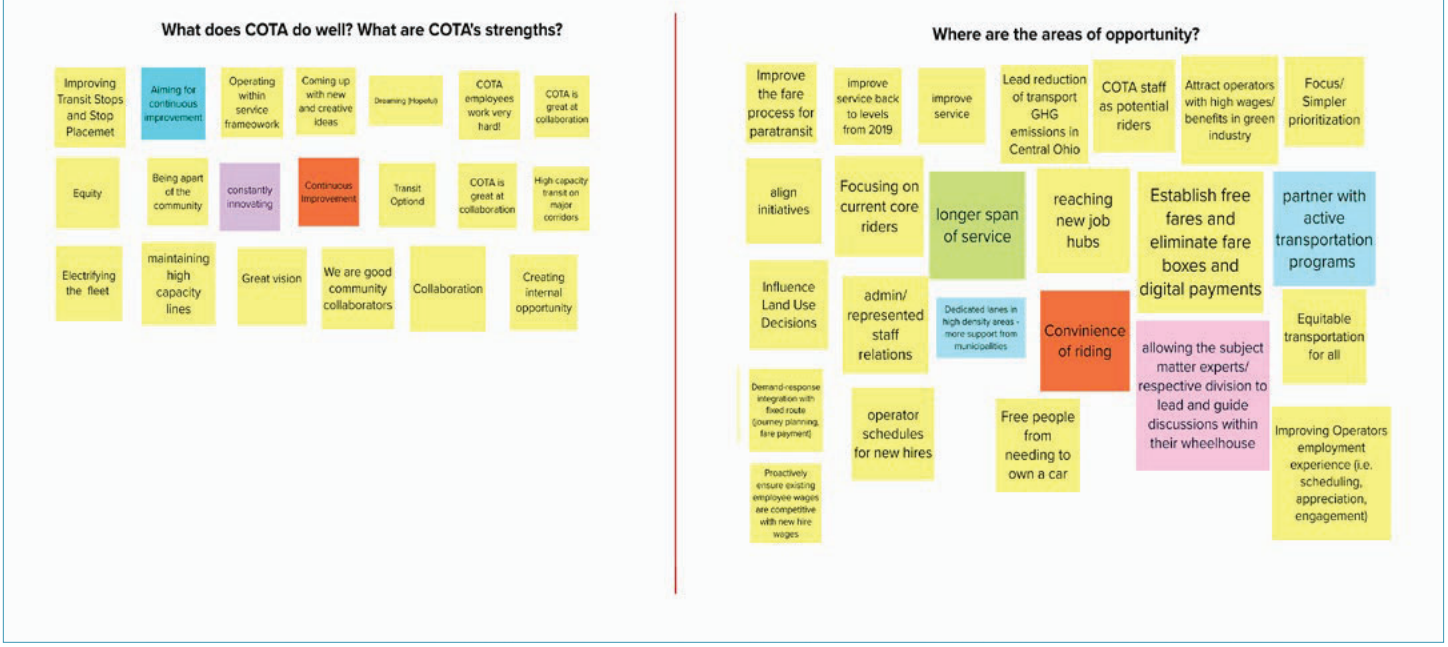
From this database, we are also able to collect specific route changes that customers recommend in terms of frequency and route direction that will be useful during the service recommendations report.

Top Customer Feedback Concerns

Description	Percentage
Passed by on Street	19%
Discourteous Bus Operator	9%
Bus Running Late	9%
Bus did not Show	6%
Other	6%
Unsafe Driving	3%
Masks	3%
Bus Running Early	3%
COTA Plus Complaint	2%
Damaged Shelter/Transh Can	1%

Figure 6 — Customer Database Results

Internal Stakeholder Mural Board Engagement Activity

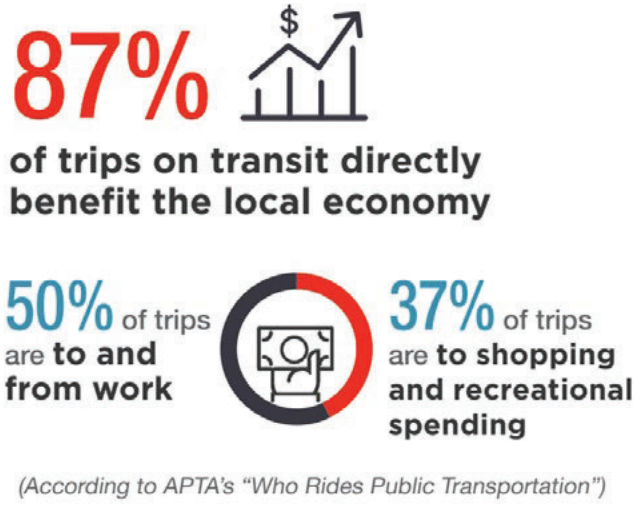


COTA SYSTEM EVALUATION

This section provides an in-depth evaluation of COTA's current transit system. The system evaluation uses data provided by COTA and MORPC to construct a full picture of strengths, weaknesses, and opportunities of each route and the COTA//Plus zones and compare it to the transit need and potential to the Central Ohio Region

Around the world, transit systems ease traffic congestion and connect people with locations of jobs, medical services, and educational opportunities. COTA provides mobility solutions that impact the overall health of the region. Research has shown that a robust transit system has positive impacts on the economy, with 87% of trips on transit directly benefiting the local economy with 50% of trips used to access employment work and 37% of trips for the purpose of shopping and recreational spending[7].

Driving the Economy



COTA is preparing for Central Ohio's future growth by identifying transit investments that integrate with regional plans and goals. Goals include maintaining regional competitiveness, connecting workforce to jobs, minimizing sprawl, and responding to demographic preferences and trends.

COTA Today

Transit service in Columbus has changed drastically over the years. In 2017, COTA rolled out its first system redesign in over 40 years, and after that, saw record ridership that proved frequent service in high ridership areas made the system easier to navigate and use for Central Ohioans.

However, the COVID-19 pandemic shuttered much of that redesign. Similar to most transit agencies around the world, COTA saw a decline in ridership, revenue, and transit service. As of May 2023, COTA is providing 72% of the pre-pandemic service hours, and is averaging 34,000 rides every weekday.

7. APTA's "Who Rides Public Transportation" https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf

Fixed Route Service Characteristic Comparison 2019 to 2021

Service	Weekday		Saturday		Sunday	
	2019	2021	2019	2021	2019	2021
Trips Per Day	3,807	1,987	2,785	1,903	2,497	1,903
Annual Ridership	14,502,720	6,929,861	1,777,320	1,074,883	1,471,814	869,931
Average Daily Ridership	56,873	27,288	34,179	20,700	25,376	15,021
Revenue Hours Per Day	2,848	2,260	2,250	2,200	1,971	2,200
Revenue Vehicle Miles Per Day	41,478	34,197	33,857	32,971	31,344	32,971
Passengers Per Trip (Average)	10.9	8.4	10.8	9.1	9.1	6.6
Passengers Per Revenue Vehicle Mile (Average)	1.2	0.4	1.0	0.5	0.8	0.4
Passengers Per Revenue Vehicle Hour (Average)	16.7	8.11	13.6	8.5	12.1	6.2

Figure 7 — Service Characteristic Comparisons

Workforce Challenges

A current nationwide shortage of transit operators exists. This affects the service levels that COTA can serve the community. The American Public Transportation Association (APTA) showed that 92% of transit agencies are having trouble finding new employees, while 66% have struggled to retain, and 71% have cut or delayed service due to staff shortages[8].

Operators are essential to restore the necessary service for Central Ohio. In September 2022, COTA had 592 operators, which is over 100 operators short. COTA had

8. APTA. Transit Workforce Shortage. https://www.apta.com/wp-content/uploads/APTA-Transit-Workforce-Shortage-Summary.pdf
9. Ferenchik, M. Cota trying to lure more drivers to restore service frequency on routes. The Columbus Dispatch. https://www.dispatch.com/story/news/local/2022/10/02/cota-needs-more-bus-drivers-to-restore-service-frequency/69520216007/

to decrease frequency of service from every 15 minutes to 20 minutes on four of the most-used routes[9]:

- No. 1 (Kenny/Livingston)
- No. 2 (East Main/North High)
- No. 10 (East Broad/West Broad)
- CMAX bus rapid transit service

In addition, COTA also decreased 30-minute frequency to 60-minute frequency for three other key system routes.

COTA has been actively marketing and promoting positions within the community, identifying candidates, assisting with job application, and training candidates through the approximately two-month Commercial Driver's License (CDL) program. COTA has also increased the wage, including training pay, while also providing bonuses to new hires. At the same time, retirements and natural attrition continuously reduce operator levels at a consistent rate. Therefore, the operator shortage requires a robust, all-in approach from the top of the organization on down with key collaboration between Human Resources, Marketing, and Operations divisions, along with reaching out to peer agencies and APTA to better understand the market and best practices. Replenishing and building operator levels to meet transit service needs for the community requires a year-long comprehensive approach.

COTA//Plus

COTA//Plus is a microtransit type service that has continued to be an asset to communities since its inception. Currently running in four communities, this service continues to be requested from other communities and suburbs wanting similar service to connect their residents to their community assets. This service is a financial partnership for the operations cost of this service.

Each zone serves a specific market during a determined span of service. Currently only Northwest Columbus and the Southside zones have service available seven-days-a-week, while Grove City and Westerville serve Monday through Friday. However, each zone shows that the weekday ridership by trip is typically taken during the peak morning and evening commute hours, showing that these routes are taken by passengers either heading to a workplace or school within that zone

Appendix B shows detailed operating characteristics for COTA//Plus.

TRANSIT MARKET ANALYSIS

Understanding existing and future markets for transit service is a fundamental part of identifying service gaps and opportunities to make better use of resources. This market analysis examines service area characteristics, such as density, demographics, land use, and regional travel patterns to create a propensity analysis to better understand the market and latest demand for transit service throughout Columbus. The timeframe being assessed will be from 2019-2027, to include pre-pandemic, post pandemic, and up to 5 years of future demand.

More than any other factor, density determines the effectiveness and efficiency of public transportation. Places with higher concentrations of people and/or jobs tend to have higher transit ridership. At the same time, most transit agencies have a mandate to provide comprehensive service in the communities they serve and to provide mobility for residents with no other means of transportation. COTA allocates 70% service hours to ridership service and 30% to coverage service. This Market Analysis aims to identify the strongest transit corridors in the COTA service area and to highlight areas with relatively high transit need. Thus, the Market Analysis consists of two key components: Transit Potential and Transit Need. Transit Potential is an analysis of population density and employment density. Transit Need focuses on socio-economic characteristics such as income, automobile availability, age, and disability status indicative of a higher propensity to use transit. Transit use is influenced by the built environment. In particular, certain land uses—such as retail centers, civic buildings, multifamily housing, educational institutions, medical facilities, and major employment centers tend to generate transit trips at a relatively higher rate.

Peer Comparison

To put COTA's fixed-route service performance into perspective, it is useful to examine the performance of peer agencies on key metrics. These metrics include the urbanized area, service area population, population density, fixed route vehicles, and annual fixed route ridership.

"More than any other factor, density determines the effectiveness and efficiency of public transportation. Places with higher concentrations of people and/or jobs tend to have higher transit ridership."

Peer Comparison (2021 Data)

Agency	UZA	Service Area Population	Population Density (Per Sq Mile)	Fixed Route Vehicles	Annual Fixed-Route Ridership
King County Department of Metro Transit (King County Metro)	Seattle, WA	2,287,050	1,072	1,405	42,536,203
Metro Transit	Minneapolis, MN	1,731,667	3,520	671	22,137,142
Milwaukee County Transit System (MCTS)	Milwaukee, WI	943,240	3,914	364	15,728,839
Central Florida Regional Transportation Authority (LYNX)	Orlando, FL	2,134,411	840	397	12,880,333
The Greater Cleveland Regional Transit Authority (RTA)	Cleveland, OH	1,412,140	3,083	231	11,184,684
Niagara Frontier Transportation Authority (NFTA)	Buffalo, NY	865,340	2,458	373	9,689,616
Southwest Ohio Regional Transit Authority (SORTA)	Cincinnati, OH	744,901	2,578	377	9,600,324
Central Ohio Transit Authority (COTA)	**Columbus, OH**	**1,168,779**	**3,479**	**365**	**8,899,769**
Charlotte Area Transit System (CATS)	Charlotte, NC	1,302,619	1,930	322	5,906,006
Jacksonville Transportation Authority (JTA)	Jacksonville, FL	1,237,843	906	238	5,057,031
Transit Authority of River City (TARC)	Louisville, KY	806,893	2,260	233	4,402,747
Indianapolis Public Transportation Corporation (IndyGo)	Indianapolis, IN	928,281	2,344	186	4,163,764
Metropolitan Transit Authority (WeGo)	Nashville, TN	694,144	1,377	277	4,150,277
Peer Average (Not Including COTA)		1,257,377	2190	423	12,286,414

Figure 8 — Peer Comparisons

The 12 peers listed above are large to mid-size transit agencies. This group was selected to compare transit agency size, regional location, and future buildout plans with high-capacity transit corridors. The chart above is organized based on annual fixed-route ridership.

Peer Comparison of Performance Metrics (2021 Data)

Category	Performance Measure	Peer Average	COTA	Relative Performance
Cost Effectiveness	Operating Expense per Passenger Trip	$14.24	$16.50	Underperforms Peer Average
Service Efficiency	Operating Expense per Revenue Hour	$150.78	$154.39	Underperforms Peer Average
Service Effectiveness	Passenger Trips per Revenue Hour	11.04	9.36	Underperforms Peer Average
Passenger Revenue Effectiveness	Fare Revenue/Operating Expenses (Farebox Recovery Ratio)	9%	7%	Underperforms Peer Average
	Fare Revenue per Passenger Trip	$1.13	$1.14	**Outperforms Peer Average**

Figure 9 — Peer Comparisons to Performance Metrics

Looking at the chart above COTA underperforms its peers in its performance metrics, except in one category, the revenue hours per capita and farebox revenue per passenger trip.

The maps in the following section show the relative densities of five high-transit-propensity population subgroups by Census block groups in the COTA service area to help determine where the need for transit service is greatest.

10. Source: 2020 US Census Bureau Decennial Census

Transit Potential

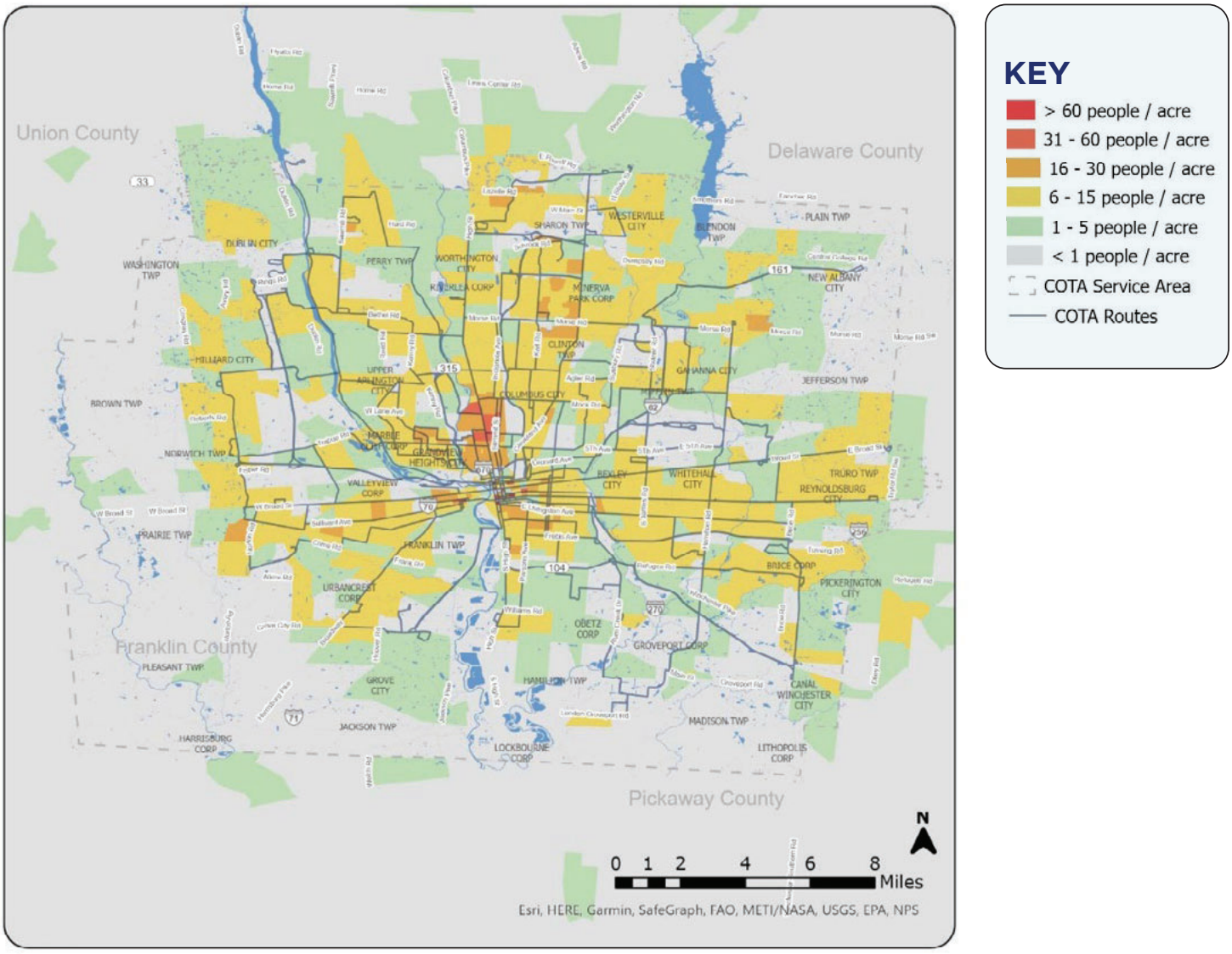


Figure 10 — 2020 Population Density

Population Density

Public transit is most efficient when it connects population and employment centers where people can easily walk to and from bus stops. Transit's reach is generally limited to within one-quarter mile to one-half mile of the transit line, or a 10-minute walk. The size of the transit travel market is directly related to population density. Typically, a density greater than five people per acre is needed to support base-level (hourly) fixed-route transit service. Figure 1 shows the population density of the service area[11].

The COTA service area consists of a mix of areas with transit-supportive population density, including in the vicinity of Ohio State University, neighborhoods along the Cleveland Avenue corridor and pockets of downtown Columbus.

11. Source: Mid-Ohio Regional Planning Commission MTP 2020-2050 Land Use Forecasts (TAZ).

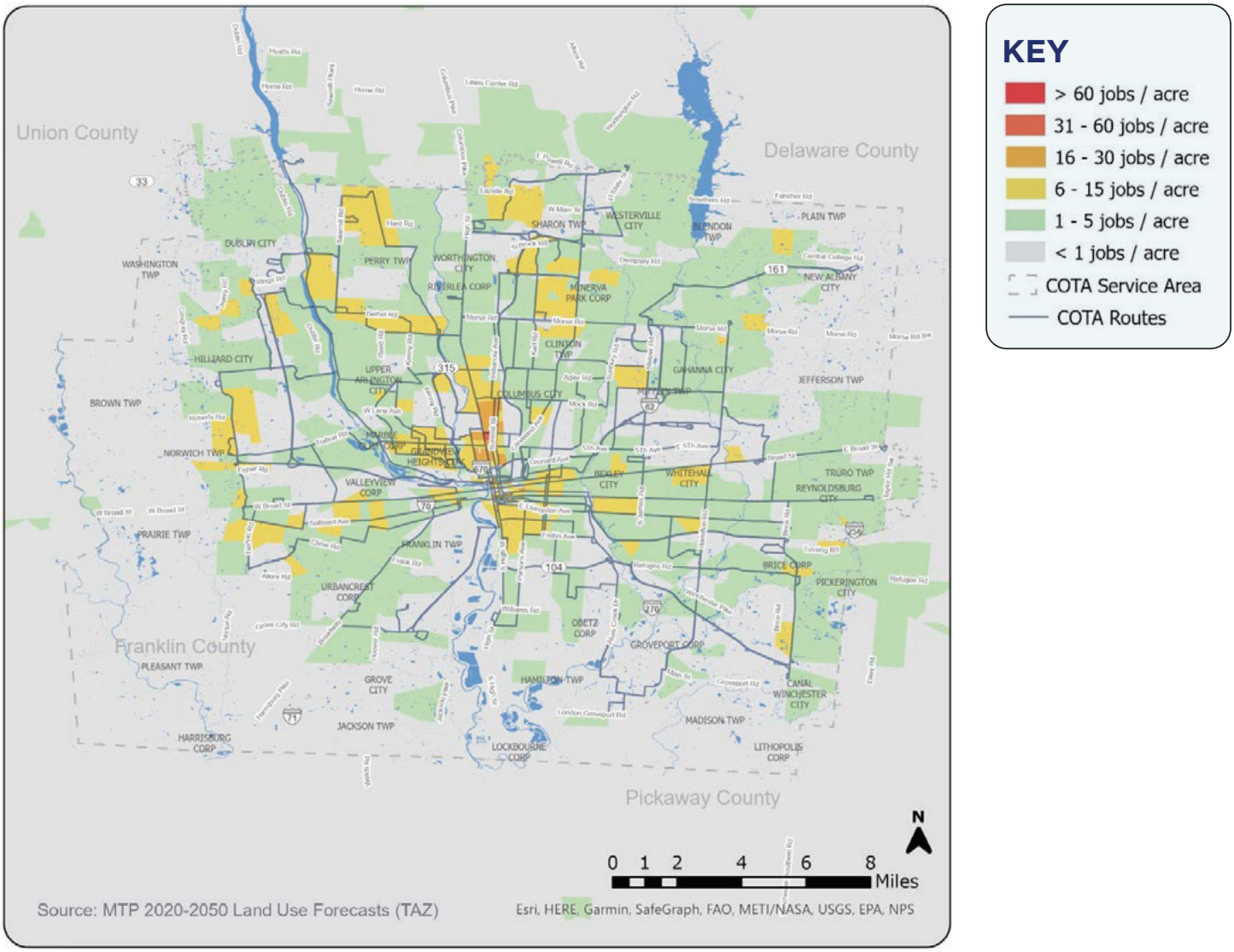


Figure 11 — 2020 Employment Density

Employment Density

Given that traveling to and from work accounts for the largest single segment of transit trips in most markets, the location and number of jobs in a region are also strong indicators of transit demand. Transit service that operates in areas of high employment density also provides key connections to job opportunities. Like population density, an employment density greater than five jobs per acre can typically support base-level fixed-route service. This density corresponds with the yellow, orange, and red areas in Figure 2.[12]

The Ohio State University Campus and downtown Columbus have the highest employment density in the region. The entire North High Street corridor spanning north to south through Columbus also contains a number of strong retails hubs, including the Shorth North Arts District.

12 Source: 2020 US Census Bureau Decennial Census

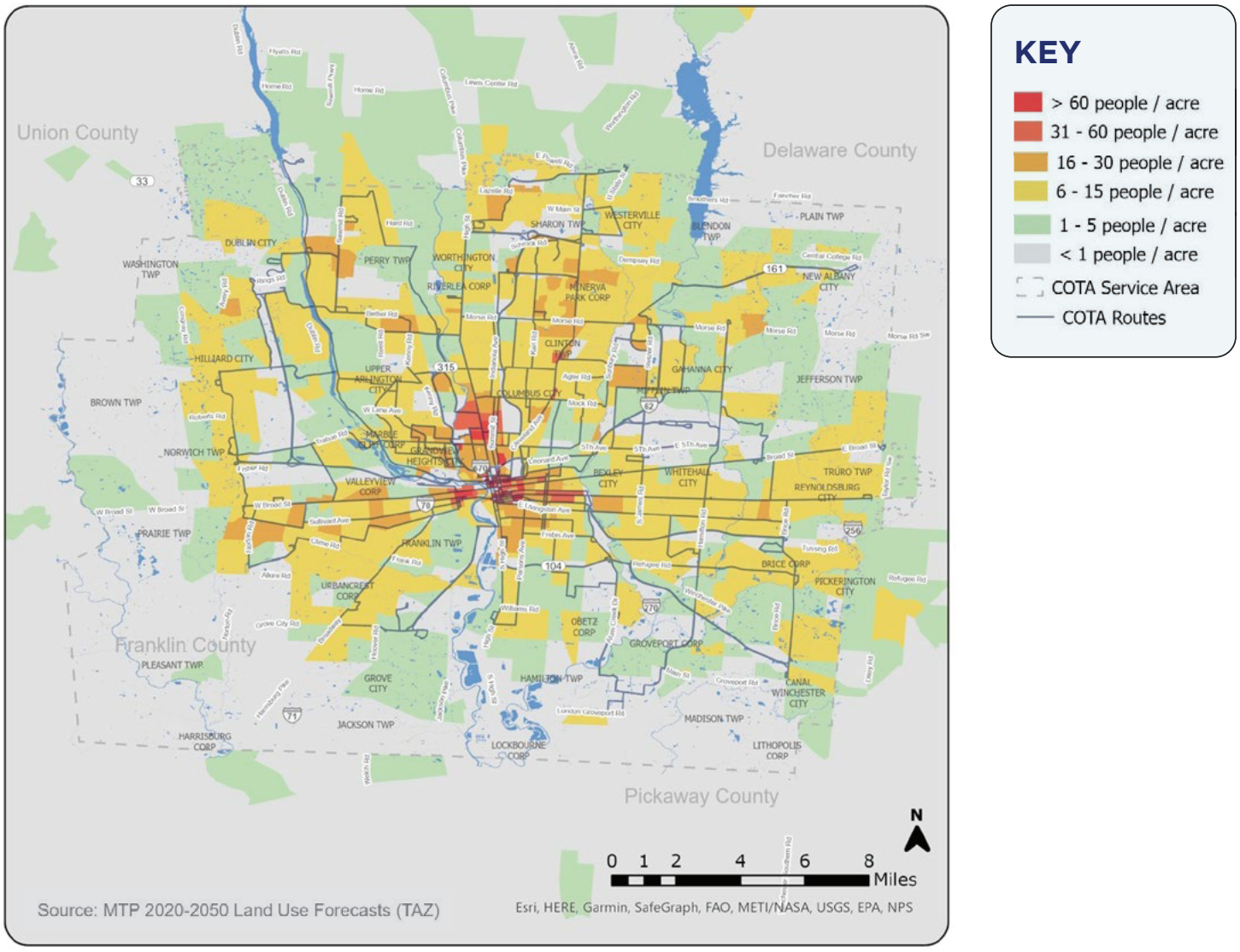


Figure 12 — 2050 Population Density

Projected Growth

MORPC provides projections for population and employment in Franklin County by traffic analysis zone. Figure 3 and Figure 4 show projected population and employment growth, respectively, from 2020 to 2050[13]. Downtown Columbus is expected to see significant population growth and additional growth is also expected to be seen in the highest concentrations in the southeast and southwest of downtown neighborhoods.

Additional growth will occur near New Albany, as the Intel Corporation announced in early 2022 that they will be investing more than $20 billion in the construction of two new leading edge chip factories in Licking County to boost production to meet the demand. This growth has yet to be projected by MORPC, but careful planning between COTA, MORPC, Ohio Department of Transportation (ODOT), City of New Albany, and Licking County must be made to ensure equitable access to this new job center[14].

13. Source: Mid-Ohio Regional Planning Commission MTP 2020-2050 Land Use Forecasts (TAZ).

14. Source: https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-ohio.html

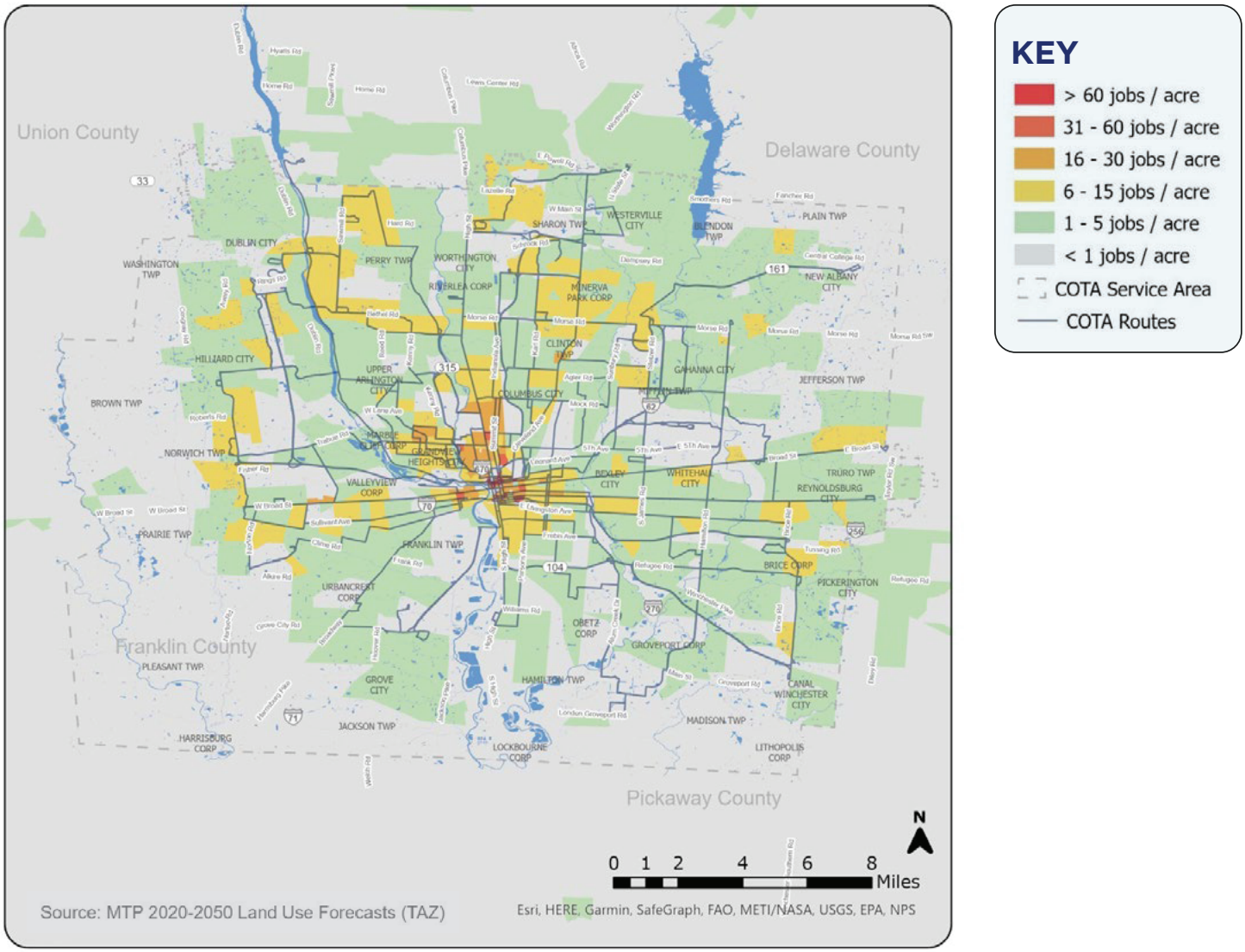


Figure 13 — 2050 Employment Density

Projected Growth (cont.)

Downtown Columbus is expected to see the largest growth in employment, which is great for existing COTA services. The areas just west of Columbus and east have the next highest expected growth rates in employment, along with the northern portions of the county where new industries are continuing to build along the service area boundary.

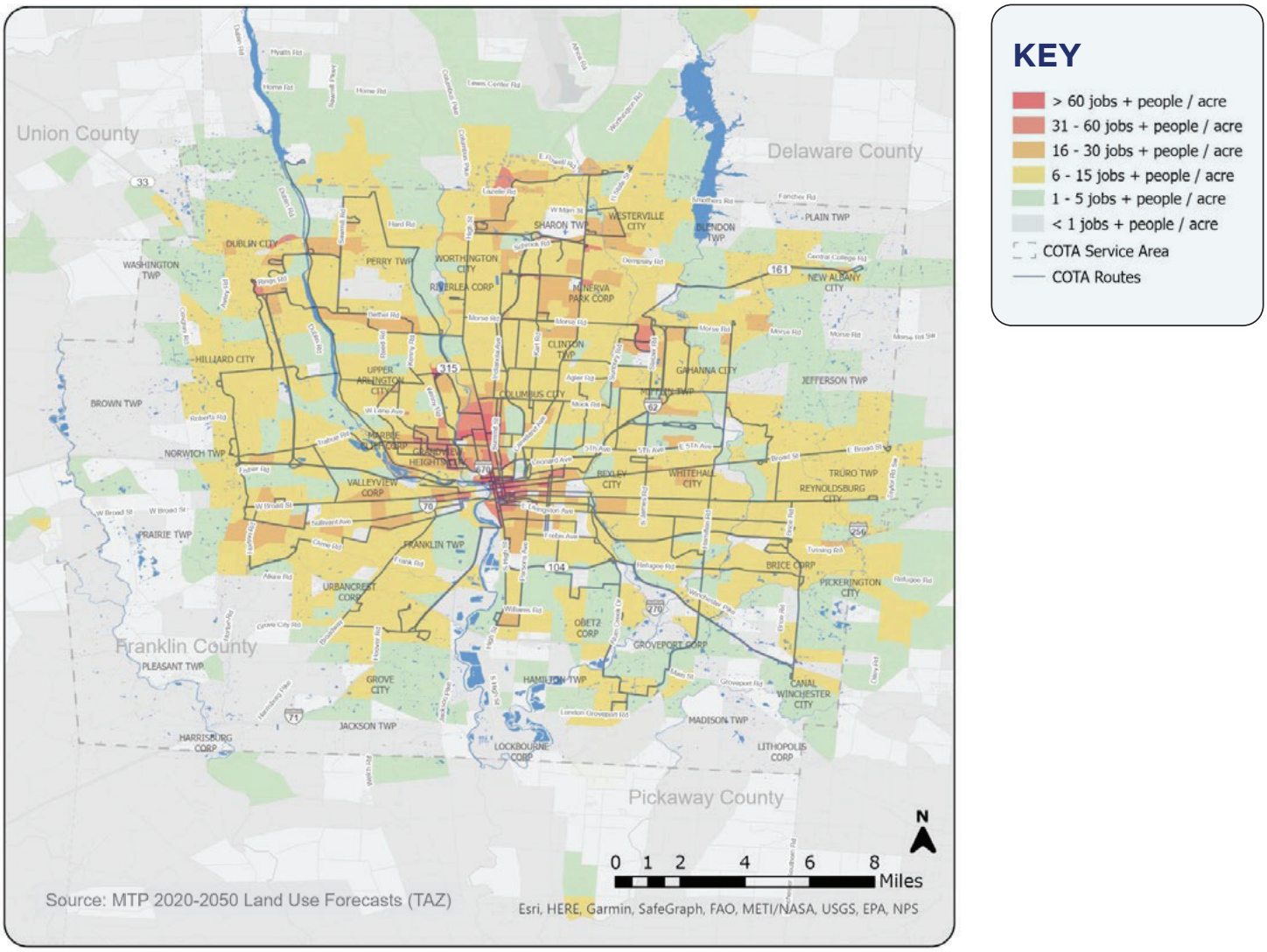


Figure 14 — 2020 Transit Potential

Overall Transit Potential

Transit Potential, depicted in Figure 5,[15] combines the population and employment densities for each block group to indicate fixed-route service viability in the study area. When combining the two metrics, many places have the minimum density to support fixed-route transit service. The areas with the highest transit potential are concentrated along North High Street, primarily south of the Ohio State around downtown Columbus, and Easton.

15. Source: Mid-Ohio Regional Planning Commission MTP 2020-2050 Land Use Forecasts (TAZ).

Transit Need

Above all, public transportation is a mobility tool. Certain population subgroups have a relatively higher propensity to use transit as their primary means of local and regional transportation. These groups include:

- **Zero-Vehicle Households:** People without access to an automobile, whether it be by choice or due to financial or legal reasons, often have no other transportation options besides using transit.
- **Persons with Disabilities:** Many of the community members with disabilities cannot drive and/or have difficulty driving.
- **Low-Income Population:** Individuals with lower incomes typically utilize transit services, as transit is less expensive than owning and operating a car.
- **Youth Population:** This group, defined as persons under the age of 18, has in recent years shown a greater interest in transit, walking, and biking than in driving.
- **Senior Population:** Older adults, who as they age, often become less comfortable or less able to operate a vehicle.

The maps in this section show the relative densities of each of these five high-transit-propensity population subgroups by Census block groups in the COTA service area to help determine where the need for transit service is greatest.

With density ranges differing for each demographic analysis, the maps utilize a Jenks Natural Breaks classification method to assign each block group to one of five density categories. For each analysis, depending on the natural break category into which it falls, a score from 1 (lowest density) to 5 (highest density) is assigned to each block group. Following the analysis of each individual factor, the Transit Need Index map (Figure 11) shows the composite Transit Need score for each block group based on the sum of its scores in each preceding analysis. For example, if a block group falls in the highest density category for each of the five demographic analyses, it will end up with a Transit Need Index value of 25 (5+5+5+5+5). The lowest possible Transit Need Index score is 5 (1+1+1+1+1).

While the Transit Potential analysis highlights areas of the COTA service area with actual densities to support fixed-route service, Transit Need is a relative measure that estimates the need for transit compared to other block groups. There is not, however, a specific Transit Need Index score or value that represents a threshold for supporting fixed-route service. Instead, Transit Need should be considered alongside Transit Potential. If two areas have similar and sufficient Transit Potential, the area with higher Transit Need should be prioritized for service. Conversely, in some locations, while the density of transit-dependent population groups may be relatively high, if the total population and/or employment density are still quite low, the potential to generate substantial fixed-route transit ridership will also remain low.

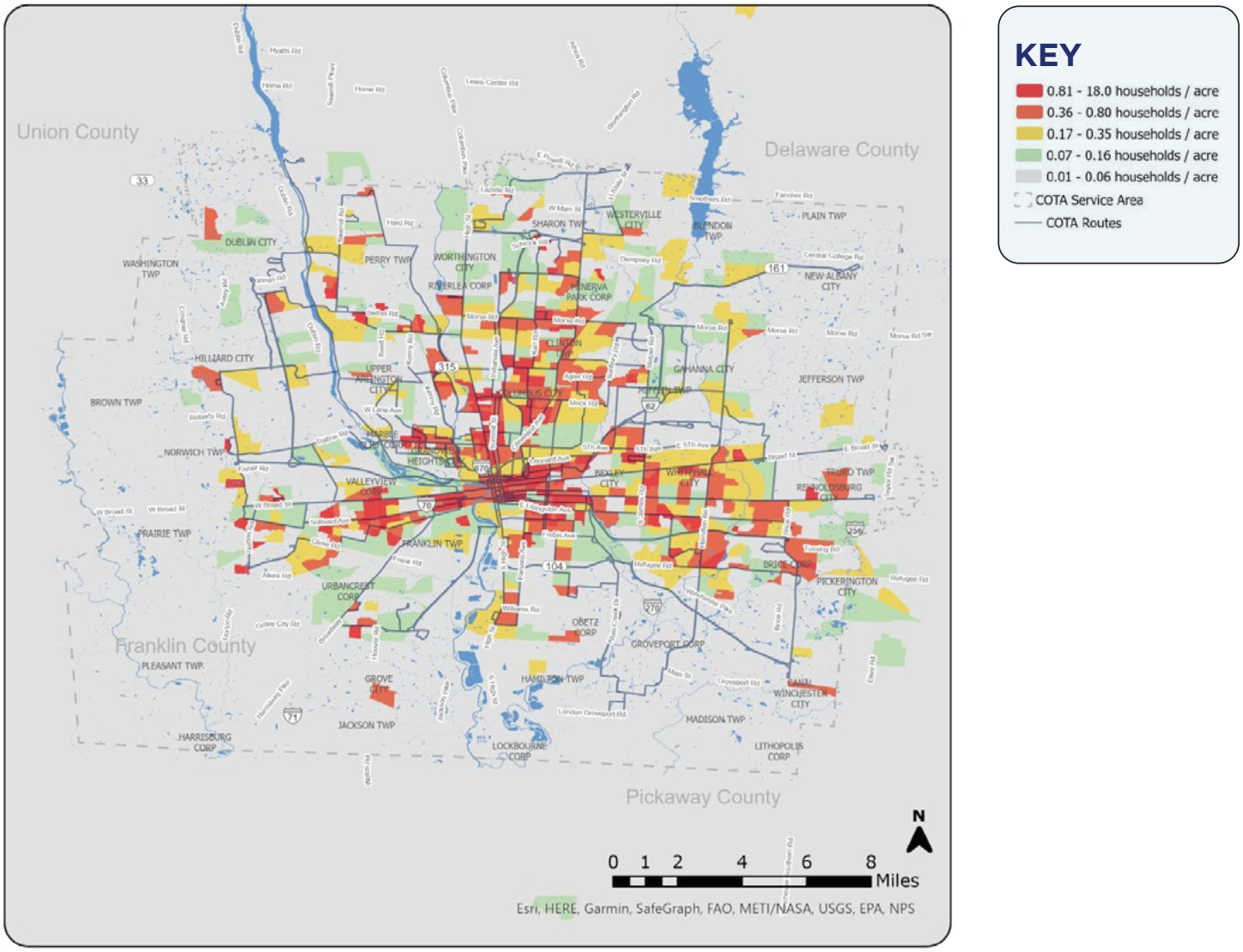


Figure 15 — Zero Vehicle Household Density

Zero-Vehicle Household Density

People without access to an automobile are generally more dependent on public transportation for their mobility needs. Figure 6 shows the relative density of households with no vehicles.[16] Downtown Columbus, the Ohio State University area, the Far South neighborhood, and the Hilltop neighborhood have the highest concentration of households with no vehicles

16. Source: US Census Bureau, American Community Survey (ACS) 5-year estimates, 2016-2020

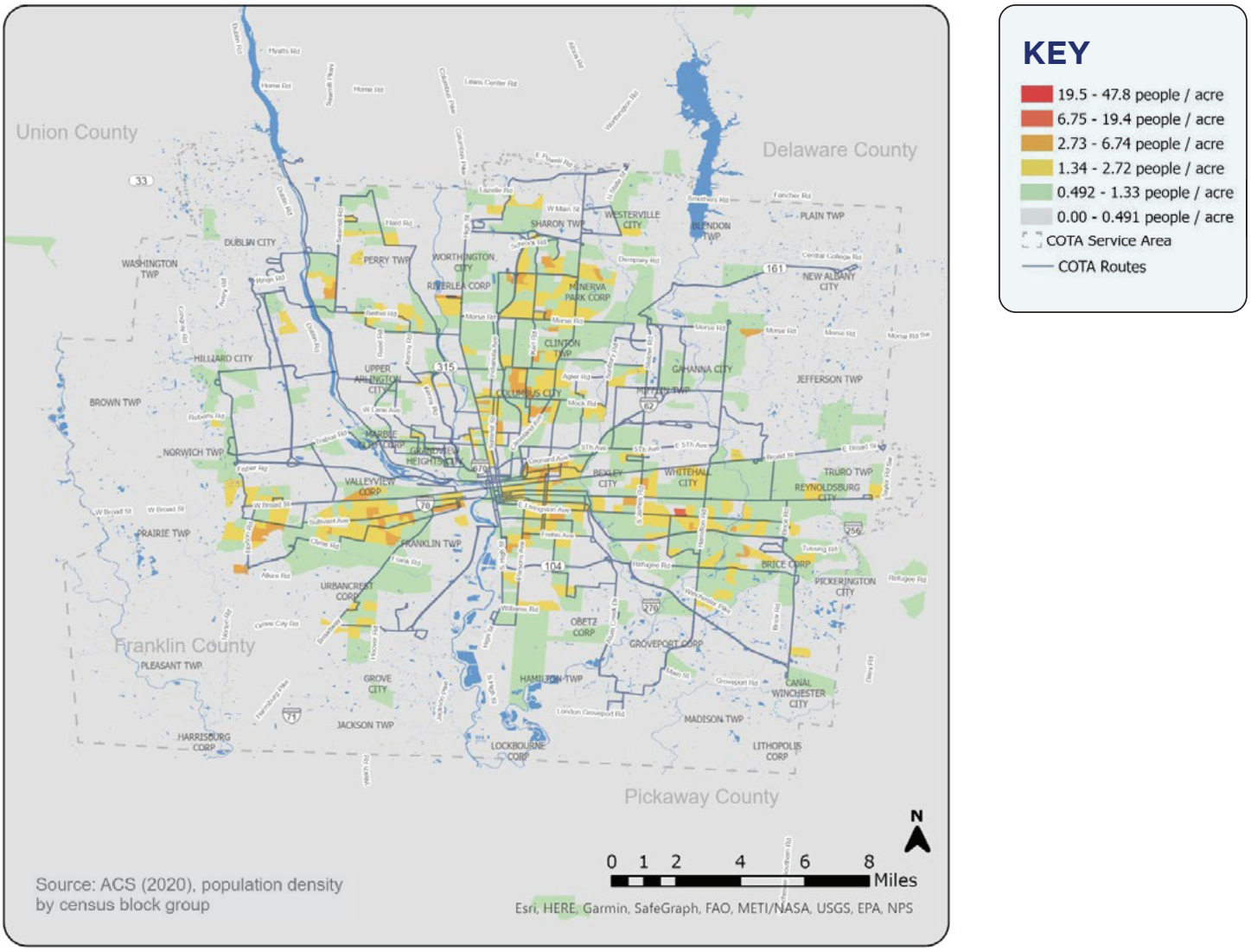


Figure 16 — Population with Disabilities Desnity

Population with Disabilities Density

Transit plays an important role in the social inclusion of persons with disability. Figure 7 shows the relative densities of the disabled population in the study area.[17] The population with disabilities is fairly spread out throughout the study area, with some noteworthy concentrations north of Mt. Vernon Avenue, east of Columbus State Community College, in the neighborhood south of Nationwide Children's Hospital and on the east side near the Eastmoor neighborhood off Livingston Avenue.

17. Source: https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-ohio.html

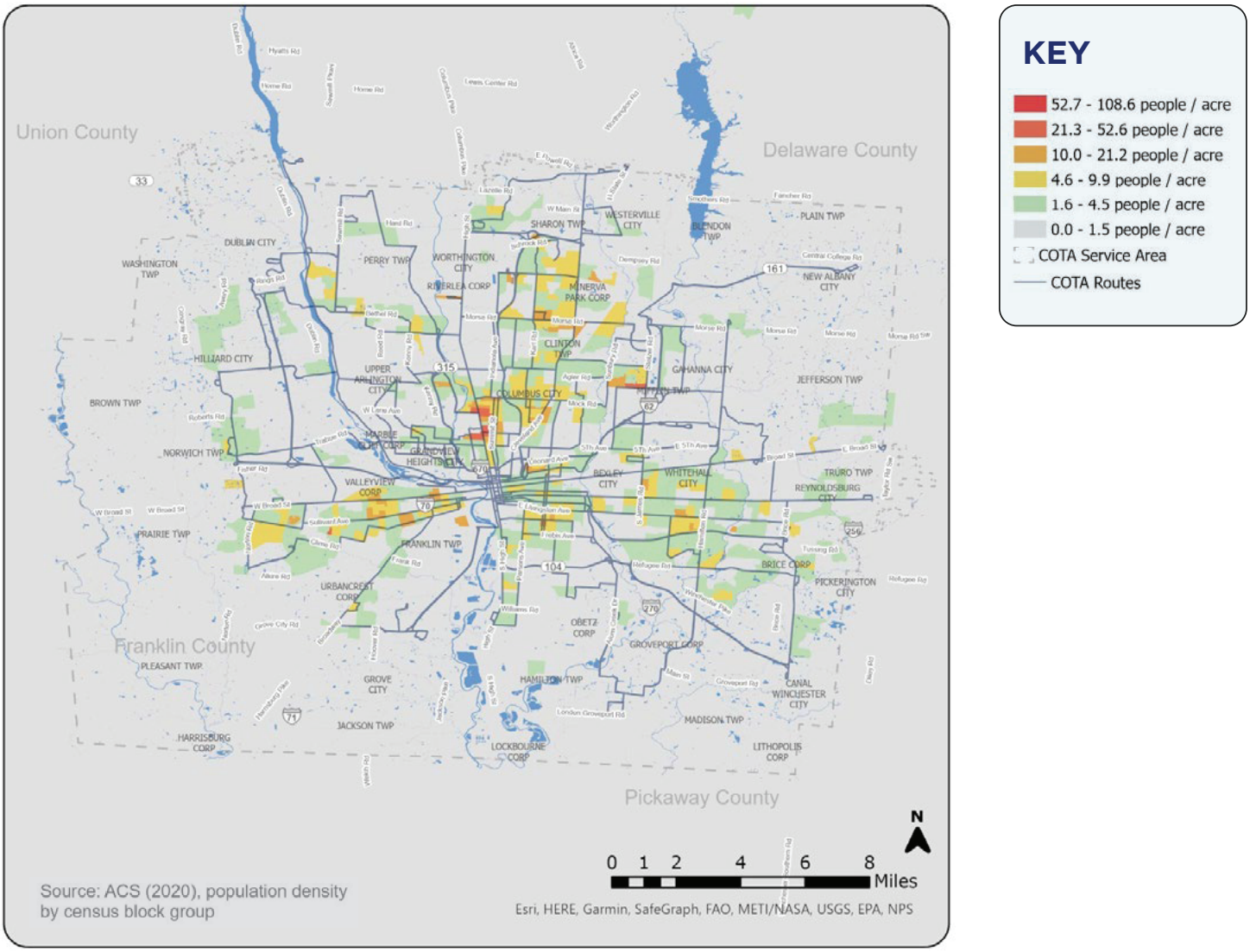


Figure 17 — Low-Income Population Density

Low-Income Population Density

Due to lower costs of transit compared to other mobility options, low-income users are more likely to rely on public transportation. Therefore, provision of transit service to such populations promotes equity. Figure 8 shows the spatial distribution of the density of low-income population.[18] There is a concentration of low-income population density just east of Ohio State University, which may reflect students housing patterns. In addition, other pockets of low income can be found throughout the service area, along West Broad Street, and generally within the northeast and southeast neighborhoods of Columbus.

18. Source: US Census Bureau, American Community Survey (ACS) 5-year estimates, 2016-2020

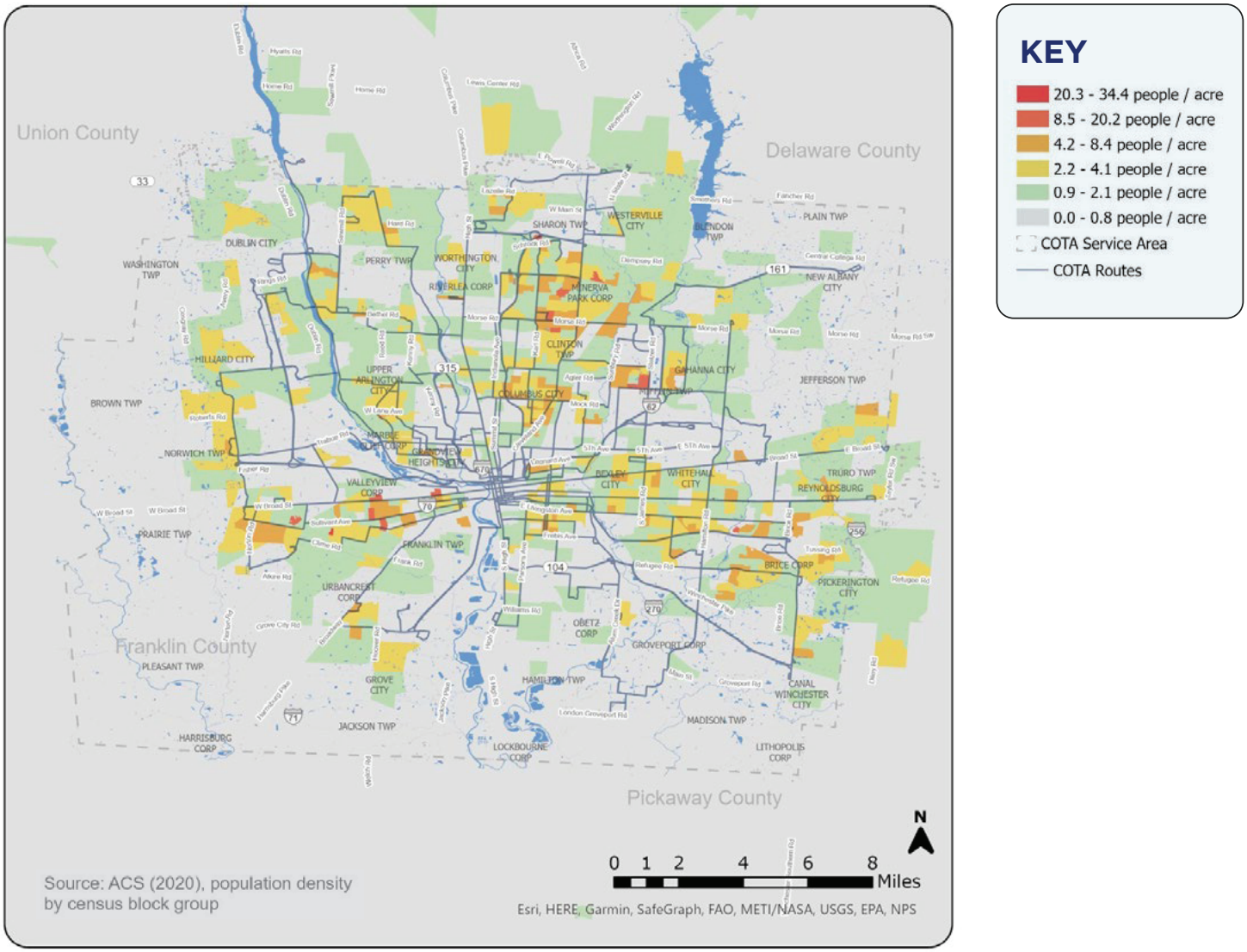


Figure 18 — Youth Population Density

Youth Population Density

As trends have shown youth and young adults putting off car ownership until later in life, this demographic group also has a high propensity for transit use. Figure 9 shows the youth population density in the service area, defined as persons age 15 through 24.[19] Youth populations are distributed across the region with pockets of density to the north, east, and west.

19. Source: US Census Bureau, American Community Survey (ACS) 5-year estimates, 2016-2020

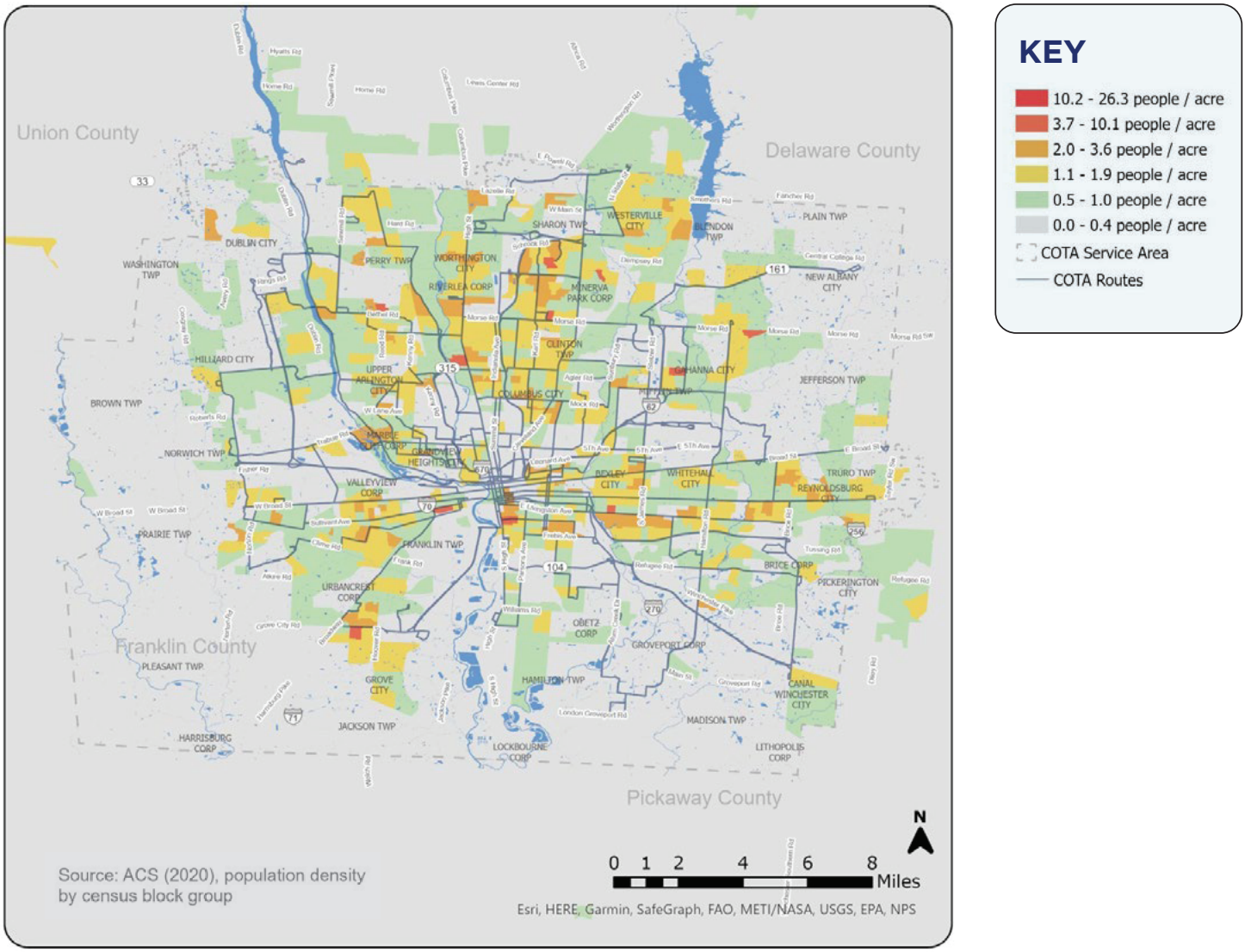


Figure 19 — Senior Population Density

Senior Population Density

In many communities, seniors, like youth, tend to have a higher propensity for transit use than the general population. Figure 10 shows the relative densities of seniors in the service area.[20] High concentrations of seniors can be found in Columbus neighborhoods such as Hilltop, German Village, Eastmoor, and the Northeast. Seniors are distributed across the region with density as well in Worthington, Gahanna, and Reynoldsburg.

20. Source: Mid-Ohio Regional Planning Commission MTP 2020-2050 Land Use Forecasts (TAZ).

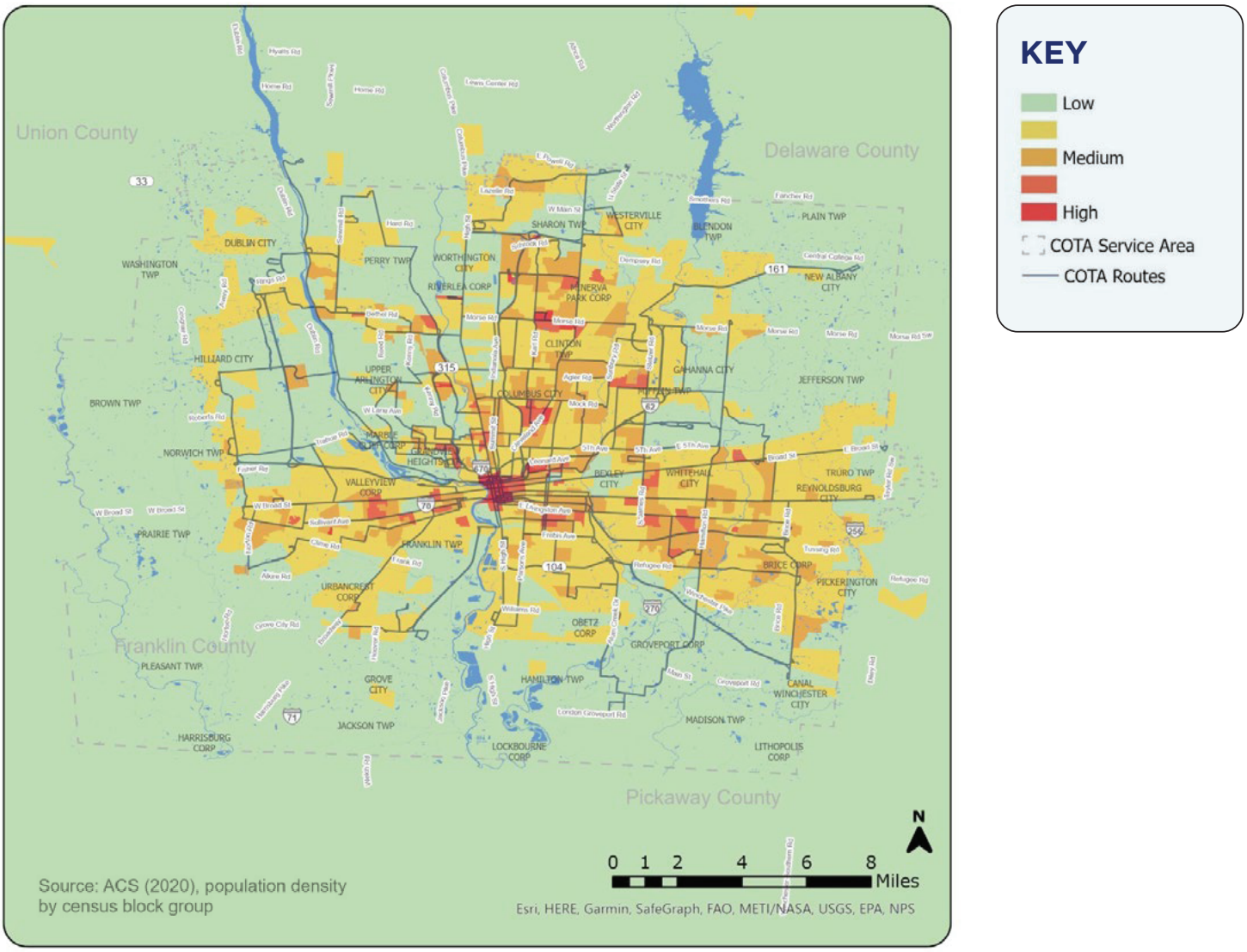


Figure 20 — Transit Need

Overall Transit Need

Figure 11 combines the five-preceding demographic-density maps into one composite Transit Need map. The Transit Need Index reveals that the populations most likely to need transit services are spread in and around downtown, Eastmoor, Hilltop, and the Northland neighborhood. These are areas where transit services have the potential to have the most ridership and provide services to those in need.

SPRING 2023 ENGAGEMENT

COTA recognizes the critical role that public transportation plays in connecting people to Central Ohio communities, economic centers, educational institutions, places of worship, and medical facilities. As COTA developed the SRTP, engagement with the public and stakeholders was a priority. The public engagement effort aimed to gather community input and feedback to inform the development and prioritization for COTA over the next five years. The project team engaged the public, community stakeholders, municipalities, internal COTA staff, COTA bus operators, and the COTA Board of Trustees. This summary outlines the key strategies, takeaways, and themes discovered through the engagement process.

In-Person and Virtual Public Meetings

Interactive sessions were hosted across the City to share the SRTP findings and preliminary recommendations.

Provided an opportunity for members of the public to share feedback and opinions.

Virtually, meetings were streamed online to Facebook and promoted through social media.

Internal and External Stakeholder Meetings

Targeted sessions with representatives from businesses, schools, non-profit organizations, and other external stakeholders were conducted to gather specialized input.

Hosted sessions for COTA staff to provide input on the future service direction of COTA

Outreach at McKinley and Fields Bus Facilities for Operator input.

Public Feedback Survey

Gathered public opinions on the SRTP, transit needs, priorities, and potential improvements.

This survey was distributed through various channels, including social media, email, and newsletters.

SRTP COTA Website

A dedicated webpage allowed the public to view and understand the SRTP process.

A comment feature allowed multiple ways to provide feedback.

Front Line Outreach

Operators have firsthand knowledge and experience of COTA's operational challenges and successes which makes their input invaluable. Operators interact directly with customers, making them aware of customer feedback and concerns. Operationally, they understand the complexity of each route and what it takes for service to run smoothly. For the SRTP process, targeted outreach was conducted in person and through an online survey. Through these methods, over 40 operators were engaged over the course of two days.

Operator feedback consisted of route specific improvements, adjustments to frequency, personal safety, and desire for increased internal communication. At a time when more violence towards transit operators is in the news, some COTA operators voiced concern about their personal safety and questioned COTA's commitment to keeping them safe. Operators expressed concern of reduced route frequency and the impact it has on the ability to serve the public. It was shared that retention for staff has been impacted with schedule changes. It was expressed that with schedule changes, senior staff are being asked to be more flexible creating some tension. Overall, Operators were appreciative of the opportunity to be heard and provide feedback.

Stakeholder Advisory

The Stakeholder Advisory Committee consisted of 16 individuals that represent various organizations throughout Central Ohio that rely on transit services. The purpose of this group was to express considerations, challenges, and successes with the current system and provide suggestions for the future. These organizations stressed the importance of frequency and safety for passengers, combined with working with the community to provide transit from communities in need to job access.

One critical takeaway from this meeting was to meet constituents where they are. As a refugee or New American, trusting public agencies is challenging for many given the circumstances for which they came to America. COTA should consider reaching out to specific populations and creating allies to grow its transit ridership to communities where transit is needed.

Internal Stakeholder Meetings

As a two part series, the SRTP project team met with internal stakeholders to discuss the current successes, challenges, and present future recommendations. In the Spring, the project team met with internal COTA stakeholders which included representation from planning, scheduling, community relations, and leadership to discuss the recommendations of the SRTP.

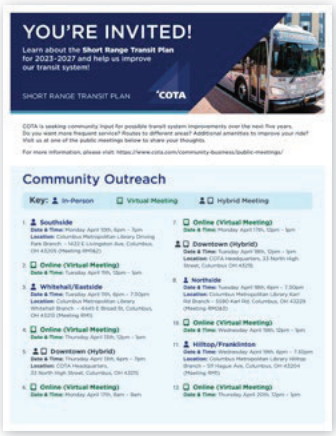
The group discussed the benefits of expanding COTA//Plus zones, how the SRTP relates to existing transit, and route recommendations in each quadrant of the service area. It was highlighted that the SRTP does not suggest cutting coverage, but instead the recommendations focus on allocating hours to areas that need more frequent service or areas of growth.

Municipality Outreach

During Fall 2023, COTA met with over 54 municipal stakeholders to discuss future development plans and ways COTA can be integral to the success. Details of each municipality can be found in the Existing Condition chapter of this report.

Municipality outreach however did not end with existing conditions. During the Service Analysis, details that municipalities provided, along with comments and suggestions were integrated to form the basis of Short Range Transit Plan recommendations. In addition, the team also re-engaged with communities to review the outcomes and verify that they have been heard.

Public Engagement



Recognizing the importance of public input and feedback in shaping a user-centric transit system, there was multiple forms of public outreach. This included a public survey, an interactive online website, and a dozen public meetings, both in-person and virtual. Furthermore, COTA utilized social media channels to disseminate information about the SRTP public events, fostering transparency and public awareness. This comprehensive engagement strategy to reach people in all parts of the service area reflects COTA's dedication to hearing from the public.

Engagement by the Numbers

The engagement efforts reached a variety of people through different key strategies.

- **54** Municipality stakeholders
- **16** External Stakeholders
- **45** members of the public in 10 public meetings
- **57** survey responses
- **41** internal stakeholders
- Website hits: **245**
- Analyzed **20,000** public comments from the past three years.

Process of Feedback Integration

Incorporating public feedback into the Short Range Transit Plan was a critical step in ensuring that the plan reflects the needs and priorities of communities. To achieve this, the project team developed a process to analyze feedback and sort comments into four quadrants, representing Central Ohio. This collection of comments was then aligned with specific routes as applicable. Through a two-day workshop and route-by-route analysis, comments and concerns were assessed along with the technical expertise of COTA Service Planners.

Feedback was analyzed from various engagement channels, including the online survey, public meetings, stakeholder meetings, and social media. By identifying recurring themes, concerns, and suggestions, the project teams gained a comprehensive understanding of the community's expectations and aspirations for the transit system. This analysis helped identify service gaps, potential improvements, and areas where resources should be allocated.

From the online survey participants were asked to identify agency priorities. Access and customer experience were the top two categories, followed by equity and other responses.

Agency Priorities

Access: COTA will facilitate increased access to jobs, education, and civic life.

Collaboration: COTA will collaborate with stakeholders to foster creative solutions to mobility challenges.

Customer experience: COTA will provide dependable, clean, fast, and seamless transportation that creates a positive experience for customers.

Economic prosperity: COTA will move the economy forward and improve the quality of life of residents by enabling economically sustainable regional land use and reinforcing investment in strategic employment and population centers.

Environmental sustainability: COTA will reduce greenhouse gas emissions in the region by providing clean transportation and shifting travelers away from single occupancy vehicles.

Equity: COTA will continue to provide equitable transit services that benefit disadvantaged individuals and communities.

Financial stability: COTA will be a responsible steward of public funds by providing exceptional services cost-effectively.

Fleet and facilities state of good repair: COTA will enhance, preserve and maintain its infrastructure, fleet, and assets.

Technological innovation: COTA will lead in its integration of innovative technologies and evolving mobility options to enhance the transportation experience for customers, COTA employees, businesses and visitors.

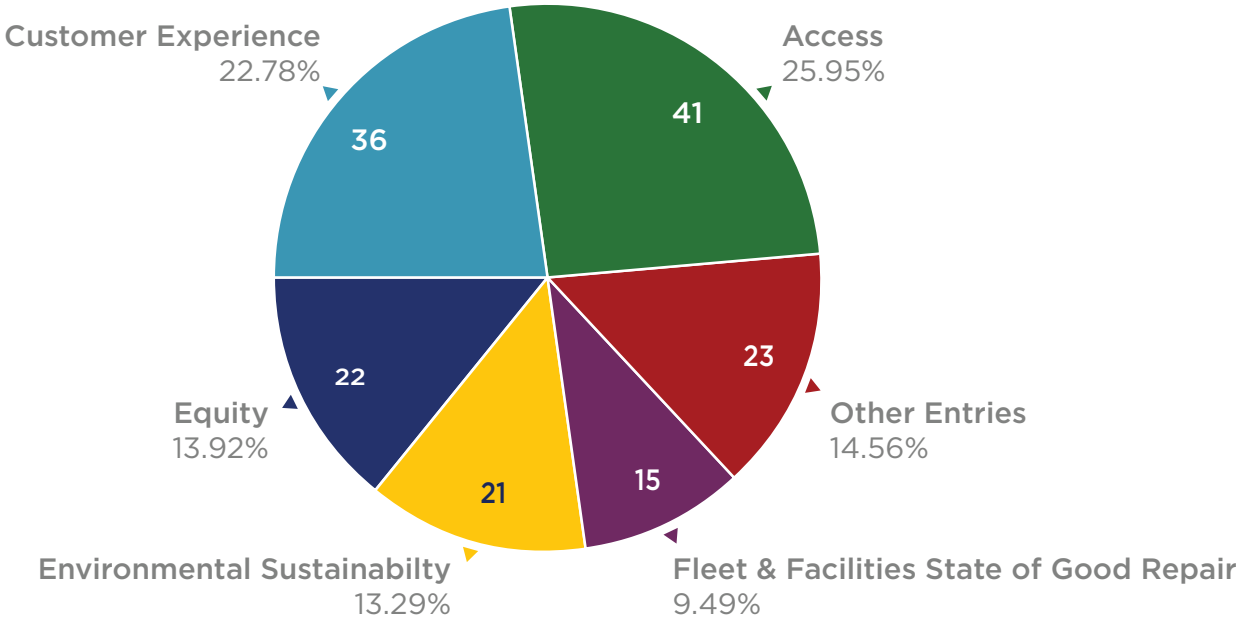


Figure 21 — COTA Priorities from the SRTP Online Survey

Regional Needs

The Short Range Transit Plan provides COTA with an opportunity to better connect with residents and stakeholders to understand the diverse transit needs that are occurring in the region. Through the community engagement process, the project team met with several stakeholder, members of the community, and the review of on-going regional collaboration and projects, to create the chart below that shows a summary of the transit needs of the region.

Regional Transit Needs

- Add additional frequency on the high frequent network to better serve Central Ohio
- Create educational programs to support and retain the recent influx of immigrants and New Americans
- Invest in Bus Rapid Transit, to create a fast, convenient, and safe transit option throughout the urban core to reach regional needs
- Better utilize transit centers through Transit Oriented Development to create a place to attract and retain customers
- Provide flexible transit solutions with technology platforms to provide quality and convenient transit service
- Transit should offer time savings for the commuter
- Create a more connected pedestrian experience for transit riders to access transit stations and their destinations
- Invest in alternative fuel vehicles and infrastructure
- Improve fixed route service to reach outward growth and job opportunities
- Continue to invest in regional partners to create a holistic transit system

Outcomes

The outcomes of the engagement analysis for the Short Range Transit Plan (SRTP) provide valuable insights into the priorities and concerns of the customers. Key outcomes of the analysis include:

- **Service Priorities:** It was identified that service reliability and frequency as primary concerns for the community. These findings suggest a need for increasing the number of operators to optimize frequencies along current routes.
- **Improve Bus Stop Areas:** The community emphasized improving bus stop areas to enhance the overall transit experience. Bus stop shelters were noted as essential for protecting against weather. Improved connectivity between bus stops and accessible sidewalks was highlighted as a priority.
- **Education on the COTA System:** Increase educational opportunities, especially for transit reliant populations like seniors, on how to access and navigate the COTA system, including using COTA// Plus.
- **Partnership Opportunities:** As the Central Ohio region continues to grow, the question of how COTA will align with development efforts was frequently asked. Large companies like Intel in New Albany, pose to create new jobs and growth in the area. COTA continues to be in conversation with key partners as the region grows.

The outcomes of the engagement process, ranging from improving service reliability to enhancing accessibility, have provided invaluable insights that will inform the development of future strategies as the SRTP is implemented. These insights will ultimately contribute to a more responsive transit system, supporting the region's growth and enhancing the quality of life for all residents.

POTENTIAL SERVICE IMPROVEMENTS

Key Themes

Throughout the service analysis and public outreach, key themes emerged as preliminary recommendations for the Short Range Transit Plan. The existing fixed route system that is in place today is supportive of the dense development that is occurring within the City of Columbus on the **high frequent network**. This indicates that the existing network provides the backbone for future service growth and opportunities, and with an increase in frequency, will continue to deliver transit services to areas where growth, development, and opportunity occur.

Another key theme that derived was the continuation of **outward growth**. As much as development is occurring within the fixed route network, new development zones are occurring just outside the COTA service boundary, creating opportunities for new partnerships, expansions, and mobility options to form new connections to new places. **New mobility options**, such as COTA//Plus, was the forefront of many discussions that were had with municipalities. Community circulation and connection to each other to expand the reach of fixed route services is key to the success of many developments that bring job, medical, and educational facilities to the region.

The SRTP has aligned and prioritized COTA initiatives based on service analysis and public outreach as part of the planning process. These initiatives are in align with resources that are projected to be available over the next five years.

Key themes for COTA's future

Service Analysis

COTA provides mobility solutions to Franklin County and charter communities, including the City of Dublin, City of Reynoldsburg and City of Westerville whose borders expand beyond Franklin County. This service area of 336 square miles impact the overall health of the region, providing reliable transit services to places of employment, educational institutions, and medical facilities. The demographics below represent Central Ohioans that currently live within a ¼ mile of an existing fixed route service.

The Central Ohio region is one of the fastest growing metropolitans in the United States, with projection of more than 3 million residents by 2050. Franklin County is expected to absorb half the regional growth. However, the six surrounding counties will experience greater growth relative to their current populations, which shows connections to these counties are more important than ever.

The current route network needs to respond to this growth by adapting its transit network to meet the demand through innovative transit solutions and a robust transit network that connects more people to jobs. County and transit connections to regional transit providers, such as Delaware County Transit, Licking County Transit, and GREAT Bus is more important than ever.

	2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027
Fixed Route Service Hours	1,108,761	1,108,761	1,108,761	1,108,761	1,108,761
Passengers	11,087,607	13,305,128	15,522,649	16,631,410	17,740,171

Figure 22 — Projected Service Hours and Passengers

COTA lost 48% of its annual weekday ridership since 2019. In concert with the loss of ridership, frequency had been reduced due to the nation-wide operator shortage and uncertainty to the labor market and commuter trends. In November 2022, COTA was down over 100 operators, causing reduction of frequency and coverage to the service area. As Central Ohio continues to grow, COTA's image of providing frequent and reliable transit services must be a priority.

Fixed Route Bus Network

COTA's current and projected revenue stream supports approximately 1.1 million hours of annualized service, a level which is expected to remain consistent over the term of the plan. This may change based on operator staffing levels and the economic state of the Country. As mobility needs change, COTA and our community partners will actively investigate service levels and explore new funding mechanisms to provide adequate service.

The projection shows fixed-route service hours remaining flat during the five-year period. This includes funding for service enhancements such as transit shelters and amenities, micro-and para-transit opportunities, as well technology investments are included. At this time, the operating plan assumption includes no fare increase.

Despite having consistent fixed hours budgeted for 2027, COTA should still monitor existing service to determine if the investment is still adequate. As part of the SRTP, COTA created a route profile for each fixed route to determine:

- Operating Characteristics, including span and frequency
- Annual Statistics, such as revenue hours, revenue miles, and ridership
- On-Time Performance
- Ridership by Trip and by Stop
- Daily Statistics, including average daily boardings, passenger by hour, per mile, and per trip.

These statistics helped determine the fixed route strengths, weaknesses, and opportunities. Other considerations included a robust engagement from analyzing over 20,000 customer comments, feedback from municipalities, and external and internal stakeholders. The goals were to find system network improvements that would:

- Better serve existing riders
- Attract new riders
- Improve the overall system efficiency
- Consider new and emerging technologies

Other factors included reviewing surrounding land-uses, locating major trip generators, such as medical facilities, retail centers, or job hubs, along with determining appropriate areas for the end of line for operator and vehicle relief.

The table on the following pages shows a detailed summary of recommendations for potential changes regarding the fixed-route network. The map highlights of where additional service is recommended in order to connect to further developments, along with areas where fixed route is removed or streamlined in order to provide maximum operational efficiency. *These recommendations will only be implemented as resources allow.*

Route Change Recommendations

Route 1

The proposed Route 1 would follow the same alignment as the current route, with one small change recommended on the southern end of downtown.

Route 2

The proposed Route 2 would follow the same alignment as the current route from the Westview Turnaround in Clintonville to E. Main Street and Lancaster Avenue in Reynoldsburg. At Lancaster Avenue, the route would turn south to serve Walmart and other retail destinations near I-70, creating a connection opportunity with Licking County Transit.

Route 3

The proposed Route 3 would operate between Kingsdale Shopping Center on Tremont Road and Parkway Centre near I-71 in Grove City, via downtown Columbus. Key changes from the current alignment include the following:

- Shift service from Northwest Boulevard to Lane Avenue and North Star Road to provide more retail connections.
- Shift service from Bobcat Avenue and Goodale Boulevard to W. 3rd and Neil Avenue due to low ridership on current alignment.
- Shift service from Harrisonburg Pike and Columbus Street to Southwest Boulevard and Hoover Road to improve access to Kroger and multi-family housing.

Route 4

The proposed Route 4 would operate between Thimbleberry Road near Obetz, and Dublin Granville Road near Worthington, following nearly the same alignment as the current route. However, from Dublin Granville Road, the route would extend north and east to the Westerville Park-and-Ride via Busch Boulevard, Schrock Road, and Cleveland Avenue. This extension would provide new service to Anheuser-Bush, Mount Carmel St. Ann's Hospital, and several multi-family housing communities.

Route 5

The proposed Route 5 would follow the same alignment as the Renner Road variant of the current route. The lower ridership Broad Street variant would be eliminated to allow for greater service frequency to Walmart and Meijer.

Route 6

The proposed Route 6 would operate between downtown Columbus and Obetz Road following nearly the same alignment as the southern branch of the current Route 8. Splitting the northern and southern branches of Route 8 into two separate routes will give COTA the flexibility to set the most appropriate service frequency for each route. The proposed Route 6 would operate as a bi-directional loop serving both the Parsons Avenue and High Street corridors. Service on South 4th Street is shifted to High Street to simplify and streamline the route.

Route 7

The proposed Route 7 would combine segments of the current routes 6 and 7 to create a cross-town route offering improved access to Columbus State Community College, Columbus VA Medical Center, and John Glenn Columbus International Airport. East of downtown, the proposed route would follow an alignment similar to the current Route 7 but with the following key changes:

- At 5th and Cassidy Avenue, service to the airport would shift from 5th Avenue and Hamilton Road to Cassidy Avenue, Maryland Avenue, Gould Road, Allegheny Avenue, Stelzer Road and International Gateway.
- Service on the Easton branch would be eliminated (but picked up by proposed Route 24), to allow for greater service frequency to the Airport and VA Medical Center.

West of downtown, the proposed route would follow an alignment similar to the current Route 6 but with the following key changes:

- At Georgesville Road and Industrial Mile Road, service to Lincoln Village would shift from Georgesville Road and Broad Street to Westport Road, Sullivant Avenue, Westwoods Boulevard, and Broad Street. This alignment would serve more multi-family housing and help streamline Route 21.

Route 8

The proposed Route 8 would follow the same alignment as the current Route 8 between downtown Columbus and Dublin Granville Road. However, from Dublin Granville Road, the route would extend north and east to the Westerville Park-and-Ride via Busch Boulevard, Huntley Road, Worthington Woods Boulevard, and Main Street. This extension would provide new service to Anheuser-Bush, the Worthington Social Security Administration office, Kroger, and the Worthington Public Library.

Route 9

The proposed Route 9 would operate between Walmart on Georgesville Road and Walmart on Morse Road, via downtown Columbus. Key changes from the current alignment include the following:

- Eliminate service west of I-270 due to low ridership, and replace this coverage with COTA//Plus service.
- Shift service from Briggs Road, Hague Avenue, and Mound Street to Eakin Road and Whitethorne Avenue due to greater ridership potential.
- Shift service from Brentnell Avenue, between Leonard Avenue and Holt Avenue, to Sunbury Road to serve Ohio Dominican University.
- Shift service from Sunbury Road, north of Agler Road, to Cassady Avenue, Agler Road, Stelzer Road, due to greater ridership potential.
- Shift service from Stelzer Road, north of Easton Way, to Morse Crossing, to provide access to Target.

Route 10

The proposed Route 10 would follow nearly the same alignment as the current route, with just one change recommended for each end of the route. On the eastern end, the route would deviate from Broad Street to serve Meijer Drive, Overmont Ridge Road, and Cedar Cliff Road. This deviation would provide better access to Meijer, Target, and multi-family housing north of Broad Street. On the western end, the route would extend further west to Kroger on Galloway Road to create a stronger end-of-line anchor.

Route 11

The proposed Route 11 would operate between the Franklin County government complex off Alum Creek Drive, and the Westerview Turnaround on High Stret, bypassing downtown Columbus. This streamlined alignment would provide more direct north/south crosstown service while still providing connections to frequent downtown service.

Route 12

The proposed Route 12 would follow nearly the same alignment as the current route.

Route 21

The proposed Route 21 would follow the same alignment as the current Route 21 between Walmart on Bethel Road, and Hillard Rome Road at Glenchester Drive. From that intersection, the route would continue to Lincoln Village via Glenchester Drive, Galloway Road, and Broad Street. Service along Sullivant Avenue and Georgesville Road would be eliminated due to low ridership, but partially picked up by Route 7 and COTA Plus service.

Route 22

Route 22 is proposed to be split into the following two new routes:

- Route 22 North would operate as a bi-directional loop connecting OSU with downtown Columbus, Columbus State Community College, and Ohio State East Hospital. The route would follow the current Route 22 alignment for much of its routing, but add service along Goodale Boulevard, Grandview Avenue, Dublin Road, Spring Street / Long Street, Taylor Avenue, and Hawthorne Avenue to complete the loop.
- Route 22 South would follow an alignment similar to the current Route 22, southeast of downtown, with the following proposed changes: from London Groveport Road and Alum Creek Drive, the route would extend east on

  London Groveport Road to Collings Drive to better serve employment opportunities including the Amazon facilities on Collings Drive. From Livingston Avenue, the route would be restructured to serve downtown Columbus via Nationwide Children's Hospital to improve access to the hospital and provide a direct connection between downtown and the Rickenbacker Airport area.

Route 23

The proposed Route 23 would follow nearly the same alignment as the current route, with one small change recommended in Easton. Service would shift from Morse Crossing, south of Easton Way, to Stelzer Road and Easton Way, to better serve Easton Town Center and multi-family housing along Easton Way.

Route 24

The proposed Route 24 would follow the same alignment as the current Route 24 between London Groveport Road, near Rickenbacker Airport, and Hamilton Road at Poth Road. From that intersection, service would shift from Hamilton Road to Poth Road, Yearling Road, E. 5th Avenue, Cassidy Avenue, Agler Road, Stelzer Rodd, and Morse Crossing. The proposed alignment would help facilitate the simplification of Route 7. Dropped coverage on Hamilton Road would be largely picked up by proposed Route 25 and COTA//Plus service.

Route 25

The proposed Route 25 would follow nearly the same alignment as the current Route 25 between Winchester Boulevard / Waterloo Street and Granville Street in Gahanna. Key changes from the current alignment include the following:

- A restructured turn-around loop at the southern end of the route, using Waterloo Street, a private road between the Kroger parking lot and McDonalds (if possible), Winchester Boulevard, and Waterloo Street. This alignment would significantly improve access to retail destinations including Kroger and Walmart.
- Restructured service north of Granville Street to serve Hamilton Road and Albany Commons.

Route 31

The proposed Route 31 would follow the same alignment as the current route between North Star Road, west of OSU and Brentnell Avenue at Mock Road. However, the proposed route has several changes beyond this common segment. West of downtown the proposed changes include the following:

- Shift service from King Avenue and Grandview Avenue to Chambers Road, Northwest Boulevard, and 5th Avenue, to provide better access to Kroger.
- Shift the end-of the line from Rail Street and Goodale Boulevard to Short Street and Liberty Street in German Village. This realignment would link Grandview Heights to Franklinton, South Franklinton, and the Harmon Road Corridor, as well as German Village.

East of downtown the proposed changes include the following:

- Shift service from Sunbury Avenue due to low ridership, and instead serve Brentnell Avenue, Perdue Avenue, Agler Road, McCutcheon Road, and Stelzer Road.

Route 32

Route 32 is proposed to be split into the following two new routes:

- Route 32 West would operate between Ohio State Outpatient Care Dublin and OSU via Kingsdale Shopping Center, the Lane Avenue retail district, and Lennox Town Center. The proposed route would overlap with the current Route 32 alignment on Cemetery Road and Fishinger Road, but would also serve many new corridors, including Avery Road, Zollinger Road, and Kinnear Road.
- Route 32 East would more closely follow the current Route 32 alignment from Kingsdale Shopping Center to Easton Transit Center, with the primary difference being a shift in service from Morse Crossing, south of Easton Way, to Stelzer Road and Easton Way, to better serve Easton Town Center and multi-family housing along Easton Way.

Route 33

The proposed Route 33 would operate along the Olde Sawmill variant of Route 33 only. The lower ridership MetroCenter Branch would be eliminated to provide greater frequency to Walmart on Summer Dr. This coverage would partially be picked up by proposed COTA Plus service.

Route 34

The proposed Route 34 would follow the same alignment as the current Route 34 between Easton Transit Center and the Westview Turnaround, but would include the following two extensions:

- From Easton Transit Center, the proposed route would extend east to serve Meijer on Chestnut Hill Drive via Morse Road. This extension provides a connection to proposed Route 25.
- From the Westview Turnaround, the route would extend west to serve Olentangy Plaza, via High Street, Henderson Road, and Olentangy River Road.

Route 35

The proposed Route 35 would restore service and include key changes from the previous alignment:

- From the previous western terminus at Busch Boulevard, the route would extend west to Ohio State Outpatient Care Dublin via Dublin Granville Road, Dale Drive, Emerald Parkway, Perimeter Drive and Avery Muirfield Drive.
- From the Northland Transit Center, the route would travel further north on Forest Hills Boulevard to serve a large concentration of multi-family housing, before returning to Dublin Granville Road via Ponderosa Drive.

Route 101 (CMAX)

No changes are recommended to this alignment.

Route 102

No changes are recommended to this alignment.

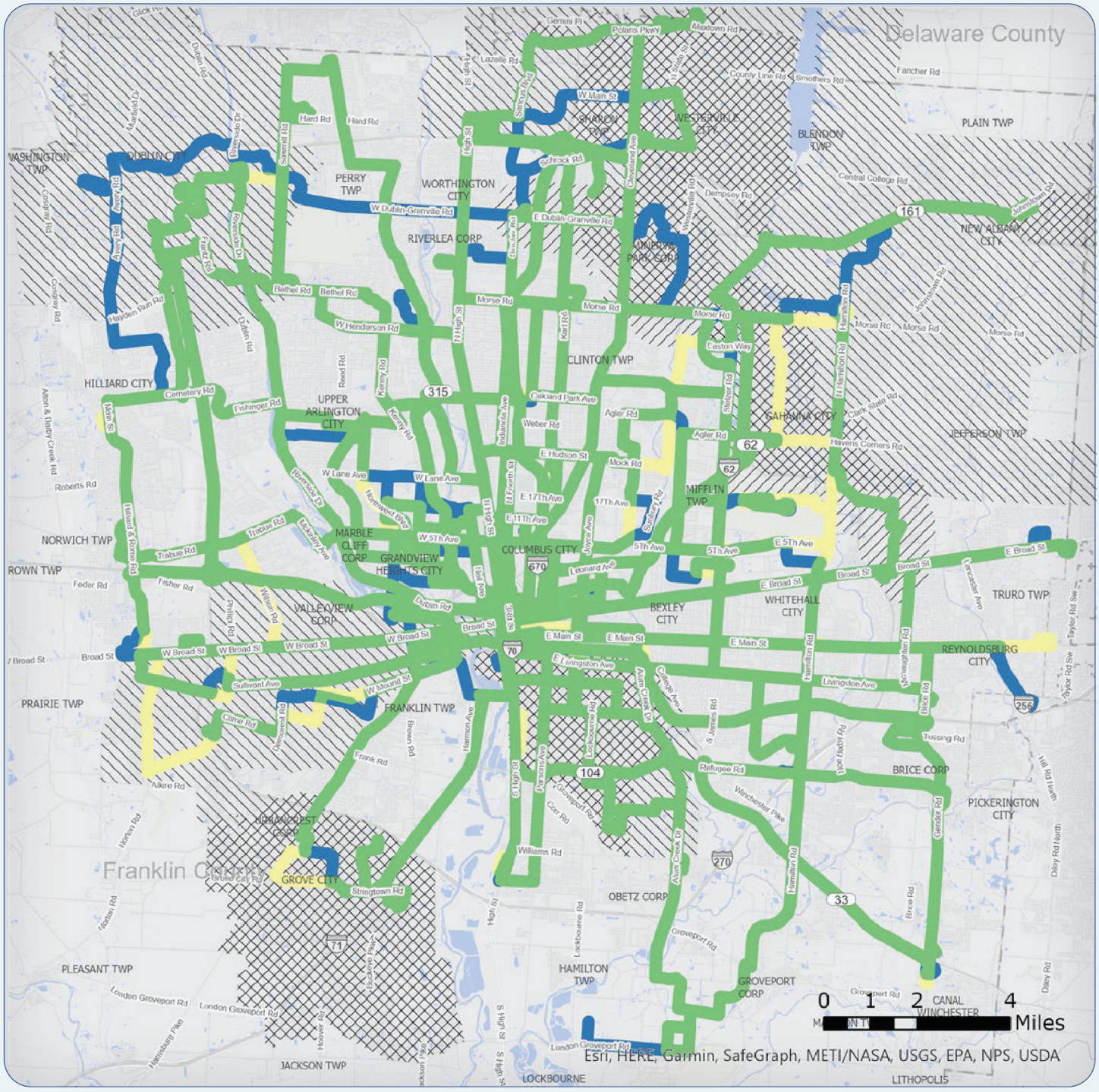


Figure 23 — Proposed Service Changes

Existing and Proposed Service

Fixed Route Service
- Unchanged COTA Service
- Existing COTA Service
- Proposed COTA Service

On-Demand Service
- COTA Plus Active Zones
- COTA Plus Recommended Zones
- COTA Plus Zone Overlap

COTA//Plus Zones

COTA//Plus provides on-demand service to customers living within a specific zone. This select service offers customers rides from point A to point B. This rideshare type service allows first last mile connections between existing fixed route services, and also provides transit services in areas that might not be feasible for a fixed route bus.

In order to create equitable transit options, the goals of COTA//Plus are:

- Extend and connect to a fixed route transit line to create a first/last mile solution
- Solve accessibility challenges, such as broken sidewalk connections or hard to reach land uses that show a demand for transit.
- Serve communities with multiple attractions, such as education, medical, and retail to create a circulator type connection.

Existing COTA//Plus Zones

Grove City COTA//Plus

The Grove City COTA//Plus is an active zone that has been in service since 2019. This service provides mobility solutions within the designated zones that include education, medical facilities, and job access, such as Mt. Carmel Medical Center, Grove City Town Center, South-Western Career Academy, Evans Center, and the SouthPark Industrial Center.

The demand for this service has been consistent, seeing an influx of students and riders at specific peak periods. The partnership with Grove City has been a success for COTA and can be a model for other municipalities and zones to help off-set the operational costs. As part of the SRTP, no changes besides span of service is recommended.

Northeast COTA//Plus

The Northeast zone is an existing COTA//Plus zone that was created as an on-demand bus zone due to the reduction of service during the COVID-19 pandemic. This zone operates differently than traditional COTA//Plus, using traditional the bus fleet and operating along a designated path with bus stops. This service provides on-demand transit access for customers who are experiencing reduced service or lost fixed-route service in parts of Northeast Columbus, Gahanna, and New Albany.

The SRTP recommends changing this zone's model to operate as a traditional Microtransit zone, using smaller vehicles in order to access door-to-door locations. It is also recommended that this zone extend off a specific path and serve all of Gahanna and New Albany to its service boundary, and the Easton Transit Center. This zone would be a connector between existing fixed route transit at the Easton Transit Center to access jobs further east through county connection and opportunities.

South Side COTA//Plus

On the South Side, COTA//Plus provides mobility solutions within the designated zone that includes German Village, the Brewery District, Nationwide Children's Hospital, Reeb Avenue Center, and the Marion Franklin Community Recreation Zone. This zone supports an area that has historically been underrepresented with a large population of low and moderate income residents. This COTA//Plus zone also supports fixed route transit routes, including Line 1, 4, 5, 8, 11, and 22.

Over the last several years, this zone has continued to increase demand and ridership, showing this transit option as an asset to the community. As part as the SRTP and analysis, it is recommended that this zone expand further east to access additional multi-family homes that are currently not served by transit. This will increase the benefit to the overall neighborhood and provide more opportunities and services to the community.

Westerville COTA//Plus

In Westerville, COTA//Plus currently provides mobility solutions that include Otterbein University, the Uptown district, and Polaris, for retail and job centers. This zone is limited in its destinations based upon its current structure, and does not include all of Westerville.

The SRTP recommends that this zone continue to grow to include all of Westerville School District, in order to better connect students and families with mobility solutions within their community. The Westerville area is experiencing consistent workforce and housing growth that would benefit from an on-demand mobility service. The City of Westerville has accessibility challenges to connect to the fixed route system, with the I-71, I-270, Sharon Woods, and Hoover Reservoir creating a barrier for transit and pedestrian access.

New COTA//Plus Zones:

Dublin COTA//Plus

The Dublin COTA//Plus zone serves the City of Dublin, Ohio. An additional zone in the Northeast part of Central Ohio expands the fixed route service to allow for additional connections to be made. The City of Dublin continues to be a fast-growing area, with a new 272,000 square foot medical facility for Ohio State Outpatient Care.

The City of Dublin currently has a partnership with Share Mobility, to provide rides for Dublin's seniors, workforce, and people with disabilities. Through this program, Dublin has seen the demand continue to increase and a COTA//Plus system could become the next phase of this service to connect more people to places. In 2022, over 11,000 trips were completed, with over 25% of those serving the workforce. Dublin also has launched a micro-mobility pilot program, making electric scooters available for the first and last mile of trips. These amenities and partnerships can help COTA expand their coverage to increasing developments in the region.

West Side COTA//Plus

The West Side of Columbus has several mobility challenges to overcome. The West Side is divided by the I-70, I-270, and I-670, in addition to several industrial uses given the active railroad tracks and the banks of the Scioto River. These land uses and accessibility challenges may be an indicator that COTA//Plus service could compliment traditional fixed route service.

The West Side of Columbus is well served by two major arterial east-west transit lines along Broad Street and Sullivant Avenue. The addition of a COTA//Plus zone will increase north-south connections in this area that has been seen as an obstacle for transit-dependent people. During the Envision Hilltop 2020 plan, 61% of households have no or limited car access. In addition, Hilltop does not have complete sidewalk coverage, posing significant connection and safety issues throughout

Annual Report: https://dublinohiousa.gov/annual-report/

the neighborhood.[1] Providing a door to door type service will increase transit access and allow more connectivity throughout this neighborhood.

This zone also has the possibility of connecting to the existing Grove City COTA//Plus zone, which would allow for new connections to be made to various jobs and distribution centers that are located further into this area.

COTA//Plus Zones

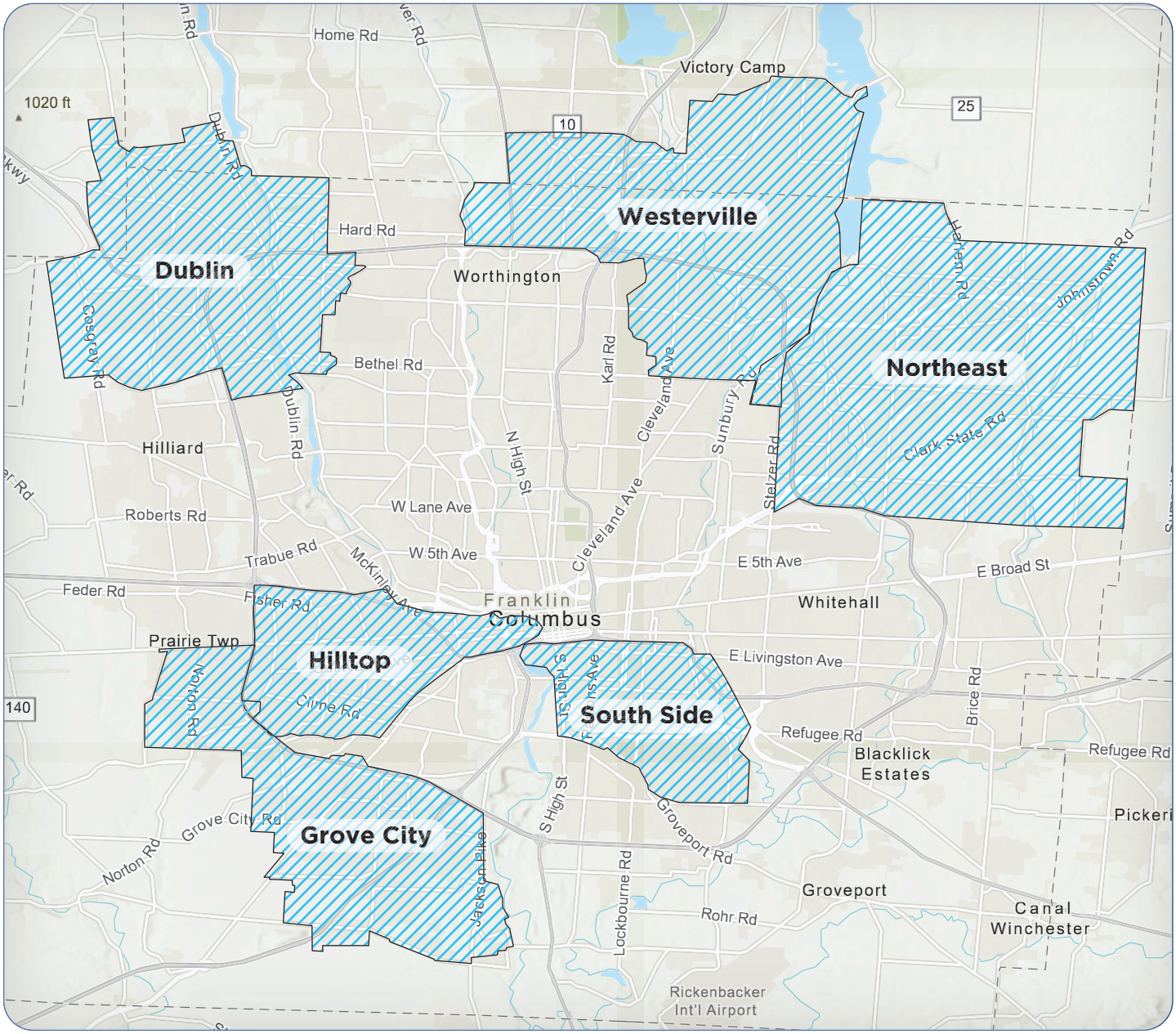


Figure 24 — Proposed COTA//Plus Zones

1. Envision 2020 Hilltop, https://www.envisionhilltop.com/_files/ugd/78ec43_2581b99323e04c19bccae3a6c76aa698.pdf

Rush Hour

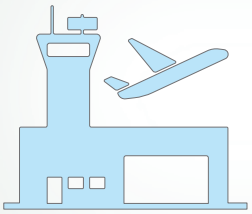
Rush hour service provides a benefit to downtown transit commuters and municipalities that may not have frequent service to the urban core. The COVID-19 pandemic has changed the way downtown office workers approach work, with a variety of schedules and the ability to continue working remote. As a result, COTA has reduced frequency as limited operators has created a chain affect to provide service to the regular fixed route system where the ridership and transit need may be greater.

However, rush hour service does provide a benefit to those who depend on transit and provide relief to those who choose to take transit. COTA should continue to evaluate the rush hour demand service and increase the number of trips when resources are available to provide a viable option to commuters and enhance regional connectivity.

Municipality Benefits

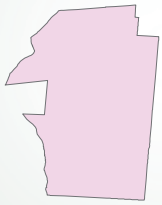
The changes in route structures create benefits and tradeoffs for key municipalities and transit notes. The following list shows the benefits based on each stakeholder and/or municipality.

Airport:



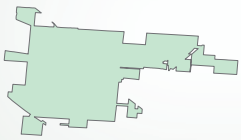
- Continued Airport Terminal access (Route 7)
- Continued service along Stelzer Road (Route 23)

Bexley:



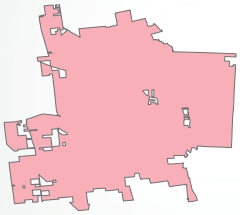
- Continued frequency (Route 1, 2, 10)

Canal Winchester:



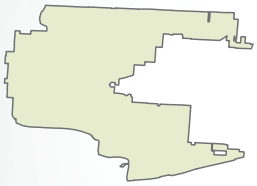
- Continued coverage on Gender Road (Route 25)

Dublin:



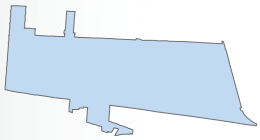
- Marketing/Promotion of a transit center at Carriage Place
- Service to OSU Medical Facility (Route 32)
- COTA//Plus Zone Possibility

Gahanna:



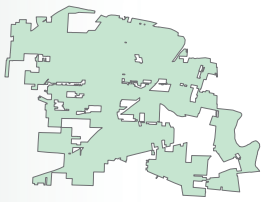
- Streamline service through Gahanna – along Hamilton to head into New Albany (via Line 25)
- Maintain access to route 2 and Mount Carmel East on Broad Street through Taylor Station Road

Grandview Heights:



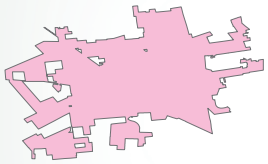
- A New Franklinton Connection (Route 31)
- OSU Connection (Route 31)
- Connection to the BMW area development (Route 31)
- Connection to Downtown and OSU via Route 22

Grove City:



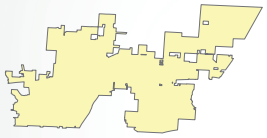
- Streamlined Service along Broadway Avenue (Route 3)
- Transit to serve – more multi-family residences (Route 3)
- Better access to Kroger on Hoover and Columbus Street (Route 3)
- Transit Access on Hoover Road. (Route 3)

Hilliard:



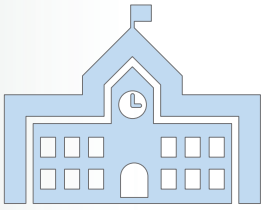
- Connection through Upper Arlington to Ohio State
- Potential access to Ohio State Medical Center in Dublin via Route 32
- Preservation of the Cemetery Park and Ride

New Albany:



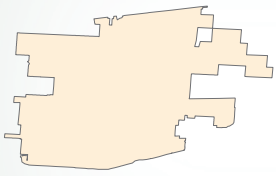
- Improved cross connections to Easton Town Center - with increased trips and frequency to consider SMART transit connection
- Connection to the Hamilton Quarter development area (Route 25)

Ohio State University:



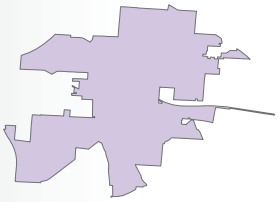
- New access to Innovation Hub and Lane Avenue (Route 32)
- Maintaining frequent service (Route 1, 2)
- Direct transit service through Grandview Heights from Franklinton (Route 31)
- Long term LinkUS infrastructure with service overlap (Route 32)

Reynoldsburg:



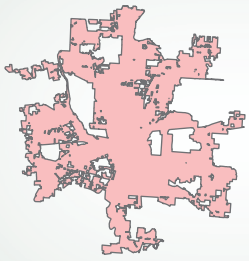
- Extension of a route to access retail development at I-70 and 256 (either through Route 1, 2, or 10) - leads to a possible connection with Licking County Transit

Rickenbacker/Groveport Area:



- One seat ride from Downtown to Rickenbacker (Route 4)
- Possible new connection from Easton to Rickenbacker (Route 24)
- Desire for a COTA// Plus connection between Grove City and Rickenbacker connection, something similar to a Dublin and New Albany Arc
- Develop County connections – Pickaway county will continue to develop.

Southside Columbus:



- Streamlined loop between High Street and Parsons Avenue to create a new Line 6 alignment.

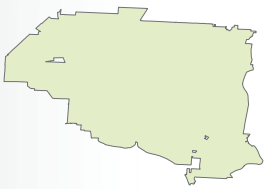
Upper Arlington:

- Service on Lane Avenue from OSU Innovation District, Lennox, to Campus.
- Service on North Star and Zollinger Road
- Direct service from Kingsdale to Hilliard and Kingsdale to Riverside Hospital to Easton.

Worthington:

- Continued service along High Street
- Increased Route 8 frequency
- Possibility of a route along 161

Westerville:



- Connection to St. Ann's Hospital (Line 4)
- Increase use of the Westerville Park and Ride (Line 4) – a future site of an EV charging station
- Continued high frequency of the Line 2 and a further extension of Line 8.

Funding Analysis

The project team carefully analyzed the cost of fixed service hours along with the operating COTA//Plus service and how these recommendations would potentially impact the bottom line. The service analysis recommendations provide options for COTA to explore dependent upon the available resources and additional service change outreach that is required.

Funding is analyzed using several metrics that can be adjusted based on the scenario. The chart below shows a list of terms commonly used to determine the cost of transit services.

Average Round Trip Miles: The milage to complete a single round-trip in revenue service for each proposed route was measured using a GIS roadway layer.

Estimated Average Speed: The estimated average speed of each proposed route takes into account both running time and dwell time at stops, and is based largely on the average speed of existing COTA routes for each service day type.

Run Time: Run time is calculated by dividing average round trip miles for a proposed route by its estimated average speed.

Minimum Recovery: Minimum recovery time is the time between trips that allows a driver to use the restroom or prepare for the next trip. To ensure resilient on-time performance, minimum recovery time is set at 10 percent of run time for each proposed route.

Minimum Cycle Time: The minimum cycle time for each proposed route is calculated by taking the sum of the run time and minimum recovery time. The result is the minimum time between same-direction departures for any given route.

Cycle Time: As minimum cycle times may be non-integers, a ”clean” cycle time is calculated by rounding the minimum cycle time upward to a multiple of the route frequency. For example, if the minimum cycle time for a proposed route is 23.5 minutes, and the intended service frequency is 30 minutes, the cycle time would be rounded up to 30.

Recovery Time/Percent Recovery: Actual recovery time is the calculated difference between the cycle time and run time. Ideally, the actual recovery time represents between 10 and 19 percent of a proposed route’s cycle time. A recovery time of less than ten percent of cycle time does not provide a sufficient buffer between trips to ensure consistent on-time performance. A recovery time of more than 19 percent results in an unproductive use of resources as vehicles are out of service for extended periods of time between trips.

Peak Frequency/Off-Peak Frequency: Frequency of service refers to the time between same-direction departures. Frequency often differs by service period, in response to fluctuating ridership demand. Industry best practice is to schedule transit service using clockface frequency, or frequency that is a product or multiple of 60.

This ensures service predictability as trips are scheduled to depart a given stop at even intervals and at the same time or times past every hour.

Peak Hours/Off-Peak Hours: Number of hours that service is available to passengers at the frequency designated for a given service period.

Peak Trips/Off-Peak Trips: Number of roundtrips in a given service period, calculated by dividing the hours of service for the service period by the frequency of service designated for the same period.

Peak Vehicles / Off-Peak Vehicles: Number of vehicles need to operate concurrently on a proposed route in order to maintain the designated service frequency for a given service period. If the vehicle count is not a whole number, then various actions can be considered including adjusting the route length or alignment to reduce travel time, or interlining the proposed route with another route. Interlining is the practice of operating a single bus or group of buses on multiple routes. Interlining can be used to optimize cycle times, recovery times, or vehicle needs.

Daily Trips: Number of roundtrips per day, calculated by adding together peak trips and off-peak trips.

Daily Hours of Service: Number of hours that service is available to passengers per day, calculated by adding together peak hours and off-peak hours.

Daily Revenue Hours: Total number of daily service hours delivered by all vehicle operating on a proposed route. This value is calculated by first multiplying peak vehicle by peak hours of service and off-peak vehicles by off-peak hours of service; and then summing together the two resulting products.

Estimated Cost per Revenue Hour: Fully allocated cost of operating one transit vehicle for one hour, provided by COTA staff.

Estimated Daily Cost: Daily operating cost for a proposed route, calculated by multiplying the estimated cost per revenue hour by the daily revenue hours for the proposed route.

Annual Service Days: Approximate number of annual occurrences of a particular service day type (weekday, Saturday, and Sunday) based on COTA service calendar. The exact number of service days for each service day type will change from year to year.

Estimated Annual Cost: Annual cost of operating a proposed route by service day type. This value is calculated by multiplying the estimated daily cost for operating a proposed route for one day on a particular service day type by the annual number of days of that service day type.

Estimated Annual Revenue Hours: Annual number of revenue hours resulting from operating a proposed route by service day type. This value is calculated by multiplying the estimated daily revenue hours resulting from the operation of a proposed route for one day on a particular service day type by the annual number of days of that service day type.

INITIATIVES

The SRTP has aligned and prioritized COTA initiatives based on analysis and outreach as part of the planning process. These initiative are in alignment with resources that are projected to be available over the next five years.

Fleet

COTA upgrades its bus fleet each year with annual bus purchases to improve its reliability and rolling stock. In order for COTA to achieve its Green House Gas (GHG) and pollution goals, a transition to a zero-emission fleet vehicles and facility operations is required. According to the COTA 2022 Sustainability Report, the bus fleet produces 71.1% of COTA's GHG emissions. This is the greatest opportunity and primary focus for COTA. COTA intends to phase out diesel by 2027 and replace with more sustainable solutions, such as compressed natural gas, battery electric, and exploring hydrogen capabilities. By 2029, COTA has set the goal of over 50% of its fleet converted to Battery Electric Buses (BEB).

Fleet Initiatives

- Follow the Sustainability Goals set in the Sustainability Report to transition bus fleet to more sustainable measures
- Create a workforce that is able to maintain and deliver on these sustainable measures
- Promote these positive changes to Central Ohio to highlight innovative technology and development

COTA//Plus

COTA//Plus is a Microtransit first-last mile solution that provides customers in specific zones door to door service to access jobs, healthcare, and more. COTA has complemented the existing fixed-route and paratransit services by continuing to invest in COTA//Plus On-Demand Microtransit services since 2019. COTA will continue to invest in this services, while also looking at ways to improve coverage of the network by creating additional zones in the next 5 years.

COTA//Plus is more costly than the traditional fixed-route bus service. As a funding model, COTA utilizes a MORPC grant and a sponsorship from the local community partner, such as the municipality and/or corporate sponsor. COTA will continue to work with local municipalities, businesses, and other stakeholders to grow the COTA Plus service areas, with a goal of additional micro-transit zones that feed into the larger fixed-route service area.

As part of the analysis and outreach, the following recommendations increase coverage of existing zones, while also creating new zones in order to better serve Central Ohio.

COTA//Plus Initiatives

- Create and explore new partnerships with municipalities to increase zone coverage
- Expand South Side COTA//Plus Zone to reach additional locations that are hard to reach
- Expand the Westerville COTA//Plus zone to reach more residents within the community and to capitalize on the growth that is occurring in the Northeast
- Re-evaluate the Northeast On-Demand structure and grow the zone to include the City of New Albany.
- Create a West Side COTA//Plus Zone to connect Hilltop neighborhood with job and neighborhood access. This would also connect with the Grove City Zone.
- Create a Dublin COTA//Plus zone to connect and access the growth that is occurring in the Northwest side of Central Ohio. This zone would connect education, entertainment, medical, and jobs.

COTA Mainstream/Paratransit Services

COTA's Mobility Services department operates COTA Mainstream, a complimentary paratransit service. Mainstream is shared-ride, providing origin-to-destination mobility for people whose functional limitations prevent them from riding COTA's fixed-route buses. Trips within ¾ mile of a fixed route are considered American with Disabilities Act (ADA) eligibility trips and receive first priority. For those eligible customers, whose trip lies outside of the ¾ mile zone, are considered "non-ADA" trips. This service is in accordance with Title VI And ADA guidelines.

Due to the rising cost and increased demand for Mainstream service, COTA continues to explore methods of cost reduction while meeting the transportation needs of the community. One example is "Mainstream On-Demand", a non-ADA service for Mainstream-eligible customers. Mainstream On-Demand provides TNC-style (Transportation Network Company/Ridesharing e.g. Uber, Lyft) service to non-ADA customers who want to travel beyond the fixed-route coverage area. Mainstream On-Demand offers a same-day travel option not previously available for Mainstream.

Mainstream Initiatives

- Continue focusing on process improvements to continue to provide reliable transit services as the demand increases

Mobility Hubs

Mobility Hubs provide a focal point in a community that integrate different modes of transportation. These hubs provide adequate transit shelters and layover zones for passenger transfers, alternative transportation modes, such as car and bike share, along with retail, free WI-FI, and open space to create a sense of place within a community. These hubs create an activity center that can accommodate potential future growth, expansion, and changes as innovative technologies evolve.

COTA will construct the Rickenbacker Mobility Center starting in the Fall 2023. This total project cost of $6.75 million will connect COTA, fixed route with first mile/last mile solutions for greater access, while also including grocery, childcare, health care, and job training services. This center will also be able to accommodate regional transfers to Pickaway and Fairfield county transit services. The Rickenbacker area continues to grow with warehouse and distribution centers, creating a robust employment center South of Central Ohio.

Rickenbacker Mobility Center

Mobility hubs will play an integral part in COTA's infrastructure future as LinkUS becomes a reality and fleet transitions occur. Mobility hubs will become the center for transit users and will allow COTA operations to be a reliable and convenient service. These mobility hubs will be placed in strategic locations throughout Central Ohio in order to connect with regional partners, such as:

- Licking County Transit
- Delaware County Transit
- SMART New Albany
- GREAT Bus System for the City of Obetz

Mobility Hub Initiatives

- Create and explore new partnerships to advance transit center success
- Explore TOD locations to maximize success of LinkUS and regional connections

Facility Improvements

COTA currently owns 25 Park and Ride lots, four transit centers, the Administrative Office and Customer Experience Center, the McKinley Avenue Bus Storage Maintenance and Customer Service Call Center, the Fields Avenue Bus Storage and Maintenance Facility, and Fields Avenue Mobility Services. These facilities are the face of COTA in these neighborhoods. Maintaining state of good repair is essential for the usefulness to the COTA operations.

Facility Improvement Initiatives

- Create and explore new partnerships with municipalities to advance transit center success

Rider Engagement

COTA continues to engage with riders through several means, including the customer care line, consistent and engaged public meetings to update the community on service changes, and various social media channels. Focusing on enhancing the overall customer experience and access to services are COTA's strategies to build on its customer base.

Rider Engagement Initiatives

- Enhance communications about service changes
- Focus on targeted outreach to New American communities
- Improve processes that connect with the GTFS feed during road closures and reroutes
- Strengthen regional partnerships to understand the transit market, improve transit connections, and stops.
- Integrate LinkUS with existing transit users to increase awareness to create a community asset

LinkUS

LinkUS is the region's growth and mobility initiative that will provide a world-class mobility and transportation system that links residents to opportunities. COTA plays a key role in this collaborative effort, along with its partners, MORPC, Franklin County, City of Columbus, and additional business and municipal partners.

Over the next five years, COTA will be working closely with these partners and the Federal Transit Administration (FTA) to create a bus rapid transit (BRT) system along three key corridors: West Broad, East Main, and the Northwest Corridor. This BRT system will boast all-electric, articulated vehicles with platform-level boarding, modern stations, dedicated transit lanes with traffic signal priority and easy off-vehicle fare payment.

As part of this investment, there will also be increased frequencies and service hours on the fixed-route lines, and more on-demand zones, shelters, and technology for improved convenience and communication. COTA and the City of Columbus will go to the voters November 2024 to secure funding for this endeavor. Much of the LinkUS success is dependent on this ballot measure.

LinkUS Initiatives

- Continue partnership with City of Columbus, MORPC, and others for continued success
- Continue working closely with FTA to secure Capital Investment Grants
- Prepare for the Ballot Initiative for November 2024

Sustainability Measures

COTA is committed to sustainable practices. Since 2013, COTA has been transitioning its bus fleet from hybrid and ultra-low sulfur diesel full to more sustainable options. As technology and funding has become available, COTA is now committed to zero emission technology, transitioning its fleet to battery electric buses, and exploring hydrogen technology.

COTA plays a key role to be a mobility solutions provider that is functional, reliable, and sustainable option for customers. Sustainability transition includes more than just the bus fleet. Finding sustainable solutions in designing and constructing facilities, educating transit users and the public about the importance of mode shift, along with reducing COTA's overall carbon footprint will continue to be a priority.

Sustainability Initiatives

- Continue and increase engagement with regional initiatives to identify collaborators in reducing emissions
- Invest in economic and technological advances that improve sustainable operations

Community Partnerships

COTA has partnered with several community resource groups to be a part of the community in other ways than just transit. Through a COTA Employee Resource Group, COTA has been an integral part of connecting with the community through food distribution at neighborhood transit centers.

Community Partnership Initiatives

- Create partnerships and committees to serve refugee and New American Communities
- Continue utilizing Employee Resource Groups to continue connecting with the community through volunteer and social outreach events.
- Job Fairs with clear marketing of requirements and opportunities within COTA

COTA Food Drive

Regional Transit Initiatives

Fixed Route Fleet Initiatives

- Follow the Sustainability Goals set in the Sustainability Report to transition bus fleet to more sustainable measures
- Create a workforce that is able to maintain and deliver on these sustainable measures
- Promote these positive changes to Central Ohio to highlight innovative technology and development

COTA//Plus Initiatives

- Create and explore new partnerships with municipalities to increase zone coverage
- Expand South Side COTA//Plus Zone to reach additional locations that are hard to reach
- Expand the Westerville COTA//Plus zone to reach more residents within the community and to capitalize on the growth that is occurring in the Northeast
- Re-evaluate the Northeast On-Demand structure and grow the zone to include the City of New Albany.
- Create a West Side COTA//Plus Zone to connect Hilltop neighborhood with job and neighborhood access. This would also connect with the Grove City Zone.
- Create a Dublin COTA//Plus zone to connect and access the growth that is occurring in the Northwest side of Central Ohio. This zone would connect education, entertainment, medical, and jobs

Mainstream Initiatives

- Continue focusing on process improvements to continue to provide reliable transit services as the demand increases

Mobility Hub Initiatives

- Create and explore new partnerships to advance transit center success
- Explore TOD locations to maximize success of LinkUS and regional connections

Facility Improvement Initiatives

- Create and explore new partnerships with municipalities to advance transit center success

Rider Engagement Initiatives

- Enhance communications about service changes
- Focus on targeted outreach to New American communities
- Improve processes that connect with the GTFS feed during road closures and reroutes
- Strengthen regional partnerships to understand the transit market, improve transit connections, and stops.
- Integrate LinkUS with existing transit users to increase awareness to create a community asset

LinkUS Initiatives

- Continue partnership with City of Columbus, MORPC, and others for continued success
- Continue working closely with FTA to secure Capital Investment Grants
- Prepare for the Ballot Initiative for November 2024

Sustainability Initiatives

- Continue and increase engagement with regional initiatives to identify collaborators in reducing emissions
- Invest in economic and technological advances that improve sustainable operations

Community Partnership Initiatives

- Create partnerships and committees to serve refugee and New American Communities
- Continue utilizing Employee Resource Groups to continue connecting with the community through volunteer and social outreach events.
- Job Fairs with clear marketing of requirements and opportunities within COTA

FINANCIAL PLAN

The Ohio Department of Transportation's Statewide Transportation Improvement Program (STIP) and MORPC's regional TIP delineates a four-year operating and capital plan. Listed in Figure 26 are COTA's annual service levels, operating and capital expenses, and expected funding levels. The TIP spans four State fiscal years (2024-2027) while COTA's Short Range Transit Plan (SRTP) covers five calendar years.

The 2024-2027 four-year TIP operating plan is COTA's continued response to the growing transportation needs of the central Ohio region by providing an expanded, reliable, and safe transit system. The foundation for this TIP update is COTA's 2019-2024 strategic Plan, "Moving Every Life Forward".

The following is a summary of operating and capital expenses in the five-year plan:

- Continued level of Fixed route and Paratransit Service
- Fixed-Route and Paratransit Vehicles Replacements
- COTA Plus Expansion
- Facility and Equipment Replacement and Upgrades
- Land Acquisitions
- COTA Facility Renovations and Improvements
- Rickenbacker Mobility Center
- Transit Center and Shelter Improvements
- Electric Charing Infrastructure
- Hydrogen Infrastructure and Technology

Financial Summary

COTA's major source of local funding and sales and use tax receipts levied in all of Franklin County and small portions of adjacent Union, Delaware, Licking, and Fairfield counties. Voters within the service area approved a permanent 0.25% sales tax; with an added ten-year renewable 0.25% sales tax renewed in 2106. This allows for continued service enhancements through at least 2026. The LinkUS Regional Initiative is planned to go to the Ballot in November 2024 which will levy a full 1% of sales tax to be used for transit and transit supportive infrastructure purposes.

Figure 26 presents a financial summary of the system, which displays COTA's projected annual fixed-route service levels, sources of revenue, operating expenses, net capital outlays and resulting cash balances through 2027.

This 2023-2027 Short Range Transit Plan (SRTP) update includes reviewing existing conditions, incorporating stakeholders and public feedback, reviewing plans and guiding documents, and analyzing data. This plan affects the Financial Summary of COTA over the last 5 years in order to align the strategic plan, SRTP, and authority financials. The Authority will continue to monitor the performance of existing routes to help ensure that the transit system is operating efficiently and so operational resources can be allocated in the most efficient manner.

COTA plans to maintain service levels at approximately 1.1 million service hours annually between 2023 and 2024. However, while sales tax revenue is anticipated to continue to fund a significant percentage of the Authority's expenditures, staff will be seeking ways to diversity and grow its non-sales tax revenue. COTA will work with partners in both the private and public sector to obtain additional grant funding and capture revenue generated from development and redevelopment efforts in order to help fund mobility improvements that will benefit the region.

Operating Plan

The following sections are a summary of the four-year operating component of the TIP including years 2024 through 2027.

Five Year Operating Budget	2023	Projected 2024 Annual Budget	Projected 2025 Annual Budget	Projected 2026 Annual Budget	Projected 2027 Annual Budget
Fixed Route Service Hours	1,108,761	1,108,761	1,108,761	1,108,761	1,108,761
Passengers	11,087,607	13,305,128	15,522,649	16,631,410	17,740,171
Revenues					
Operating Revenues	$ 12,773,000	$ 13,156,190	$ 13,550,876	$ 13,957,402	$ 14,376,124
Sales Tax Levy Receipts	$ 151,699,500	$ 157,767,480	$ 162,500,504	$ 167,375,520	$ 172,396,785
State and Local Assistance	$ 1,780,000	$ 1,833,400	$ 1,888,402	$ 1,945,054	$ 2,003,406
Grant Revenue	$ 20,381,000	$ 15,000,000	$ 15,450,000	$ 15,913,500	$ 16,390,905
Non-Operating Revenues	$ 2,903,000	$ 2,990,090	$ 3,079,793	$ 3,172,186	$ 3,267,352
Total Revenues	**$ 189,536,500**	**$ 190,747,160**	**$ 196,469,575**	**$ 202,363,662**	**$ 208,434,572**
Expenses					
Labor & Fringe Benefits	$ 116,524,000	$ 116,524,000	$ 120,019,720	$ 123,620,312	$ 127,328,921
Services	$ 35,282,000	$ 35,282,000	$ 36,340,460	$ 37,430,674	$ 38,553,594
Materials & Supplies	$ 11,104,800	$ 11,104,800	$ 11,437,944	$ 11,781,082	$ 12,134,515
Fuel	$ 4,806,000	$ 4,806,000	$ 4,950,180	$ 5,098,685	$ 5,251,646
Utilities	$ 3,625,302	$ 3,625,302	$ 3,734,061	$ 3,846,083	$ 3,961,465
Purchased Transportation	$ 14,368,002	$ 14,368,002	$ 14,799,042	$ 15,243,013	$ 15,700,304
Other/Misc.	$ 3,826,900	$ 3,826,900	$ 3,941,707	$ 4,059,958	$ 4,181,757
Non-Operating Expenses	$ 4,000,000	$ 1,000,000	$ 1,030,000	$ 1,060,900	$ 1,092,727
Total Expenses	**$ 193,537,004**	**$ 190,537,004**	**$ 196,253,114**	**$ 202,140,708**	**$ 208,204,929**

Figure 26 — Financial Summary

Local Funding

COTA's local funding sources include a service area-wide sales tax and farebox revenue. There is a permanent sales tax of 0.25% with an added 10-year 0.25% sales tax that was passed by the voters in November 2016. This 0.5% sales tax roughly makes up over 80% of operating funds before the COVID-19 Pandemic. Despite COVID-19, passenger fares averaged around 17% of operating funds in the last 5 years.

Local funds only attributed 2.7% of the 2021 operating budget due to the one-time federal COVID relief for operating expenses. Local funds instead attributed to 79% of capital expenses in 2021. Figure 27 below shows a breakdown of COTA operating funds for each year from 2017 to 2021.

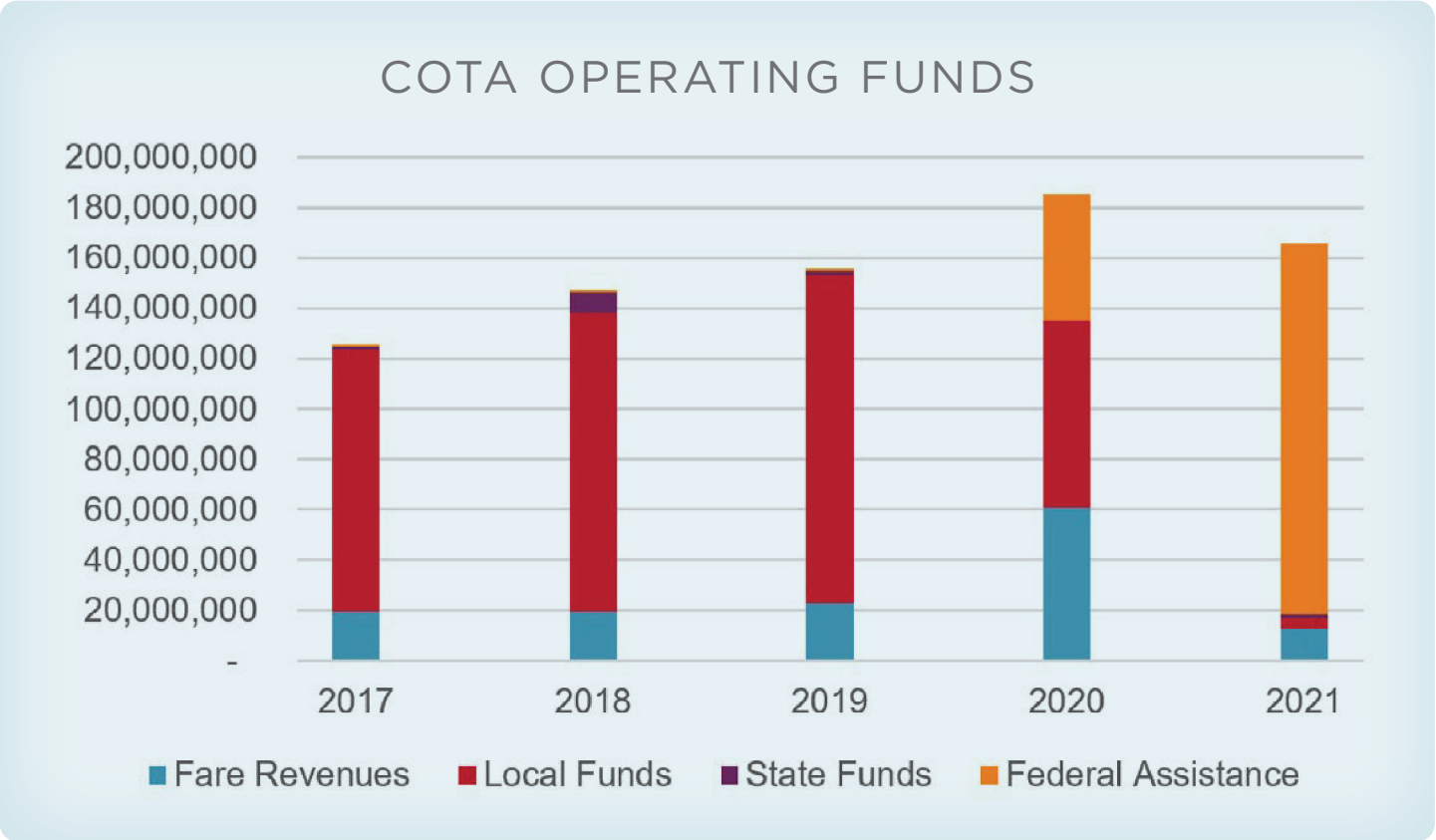


Figure 27 — COTA Operating Funds

Capital Plan

Major capital items include buses, facilities, and strategic investments to maintain state of good repair and improve transit service throughout Central Ohio. Key initiatives are described in greater detail in COTA's Short Range Transit Plan (2023-2027) and Long-Range (2050) Plan. Major capital items will be funded primarily with Federal Section 5307 Urbanized Area Formula program grants and Congestion Mitigation Air Quality (CMAQ) funds. See Figure 28 below for capital program.

Summary of Revenues and Expenditures	2023	2024	2025	2026	2027
Capital Improvement Fund					
Capital Revenues					
Allocation from Operating Fund	$ -	$ -	$ -	$ -	$ -
Sales Tax Allocation - Cash Allocation	$ 6,794,000	$ 6,964,000	$ 6,964,000	$ 7,138,000	$ 7,317,000
Sales Tax Allocation - Debt Allocation	$ 10,191,000	$ 10,446,000	$ 10,446,000	$ 10,707,000	$ 10,975,000
Federal Grants	$ -	$ -	$ -	$ -	$ -
State Grants	$ -	$ -	$ -	$ -	$ -
Grant Revenue	$ 26,314,000	$ 20,618,000	$ 31,767,000	$ 32,235,000	$ 19,877,000
Disposal of Assets	$ -	$ -	$ -	$ -	$ -
Investment Income	$ 1,070,492	$ 887,551	$ 768,056	$ 740,623	$ 552,108
Debt Service Proceeds	$ 25,000,000	$ 9,750,000	$ 17,750,000	$ 8,000,000	$ 6,500,000
Other	$ -	$ 4,470,000	$ 17,750,000	$ 8,000,000	$ 6,500,000
Total Revenues	**$ 69,369,492**	**$ 53,135,551**	**$ 85,445,056**	**$ 66,820,623**	**$ 51,721,108**
Capital Expenditures					
Vehicles & Equipment	$ 18,582,702	$ 20,951,532	$ 41,614,010	$ 43,597,150	$ 45,709,161
Facilities	$ 44,908,900	$ 33,305,000	$ 36,645,000	$ 22,815,000	$ 13,900,000
Technology	$ 18,687,000	$ 6,705,900	$ 4,985,000	$ 9,600,000	$ 4,350,000
Development	$ 3,535,000	$ 1,035,000	$ 1,335,000	$ 5,035,000	$ 35,000
Administration	$ 1,325,000	$ 1,070,000	$ 700,000	$ 700,000	$ 700,000
Grant Revenue	$ 87,038,602	$ 63,067,432	$ 85,279,010	$ 81,747,150	$ 64,694,161
Debt Service	$ 625,000	$ 2,017,561	$ 2,909,348	$ 3,925,004	$ 4,455,124
Total Expenditures	**$ 87,663,602**	**$ 65,084,993**	**$ 88,188,358**	**$ 85,672,154**	**$ 69,149,285**
Surplus/Shortfall	$ (18,294,110)	$ (11,949,442)	$ (2,743,302)	$ (18,851,531)	$ (17,428,177)
Beginning Fund Balance	**$ 107,049,172**	**$ 88,755,062**	**$ 76,805,620**	**$ 74,062,318**	**$ 55,210,787**
Ending Fund Balance	**$ 88,755,062**	**$ 76,805,620**	**$ 74,062,318**	**$ 55,210,787**	**$ 37,782,610**

Figure 28 — Summary of Revenues and Expenditures, Capital Improvement Fund

Major Capital Projects

The total five-year Capital Acquisitions Plan is projected to cost over $395.7 million as identified in Table 1-2. During this SRTP timeframe and in alignment with the Authority's strategic plan, COTA is proposing significant capital improvement investments aimed to strengthen and provide new transit services in the central Ohio area.

Vehicle Replacement and Expansion

- Replacement of aging existing fixed-route coaches, paratransit, and on-demand micro-transit vehicle expansion plans are a priority. The total five-year investment in vehicles and equipment is over $170.45 million.
  - Purchase of 14 zero emission electric coaches annually over two years and will then purchase up to 28 vehicles each year after, which will include Battery Electric Buses (BEB) and two hydrogen buses by 2027.
  - Purchase of ten (10) COTA Plus vehicles each year, five (5) of which have ADA accessibility.
  - Replacing 20 vehicles each year of cutaway vehicles and full-sized vans to operate Mainstream
  - Purchase 10 non-revenue vehicles to assist in the operations of COTA's services.
  - Replacement the Scrubber to clean the McKinley facility

Alternative Fuels Initiatives

- Improve grid capacity for depot bus charging at COTA facilities and on-route charging facilities.
- Update facilities to provide necessary infrastructure to facilitate hydrogen generation and fueling.

Facilities Improvements

- COTA has the responsibility to ensure safe operations of its facilities in order to provide the best transit service to the public, including:
  - 1125 East Main Street Building Repairs
  - Modernization of COTA's administration offices as 33 North High Street: Funding is requested in 2023 and 2024 for modernization of COTA's administration offices
  - 1333 Fields Avenue Improvements, including vehicle maintenance bus lifts, safety scaffolding, and fall protection rails for battery electric and CNG coach maintenance
  - Construction of a storage facility at 1325 Essex Pole Barns for transit shelter storage and assembly.

Park & Rides

COTA maintains a network of park and rides which allow commuters heading to Downtown to leave their vehicles and board the bus for the remainder of the journey. This includes renovations to maintain state of good repairs and standardization of signage to incorporate current COTA marketing to improve customer experience.

Transit Centers & Mobility Hubs

Transit Centers and Mobility Hubs provide turnaround space, coach layover, and a safe pick-up zone for passengers. These infrastructure improvements will extend the life of these facilities and allow for the potential of transit oriented development to occur at end of line. These projects include engaging with municipalities, private mobility companies, and the community to coordinate efforts to enhance transit.

Bus Stop Shelter and Transit Enhancements

COTA's Capital Improvement Plan includes various passenger amenity improvements for convenient, comfortable, and safe passenger waiting areas for customers. Bus stop improvements include a goal to provide shelter amenities at all COTA stops that meet a minimum ridership threshold of 35 boardings per day and include solar lighting at all new shelter installations.

Intelligent Transportation Systems (ITS)

ITS is the application of various technologies that improve information, control, and communication systems for a region's transportation system, including public transit. COTA will bring consoles up to current standards, upgrade switches and bright signs, upgrade the automated counting of passengers (APC) on vehicles to provide a more accurate ridership count, fund real-time arrival signage at select bus stops, upgrade the on-board WI-FI system, and the cameras and recording systems for safety.

Development

COTA will invest more than $10.9 million over the next 5 years in key development opportunities throughout Central Ohio. Innovation is key to creating a robust transit network. This will include strategic land purchases related to corridor projects, future operating facilities, or right-of-way assembly, various mobility innovation projects to demonstrate improved mobility, funding for the Westside Mobility Center along Broad Street, and other unplanned opportunities that may arise on existing COTA properties.

IMPLEMENTATION PLAN

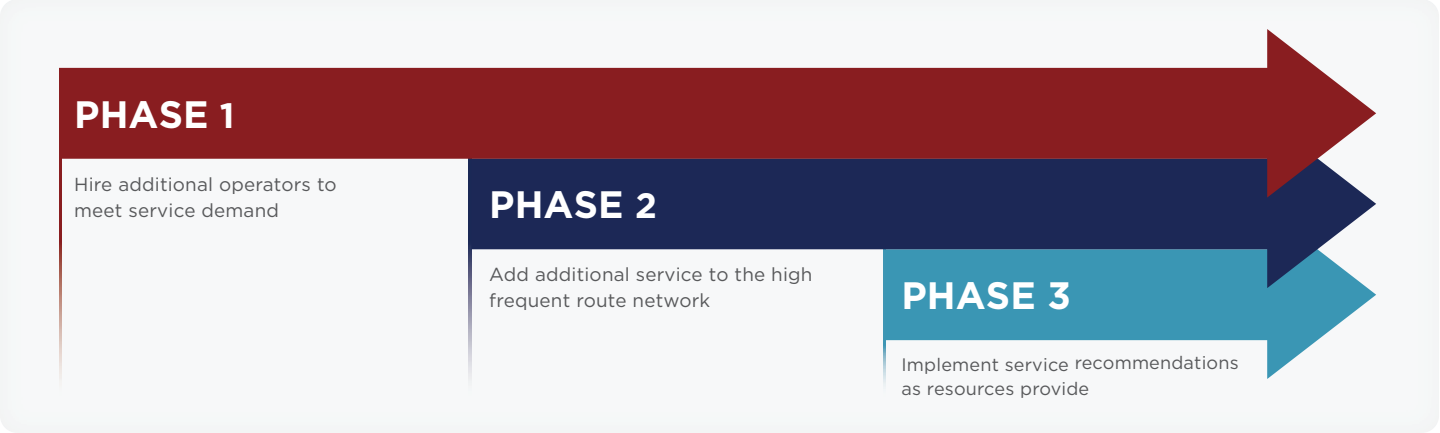


Figure 29 — Implementation Phased Approach

As part of the operations recommendations for the next five years, there is a phased approach to guide COTA for optimal success.

The **first phase** of implementation is hiring additional operators to meet the existing service demand. In the last 2 years, COTA has cut service due to insufficient operators to meet the service demand. Retaining, hiring, and expanding the operator pool will relieve operator stress and also restore service to lines that have experienced reduced frequencies due to this crisis.

The **second phase** is to use additional operators and resources to add additional service to the existing frequent network. This network includes Line 1, 2, 5, 7, 8, 10, 23, 34 which is the backbone of the 2017 redesign that recognized that these routes were optimal to serve the network and ridership with 15 minute or less frequencies. This was shown to be a success based on historical ridership, with the highest ridership year being in 2019. COTA needs to increase frequency on the existing route network in order to redeem its ridership and grow its system to reach the impending growth of the region.

The **third phase** is to implement service recommendations as listed in the service plan recommendations in this report as resources are available. The fixed-route recommendations provide transit access to more people and jobs. The Short Range Transit plan modifies the existing service to continue to deliver transit services where needed.

The route network needs to be reviewed every SRTP in order to keep transit consistent with the growth that Central Ohio is experiencing. The Short Range Transit plan provides a link between the existing service today and the future vision of LinkUS, where a more robust mobility and growth plan will connect Central Ohio with its growing region.

CONCLUSION

Central Ohio is growing unlike anywhere else in the State. COTA needs to position their operations in a way to capture that growth within their service area. COTA will plan for increased frequency, promote mobility options, continue investment in the LinkUS initiative, and improve community partnerships.

Where is COTA Now

COTA has slowly restored transit service from the COVID-19 impact. However, labor market conditions have made it difficult for COTA to retain and hire operators, causing service reductions. The transit network was redesigned in 2017 and is the backbone of transit in Columbus. The corridors that COTA serves continues to revitalize and increase density that supports a frequent network. COTA provides transit services to areas of greatest need and potential within its service boundary. However, there continues to be opportunities to expand and grow to reach additional people and jobs in regional areas.

Where COTA is going

As Central Ohio prepares for growth, COTA is partnering and collaborating with MORPC, City of Columbus, Franklin County, and others to bring the LinkUS mobility initiative to fruition in the next decade. LinkUS will provide mobility and funding to transport Central Ohioans throughout the region to access jobs, education, and healthcare. The recommendations in the Short Range Transit Plan provide a guide for COTA to use to reach even more people and jobs than they do today. These recommendations in the Short Range Transit Plan stretch transit to more opportunities and focus on density, streamlined services, and transit rich destinations.

COTA

Central Ohio Transit Authority
33 N. High St.
Columbus, OH 43215
(614) 275-5876

www.cota.com

CENTRAL OHIO TRANSIT AUTHORITY
2025- 2029 Capital Improvements Program

	2025 Approved Budget	2026 Projected Budget	2027 Projected Budget	2028 Projected Budget	2029 Projected Budget
Capital Revenue:					
Operating Revenues					
Sales Tax Levy Receipts	56,150,998	95,115,263	85,992,644	76,641,960	67,057,509
Federal State and Local Assistance	46,382,743	26,668,715	26,668,715	26,668,715	26,668,715
Grant Revenue	81,730,853	155,816,154	109,273,092	89,500,000	31,365,400
Debt Issuance Proceeds	75,000,000	0	150,000,000	0	0
Total Capital Revenue	**$ 259,264,595**	**$ 277,600,131**	**$ 371,934,451**	**$ 192,810,675**	**$ 125,091,624**
Vehicles & Equipment	32,080,601	30,524,776	63,352,690	33,506,991	54,733,329
Facilities	16,427,616	19,652,000	22,270,000	13,750,000	9,575,000
Technology	3,429,200	6,641,900	3,400,000	5,050,000	2,965,000
Development	162,398,000	210,371,000	210,676,000	213,625,000	123,162,000
Administration	1,025,000	615,000	365,000	365,000	1,365,000
Debt Service	4,003,574	7,450,008	11,200,008	18,092,877	18,092,877
Other/Misc.	1,520,000	1,520,000	1,520,000	1,520,000	1,520,000
Total Capital Revenue	**$ 220,883,991**	**$ 276,774,684**	**$ 312,783,698**	**$ 285,909,868**	**$ 211,413,206**
Net Position Increase (Decrease)	**$ 38,380,603**	**$ 825,447**	**$ 59,150,753**	**$ (93,099,192)**	**$ (86,321,581)**
Beginning Fund Balance	**$ 90,105,383**	**$ 128,485,986**	**$ 129,311,434**	**$ 188,462,187**	**$ 95,362,995**
Ending Fund Balance	**$ 128,485,986**	**$ 129,311,434**	**$ 188,462,187**	**$ 95,362,995**	**$ 9,041,413**

CENTRAL OHIO TRANSIT AUTHORITY
2025 Budget & Operating Plan

	2025 Approved Budget	2026 Projected Budget	2027 Projected Budget	2028 Projected Budget	2029 Projected Budget
Operating Revenues:					
Operating Revenues	15,043,000	15,795,150	16,584,908	17,414,153	18,284,861
Sales Tax Levy Receipts	204,820,000	217,786,150	231,320,204	242,820,704	254,321,204
State and Local Assistance	2,550,000	2,601,000	2,653,020	2,732,611	2,814,589
Grant Revenue	8,000,000	6,640,000	6,839,200	7,044,376	7,255,707
Non-Operating Revenues	7,410,000	7,558,200	7,709,364	7,863,551	8,020,822
Total Operating Revenues:	**$ 237,823,000**	**$ 250,380,500**	**$ 265,106,696**	**$ 277,875,395**	**$ 290,697,184**
Operating Expenses:					
Labor	102,173,272	110,874,253	118,015,447	122,736,065	127,645,508
Fringe Benefits	45,977,729	49,893,414	53,106,951	55,762,299	58,550,414
Services	42,600,000	38,299,724	39,491,182	41,465,741	43,539,028
Materials & Supplies	13,276,000	13,866,741	14,466,896	15,190,241	15,949,753
Fuel	6,419,000	7,396,803	8,223,217	8,839,959	9,502,956
Utilities	4,143,000	4,454,736	4,455,445	4,678,217	5,029,084
Purchased Transportation	19,046,000	21,046,000	23,046,000	24,198,300	25,408,215
Other/Misc.	4,188,000	4,177,800	4,199,350	4,325,331	4,455,091
Total Operating Expenses:	**$ 237,823,000**	**$ 250,009,470**	**$ 265,004,489**	**$ 277,196,153**	**$ 290,080,047**
Net Position Increase (Decrease)	**$ (0)**	**$ 371,030**	**$ 102,207**	**$ 679,243**	**$ 617,136**

DELAWARE COUNTY TRANSIT

Strategic Plan

Strategic Plan

Delaware County Transit's "North Star" 2024-2028

DRAFT
February 15, 2024

Acknowledgments

Delaware County Transit

Andy Volenik, Executive Director
Crystal James, Operations Director

Delaware County Transit Board

Ferzan Ahmed, Board Chair
Bruce Luecke
Sarah Huffman
Chase Waits
Beth Easterday Futryk
Ben Turner
Jason Sanson

Consultant Team

Strategic Plan was created by HDR, with support from Foursquare ITP and Murphy Epson

Table of Contents

DELAWARE COUNTY TRANSIT
Strategic Plan

Introduction

Existing Conditions

Table of Contents

Strategic Plan

Engagement

Evaluation and Recommendations

Table of Contents

Introduction

The Delaware County Transit (DCT) Strategic Plan is the culmination of a collaborative planning process that sets a path for the agency's growth over the next five years. The Mid-Ohio Regional Planning Commission (MORPC) expects the region to grow to over 3 million by 2050, with a continual increase in the number of residents and employers who call Delaware County home. As the community grows, its transit needs continue to evolve.

The Strategic Plan includes the following sections:

- **Existing Conditions:** This section creates the baseline of determining gaps and opportunities.
    - Transit Market Assessment: An evaluation of transit potential and transit need.
    - Financial Assessment: An overview of existing financial conditions.
    - Facility Evaluation: An assessment of DCT's existing facility and site.
- **Engagement:** This section highlights the robust collaboration that occurred to educate the community and obtain feedback throughout the plan.
    - Process and Goals: A description of activities to partner with the community.
    - Steering Committee: The group that provided advisory input on needs and solutions.
    - Public Engagement: Highlighting variety of in-person and online public involvement.
- **Evaluation and Recommendations:** This section explains the analysis that informed the recommendations.
    - Service Expansion Analysis: Combines findings from service analysis, market analysis, and engagement to examine opportunities.
    - Maintenance Facility Analysis: Describes the need for a larger facility to store, maintain, and dispatch the larger fleet of the future.
    - Service Expansion Funding Analysis: Examines additional funding to be identified.
    - Recommendations: Identifies Service, Capital Improvements, Policy, and Funding.
    - Implementation Plan and Timeline: Highlights the next five years of phased launch of

The Strategic Transit Plan highlights the path forward through a logical and cohesive method. At the same time, the plan sets the stage for DCT to be flexible and nimble in a time of technological change and rapid growth. As partnership opportunities arise, the Strategic Plan highlights that DCT will be ready to collaborate on innovative approaches to regional issues.

Ultimately, the planning process established that Delaware County is one of the healthiest, wealthiest, educated, and fastest growing counties in Ohio. As such, Delaware County Transit should plan for investing in a transit system that helps allow all residents to share in Delaware County's opportunities.

DELAWARE COUNTY TRANSIT

Strategic Plan

Existing Conditions

Service, Transit Market, Funding, Fares, and Facility Assessment

DRAFT

State of Delaware County Transit

The following section looks at DCT holistically through service and financial data. The State of DCT creates the backbone of determining gaps and opportunities.

Service Types

In 2020, during the midst of the COVID-19 pandemic, DCT changed its operating model and removed fixed route services. Fixed route service follows a predetermined and unchanged route based on a set schedule with designated stops. This transit mechanism works well in large urban cores where there is one central hub. However, Delaware County's development and car-centric land use showed the need for a different type of transit service to better serve residents. DCT offers two types of transit services, Demand Response and FLEX services. Each service provides customers with a unique experience to cater towards their needs. **Table 1** shows the key differences between the two transit services.

Table 1 *DCT Service Types*

	FLEX for Delaware City	Demand Response
Service Type	On-demand	On-demand
Service Area	For trips within Delaware City	Countywide service
Service Hours	Monday-Friday: 6AM - 6PM	Monday-Friday: 6AM - 6PM
Fare	Standard: $2.00 Discounted: $1.00 for <18 or 65+ or Disabled	0 to 10 miles: $8.00 10 to 20 miles: $17.00 More than 20 miles: $29.00 Out of county medical facilities: $3.80 (per mile)
Ride Booking	Same day or up to two weeks	Schedule at least noon of the business day prior to trip or up to two weeks in advance

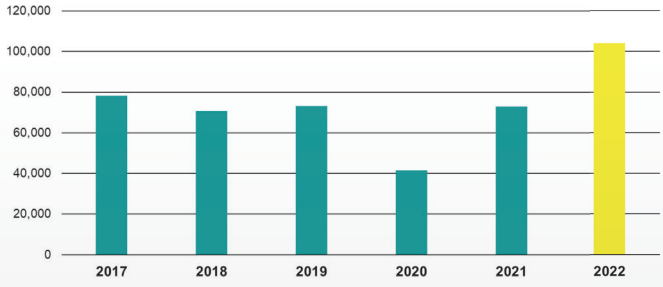
Demand Response is a countywide service that offers customers a door-to-door service. These trips can originate anywhere in the County and provide solutions to customers who need to travel outside of Delaware City. This service also provides those with disabilities or limitations extra care by having an operator assist them to the door of their destination. Most Demand Response trips provide transit to medical appointments, however, users can be taken to any destination. Customers are charged based on a mileage fee and can be taken outside of Delaware County for an additional fee to access other medical institutions.

FLEX service offers an on-demand microtransit experience for customers wanting to travel within Delaware City limits. This service offers customers curb-to-curb services to their destination. In September 2023, DCT invested more into its FLEX service by partnering with Via to modernize its transit offerings by using technology to provide more efficient, flexible, and cost-effective transportation to customers. Customers are now able to schedule a FLEX trip using an App based system, in addition to calling Dispatch and booking a trip. This option allows users a more seamless way to schedule and pay for transit.

Transit Ridership

Transit ridership has grown exceptionally since changing the service structure and removing fixed route services. In 2022, DCT completed 104,000 trips, the largest ridership year since its inception. Since 2020 and the COVID-19 pandemic, DCT has seen an almost 150% increase in ridership, with 85% of these trips beginning and ending within Delaware City.

Figure *1 DCT Annual Ridership*



Nationally, DCT is outperforming its peers in retaining and gaining ridership compared to pre-pandemic. DCT is also not experiencing similar service operation hardships, such as an operator shortage, as the other nearby public transit agencies have reported. Several reasons could attribute to these differences, including:

- Continued growth in the community as Delaware County continues to grow in population and job opportunities.
- Change in less traditional transit services and more demand response.
- Reputation of safe, clean, and dependable transit services.
- Continued loyal, friendly, and helpful staff throughout the years.

Delaware County residents use transit services for a multitude of purposes. Each transit service provides a unique experience to the customer, with preferences of transit options for specific trip purposes. **Table 2** shows that transit is used for adult day care services, education, employment, governmental agency access, medical appointments, various services, shopping, and social engagements. These purposes provide essential access to individuals who need accessible, affordable, and convenient transportation options. Based on the total trips between Demand Response and FLEX, FLEX services account for 75% of DCT ridership.

Table 2 *Trip Purpose*

Trip Purpose	Demand Response	*FLEX*
Adult daycare	1791	71
Education	145	6053
Employment	3186	22943
Government Agency	19	215
Medical	14013	8720
Service	1038	8283
Shopping	1166	23329
Social	3180	9073
Total	24538	78687

Source: DCT, 2022 (Annual)

Demand Response services provide more trips to medical appointments as it aids the customer to the door, rather than the curb like FLEX service. The cost for Demand Response is also more than the FLEX fixed rate. FLEX, as its more flexible in terms of booking, provides the most trips for shopping and those accessing employment centers within the City of Delaware.

Performance Measures

DCT creates performance metrics to measure the quality of service they provide to their customers. These metrics provide a target and goal for each category and allow DCT to adjust operations and administrative policies to achieve these set goals. A goal is defined as the ideal level of performance for each metric. This is the performance level that DCT administration, operators, and maintenance employees strive for to provide optimal service for Delaware County. The target range is the level of performance that is acceptable for operations. DCT annual performance reviews are linked to performance measures.

Performance measures are determined annually by the Board of Trustees to keep DCT operations on track to provide reliable, safe, and effective transportation solutions. These are reviewed on an annual basis to keep DCT accountable.

The following table shows how the 2023 Performance Metrics aligned with the operations that DCT performed in the first half of 2023. DCT either met or exceeded six of the eight metrics.

Metric	
Customer Satisfaction	Customer satisfaction is measured in the number of compliments and complaints. The target is to receive 2 or more compliments, with a goal of 2.1 monthly. For complaints, the target is to receive less than 1 and a goal of 0.5.
On-time Performance	On-time performance is measured for both FLEX and Demand Response using the same target and goals. The target is 90% on-time performance, with a goal of 95%.
Response Time /Pick Up	Response Time is only measured for FLEX services, with a target of being under 20-minute pickups and a goal of 15 minutes.
Ride Time	Ride Time is captured for FLEX services. The target ride time is 15 minutes, with a goal of 12 minutes. The faster the trip leads to more productivity for the transit system.
Denials	DCT prides itself on providing every customer a trip. DCT has 0% denials for the first 5 months of 2023 which hits their goal of 0%.
Passengers per Hour	The more passengers per hour makes the transit trip more economically feasible. DCT has two different goals based on FLEX and demand response services. Each service at a minimum has hit its target but only two months for demand response to achieve its goal of more than 1.9 passengers per hour. Providing more rides at the same time reduces costs and serves more passengers.
Accidents	Accidents are measured for those that are “At Fault”. DCT has a combined target of 1.8 and a goal of 0.5 for FLEX and On Demand services.
Vehicle Reliability	Vehicle Reliability tracks the number of road calls for maintenance requests for safe vehicle operations. The combined target is 4.5 and a goal of 4 for both FLEX and On Demand services.

Service Performance

Ridership on the DCT Transit System has been growing steadily. Service performance relates to annual ridership, annual revenue hours, and annual revenue miles and can measure and evaluate the performance and financial aspects of transit services.

Revenue miles refers to the total number of miles that revenue-generating transit vehicles travel while in service. These miles include all miles driven by buses that are available to passengers. This metric assesses the extent of service coverage and the utilization of transit resources within the system.

Revenue hours represent the total number of hours that revenue-generating transit vehicles are operating, providing service to passengers. This includes time spent on routes, making stops, and being available for passenger use. This metric evaluates the efficiency of operations and ensures that service levels meet the demands of the community.

Tracking these metrics allows transit agencies to make data-driven decisions to optimize service, allocate resources efficiently, and improve the overall quality of public transit for riders. DCT annual 2022 statistics for demand response and FLEX service are shown in **Table 3**.

Table 3 *Annual Statistics for Demand Response and FLEX Services*

	Annual* Ridership	Annual Revenue Hours	Annual Revenue Miles
Demand Response	25,471	12,940	260,185
FLEX	78,693	20,453	294,742

*Annual statistics are based on data from 2022.

To continue evaluating the productivity of transit services, **Table 4** shows the average daily ridership, passengers per hour, average wait time, average trip duration, and average trip length between the two services. With the combination of higher ridership of three more passengers per hour with a shorter trip duration by an average of 9.4 minutes, the FLEX service provides greater productivity compared to the County-wide Demand Response service.

Table 4 *Productivity of Demand Response and FLEX Service**

	Avg. Daily Ridership	Passengers Per Hour	Avg. Wait Time (min.)	Avg. Trip Duration (min.)	Avg.Trip Length (miles)
Demand Response	76.1	2.8	3.3**	21.7	10.3
FLEX	370.1	5.8	11.2	12.3	2.6

* All figures in Table 4 represent averages from July, August, and September of 2022.
**Represents the average difference between scheduled pickup time and actual pickup time.

Demand Response Ridership

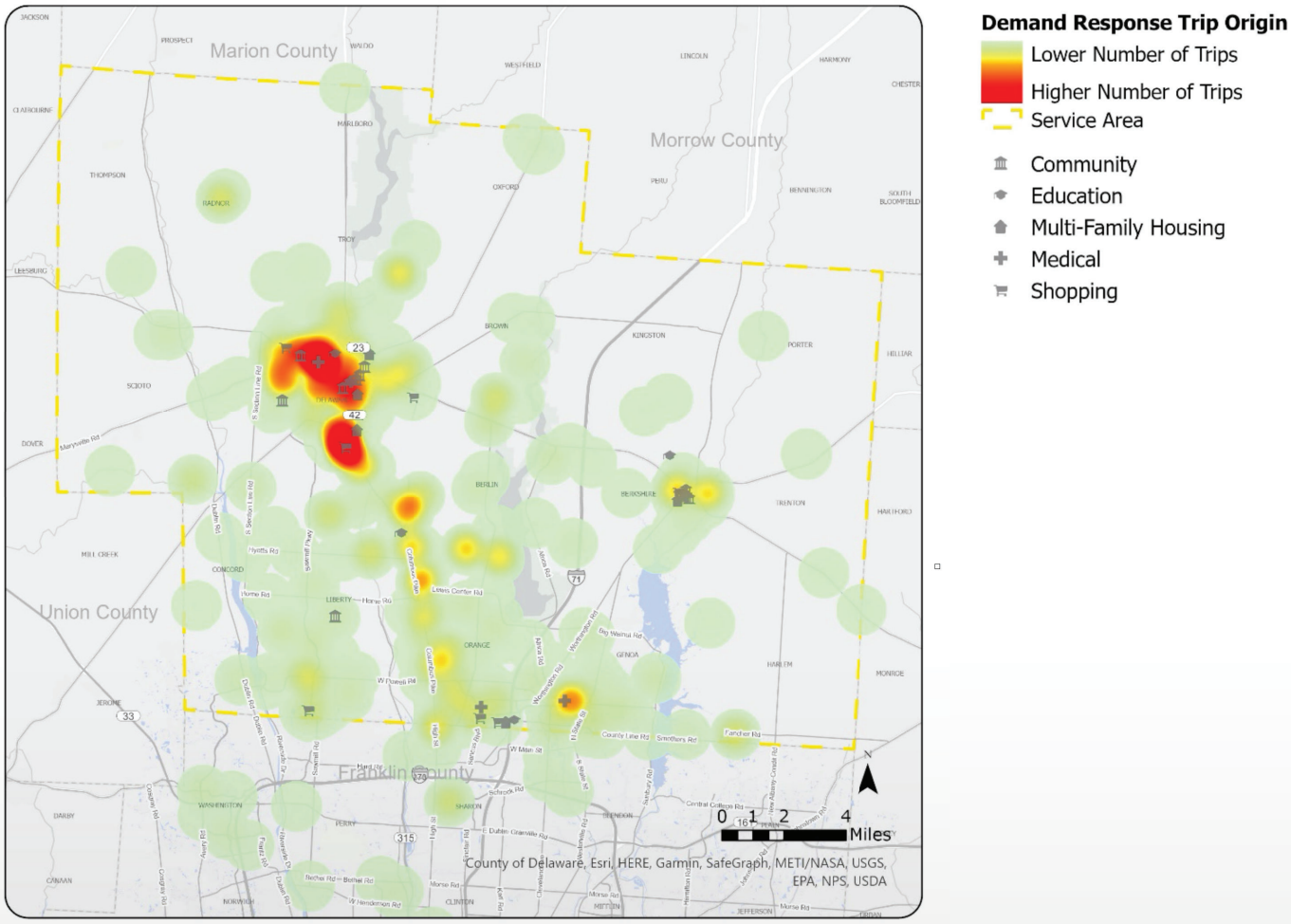
Many riders use both FLEX and Demand Response services. Some riders prefer Demand Response service even for trips that begin and end in Delaware City because the service offers more door-to-door assistance compared to the curb-to-curb service model of FLEX. The data shows that 37.5 percent of Demand Response trips both begin and end in Delaware City.

Figure 2 shows a ridership heatmap of all Demand Response trip origins for the months of July, August, and September 2022. Only trip origins are shown because nearly all trip destinations are also trip origins for return trips.

The highest concentrations of Demand Response trip origins are in the vicinity of OhioHealth Grady Memorial Hospital, with a second large concentration in the south of the city near Walmart, Kroger, and other retail destinations at Delaware Community Plaza. There are other significant concentrations of Demand Response ridership activity including:

- Ohio Wesleyan University
- US-23 corridor between Delaware City and the Polaris area
- Downtown Sunbury
- OhioHealth Westerville
- Powell Crossing Shopping Center in Powell

Figure 2 *Trip Origins – Demand Response*



Demand Response ridership peaks during the late morning, with an average of 9.1 passenger trips per hour in the 10:00 a.m. hour of operation. **Figure 3** shows average ridership by hour on demand response, along with the minimum and maximum DCT has seen. Understanding where peak ridership is during service hours helps DCT allocate resources to meet that demand. Similarly, the peak vehicle count for Demand Response service occurs in the late morning and early afternoon hours as shown in **Figure 4**, with five peak vehicles to accommodate the peak ridership times.

Figure 3 *Average Ridership by Hour – Demand Response*

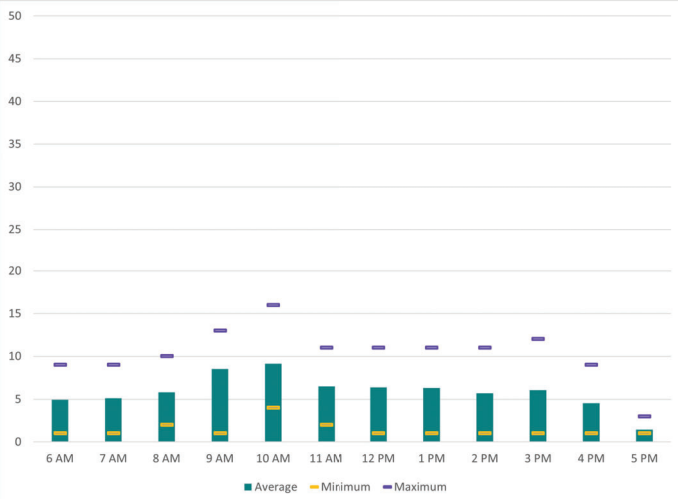
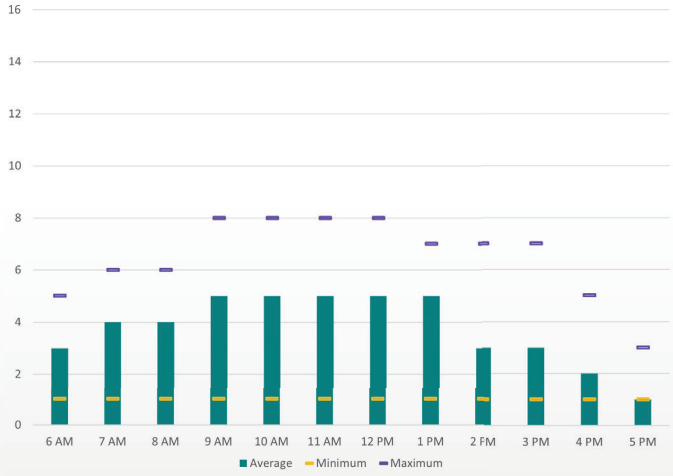
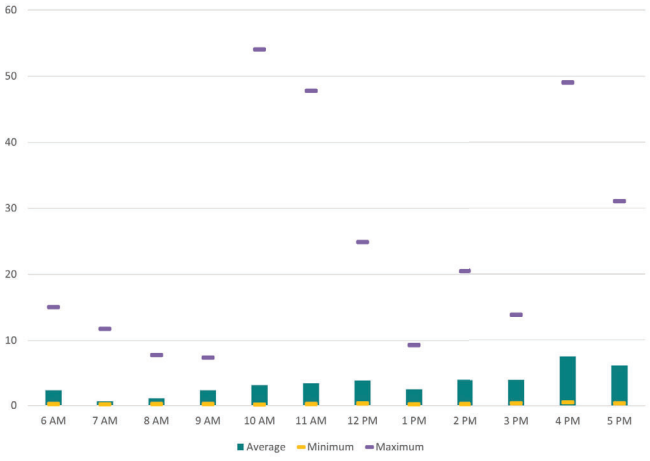


Figure 4 *Average Vehicle Count by Hour – Demand Response*



Demand Response trips must be booked at least a day in advance. **Figure 5** shows the average difference between scheduled pick-up times and actual pick-up times for Demand Response service. This difference is less than 10 minutes. These pick-ups exceed DCT target and goals for service performance metrics and show an excellence to their customer service and on-time performance.

Figure 5 *Average Difference in Scheduled vs. Actual Pickup Time by Hour – Demand Response*

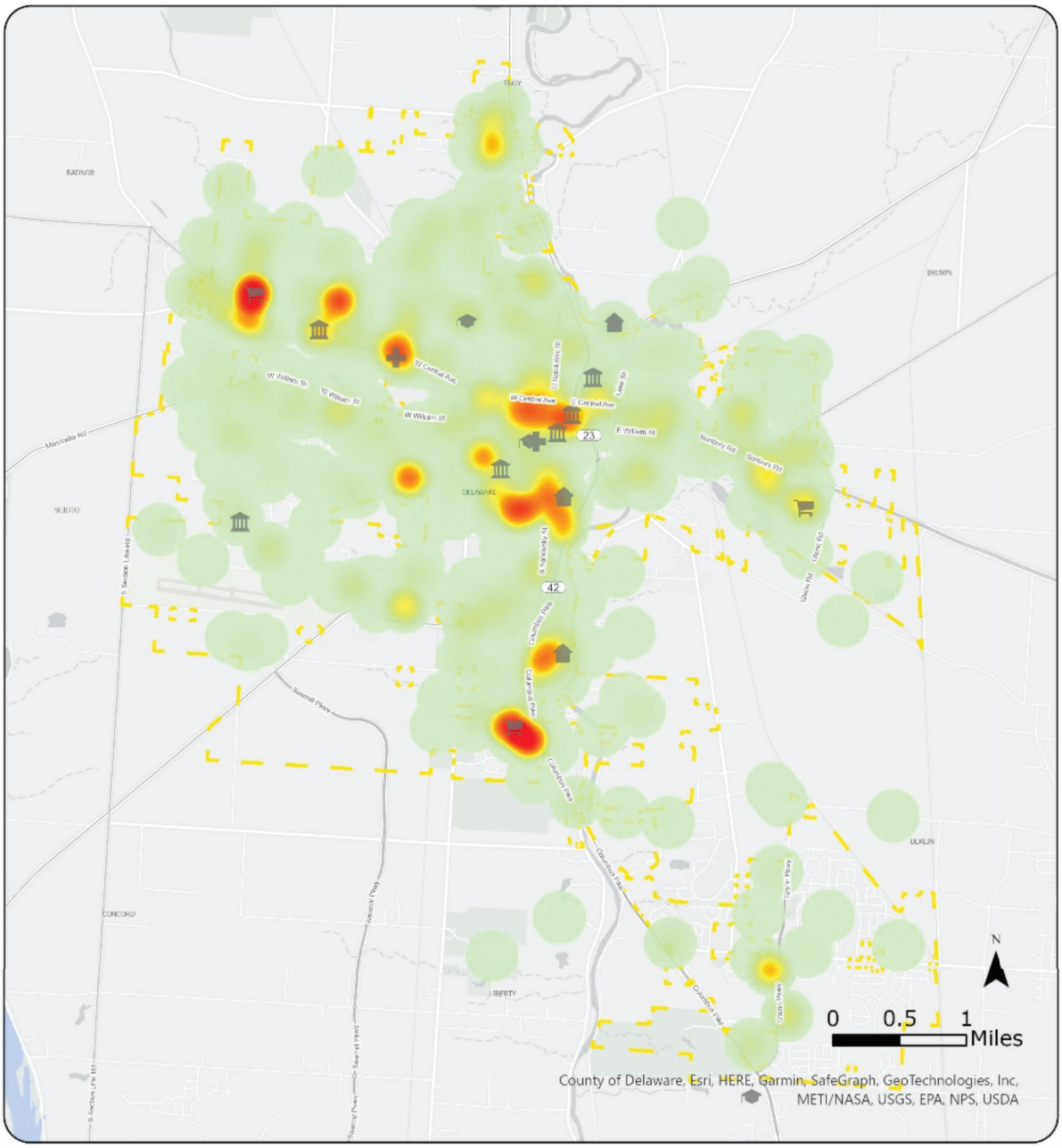


FLEX Service Ridership Details

FLEX Service offers riders a curb-to-curb transit service from their origin and to their destination within Delaware City. Similar to Demand Response, FLEX service has heavy concentrations of ridership activity in the vicinity of OhioHealth Grady Memorial Hospital and at Delaware Community Plaza for shopping. In addition, FLEX sees strong ridership at the following locations as shown on **Figure 6**:

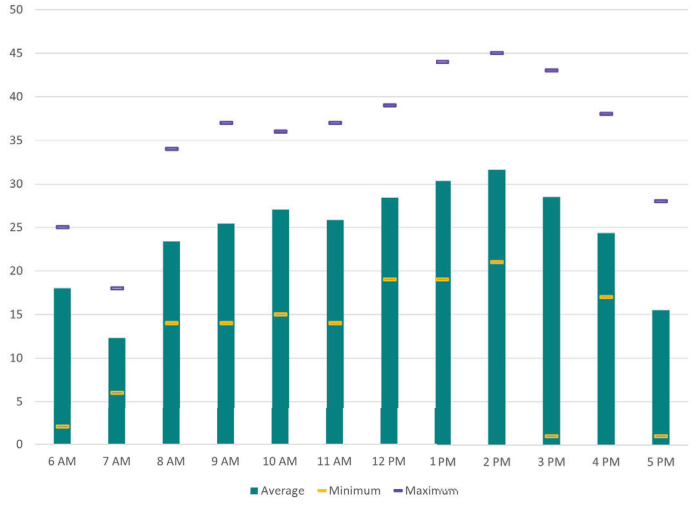
- Kroger on W. Central Avenue
- Muirwood Village
- Downtown Delaware City
- Londontown Apartments
- Homestead Mobile Home Park
- Goodwill / Habitat for Humanity ReStore
- Glennwood Commons.

Figure 6 *Trip Origins – FLEX Service in Delaware City*



FLEX Service accounts for 75% of the annual ridership. The FLEX ridership exceeds twenty-five passengers per hour from 9:00 a.m. until 3:00 p.m., half of the amount of time the service is in operation for the day. The highest ridership demand is around 2:00 p.m., with an average of thirty-two passengers per hour, as shown in **Figure 7.** At the start of the revenue service, ridership starts with an average of eighteen passengers per hour at 6 a.m., suggesting that an earlier demand for service is likely to benefit those who utilize FLEX services. Overall, ridership remains consistent throughout the day for this service type. With the introduction of Via, this ridership could increase with new demand and an easier way to schedule through a smartphone device.

Figure 7 *Average Monthly Ridership by Hour – FLEX Service*



The peak vehicle count for FLEX service occurs between 12:00 p.m. and 2:00 p.m., with ten vehicles in service concurrently, as shown in **Figure 8**. However, as ridership demand is highest at 2:00 p.m, the average vehicle count begins to drop, while the average wait time for service begins to rise and peaks at 3:00 p.m. with an average of 13.2 minutes between trip booking and pick-up. This could be due to a variety of factors, such as shift changes and operator availability. However, this wait time is still well below DCT's maximum wait time target of 30 minutes. Wait times are an important factor to consider for FLEX Service as it needs to be efficient in order for the rider to consider using the on-demand service. DCT has a maximum wait time target of 30 minutes, and all trips average wait times are way below this target goal as seen in **Figure 9.**

Figure 8 *Average Vehicle Count by Hour – FLEX Services*

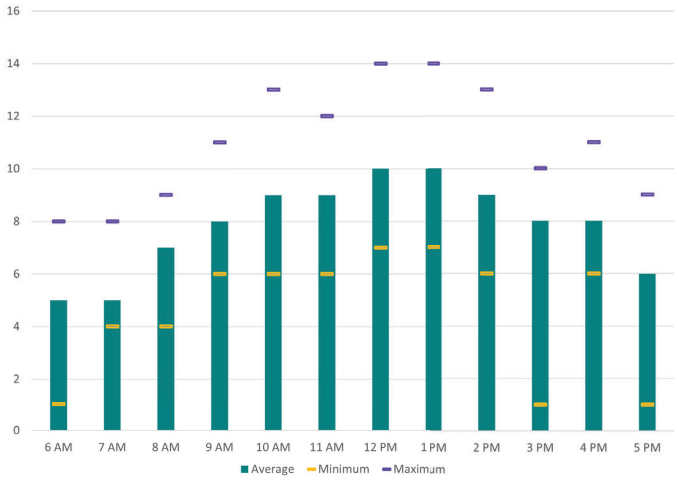
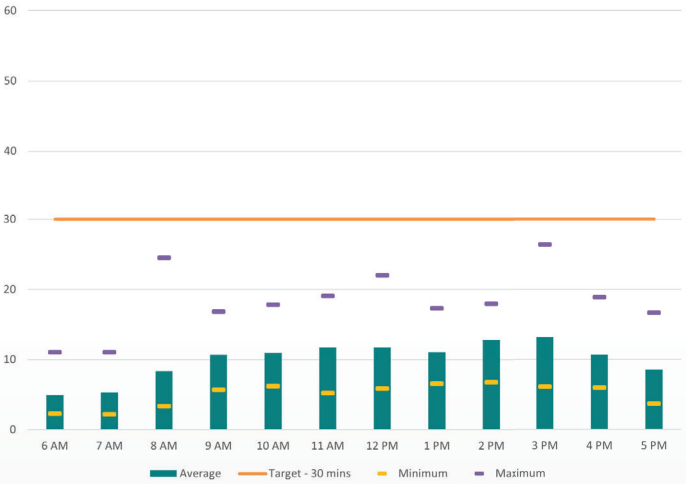


Figure 9 *Average Wait Time by Hour – FLEX Service*



Transit Market Assessment

Density determines the effectiveness and efficiency of public transportation. Places with higher concentrations of people and/or jobs tend to have higher transit ridership. At the same time, most transit agencies have a mandate to provide comprehensive service in the communities they serve and to provide mobility for residents with no other means of transportation. The purpose of this Market Analysis is to both assess how well the current DCT service aligns with demand and to identify potential opportunities for service expansion.

The Transit Market Assessment consists of two key components: Transit Potential and Transit Need. Transit Potential is an analysis of the overall population and employment density of Delaware County, while Transit Need focuses on specific socio-economic characteristics such as income, automobile availability, age, and disability status that are indicative of a higher propensity to use transit. As transit use is influenced by land use and the built environment, the Market Assessment also highlights the locations of key activity centers such as multifamily housing, major retail, medical facilities, educational institutions, and civic and community centers, that tend to be strong transit ridership generators.

Transit Potential

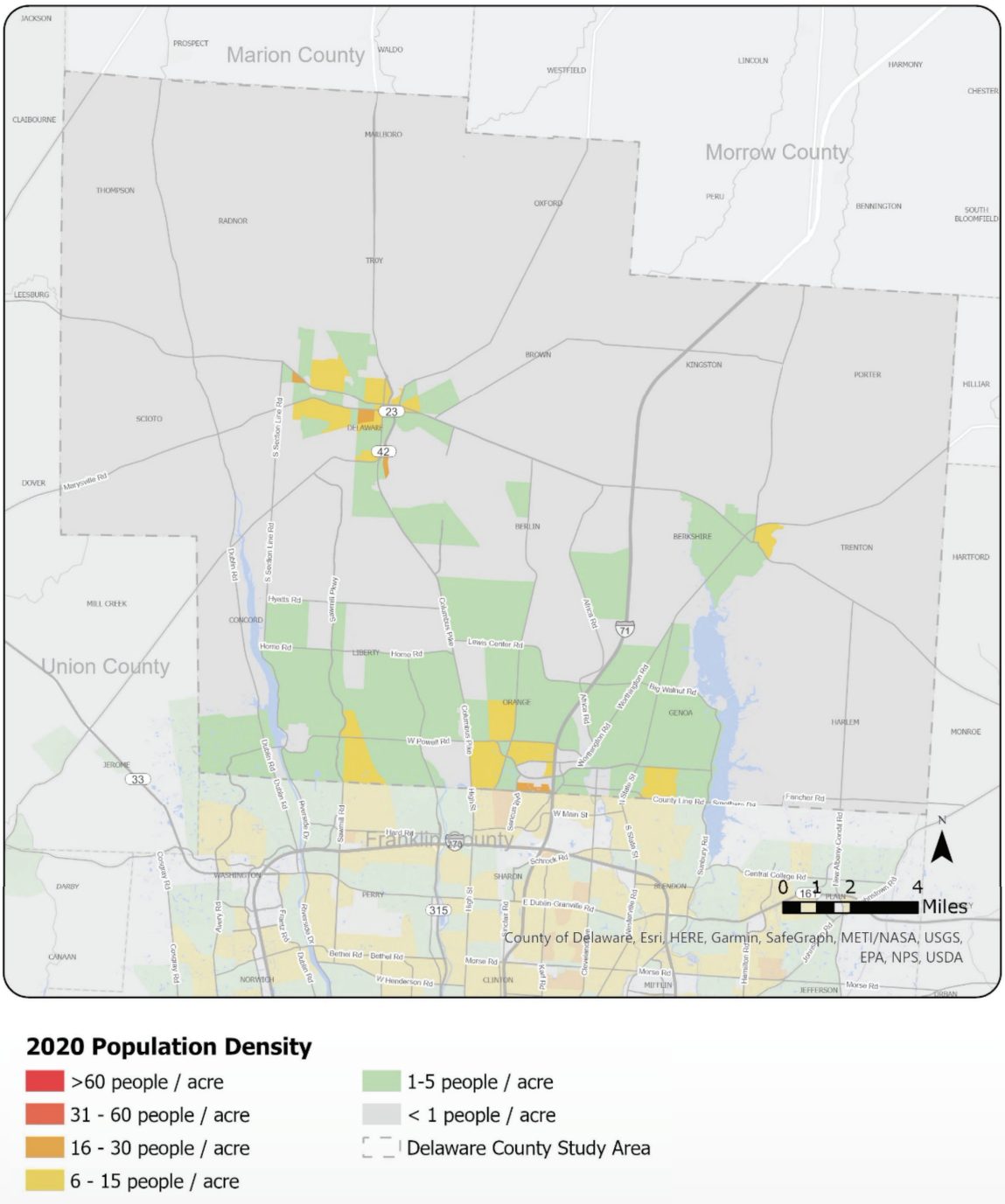
Transit service is generally the most effective and efficient in areas with high concentrations of residents and/or jobs. The transit potential of an area can be assessed by examining the combined population and employment density of the area. The Transit Potential analysis described below is based on data provided by the Mid-Ohio Regional Planning Commission (MORPC) and is aggregated at the Traffic Analysis Zone (TAZ) level. The data is the most recent provided by MORPC, however, does not include larger scale developments that have recently been announced, such as the $20 Billion Intel Plant being built in Licking County and expected to spur additional economic growth around the eastern area of Delaware County.

Population Density

Population density is a measure of the number of people living per acre of land. This is a demographic statistic used to understand the concentration of a population within a particular region. High population density implies a greater concentration of people in an area, while low population density indicates a sparser distribution of population.

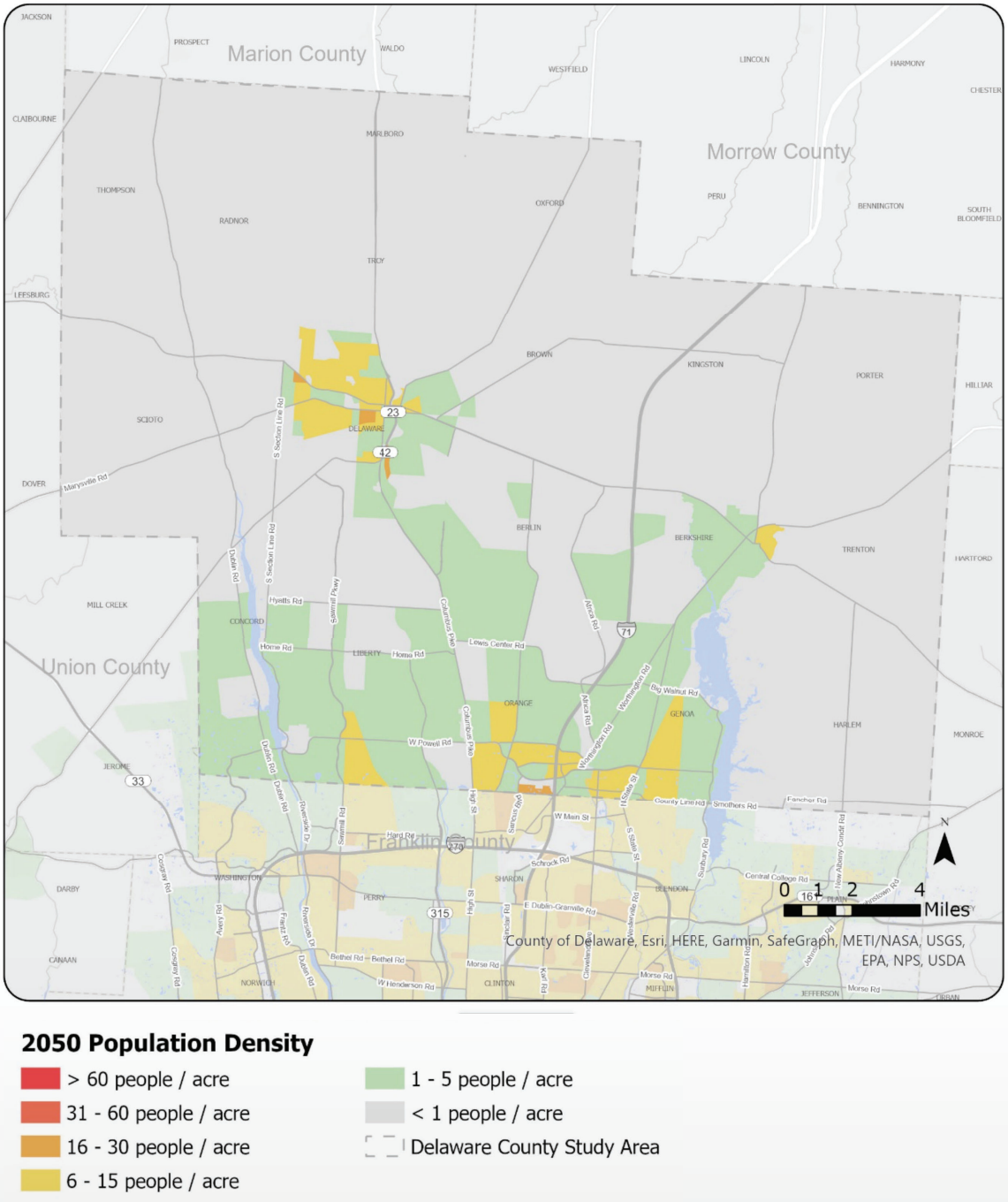
Figure 10 shows the number of people per acre in 2020 by TAZ across Delaware County. MORPC updates this data every four years. Pockets of higher population density of more than five people per acre can be seen in Delaware City, Sunbury, and across the southern tier of the County, near the border with Franklin County. The highest population densities (16 – 30 people per acre) can be found in the Polaris area and along Stafford Road, West William Street, and West Central Avenue in Delaware City.

Figure 10 *2020 Population Density by TAZ*



It is important to consider population densities for future years to understand the growth pattern of the County. **Figure 11** shows the population density of Delaware County by TAZ for forecast year 2050, based on MORPC projections. By 2050, most of Delaware City and west of US-23 is projected to have population densities above five people per acre. Similar densities are also expected to emerge in the neighborhoods surrounding Westerville Central High School through the Sunbury region.

Figure 11 *2050 Population Density by TAZ*



Employment Density

Employment density is the concentration of employment opportunities within an acre. The higher the employment density suggests that the area has a significant number of job opportunities, while lower employment density indicates a scarcity of employment opportunities. This factor is important to understand commuting patterns, job access, and overall economic vitality of the Delaware region.

Figures 12 - 15 show 2020 employment density in Delaware County by TAZ. This data, which is also provided by MORPC, shows small clusters of higher employment density of more than five jobs per acre in Delaware City, and along the US-23 corridor. However, the highest employment densities in the county are found in the Polaris area, east and west of I-71.

Figure 12 *2020 Employment Density by TAZ*

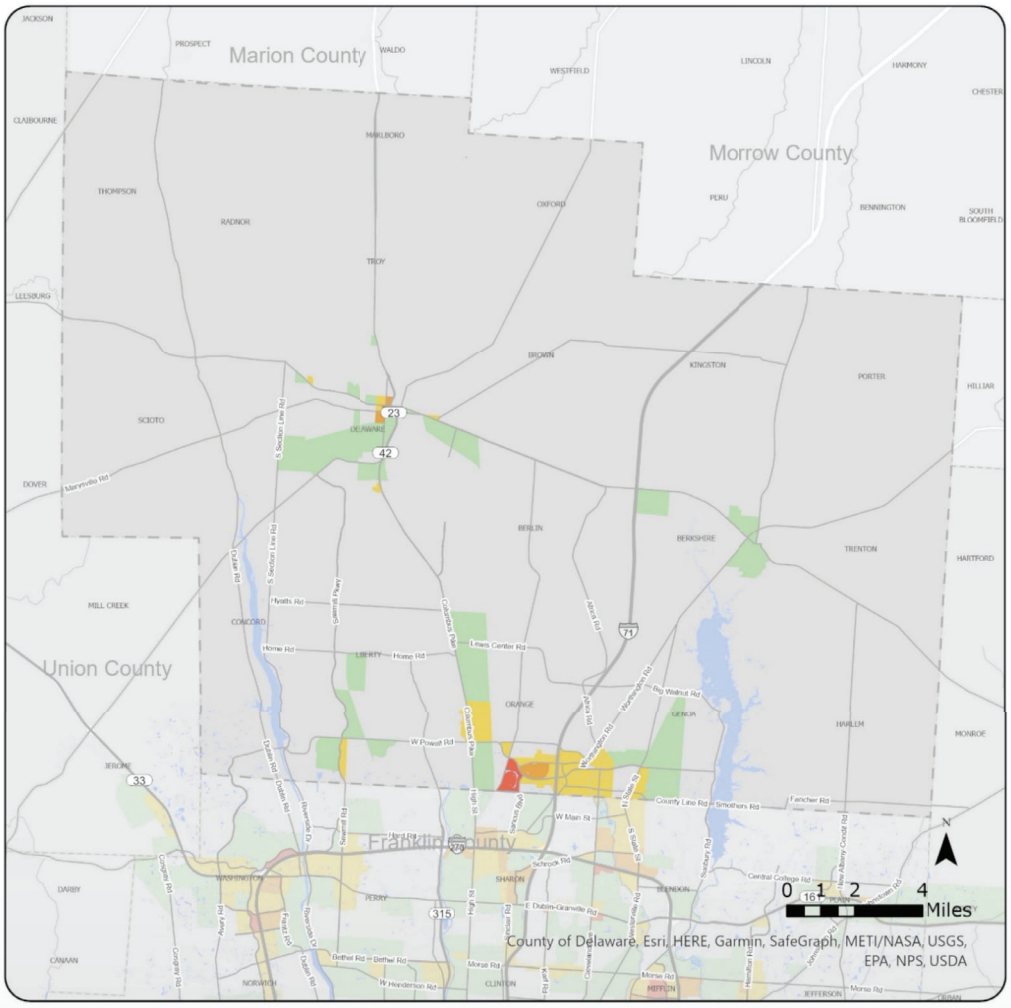
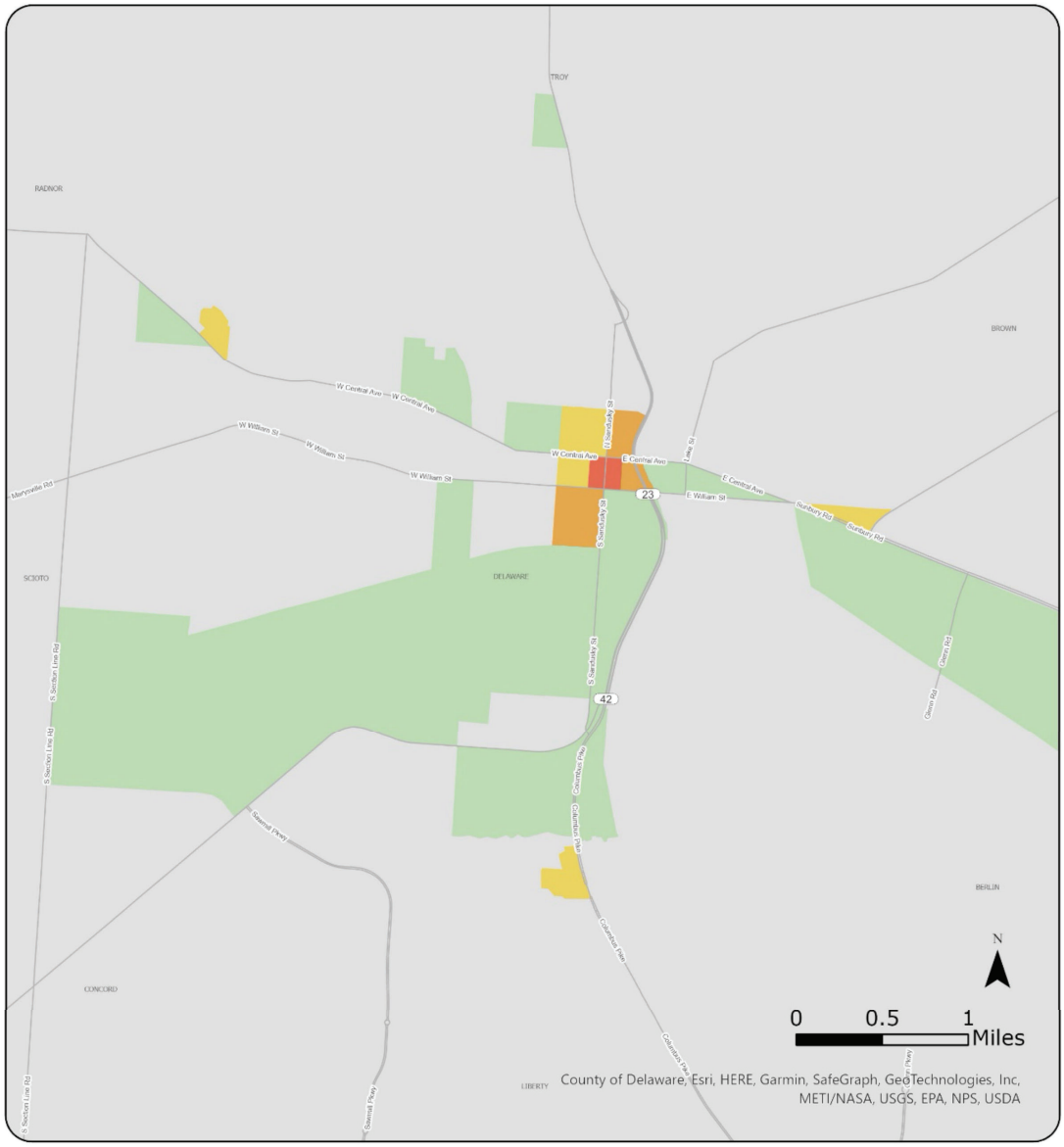


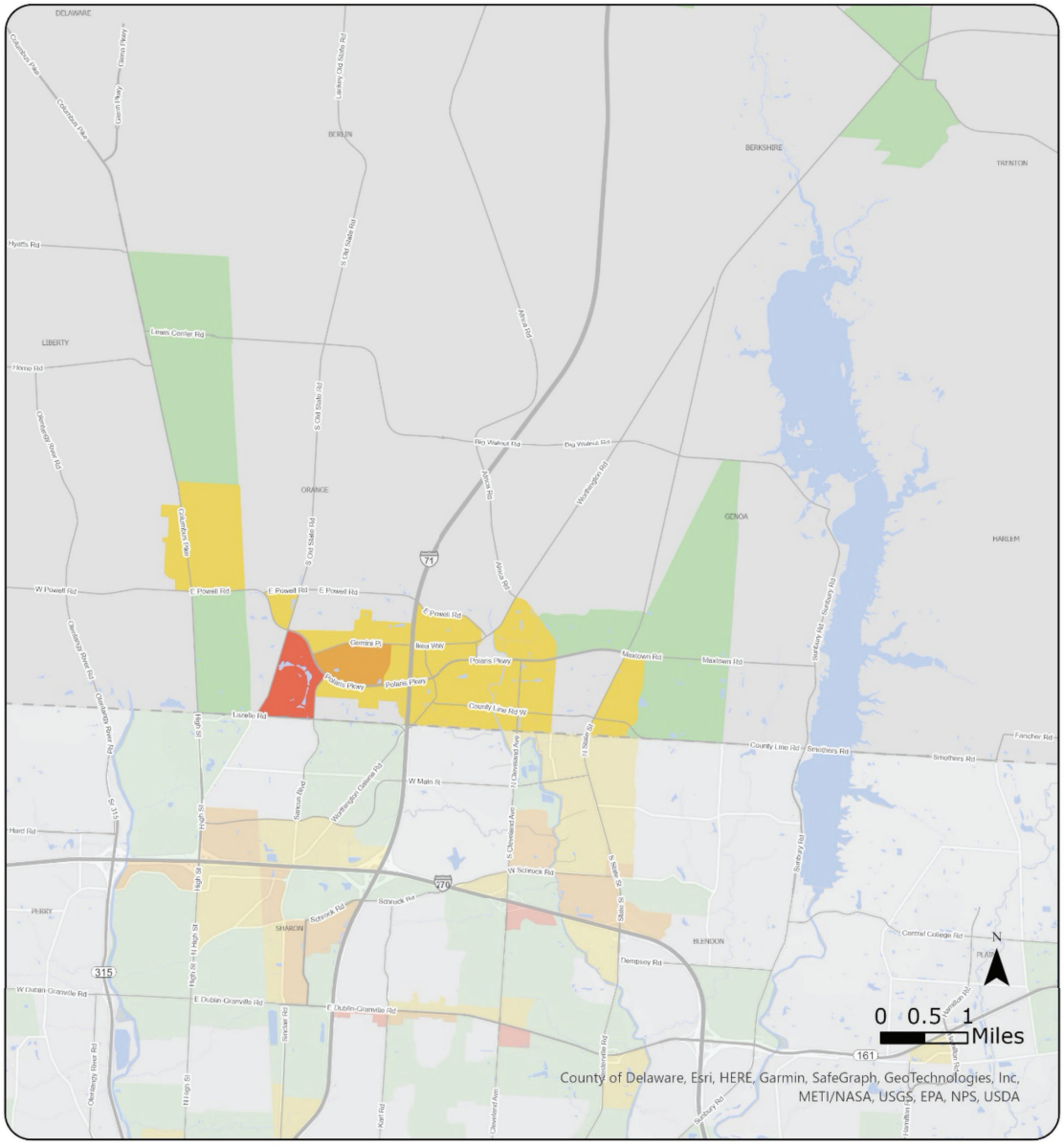
Figure 13 *2020 Employment Density in Delaware City*



2020 Employment Density

- > 60 jobs / acre
- 31 - 60 jobs / acre
- 16 - 30 jobs / acre
- 6 - 15 jobs / acre
- 1 - 5 jobs / acre
- < 1 job / acre
- Delaware County Study Area

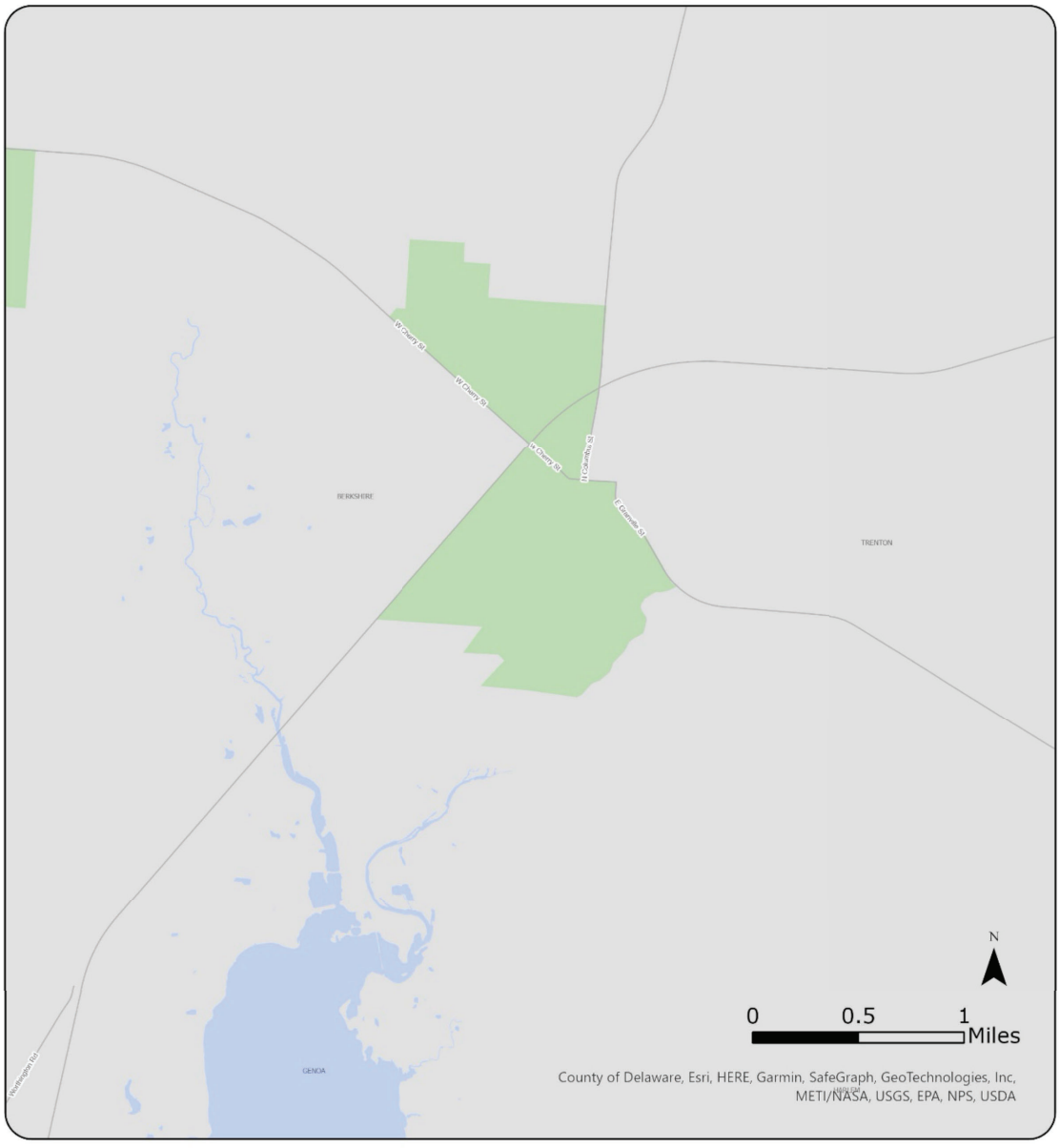
Figure 14 *2020 Employment Density for Southern Delaware County*



2020 Employment Density

- > 60 jobs / acre
- 31 - 60 jobs / acre
- 16 - 30 jobs / acre
- 6 - 15 jobs / acre
- 1 - 5 jobs / acre
- < 1 job / acre
- Delaware County Study Area

Figure 15 *2020 Employment Density for Sunbury*



MORPC's projected 2050 employment density, shown in **Figures 16 -19,** indicates that job growth will continue in and around Delaware City, as well as the Polaris area which will see higher concentrations of jobs in the same locations as they are found now. This type of growth is helpful for transit planning as investment in these areas will continue into the future.

Figure 16 *2050 Employment Density by TAZ*

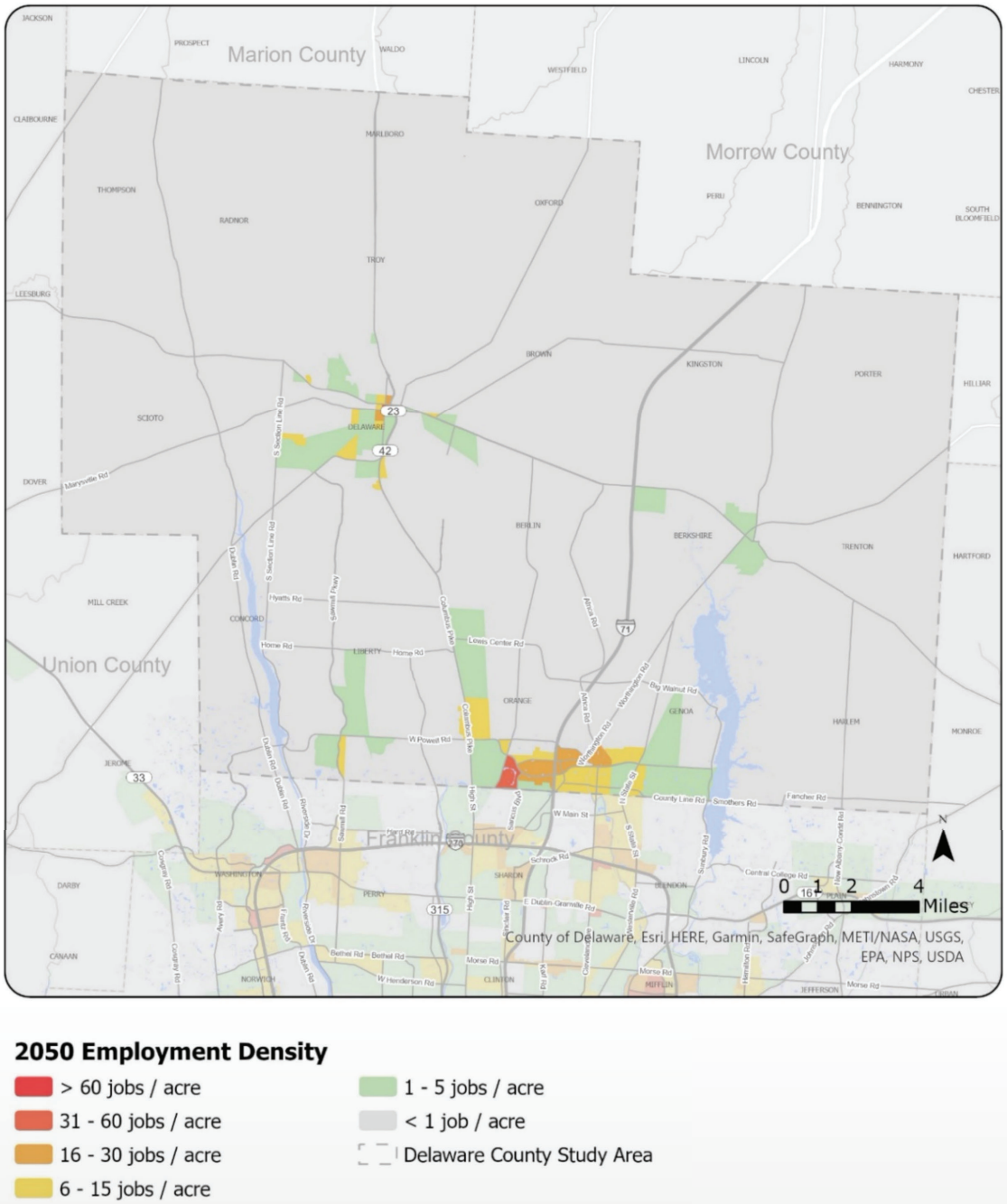


Figure 17 *2050 Employment Density for Delaware City*

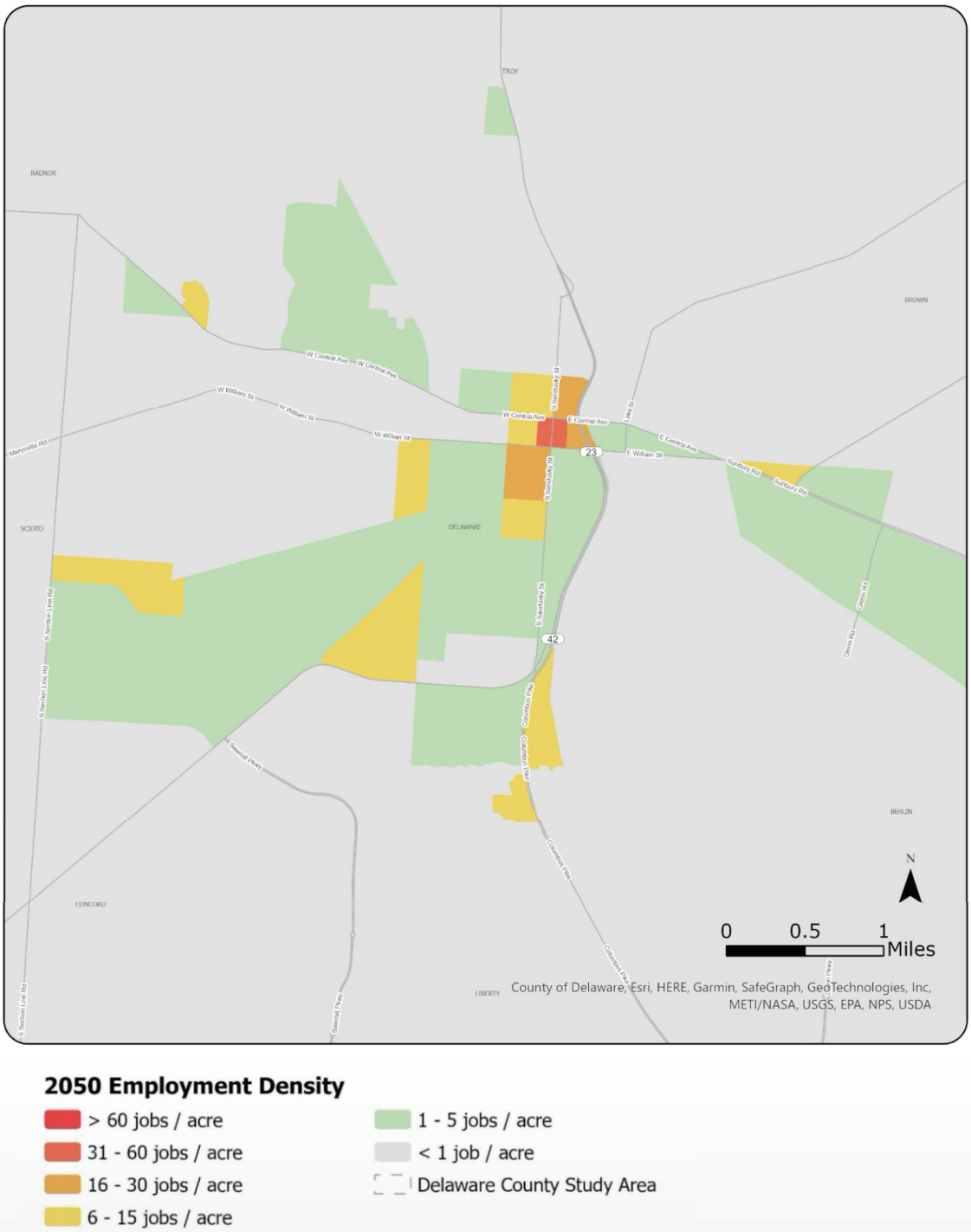


Figure 18 *2050 Employment Density for Southern Delaware County*

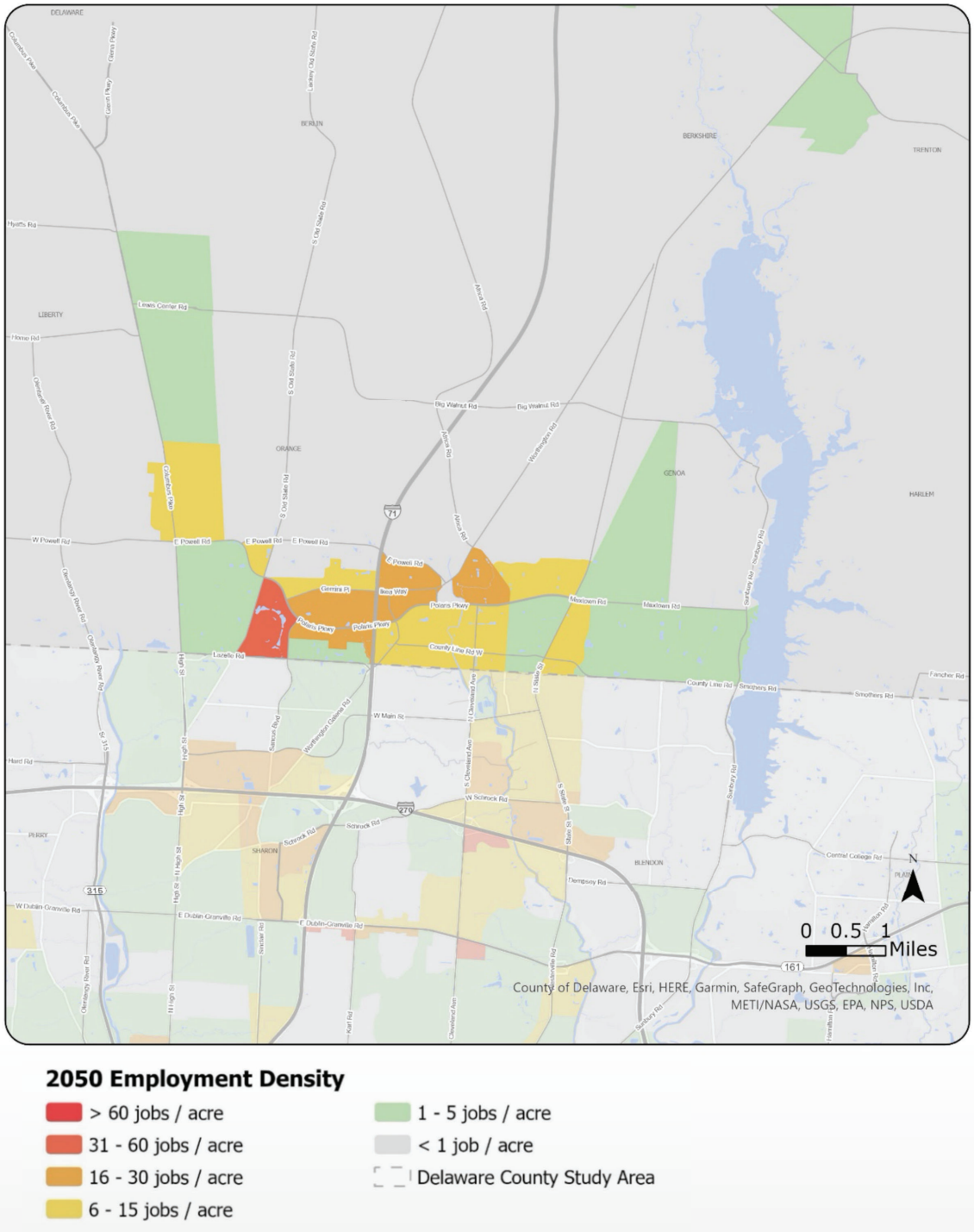
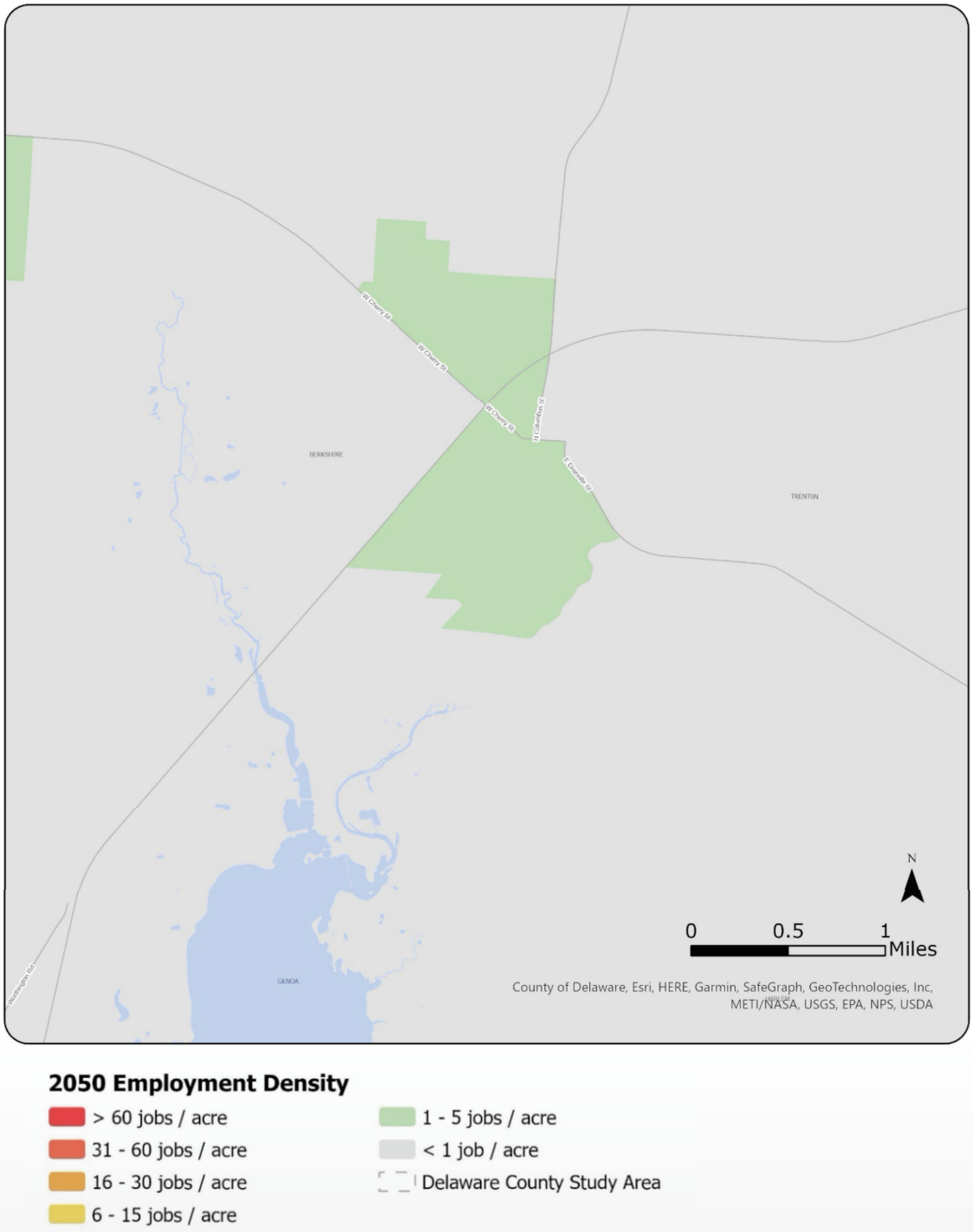


Figure 19 *2050 Employment Density for Sunbury*



Transit Potential

Transit Potential describes the combined population and employment densities. Areas with the largest transit potential are those that have higher concentrations of populations and jobs. These areas include Delaware City, City of Sunbury, and the southern tier of the County, including City of Powell, Polaris area, and City of Westerville. **Figure 20 through Figure 27** show transit potential from 2020 and 2050. Looking forward to 2050, Delaware will continue to have high transit populations in more parts of Sunbury, along the east and west of I-71, and along the Franklin/Delaware County border near Polaris.

Figure 20 *2020 Transit Potential for Delaware County*

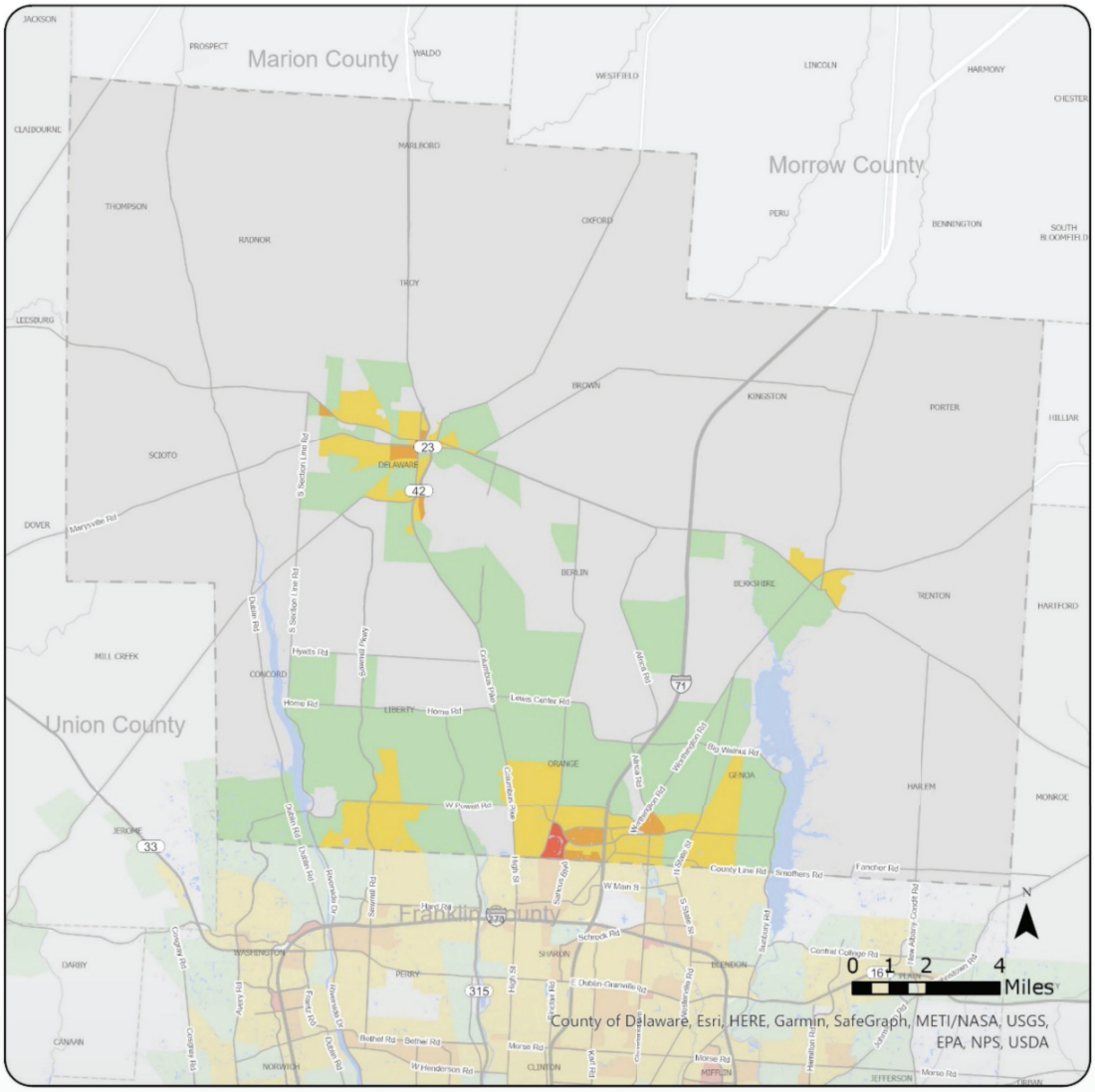
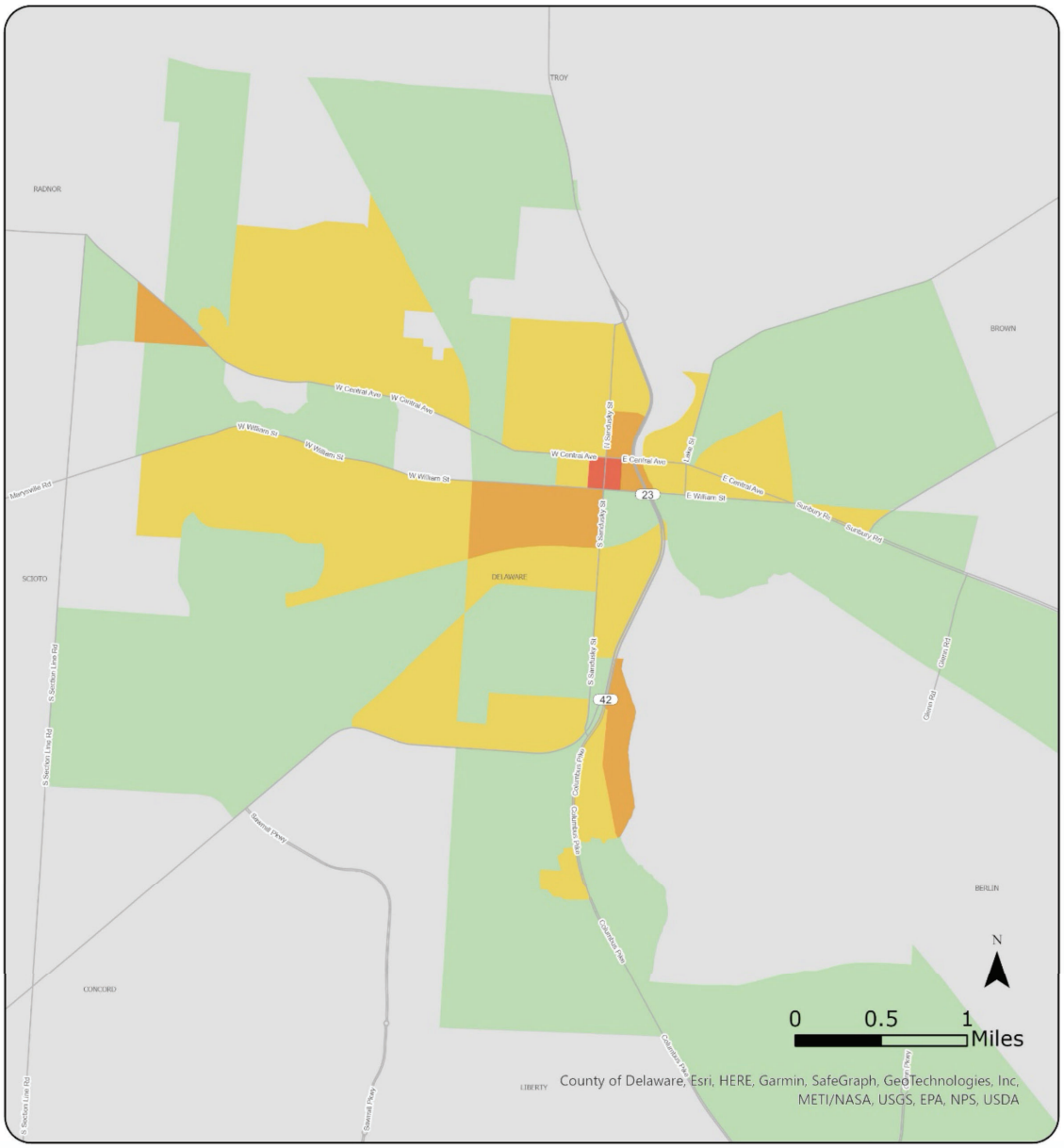


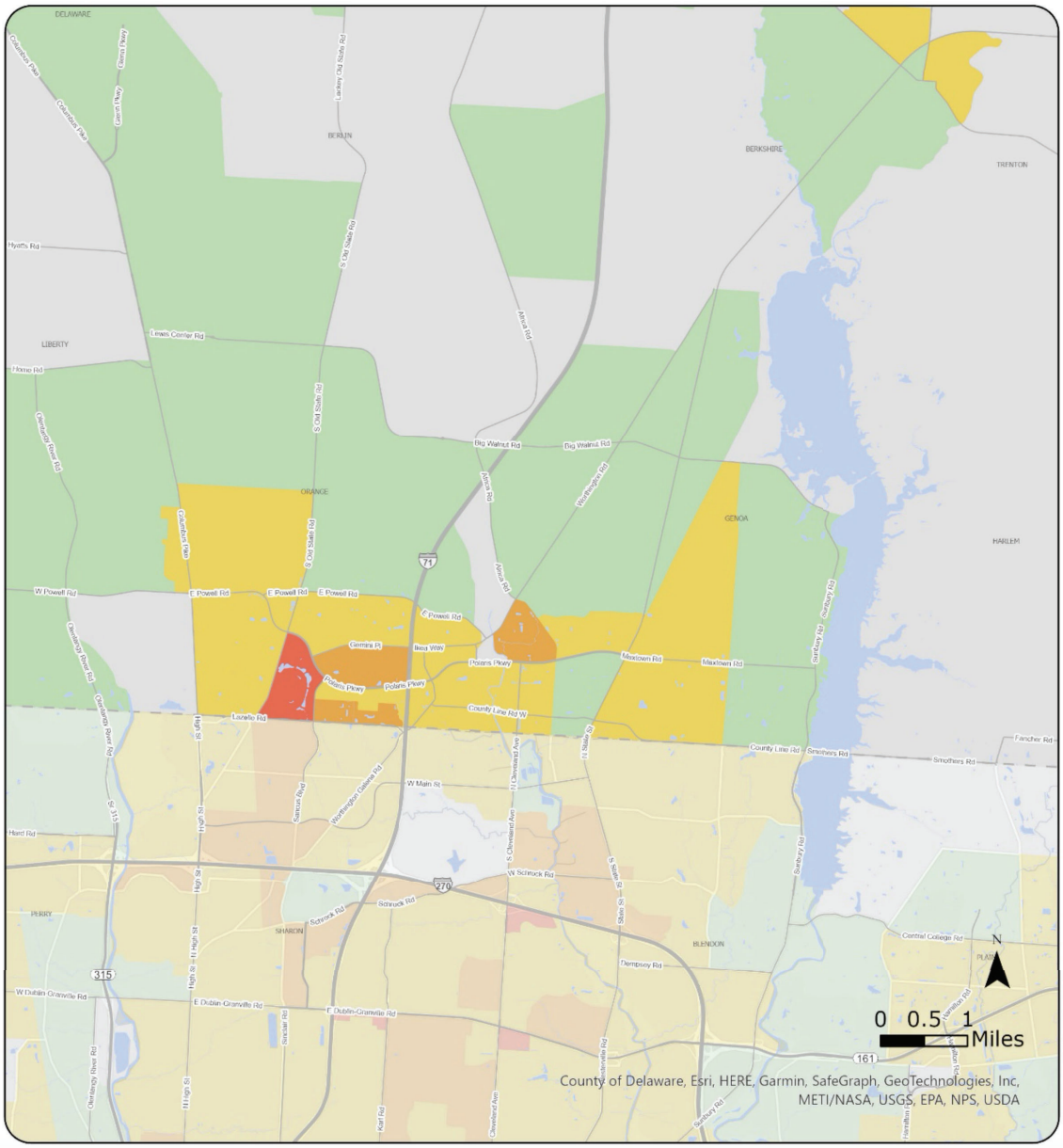
Figure 21 *2020 Transit Potential for Delaware City*



2020 Transit Potential

- > 60 jobs + people / acre
- 31 - 60 jobs + people / acre
- 16 - 30 jobs + people / acre
- 6 - 15 jobs + people / acre
- 1 - 5 jobs + people / acre
- < 1 jobs + people / acre
- Delaware County Study Area

Figure 22 *2020 Transit Potential for Southern Delaware County*



2020 Transit Potential

- > 60 jobs + people / acre
- 31 - 60 jobs + people / acre
- 16 - 30 jobs + people / acre
- 6 - 15 jobs + people / acre
- 1 - 5 jobs + people / acre
- < 1 jobs + people / acre
- Delaware County Study Area

Figure 23 *2020 Transit Potential for Sunbury*

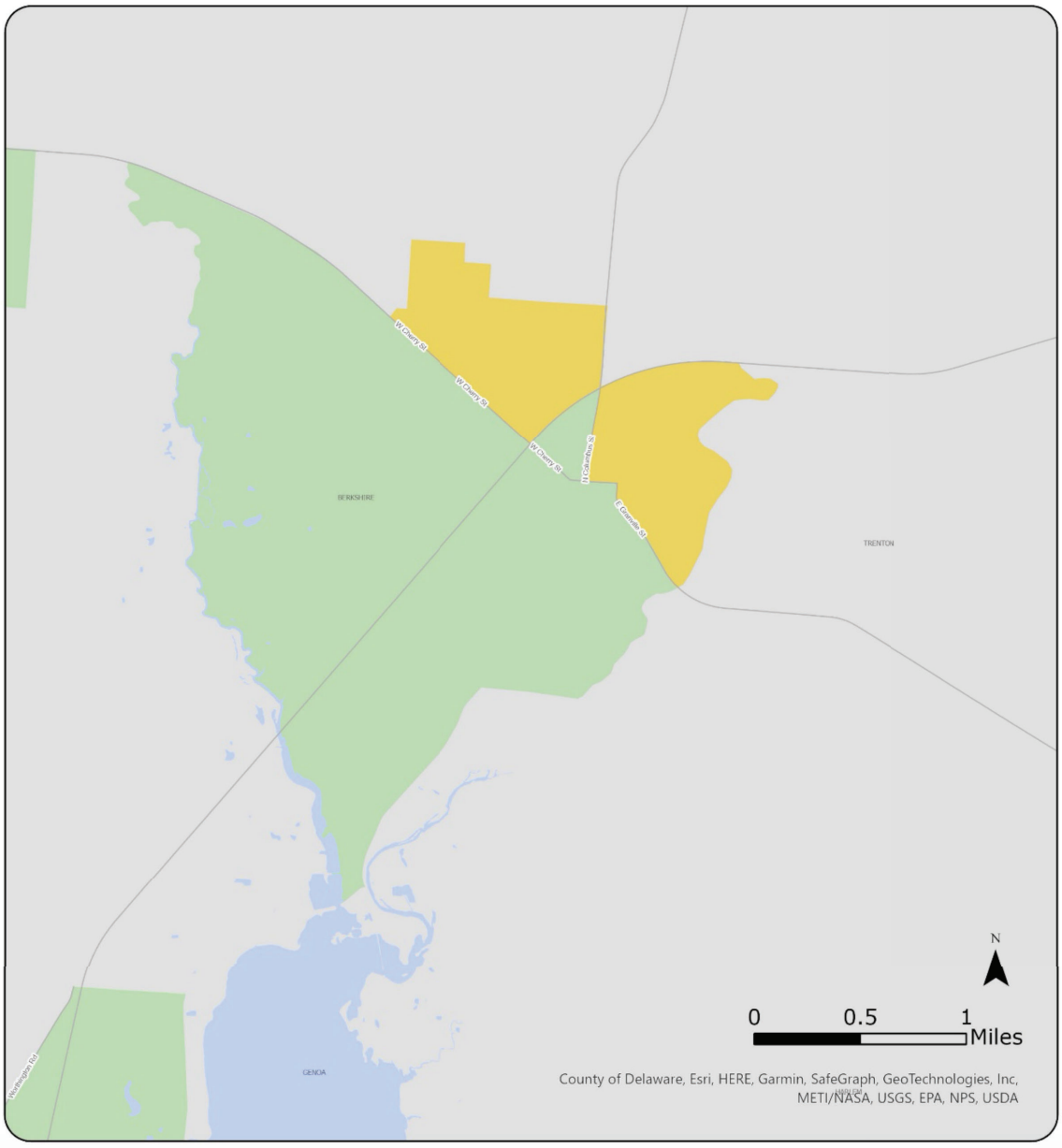
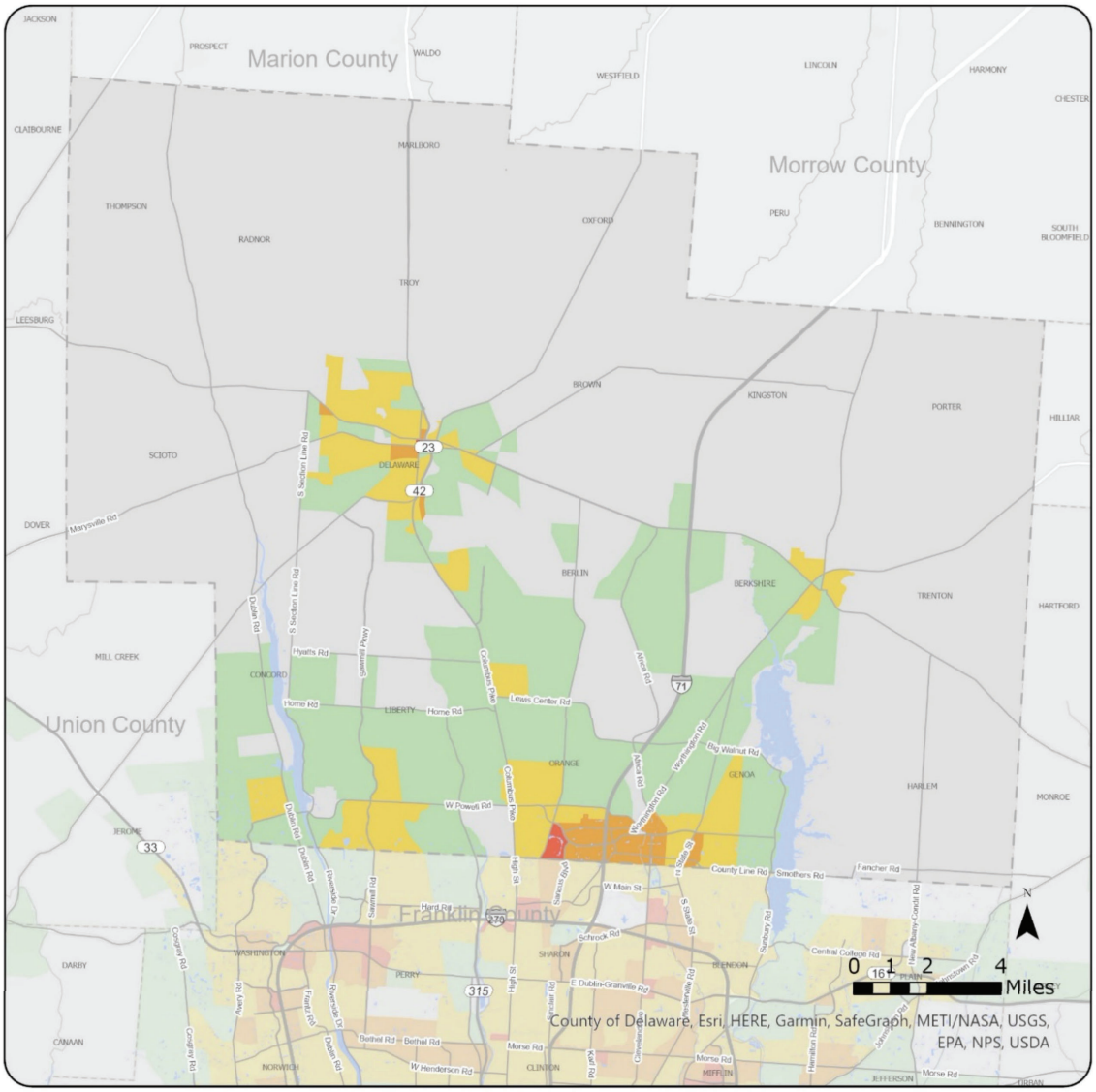


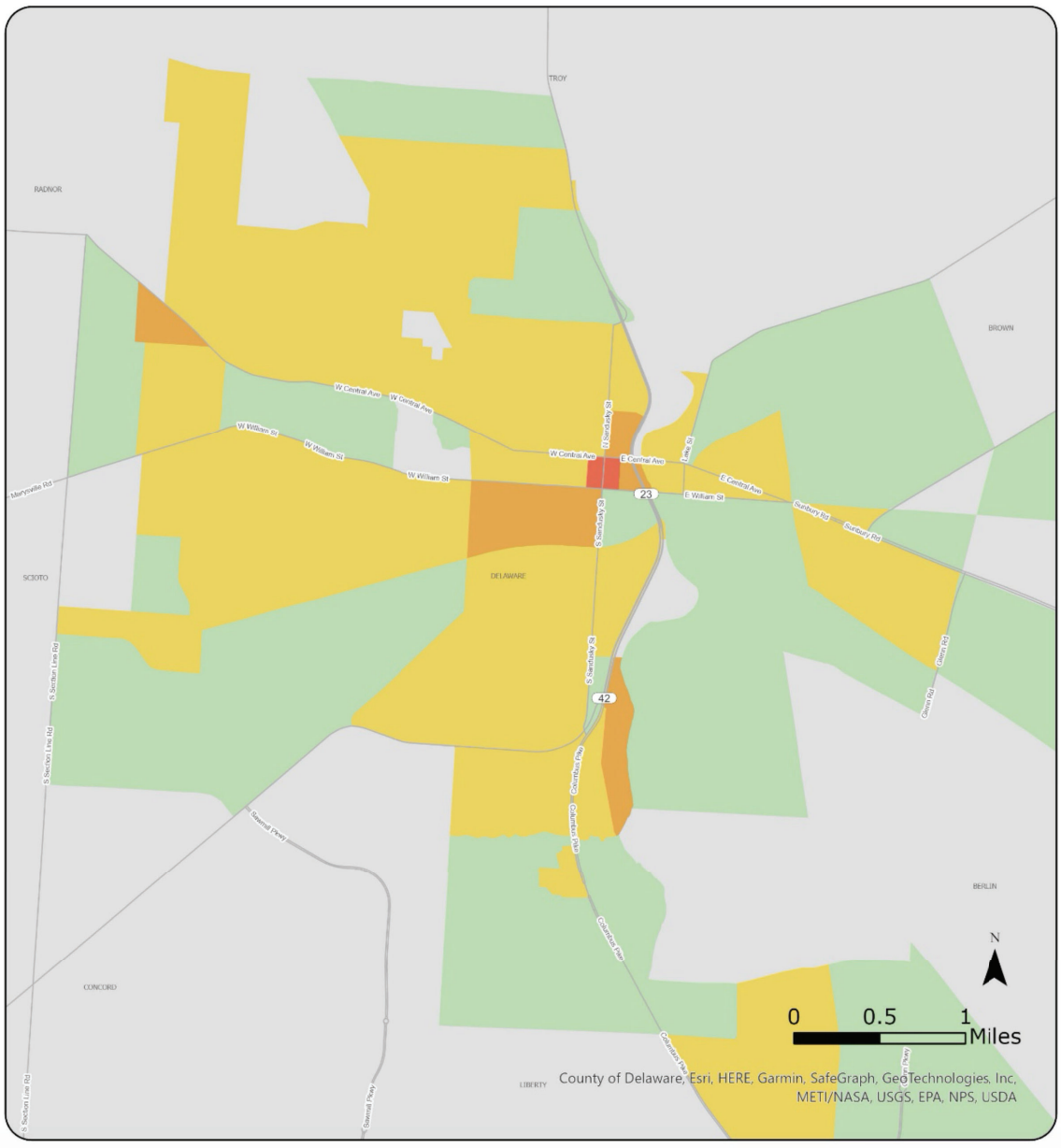
Figure 24 *2050 Transit Potential for Delaware County*



2050 Transit Potential

- > 60 jobs + people / acre
- 31 - 60 jobs + people / acre
- 16 - 30 jobs + people / acre
- 6 - 15 jobs + people / acre
- 1 - 5 jobs + people / acre
- < 1 jobs + people / acre
- Delaware County Study Area

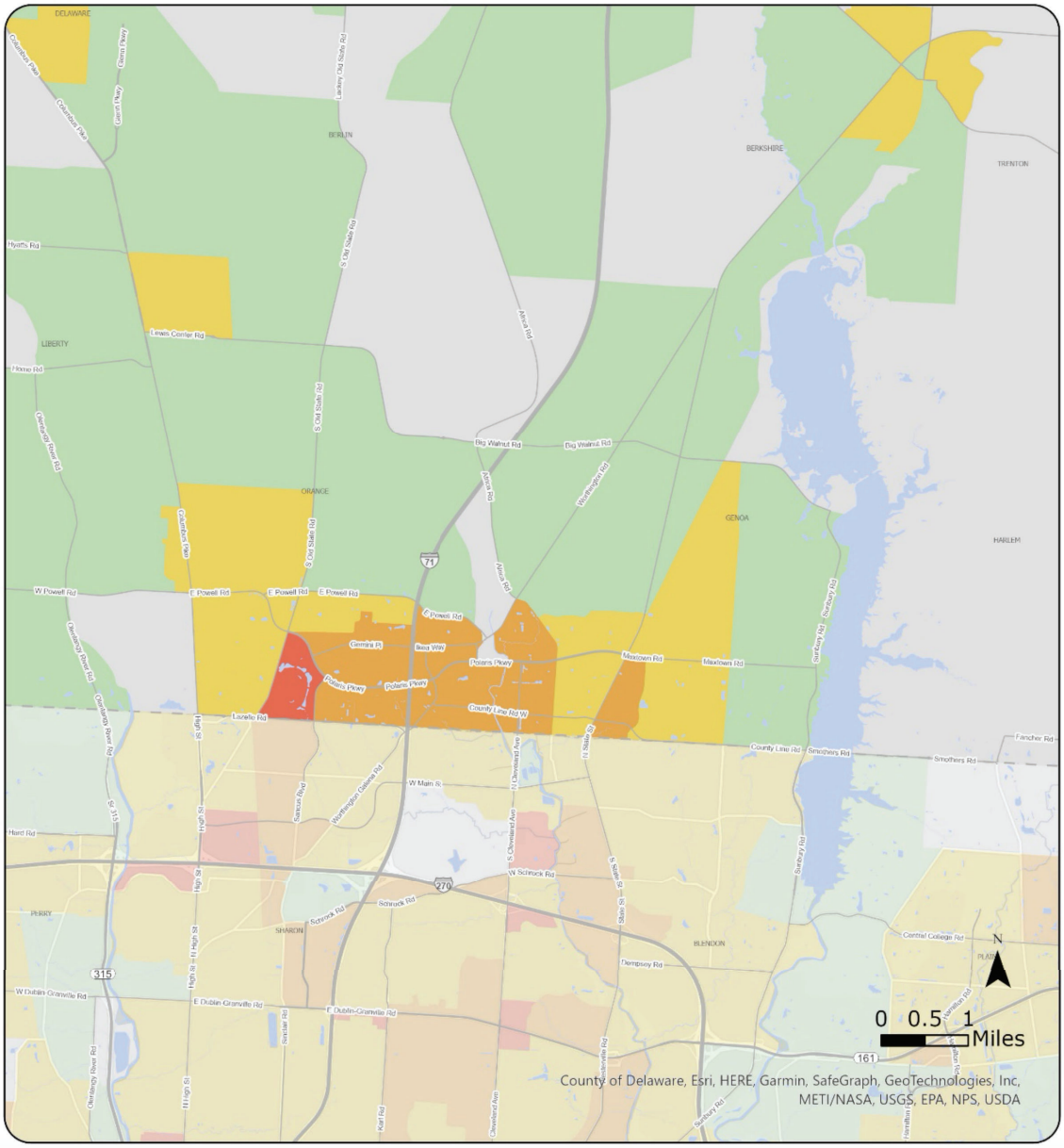
Figure 25 *2050 Transit Potential for Delaware City*



2050 Transit Potential

- > 60 jobs + people / acre
- 31 - 60 jobs + people / acre
- 16 - 30 jobs + people / acre
- 6 - 15 jobs + people / acre
- 1 - 5 jobs + people / acre
- < 1 jobs + people / acre
- Delaware County Study Area

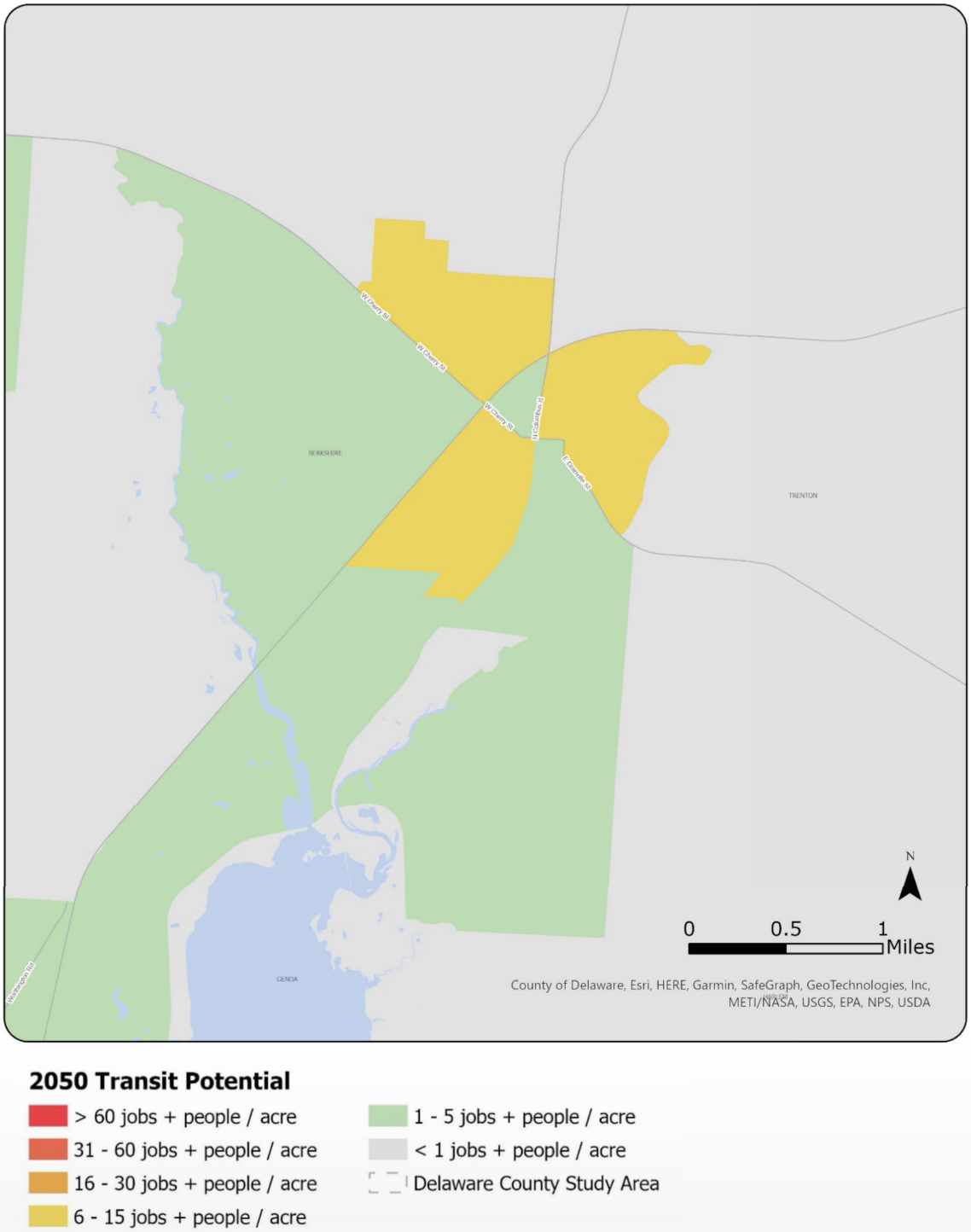
Figure 26 *2050 Transit Potential for Southern Delaware County*



2050 Transit Potential

- > 60 jobs + people / acre
- 31 - 60 jobs + people / acre
- 16 - 30 jobs + people / acre
- 6 - 15 jobs + people / acre
- 1 - 5 jobs + people / acre
- < 1 jobs + people / acre
- Delaware County Study Area

Figure 27 *2050 Transit Potential for Sunbury*



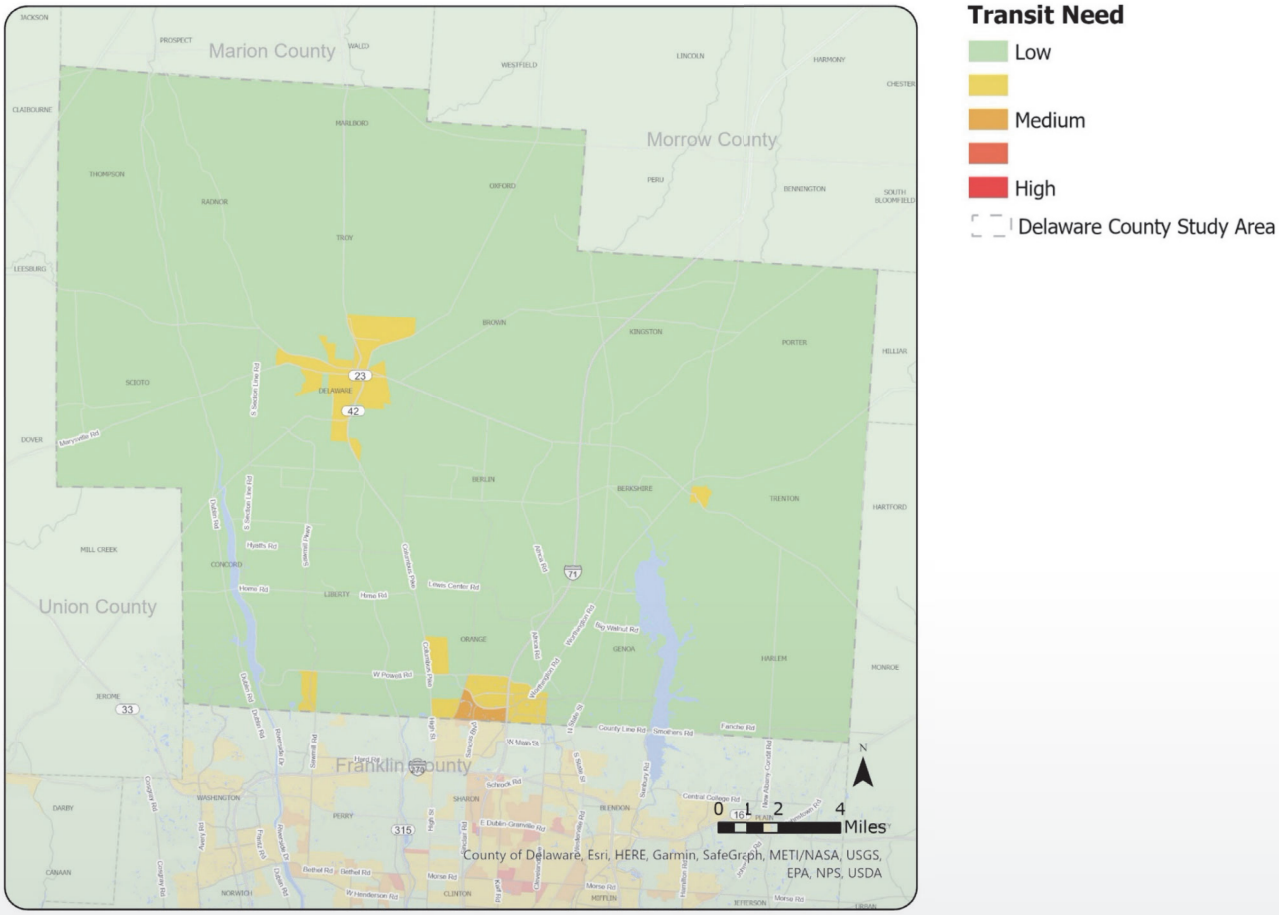
Transit Need

The likely demand for transit service can be assessed by examining key demographics of an area. Certain population subgroups have a relatively higher propensity, or likelihood to use transit as their primary means of transportation. These groups include:

- **Households without access to a vehicle.** Families that lack access to a vehicle either for financial or legal reasons often have few mobility options other than public transportation.
- **Persons with disabilities.** Individuals who are unable to or have difficulty operating a motor vehicle are especially likely to use public transportation services.
- **Low-income individuals.** Because using transit is often less expensive than owning a car, individuals in low-income households are more likely to rely on transit.
- **Young people.** Individuals aged 15 to 24 and younger may not have access to or the ability to operate a vehicle and tend to rely on transit and other alternatives for their mobility needs.
- **Older adults.** As individuals age, they may be less willing or able to operate a motor vehicle.

As DCT looks to grow in the future, it is important to continue to focus on the needs of the community. Using the most recent American Community Survey (ACS) 5-year data, these population subgroups by Census Block Group will determine the propensity of the highest likeliness of transit need. For each demographic analysis, each block group was assigned a density category based on the concentrations of the population subgroups being examined. **Figure 28** shows the composite of the Transit Need based on the sum of the scores for each demographic analysis.

Figure 28 *Delaware County Transit Need*



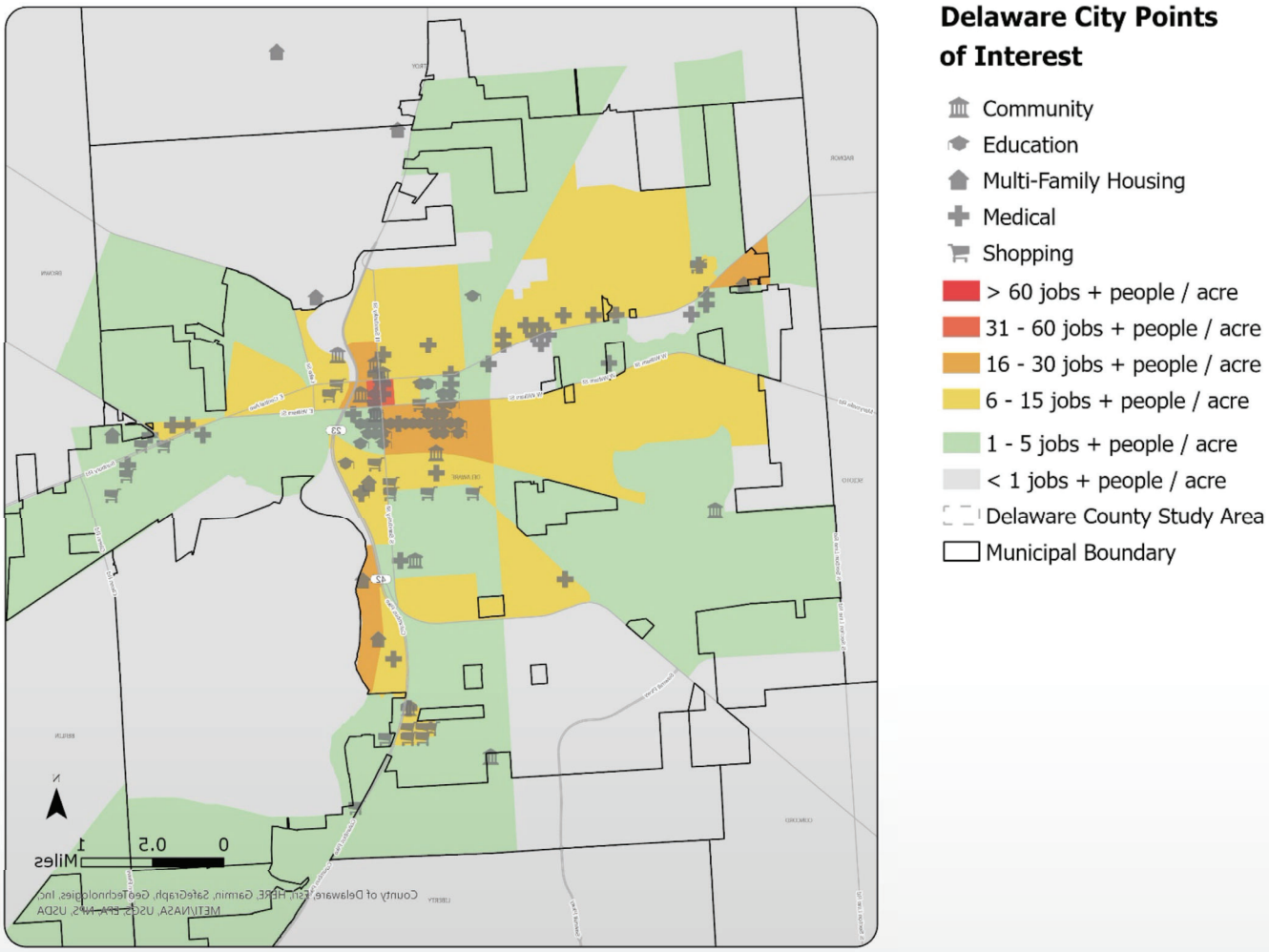
Transit Need exists in many of the same places as higher levels of Transit Potential. This overlap of transit potential and transit need is economical for the transit agency as it is able to serve both types of consumers. As a whole, the County has low transit need comparably to the rest of the State, but Delaware City, City of Sunbury, and the Polaris area in the south show a higher transit need than the rest of the County.

Land-Use and Activity Centers

In addition to density and demographics, transit use is also influenced by the built environment. In particular, there are certain land uses – such as multi-family housing, major grocery and retail centers, medical facilities, educational institutions, and civic and community centers – that tend to generate transit trips at a higher rate than other land-uses. A robust mix of these activity centers is key to ensuring strong ridership demand for any transit service.

Based on the Transit Potential and Transit Need analysis, three key areas are Delaware City, Sunbury region, and the Southern portion of Delaware County including Polaris and the City of Powell. As Delaware County is continuing to grow, continuing to identify key activities in these areas will be important to determine where transit could be successful.

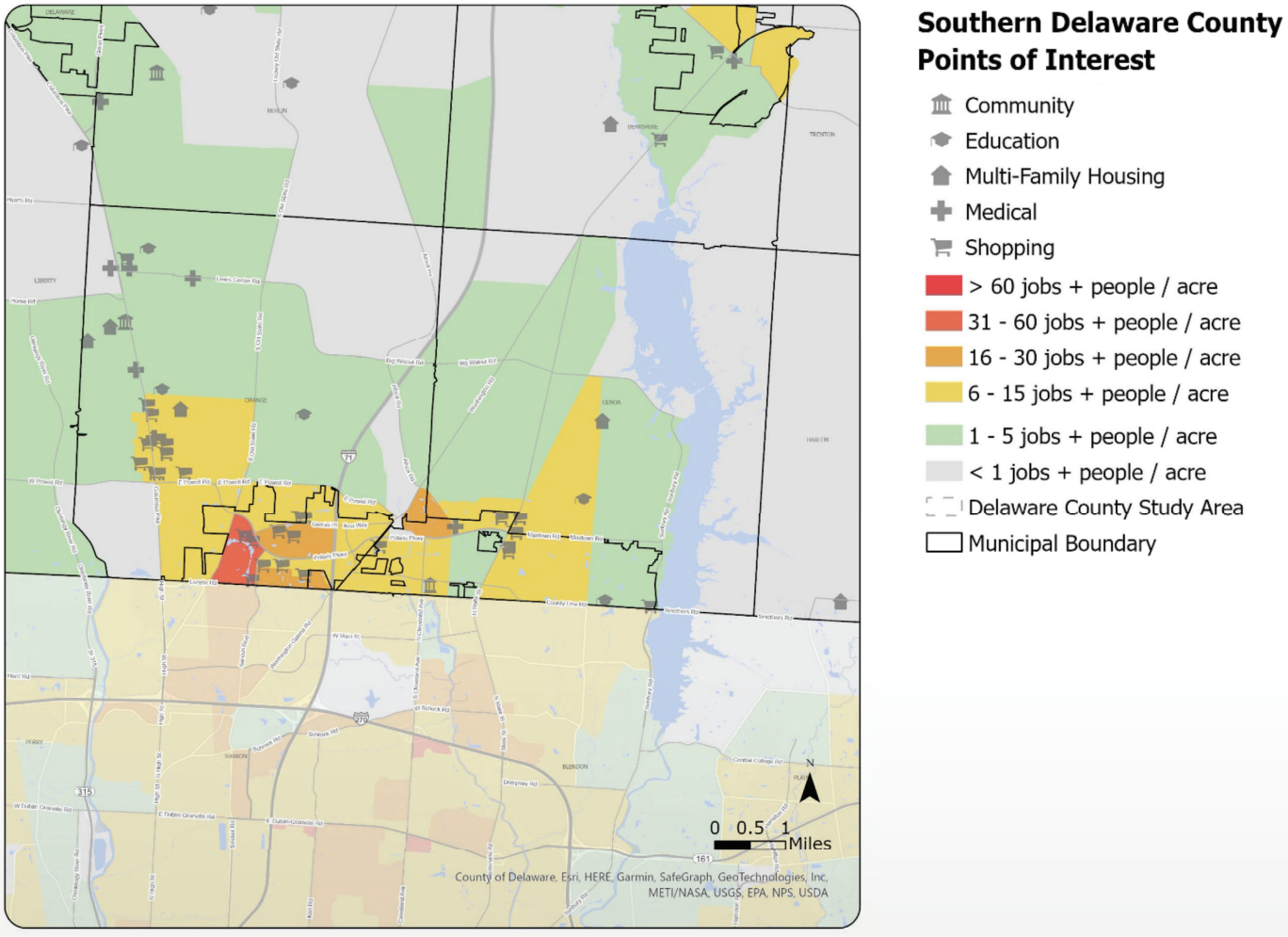
Figure 29 *Delaware City Transit Potential and Points of Interest*



Delaware City shown in **Figure 29** is an area in the County with growing Transit Potential. The city is currently served by DCT's FLEX service, in addition to the county-wide Demand Response service. Much of the density and Transit Potential in the center of the City is associated with Ohio Wesleyan University. Other key drivers of higher density and Transit Potential in Delaware City include Grady Memorial Hospital and nearby medical offices, Glenwood Commons along Sunbury Road, and Delaware Community Plaza, including Walmart and Kroger, along US-23.

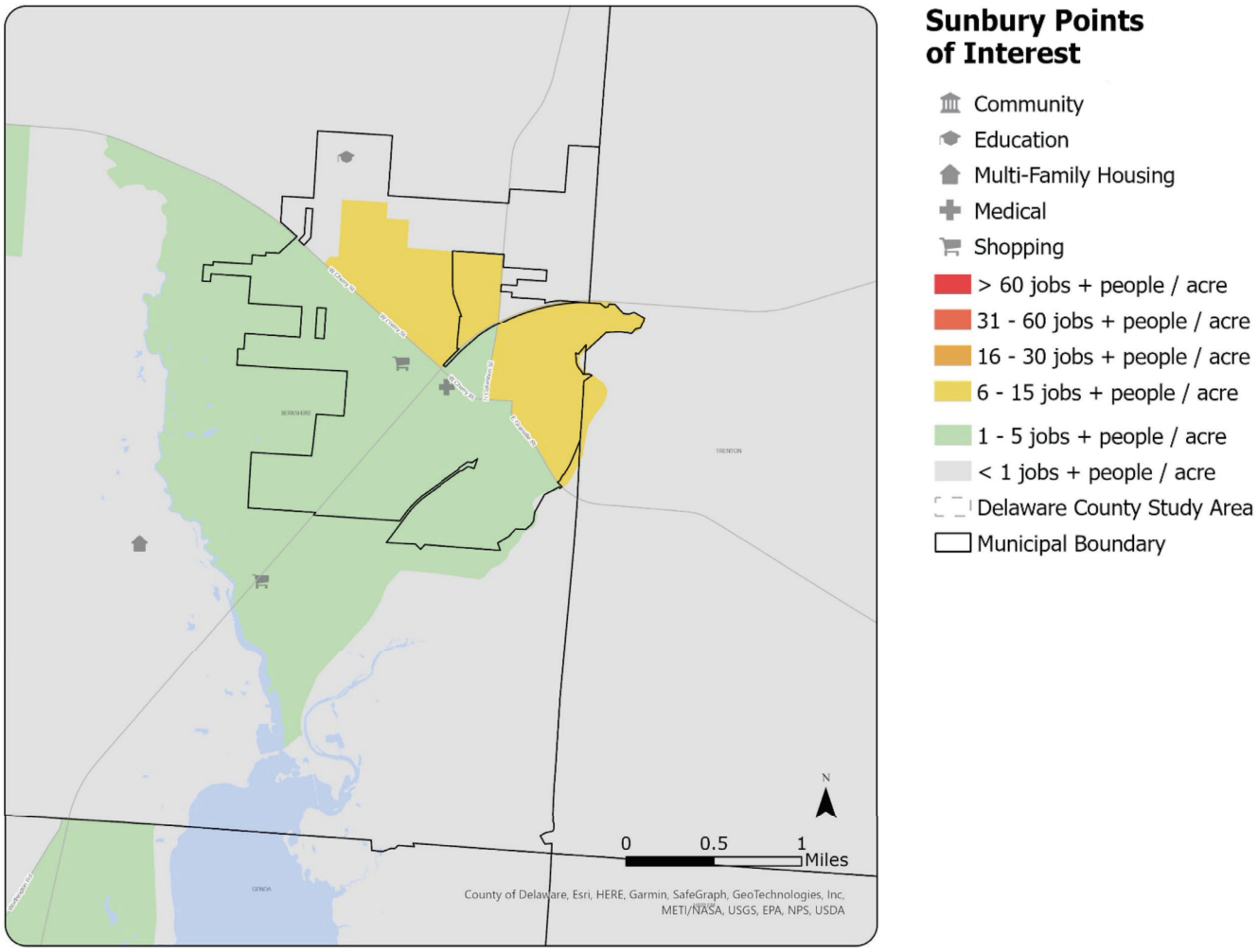
Southern Delaware County shown in **Figure 30** has some of the greatest Transit Potential in the County, due in large part to its proximity to Columbus. The settlement and development patterns present in this part of the County illustrate how the City of Columbus is expanding northward and will continue doing so into the future based upon job and population forecasts. US-23 to the west operates as a major corridor connecting the southern portion of the County north to Delaware City. Along this corridor are numerous grocery stores, retail shopping destinations, multi-family housing, and medical offices. The highest density of people and jobs is found in the Polaris area, which includes several large retail centers and the JP Morgan Chase corporate office, as well as COTA fixed-route bus connections.

Figure 30 *Southern Delaware County Transit Potential and Points of Interest*



Shown in **Figure 31**, Sunbury is a growing city in Delaware County and a key area to consider when planning future service for the region. The city provides a number of essential services including a high school, urgent care center, dental offices, and a Kroger grocery store. New residential development is occurring both inside and just outside the city boundaries. It also has a large retail outlet center, providing job opportunities.

Figure 31 *Sunbury Transit Potential and Points of Interest*



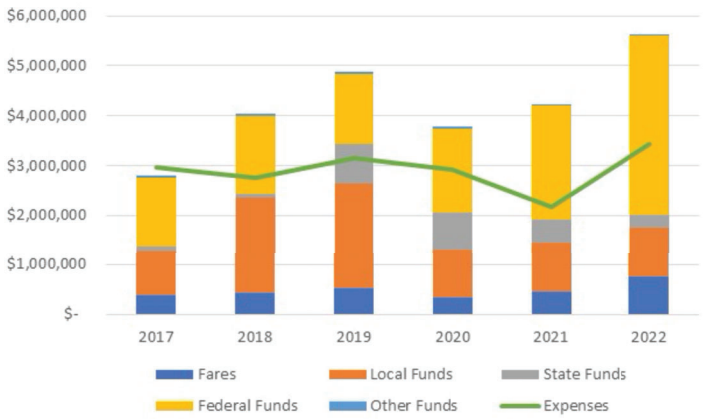
Financial Assessment

The following provides an overview of DCT's existing financial conditions and provides a high level financial comparison to six peer transit systems. The purpose of the existing conditions analysis is to provide an overview of the respective role contributions from federal, state, and local revenue streams play in addressing DCT's annual costs. The peer comparison provides an opportunity to benchmark DCT's financial performance compared to similar transit systems and provides an opportunity to evaluate alternative local funding approaches based on information reported to the National Transit Database (NTD).

Existing Financial Conditions

DCT has an operating budget of just under $4 million, receiving roughly 85% of the budget from federal, state, and local grants. The other 15% of the budget comes from passenger fares. This budget supports over 100,000 trips, twenty-six revenue vehicles, one bus facility, and over fifty-four full-time employees. **Figure 32** summarizes DCT's total annual costs and revenues over fiscal year (FY) 2017 to 2022 period based on the FY 2019 Annual Financial Report and FY 2022 Annual Financial Report. As shown in the figure, total costs have remained relatively stable over the last five years, while annual revenues have generally increased. Additionally, with the exception of FY 2017, DCT's annual revenues have exceeded costs, which has resulted in DCT's non-restricted cash and cash equivalent balance growing over time and totaling approximately $6.0 million as of December 31, 2022. This balance has grown due to the reduction in service levels during the COVID-19 pandemic and the increased level of federal funding that was provided during 2020 and 2021 to offset COVID-19 pandemic impacts.

Figure 32 *DCT Annual Revenue Sources and Operating Expenses (2017-2022)*



Revenue Sources

DCT's annual revenue primarily reflects a combination of federal, state, and local funds.

Federal Funds

The Federal Transit Administration (FTA) allocates annual federal formula funds to urbanized areas across the country based on a methodology that incorporates population levels, levels of service provided, and ridership variables. Reflecting Delaware County's population, DCT is classified as a large urban transit system and is an eligible direct recipient of FTA formula funds.

The annual level of federal formula funds provided to DCT is a portion of the total amount FTA allocates to the Columbus Urbanized Area (CUA). On an annual basis, and in partnership with the Mid-Ohio Regional Planning Commission (MORPC), the three transit systems within the CUA - Central Ohio Transit Authority (COTA), Licking County Transit Board (LCTB), and DCT - agree to allocate the full apportionment of Section 5307 Urbanized Area Formula Funds, Section 5340 Growing States and High Density States Formula Funds, and Section 5339 Bus and Bus Facilities Funds based on the same methodology FTA uses to allocate funds nationally.

As an example, **Table 5** summarizes the allocation of FY 2021 FTA formula funds among the three transit systems, with DCT receiving approximately 5 percent of the total funds. The eligible uses for these federal funds reflect the following:

- **Section 5307 and Section 5340:** expenses associated with transit capital project, operating assistance, and transportation-related planning.
- **Section 5339:** expenses related to replacing, rehabilitating, and purchasing buses and related equipment and to construct bus-related facilities.

Table 5 *Urban FTA Formula Fund Allocations (FY 2021)*

Transit Provider	Section 5307 & 5340	Section 5339	Total
CUA Total Funds	**$19,039,511**	**$2,175,906**	**$21,215,417**
COTA	$17,811,429	$2,040,287	$19,851,716
DCTB	$973,240	$106,392	$1,079,632
LCTB	$254,842	$29,227	$284,069

The CUA also receives **Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities** formula funds which are provided to and allocated by MORPC. DCT is one of the transit providers that is eligible to apply for annual funding through MORPC for capital projects and operating expenses that enhance mobility for older adults (65+) and persons with disabilities. The annual Section 5310 allocation to MORPC is less than $2 million.

State Funds

DCT receives state funding through the State Urban Transit Program (UTP) and the Ohio Transit Partnership Program (OTP2).

- **UTP Funding:** DCT is one of the twenty-seven urban transit systems within the State that is eligible to receive UTP funding. Since the 2020-2021 biennium, the Ohio General Assembly has increased funding for this program from $16.6 million to $21.9 million in the 2024-2025 biennium. The UTP funds are split into two parts. For the 2024-25 biennium, the first $18.9 million are allocated proportionally to transit systems based on approximately 13 percent of their annual FTA Section 5307 allocation. The remaining $3 million are distributed in a Small Urban Bonus to transit systems in Small Urban UZAs (50,000-199,000 people) based on population and ridership. As a large urban transit system – DCT is not eligible for the Small Urban Bonus.
- **OTP2:** The Ohio Department of Transportation (ODOT) provides transit funding to rural and urban transit systems through a competitive application process. There are two categories of eligible projects under OTP2. Tier 1 projects maintain, sustain, or keep in a good sound state transit systems. Tier II projects are focused on regionalization, coordination, technology, service expansion, workforce initiatives, and healthcare initiatives. OTP2 is funded through a combination of State appropriated funds and FTA formula funds that are allocated directly to ODOT.

Table 6 summarizes the DCT projects that have been awarded OTP2 grants since 2020. In total DCT has received approximately $4.4 million to cover costs associated with operations, rehabilitation/renovation to existing facilities, expanding the vehicle fleet size, replacing the existing fleet, and a planning study.

Table 6 *OPT2 Funding for DCT Projects*

OTP2 Application Cycle	Award Amounts
2020 Application Cycle	
Operating Assistance	$500,000
Facility Rehabilitation / Renovation	$193,138
Expansion Vehicle	$150,000
2020 Total	**$843,138**
2021 Application Cycle	
Operating Assistance, Expansion Vehicles (2)	$848,711
2021 Total	**$848,711**
2022 Application Cycle	
Mobility Development Plan	$500,000
Expansion Vehicle (2)	$229,643
Replacement Vehicle (1)	$148,093
Facility HVAC	$69,250
2022 Total	**$946,986**
2023 Application Cycle	
Expansion Vehicle (2)	$323,514
Replacement Vehicle (3)	$485,271
2023 Total	**$808,785**
2023 Application Cycle	
Replacement Vehicle (8)	$953,352
2024 Total	**$953,352**

Local Funds

The two primary local funding sources are passenger fares and sales tax revenue received from COTA as part of a regional revenue-sharing agreement which is described below.

Passenger Fare Revenue

As shown in **Table 7** and **Table 8**, DCT has a separate fare structure for the two current service options: County-wide Demand Response and FLEX curb-to-curb service within Delaware City. Fares for the County-wide Demand Response service are based on the age of the passenger and the distance traveled and include a per-mile surcharge for medical trips that travel outside of the county. Fares for the FLEX service are based on age.

Table 7 *Delaware County Demand Response Rates (2023)*

Traveler	Demand Response Rates
Regular	0-10 miles: $8.00 10-20 miles: $17.00 >20 miles: $29.00
People over 55*	0-10 miles: $2.00 10-20 miles: $4.00 >20 miles: $6.00
Out of County	$3.80/mile (medical trips only)

*Up to 10 one-way trips each month within Delaware County

Table 8 *FLEX for Delaware City Fare Structure (2023)*

Traveler	FLEX Rate
0 to 4 years	Free
0 to 18 years	$1.00
19 to 64 years	$2.00
65 years and up	$1.00
Disabled	$1.00

Table 9 provides a comparison of DCT's annual total revenues, annual fare revenue, and annual total operating expenses over the last five years. Over this period annual fare revenue has ranged from $0.33 million to $0.76 million and has ac-

counted for between 9 percent and 14 percent of DCT's total annual revenues, while the farebox recovery ratio (fare revenue compared to operating expenses) ranged from 11 percent to 22 percent. Additionally, in 2022, annual passenger fare revenue levels exceeded levels generated prior to the pandemic.

Table 9 *DCT Revenues (Including Fares) and Expenses*

	2017	2018	2019	2020	2021	2022
Total Annual Revenues	$2,808,412	$4,051,109	$4,872,684	$3,778,632	$4,234,032	$5,629,713
Total Annual Fare Revenue	$387,190	$427,159	$509,972	$334,307	$434,834	$755,538
% of Total Revenue	14%	11%	10%	9%	10%	13%
Total Operating Expenses	$2,964,413	$2,745,614	$3,163,147	$2,928,565	$2,162,265	$3,444,241
Farebox Recovery Percentage	13%	16%	16%	11%	20%	22%

Source: DCT Annual Financial Reports, 2019 and 2022

Operating Expenses

A breakdown of DCT annual operating expenses for the 2017 to 2022 period is provided in **Table 10**. Over the last five years, annual expenses have increased from $2.96 million to $3.44 million. The primary expense categories are salaries and benefits which combined accounted for between 65 percent and 79 percent of total expenses. Materials and supplies was the second largest category accounting for between 7 percent and 13 percent of total expenses and contract services was the third largest category accounting for 3 percent to 10 percent of the total.

Table 10 *DCT Annual Operating Expenses*

Annual Expenses	2017	2018	2019	2020	2021	2022
Labor (salaries)	$1,217,189	$1,170,424	$1,202,236	$1,305,261	$1,507,469	$1,818,912
Fringe Benefits	$1,130,502	$873,691	$1,144,267	$924,786	-$385,726	$425,983
Contract Services	$102,490	$87,802	$125,476	$114,344	$222,189	$207,923
Materials and Supplies	$209,234	$248,487	$226,448	$127,864	$272,982	$410,961
Utilities	$22,533	$26,026	$27,737	$28,408	$32,117	$37,003
Casualty and Liability Insurance	$80,017	$92,566	$121,514	$90,393	$92,833	$114,856
Miscellaneous	$14,243	$18,272	$19,562	$16,037	$16,766	$17,882
Depreciation Expense	$188,205	$228,346	$295,907	$321,472	$403,635	$410,721
Total Expenses	**$2,964,413**	**$2,745,614**	**$3,163,147**	**$2,928,565**	**$2,162,265**	**$3,444,241**

Peer System Comparison

Six peer transit systems were selected for this comparison, including three from Ohio and three from other states. These agencies were selected for their similarity across over 20 variables related to demographics and transit service, using a methodology from the Urban Integrated National Transit Database (Urban NTD)[1]. **Table 11** provides a summary comparison of the peer systems to DCT. Following this table are the peer comparison results for revenues and expenses based on information from the NTD.

Table 11 *DCT Peer Agencies*

Agency Name	Location	State	Urban Area Population	Population Growth Rate*	Percent Poverty**	Percent of total Service Provided That Is Demand Response (2021)
Delaware County Transit	**Delaware**	**OH**	**1,554,047**	**26%**	**13%**	**100%**
Butler County Regional Transit Authority (BCRTA)	Hamilton	OH	1,724,514	13%	13%	53%
Allen County Regional Transit Authority (ACRTA)	Lima	OH	71,731	-1%	20%	44%
Medina County Public Transit	Medina	OH	1,774,219	6%	13%	67%
City of Petersburg	Petersburg	VA	1,047,835	17%	12%	33%
Henry County	McDonough	GA	5,225,579	31%	12%	100%
Public Transit Services	Mineral Wells	TX	5,901,118	29%	12%	87%

*Percent change in population from 2010 to 2021.
** Percent of population living below the poverty threshold, as defined by the American Community Survey.

Revenue Comparison

The following provides a comparison of the types of revenues used among the Peer systems. The operating revenue comparison focuses on passenger fares and the non-operating revenue comparison looks at the role of federal and state funding programs and local contributions.

Fare Structure

As summarized in **Table 12**, demand-response fare structures vary among the peer systems according to distance, demographics, and other factors. As shown in the table, DCT has more fare categories, primarily based on distance thresholds and while the fares for the County-wide service are higher than the peers, the fares for the Delaware City FLEX service are slightly less than the peers.

1 https://ftis.org/urban_iNTD.aspx

Table 12 *Demand-Response Fare Structure Comparison*

Agency Name	Regular Demand-Response Fare	Youth	Elderly	Paratransit (ADA)
Delaware County Transit	**Delaware City-FLEX: $2.00 each way. Countywide Demand Response: 0-10 miles: $8.00; 10-20 miles: $17.00; >20 miles: $29.00; Out-of-County (medical only): $3.80 per mile**	**Delaware City-FLEX: Under 4: Free; 5-18: $1.00 each way Countywide Demand Response Regular Fare**	**Delaware City-FLEX: $1.00 each way. Countywide Demand Response: 0-10 miles: $2.00; 10-20 miles: $4.00; >20 miles: $6.00**	**Delaware City-FLEX: $1.00 each way. Countywide Demand Response: $2.00**
Butler County Regional Transit Authority	$5.00/trip	Under 12: Free	Regular rate	Free
Allen County Regional Transit Authority	Within Lima City Limits: $7.00; Within Allen County: $10 to $13	Regular rate	Regular rate	Regular rate
Medina County Public Transit	One Way: $4.00	Regular rate	One Way: $2.00	One Way: $2.00
City of Petersburg	N/A	N/A	N/A	One Way: $0.75
Henry County	Per person per stop: $4.00	Regular rate	Over 60: $2.00 per person per stop	Regular rate
Public Transit Services	Within 5-mile radius: Starts at $2.00/trip; outside of county varies	Regular rate	Over 60: 1/2 of regular price	Regular rate

Annual Fare Revenue and Performance Metrics Comparisons

The varied demand-response fare structures and levels of service provided creates a challenge to benchmark DCT's fare structure compared to the peers based on annual fare revenue levels. In an attempt to normalize the information among the peers, a series of performance metrics are provided in **Table 13** and **Table 14** for 2019 (pre-pandemic) and 2021 (post-pandemic). As shown in tables, DCT:

- Generates significantly more fare revenue than the peers and in 2021 generated the highest level of passenger trips and fare revenue.
- Has the highest average demand response fare per trip among the peers.
- Has annual fare revenue levels that are the largest share of total revenues and results in farebox recovery ratios that are among the highest among the peers.

Table 13 *Average Demand-Response Annual Fare Revenue, Total Trips and Fare Per Trip Comparison – 2019 and 2021*

Agency Name	Annual Fare Revenue (2019)	Total Demand-Response Trips (2019)	Average Demand-Response Fare per Trip (2019)	Annual Fare Revenue (2021)	Total Demand-Response Trips (2021)	Average Demand-Response Fare per Trip (2021)
Delaware County Transit	**$476,550**	**23,561**	**$20.2**	**$636,063**	**72,927**	**$8.7**
Butler County Regional Transit Authority (BCRTA)	$263,203	30,821	$8.6	$228,170	46,454	$4.9
Allen County Regional Transit Authority (ACRTA)	$499,522	48,867	$10.2	$65,846	22,817	$2.9
Medina County Public Transit	$32,407	38,947	$0.5	$459,533	32,306	$8.7
City of Petersburg	$16,213	9,286	$1.8	$549	6,002	$0.1
Henry County	$66,485	70,650	$0.9	$48,842	26,607	$1.8
Public Transit Services	$74,103	65,972	$0.6	$47,922	44,211	$1.1

Source: National Transit Database

Table 14 *Fare Revenue as a Percent of Total Revenues and Farebox Recovery Comparison – 2019 and 2021*

Agency Name	Fare Revenue as a Percentage of Total Revenue (2019)	Demand-Response Farebox Recovery (2019)	Fare Revenue as a Percentage of Total Revenue (2021)	Demand-Response Farebox Recovery (2021)
Delaware County Transit	**17.0%**	**13.5%**	**21.5%**	**21.6%**
Butler County Regional Transit Authority (BCRTA)	3.6%	14.6%	2.9%	9.6%
Allen County Regional Transit Authority (ACRTA)	11.9%	38.4%	1.6%	7.1%
Medina County Public Transit	1.4%	4.0%	20.7%	48.9%
City of Petersburg	0.4%	9.5%	0.0%	0.3%
Henry County	2.5%	3.2%	2.4%	2.4%
Public Transit Services	1.4%	4.1%	2.0%	2.9%

Source: National Transit Database

Non-Operating Revenue Sources

In addition to passenger fare revenue, DCT and the peer transit systems receive differing levels of federal funding and contributions from local sources. **Table 15** summarizes the funding sources as reported to the NTD in 2021 and **Table 16** summarizes the share of total funding provided by the federal and local sources.

Table 15 *Federal, State, and Local Revenue Sources Reported to NTD (2021)*

Agency	Federal Sources	Local Sources
Delaware County Transit	**FTA 5307, FTA 5339, FTA 5310**	**Fares, general fund, sales tax from regional revenue agreement with COTA, advertising, checking interest, and sale and disposal of assets**
Butler County Regional Transit Authority (BCRTA)	FTA 5307, FTA 5339, FTA 5310	Fares, Interest income, gain on sale of assets, maintenance services, BWC premium refunds
Allen County Regional Transit Authority (ACRTA)	FTA 5307	Fares, Dedicated sales tax, Scrap sales, advertising, and Concessions
Medina County Public Transit	FTA 5307	Fares, General Fund, Greater Cleveland Transit Authority MOU agreement (sales tax)
City of Petersburg	FTA 5307, FTA 5339	Fares, Hopewell contract and Riverside revenue
Henry County	FTA 5FTA 5307, FTA 5311307	Fares
Public Transit Services	FTA 5307, FTA 5339, FTA 5311, Area Agency on Aging Title IIIb	Fares

Source: National Transit Database

Table 16 *Share of Revenue from Local, State and Federal Sources Comparison (2021)*

Agency Name	% of total revenue from Local sources	% of total revenue from State sources	% of total revenue from Federal sources
Delaware County Transit	**7%**	**16%**	**77%**
Butler County Regional Transit Authority (BCRTA)	46%	7%	47%
Allen County Regional Transit Authority (ACRTA)	14%	5%	82%
Medina County Public Transit	20%	9%	71%
City of Petersburg	27%	16%	56%
Henry County	6%	0%	94%
Public Transit Services	12%	7%	81%

For the purpose of this study, the primary takeaway is from the comparison of local sources. Among DCT and the peer systems, there is only one transit system that has a local dedicated transit revenue source – Allen County Regional Transit Authority (ACRTA). While both DCT and Medina County Public Transit (MCPT) both report sales tax as a local source, in both cases the revenue reflects a swap of their federal grant funds for local dedicated sales tax revenue from a neighboring transit system - COTA and the Greater Cleveland Regional Transit Authority, respectively. While these regional revenue agreements benefit DCT and MCPT by increasing the level of local dollars that can be used to match federal capital grant awards, the agreements do not provide a long term stable revenue source that will provide these transit systems the ability to enhance and increase their services.

With regards to the local dedicated sales tax for ACRTA, in 2017 the County faced a significant reduction in grant funding for transit services, leading ACRTA to forecast a budget deficit of over $1 million. In response, the county proposed a sales tax increase to address the funding shortfall gap. The initial ballot called for a 0.25% increase in sales tax and was rejected by voters. When the County referred a sales tax measure in 2019, it included a 0.1% increase – the lowest allowable increase that could be presented to the voters. This adjusted proposal passed with over 70% of the vote. With this 0.1% increase, the County projected an annual supplemental revenue of approximately $1.4 million from the sales tax, with a primary goal to use these funds as match for federal grants.

It is worth noting the contrast between the two ballot initiatives. While the initial 0.25% increase aimed to generate approximately $3 million annually, it had broader ambitions, including enhancing transportation infrastructure with new sidewalks, improved ramps, and new bus shelters along transit routes. However, the more conservative 0.1% increase was clearly linked to the pressing need of matching federal funds, highlighting the importance of clarity and necessity in gaining voter approval.

Operating Expenses and Performance Metrics Expenditures

Finally, in terms of benchmarking the delivery of demand response services, **Table 17** and **Table 18** compare annual operating costs, service-efficiency (cost per revenue hour) and service-effectiveness (cost per trip) for DCT and the peer transit systems. As shown in the tables, in 2019 DCT was ranked fifth among the peer systems for service efficiency and service effectiveness. In 2021, DCT ranked seventh for service-efficiency and fifth for service-effectiveness.

Table 17 *Annual Operating Expenses and Performance Metrics (2019)*

Company Name	Annual Operating Costs	Cost per Revenue Hour	Cost per Trip
Delaware County Transit Board	**$1,271,147**	**$89.00**	**$53.95**
Butler County Regional Transit Authority	$1,824,094	$101.65	$59.18
Allen County Regional Transit Authority	$1,300,407	$107.49	$26.61
Medina County Public Transit	$812,898	$40.78	$22.70
City of Petersburg	$170,836	$67.90	$18.40
Henry County	$2,107,267	$59.28	$29.83
Public Transit Services	$1,860,213	$70.12	$28.20

Source: National Transit Database

Table 18 *Annual Operating Expenses and Performance Metrics (2021)*

Company Name	Annual Operating Costs	Cost per Revenue Hour	Cost per Trip
Delaware County Transit Board	**$2,946,477**	**$103.00**	**$40.40**
Butler County Regional Transit Authority	$2,368,007	$98.25	$50.98
Allen County Regional Transit Authority	$921,647	$89.51	$40.39
Medina County Public Transit	$1,293,837	$62.59	$40.05
City of Petersburg	$188,028	$43.61	$31.33
Henry County	$2,013,519	$57.70	$75.68
Public Transit Services	$1,670,258	$90.25	$37.78

Source: National Transit Database

Potential Supplemental Funding

Based on the discussions in the prior sections, DCT has historically been able to obtain funding from federal, state, and local sources to maintain and incrementally increase service levels over the last five years. However, the goal of this study is to develop a vision for service expansion to address the needs for the growing community. The existing funding sources do not have the capacity to implement the type of enhancements and expansions under consideration. While the focus of this study is not to define the specific supplemental dedicated funding source that should be targeted, it is important to identify the level of funding that will be needed and provide context for the source or sources that can be pursued to address the funding needs. Based on experiences in other communities that faced this same challenge, the following are examples from around the country of funding sources that have been approved by voters and dedicated to transit systems.

- **Property Tax:** Assign a portion of property taxes to fund transit activities through a dedicated levy.
- **Sales Tax:** Establish a dedicated sales taxes to transit with rates ranging from 0.1 percent to 1.0 percent.
- **Income Taxes:** Income taxes have the advantage of being a generally progressive tax structure. Some jurisdictions (including the Indianapolis region) have established income tax levies to fund activities such as the provision of transit service.
- **Fuel Taxes:** Increase existing rates or dedicating a portion of existing revenue stream to transit.
- **Vehicle Levy:** Dedicate a portions of the annual vehicle registration and associated fees to transit.
- **Utility Levy:** While less common, some jurisdictions apply a levy on utility bills to fund transit services.
- **Employee Levy:** The use of taxes paid directly by employers is a strategy employed by some jurisdictions, especially in cases where there is a desire to improve transit service to a particular employment center.
- **Land Value Capture:** Also called a transit benefit district tax, this is a property tax assessed in a specific area to help fund service improvements that increase land values.

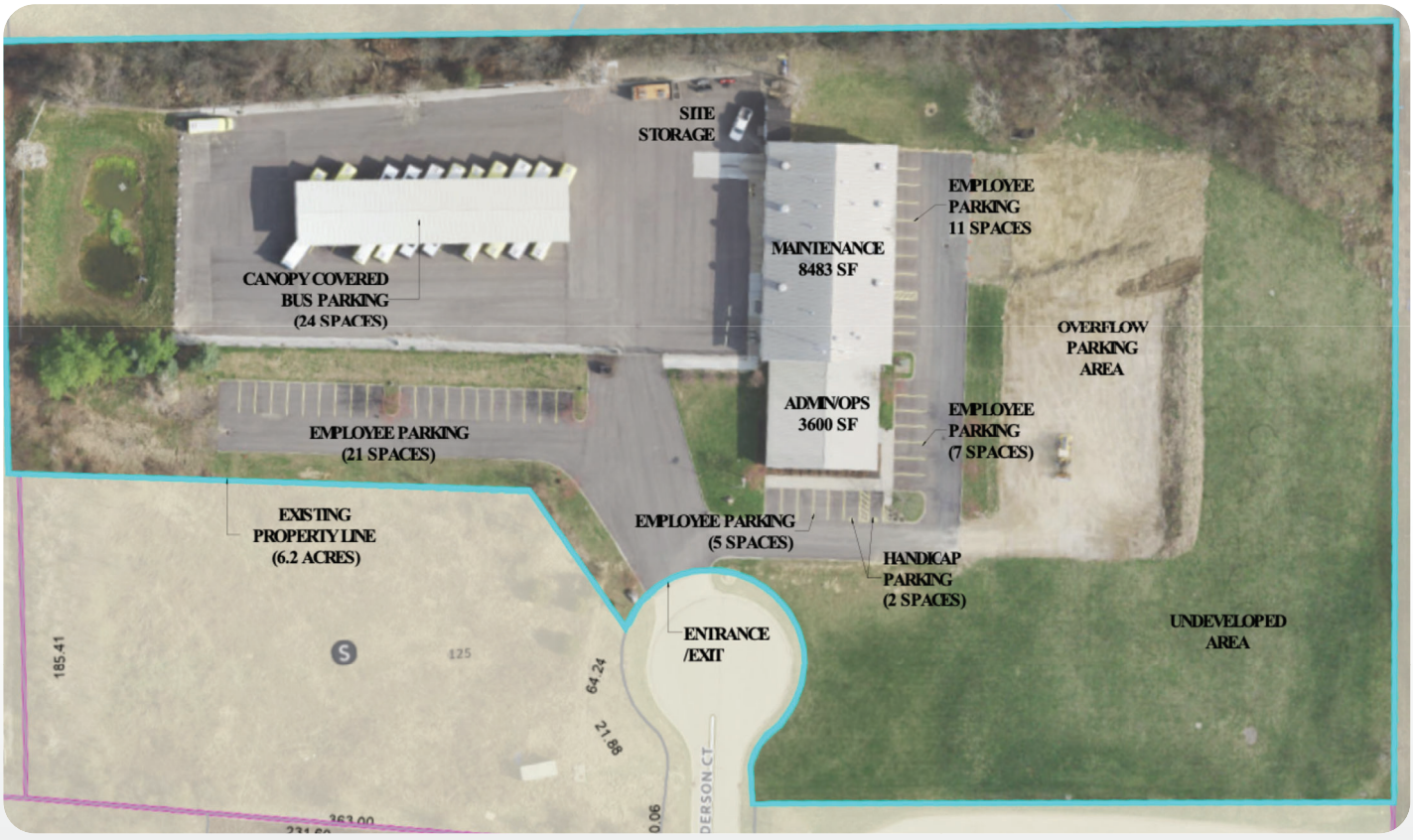
Strategies to pay for future DCT improvements are discussed later in the Recommendations section of this report.

Facility Evaluation

The purpose of this evaluation is to assess the condition and space needs of the existing facility and site and determine if this facility will be sufficient for the consistent and predictive growth of Delaware County in the next decade. DCT offers on-demand transit services to all residents in Delaware County, which has a total area of 457 square miles.

DCT has one facility located at 119 Henderson Court, Delaware, Ohio 43015. The facility was renovated in 2019 and has an overall building condition of good. The total building footprint is 12,000 square feet on 6.2 acres with one access driveway. The parking areas have been well maintained and there are no issues related to site drainage. The current facility is an insulated metal panel construction with fire sprinklers. There is no emergency generator and there are gaps in site security such as security camera systems and lack of card/FOB access system. The facility is on local city, water, and sewer systems and DCT owns some of the adjacent undeveloped property.

Figure 33 *DCT Existing Facility*



Specific Site Evaluation

DCT administration has grown since the building had been renovated. There are several positions within the DCT organization that currently share offices. The following positions and facility spaces are examples of where space is constrained and could be evaluated for potential solutions.

Mobility Coordinators

There are currently four Mobility Coordinators on staff. The office space is too small to facilitate four workstations, resulting in one team member working from home. It is preferred to have all staff work in the office. In addition, these positions require phone conversations and visitors, which disturbs workflows and creates background noise for other employees. The position of these workstations in the facility is also not ideal, as it should be adjacent to Dispatch.

Dispatch

The Dispatch office has three team members who share the office. There is no dispatch window, which would be a benefit as there are frequent driver interactions that impact workflows. In addition, for security purposes, access should be minimized.

Finance Department

The Finance Manager and Director's workstation is currently located in the Employee Break and Locker room. This is not a suitable location for these positions, as it is necessary to be adjacent to dispatch. There would also be a benefit for a secure fare count room and storage space.

Operations Staff

The operations staff has two individuals working in the office at one time. When HR related conversations are necessary with other team members, conversations often need to be held outside of the office to maintain confidentiality. It is ideal that Operation Managers have individual offices. In addition, the current office door does not have privacy film, which reduces the office effectiveness for confidential conversations.

Employee Break / Locker Area

The employee break area is in conjunction with the existing driver locker rooms. This area has good seating options and amenities and has enough lockers available for all employees. However, due to space constraints, the Finance Director's workstation is located in this area, which is not a good location as it should be a place of rest for employees.

Conference Rooms

There is only one conference room and it is too small for staff meetings, resulting in overflow seating into the hallway. In addition, Board Meetings are also held in this room which also causes issues with adequate space for Board Members, presenters, staff, and members of the public.

Fleet Maintenance

The maintenance staff consists of one mechanic and one service technician who both share an office. The shop equipment is in adequate condition. There would be a benefit of adding an additional vehicle lift, and also an automatic wash bay in order to wash the undercarriage of the vehicles to reduce corrosion. The facility also has one shared entrance and exit, resulting in vehicles having to reverse.

The storage space within the facility is lacking. There is no dedicated space for small parts storage and the large parts storage on the mezzanine is difficult to access and cannot store equipment. The vehicle tires are currently being stored in a separate exterior shed. There is no efficient way to store used oil and the bulk fluid tanks are filled by a delivery truck backing into the facility. There is no on-site fueling available which takes away from service operations when the vehicle leaves for their shift.

Parking and Vehicle Storage

There are not enough parking spaces for the current staff count or any visitors that might be at the facility. Several employees park on the adjacent grass lot when additional visitors are expected.

There is an existing canopy in the bus parking lot. However, it is too narrow to cover the entire bus. There is also not enough under canopy parking spaces for the existing fleet. Due to the harsh climate of Delaware County, an indoor fleet parking garage would be preferred.

Future Facility Considerations

DCT operations have currently outgrown its facility. In order to prepare for the future growth both of Delaware County and the transit system, potential considerations could include a Facility Master Plan to clearly understand the how the existing site can be adapted and expanded to meet the needs of DCT.

DELAWARE COUNTY TRANSIT

Strategic Plan

Engagement

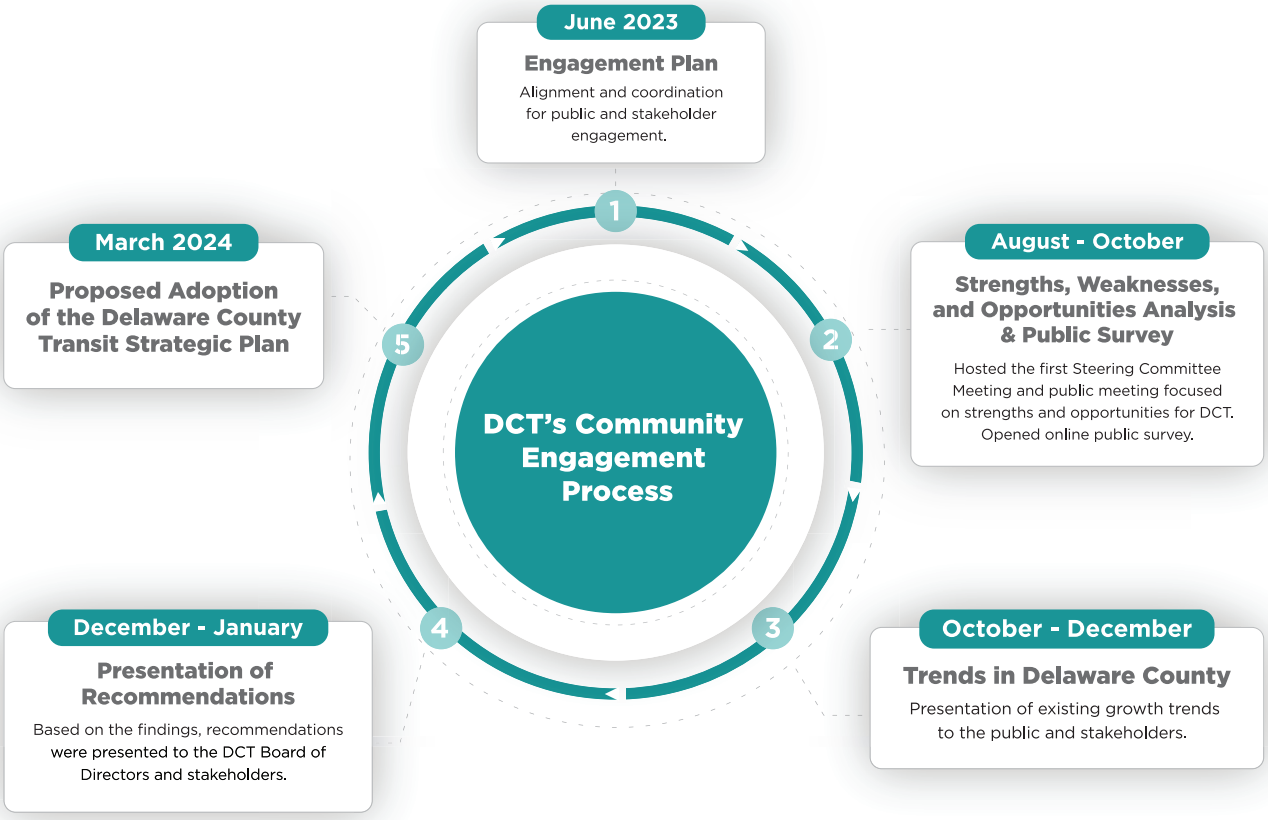
Customer, Stakeholder and Public Engagement

DRAFT

DCT's Strategic Plan Engagement Process

Introduction

A comprehensive and inclusive process was essential for developing the Delaware County Transit Strategic Plan. The engagement process provided key insights about the current transit needs in Delaware County and areas of improvement. Stakeholders and the public shared information that led the project team to a better understanding of how DCT can adapt and provide service in the future. Through the course of the study, the project team provided multiple avenues for community, stakeholder, and board member feedback about the future direction of DCT. This section provides a summary of key engagement findings and details how feedback was incorporated into the strategic plan.



The graphic above displays the phases of the engagement process, beginning in June 2023 and concluding in early 2024. To have meaningful engagement, the project team organized logistics and communicated with stakeholders and the public well in advance of meetings. Physical flyers were displayed in DCT vehicles, posts were made on social media, and a survey link was embedded on DCT's webpage. Through the Fall of 2023, the Steering Committee and the public provided input on the strengths, weaknesses, opportunities, and threats to DCT. This feedback combined with transit need and transit opportunity locations created the foundation of key recommendations within the DCT Strategic Plan. In 2024, the DCT Board of Directors provided strategic guidance on the recommendations.

Communication and Engagement Goals

The project team embarked on DCT's Strategic Plan, with three main goals. These pillars encouraged transparency and accessibility throughout the entire engagement process.

Drive awareness of the DCT strategic planning process amongst Delaware County residents and community partners.

Seek community feedback to inform the technical development of the Strategic Plan.

Build consensus and accountability amongst community partners for future implementation of plan elements.

Points of Engagement

Steering Committee

The Steering Committee was convened to provide advisory input on community needs, priorities, and solutions. In total, the Steering Committee met three times in person and engaged with the project team to discuss trends, transit gaps, and future-oriented solutions.

Meeting Dates

- August 1, 2023 – 2 pm to 4 pm
- October 24th, 2023 – 2 pm to 3:30 pm
- December 13th, 2023 – 2 pm to 3:30 pm

Public Meetings

Public Meetings were hosted in person, via Zoom, and were posted on Facebook. The three public meetings provided an opportunity for community members and DCT customers to express their hopes and concerns about the future of transit in Delaware County. There were a total of three public meetings with a mix of online and in-person engagement.

Meeting Dates

- August 15, 2023 – 5:30 pm to 7 pm
- August 23, 2023 – 12 pm to 1 pm (virtual)
- November 15, 2023 – 3:30 pm to 5 pm

DCT Board Meetings

Throughout the project, the project team presented monthly updates to the Delaware County Transit Board. This provided an opportunity for board members to engage and ask questions about key findings from the process. In January 2024, the project team hosted a two-hour workshop to discuss the final strategic plan recommendations.

Meeting Dates

- July 19, 2023 – 5:30 pm
- August 16, 2023 – 5:30 pm
- September 27, 2023 – 5:30 pm
- October 18, 2023 – 5:30 pm
- December 20, 2023 – 5:30 pm
- January 24, 2023 – 5:30 pm

Public Online Survey

The online survey was available via SurveyMonkey from August through November. The survey link was promoted on DCT's social media, bus flyers, public and stakeholder meetings and via Steering Committee members. Paper copies were available at all public meetings. The DCT Strategic Plan survey consisted of 11 questions asking respondents to share how often they ride DCT, and their thoughts on DCT's strengths, weaknesses, and priorities for the Strategic Plan.

Stakeholder Outreach

The Steering Committee and stakeholder outreach consisted of 22 organizations representing non-profits, government agencies, and social service agencies. Below is a list of participants by sector.

Government agencies/municipalities:

- City of Delaware
- City of Powell
- City of Sunbury
- Central Ohio Transit Authority
- Delaware County
- Delaware County District Libraries
- Delaware County Economic Development
- Delaware County Job and Family Services
- Delaware County Regional Planning Commission
- Liberty Township
- Ohio Department of Transportation
- Orange Township
- Ostrander
- Mid-Ohio Regional Planning Commission (MORPC),
- Ohio Means Jobs – Delaware County

Social service agencies:

- Delaware County Board of Developmental Disabilities
- Delaware-Morrow Mental Health & Recovery Services Board
- SourcePoint

Additional organizations:

- Delaware Area Chamber of Commerce
- Powell Chamber of Commerce
- Sunbury-Big Walnut Chamber of Commerce
- Olentangy Powell and Liberty Trails (OPAL)

Engagement Materials and Reach

To reach a broad audience multiple methods of engagement were utilized including Facebook Live streaming, an online public survey, physical flyers in DCT vehicles, and outreach to local news stations. In total, there were approximately 14,825 impressions via social media and advertising. Throughout the creation of the strategic plan, the engagement process was activated to engage with the community in a manner that was extensive, transparent, and accessible. For all communications, technical information was translated into content that could be quickly understood and with minimal context.

14,825

impressions via social media and advertising.

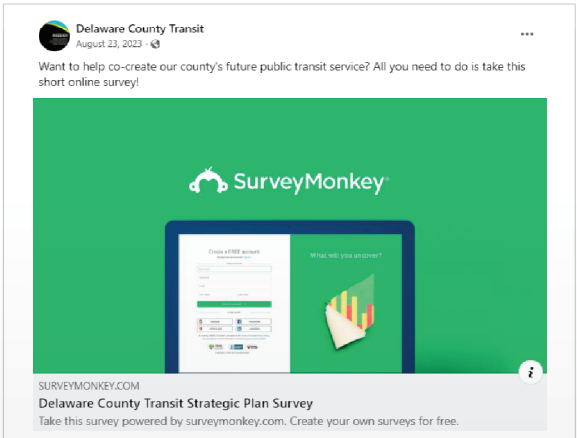
175

people engaged through public meetings and Steering Committee meetings.

Online survey cards handed out at public meetings and to the Steering Committee.

Public Meeting invitation on DCT's X Page (formally Twitter).

Public Meeting Flyer, "Deep Dive with Delaware County Transit".



Facebook post promoting the public survey.

What We Heard: Strengths, Weaknesses, and Opportunities Analysis

From public input and the steering committee, key strengths, weaknesses, and opportunities were identified.

Strengths

- **Provides Accessible Transit Options:** DCT offers transit services that are reliable and affordable for Delaware County.
- **Customer-Oriented Staff:** DCT's staff and leadership are knowledgeable and supportive of all customers.
- **Positive Public Perception:** DCT is known for reliability, clean buses, friendly staff, and programs that meet the community's needs.

Weaknesses/Needs/Gaps

- **Hours of Service:** DCT's service hours are limited and do not meet non-standard shift hours.
- **Limited Public Awareness:** While DCT is recognized for being reliable, there are still people in the county who are unaware of DCT and how the services function.

Opportunities

- **Potential Service Expansion:** DCT's FLEX service was highlighted as a key asset and there was a desire to expand the service to other villages and townships in the county.
- **Longer Service Hours:** It was discussed that DCT currently ends service at 6 pm, however extended service hours could serve more people, specifically second and third-shift workers.
- **Weekend Service:** DCT has the opportunity to extend service hours on the weekend.

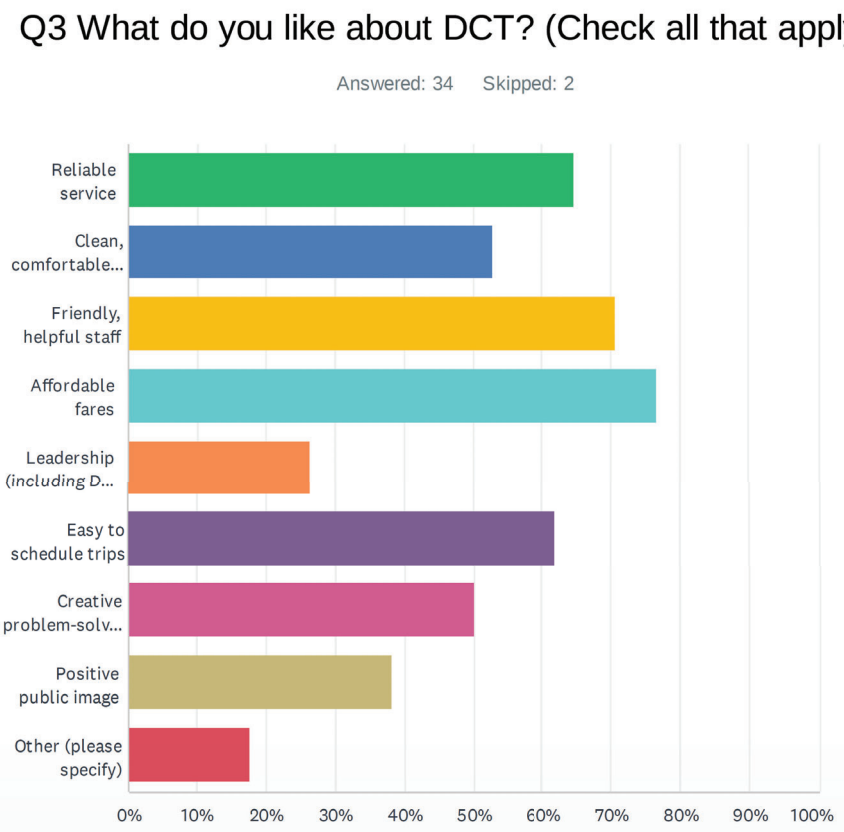
Public Survey

The public survey was open from August to November- a total of 46 people responded to the survey. Over 50% of respondents were weekly or daily riders, followed by 33% who never rode DCT. 13% of respondents were monthly or infrequent riders. Over 50% of respondents rode FLEX service and 36% rode demand response.

DCT strengths include: **Reliable service, helpful staff and easy scheduling**

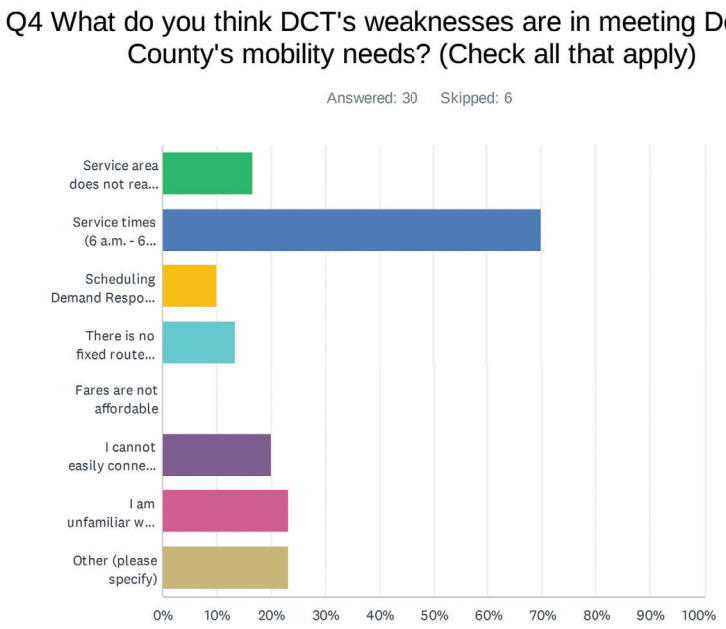
What do you like about DCT?

Many respondents noted affordable fares, reliable service, helpful staff and easy scheduling as top strengths, with clean buses, creative problem solving for Delaware County's needs and a positive public image as secondary strengths.



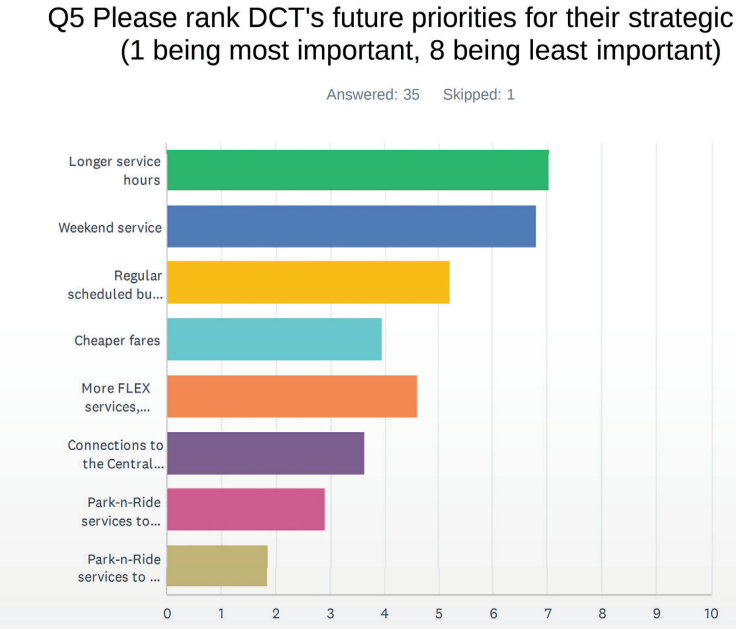
What do you think DCT's weaknesses are in meeting Delaware County's mobility needs?

When asked about DCT's weaknesses, 70% of respondents identified service times as a weakness. Lack of connections to other transit services, like COTA, and an unfamiliarity with DCT's services was also identified as a weakness.



Please rank DCT's future priorities for their strategic plan.

When asked about DCT's future priorities longer service hours and weekend service were the top two priorities.



Steering Committee Meetings Objectives and Outcomes

The Steering Committee, a dedicated group of community leaders and officials, played an instrumental role in DCT's strategic planning process. The committee's members, drawn from diverse backgrounds and areas of expertise, contributed valuable insights that enriched the strategic plan. In total, there were three Steering Committee meetings. Below is a summary of each meeting and key outcomes.

Steering Committee Meeting #1

On August 1, 2023 the Steering Committee met at the Delaware County Library Orange Branch. There were 24 Steering Committee members in attendance.

Key objectives:

- Formation of a Steering Committee (SC) to provide advisory input on community mobility needs, priorities and solutions to inform the final Strategic Plan
- An initial SC meeting to introduce the Strategic Plan and DCT's existing conditions; conduct a strengths, weaknesses, opportunities and threats (SWOT) analysis for DCT; and determine stakeholder priorities for the Strategic Plan
- Ask SC members to promote public engagement opportunities (public meeting, online survey) with their constituencies

Key outcomes:

From the meeting, top priorities were identified.

- Facility and maintenance locations
- Inter-county connections and county-to-county connections
- Long-term sustainable funding
- FLEX service in villages and townships
- Collaboration across county services

Steering Committee Meeting #2

On October 24, 2023 the Steering Committee met at the Delaware County Library Liberty Branch. There were 16 Steering Committee members in attendance.

Key objectives:

- Present preliminary findings regarding transit demand, service performance, facility analysis and peer revenue assessment
- Seek initial feedback from the group regarding the transit potential map, expanded service and future partnerships
- Present an overview of Delaware County's growth trends from the Delaware County Regional Planning Commission to contextualize preliminary findings
- Ask SC members to promote public engagement opportunities (public meeting, online survey) with their constituencies

Key outcomes:

- Steering Committee members agreed with the identified areas of growth in Delaware, Sunbury, and Powell/ Polaris.
- Service expansion and possible funding opportunities were discussed.

Steering Committee Meeting #3

On December 13, 2023 the Steering Committee met at the Delaware County Commissioners' Hearing room. There were 17 Steering Committee members in attendance.

Key objectives:

- Recap the Strategic Plan process, including purpose and goals, community engagement and existing conditions
- Present final recommendations, including proposed timeline and budget considerations for each recommendation before submittal to the DCT Board in 2024
- Discuss funding recommendations, including local funding options

Key outcomes:

- Positive reaction to proposed service enhancements.
- Understanding of need for expansion of DCT facility.
- Funding considerations and pros and cons of a sales tax.

Public Meetings

The project team facilitated a series of public meetings to provide an opportunity for community members and customers to influence the direction of DCT. The insights from the public meetings were invaluable and provided the team with real-time feedback on priorities in the community. Below is a summary of each of the public meetings.

Public Meeting #1: Dine and Dish with Delaware County Transit

On August 15, 2023 a public meeting was hosted at the Delaware Community Center YMCA. There were 13 people in attendance.

Key objectives:

- Inform Delaware County residents, transit riders, and other stakeholders about the Delaware County Transit (DCT) Strategic Plan.
- Provide an overview of existing conditions and outline upcoming work as part of the Strategic Plan.
- Seek feedback on DCT's strengths, weaknesses, and future priorities through facilitated engagement activities.

Key outcomes:

- Participants supported extended weekday service and new weekend service.
- Praised great customer service from drivers and DCT staff members.

Public Meeting #2: Dine and Dish with Delaware County Transit (Virtual)

On August 23, 2023 a public meeting was hosted virtually on Zoom. There were 20 people in attendance.

Key objectives:

- Inform Delaware County residents, transit riders, and other stakeholders about the Delaware County Transit (DCT) Strategic Plan.
- Provide an overview of existing conditions and outline upcoming work as part of the Strategic Plan.
- Seek feedback on DCT's strengths, weaknesses, and future priorities through facilitated engagement activities.

Key outcomes:

- Affordable fares and DCT's staff and leadership were highlighted as a key strength.
- Longer service hours, weekend service and connections to COTA services were identified as priorities.

Public Meeting #3: Deep Dive with Delaware County Transit (In Person with Recording Posted Online)

On November 15, 2023 a public meeting was hosted at the Delaware Community Center YMCA. There were 12 people in attendance. 64 people viewed the video on Facebook.

Key objectives:

- Share insights about Delaware County and future growth trends from local industry leaders.
- Understand how growth will impact DCT's future and strategic vision.

Key outcomes:

- Participants left with a better understanding of Delaware County and how DCT will need to change to serve the growing county.

As a way to engage the public with experts, the project team organized a panel discussion with local industry leaders. At this panel discussion, panelists spoke about the growth in Delaware County, economic development, human service transportation, and implications for the future of DCT. This forum allowed the public to ask questions and gain a deeper knowledge of current transportation challenges that exist as the county continues to grow. The panel consisted of a panel discussion with:

- Andy Volenik, Delaware County Transit
- Josh Sikich, HDR
- Bob Anderson, Delaware County Job and Family Services
- Monica Conners, Delaware County Economic Development
- Scot Sanders, Delaware County Regional Planning Commission

How was Feedback Incorporated?

Public engagement was the backbone of the development of the Strategic Plan. This plan aims to be the North Star for DCT, aligning its service with the hopes and desires the public wants to see from its public transit agency. As part of public engagement, the Strategic plan looked to understand the strengths, weaknesses, and opportunities from a customer perspective. It was also important to pair these hopes and desires with how Delaware County is shaping and evolving. Hosting a panel discussion with the movers and shakers of Delaware County, getting industry expertise in County Planning, JFS Transit, and Economic Development drives where and how transit should evolve with these changes. Feedback from the Steering Committee was taken into consideration while developing the recommendations. The Steering Committee allowed the Project team to share the existing conditions of the system, and determine the feasibility of solutions with the committee. This process kept the project aligned with the goals and objectives of DCT.

The public was interested in discussing future zones, connections to jobs, and having more service hours available to their existing services. This helped shape the recommendations by understanding what the customers want and need from their transit agency.
The Steering Committee wanted a transit system that they could be partners with and have an understanding and data on what DCT does for their constituents and community. The steering committee was a sounding board for the project team as a robust discussion led to the refinement of recommendations based on feasibility.

Ultimately, the Steering Committee and engagement process established that Delaware County is one of the healthiest, wealthiest, educated, and fastest growing counties in Ohio. As such, Delaware County Transit should plan for investing in a transit system that helps allow all residents to share in Delaware County's opportunities.

DELAWARE COUNTY TRANSIT

Strategic Plan

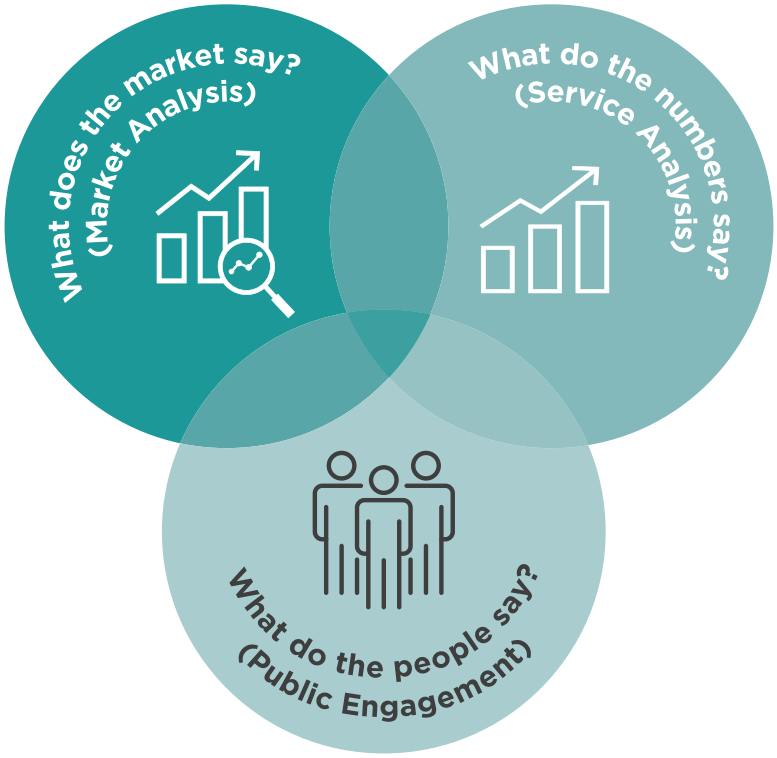
Evaluation and Recommendations

Service Expansion Analysis,
Maintenance Facility Analysis,
Service Expansion Funding Analysis,
Recommendation, Implementation

DRAFT

Service Expansion Analysis

The Strategic Plan process is a three-pronged approach, combining the findings from service analysis, market analysis, and engagement to examine opportunities to improve and expand on-demand service in the County.

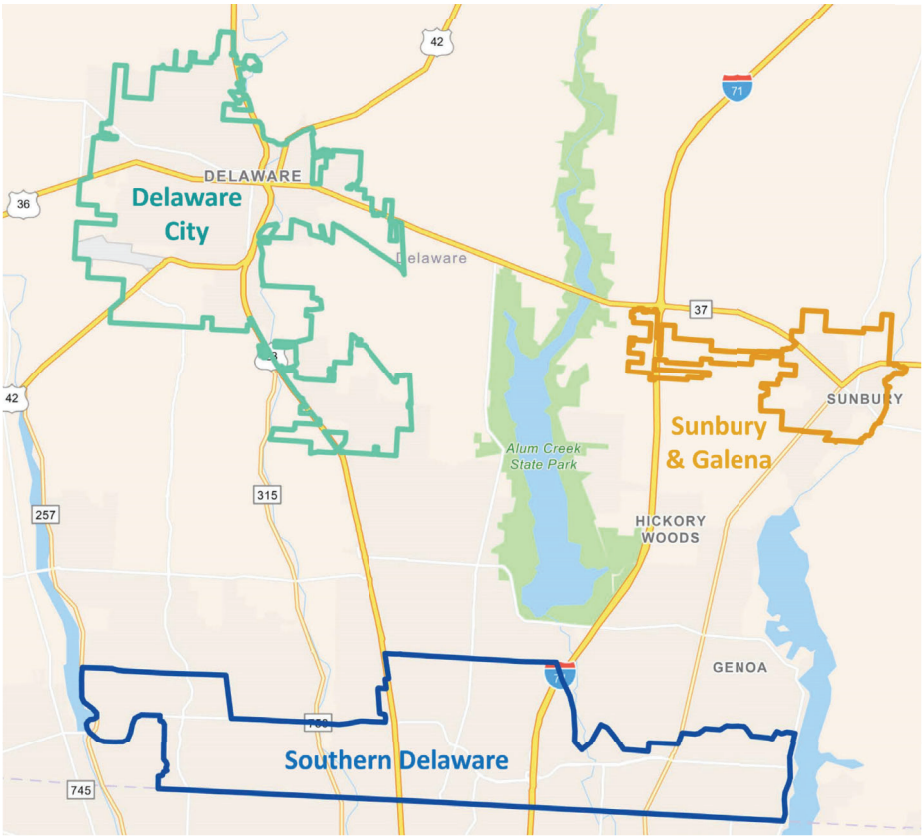


DCT FLEX Service has proven to be a popular and productive mobility option for Delaware City residents. As of January 2024, the Delaware City FLEX services set a new single-day record providing over 626 trips just within the City of Delaware. Through a market analysis, three areas of Delaware County were identified as having the highest Transit Potential and/or Transit Need in the study area. Based on this assessment three locations were determined to be prospective candidates for expanded or new FLEX service.

- Delaware City
- City of Sunbury
- Delaware South, including parts of Powell, Polaris, and Westerville

The specific boundaries for each candidate zone were guided by the locations of key activity centers that are likely to generate FLEX ridership. **Figure 34** shows the three zones that were analyzed for potential future service to estimate the ridership, vehicle needs, and average transit wait time.

Figure 34 *Proposed Microtransit Zones in Delaware County*



Projected Ridership and Vehicle Needs Methodology

To assess the costs and benefits of extending FLEX zones, ridership was estimated using Fall 2022 weekday and weekend trip data from Replica. Replica is a data management tool that transforms available datasets into a holistic picture of mobility, land use, people, and economic activity using available data. Replica is a modeling tool to determine demand and potential ridership within an area with high accuracy. Data was then validated by comparing the projected and actual ridership by hour for the Delaware City FLEX zone **(see Figure 34)**. Existing FLEX service is only available on weekdays from 6:00 am to 6:00 pm, however ridership was estimated for 24 hours for each zone to assess the impact that expanded service hours could have on ridership trends.

Projected vehicle needs correspond with ridership demands that are estimated using the Replica projected ridership levels. Based on the performance measures set by the DCT Board of Trustees, vehicle estimates ensures that customers' wait times do not exceed 30 minutes for FLEX, with a goal of 15 minutes. For estimating purposes for the Strategic Plan, the target and goal was adjusted to 20 minutes, to ensure the service expansion costs are realistically captured based on current service measures.

Wait time is a key measure of service quality for app based Microtransit services like FLEX. Wait time refers to the time between a trip request via the user app or call-in number, and a pick-up at the rider's point of origin. Wait time is a function of several factors including ridership demand, zone size, and vehicles available for service. To ensure that wait times remain below 30 minutes throughout the service day, DCT adjusts the number of FLEX vehicles in service throughout the day.

Delaware City FLEX Zone

Delaware City operates a FLEX service Monday through Friday from 6 a.m. to 6 p.m. The weekday ridership projections from Replica for Delaware City do not exactly match the actual ridership of DCT for any one hour, but the total projected ridership between 6:00 am and 6:00 pm is within nine percent of actual ridership (with projected ridership exceeding actual). In **Figure 35**, the chart shows potential ridership earlier and later in the day, beyond the current service hours from 6 a.m. to 6 p.m..

The projected weekday ridership for Delaware City FLEX is higher than the actual reported 2022 ridership during morning and afternoon peak periods and lower than actual ridership in the mid-day period. It should be noted, that since 2022, DCT has seen a consistent ridership growth with this service.

Figure 35 *Current and Projected Weekday Ridership by Hour – Delaware City FLEX*

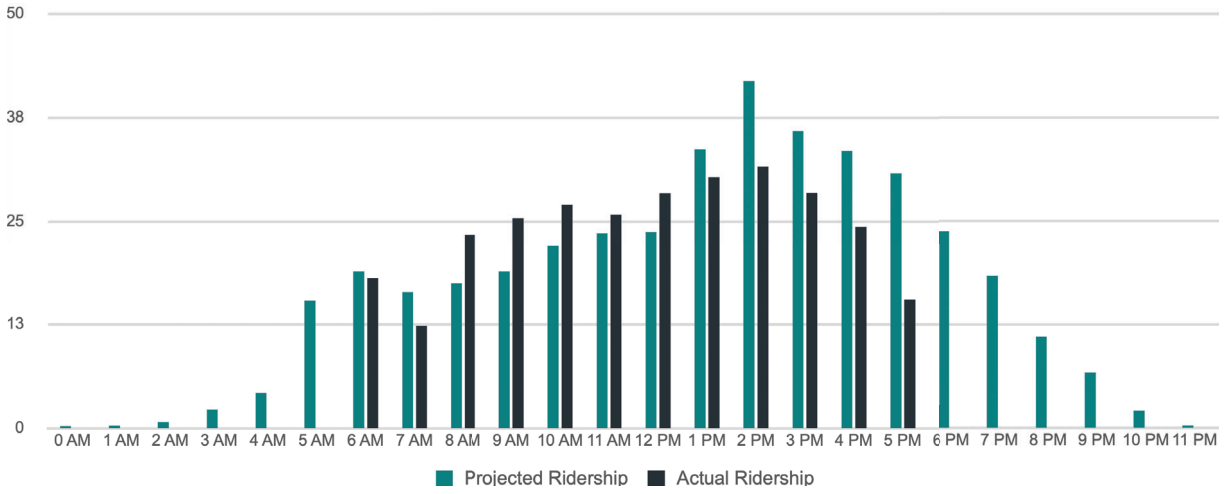
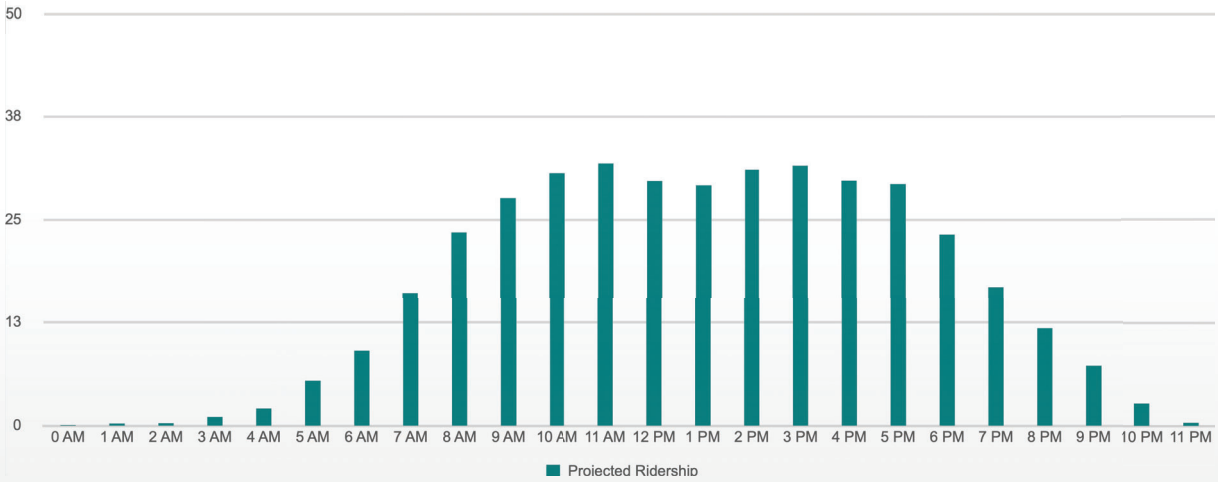


Figure 36 shows the projected weekend ridership for Delaware City FLEX. The demand for weekend service is relatively similar to weekday service, showing that expanded service may benefit the community.

Figure 36 *Projected Weekend Ridership – Delaware City*



Projected Wait Times and Vehicle Needs

Figure 37 shows the average number of FLEX vehicles currently in service each hour in Delaware City, and the estimated number of vehicles needed to accommodate projected weekday ridership demand. The current average number of vehicles in service is higher than the projected vehicle needs. Delaware City FLEX could operate with less vehicles and still meet its target performance metrics for its current service. As demand for FLEX continues to grow, the vehicle fleet will also need to grow.

Figure 37 *Current and Projected Average Weekday Vehicle Needs by Hour – Delaware City FLEX*

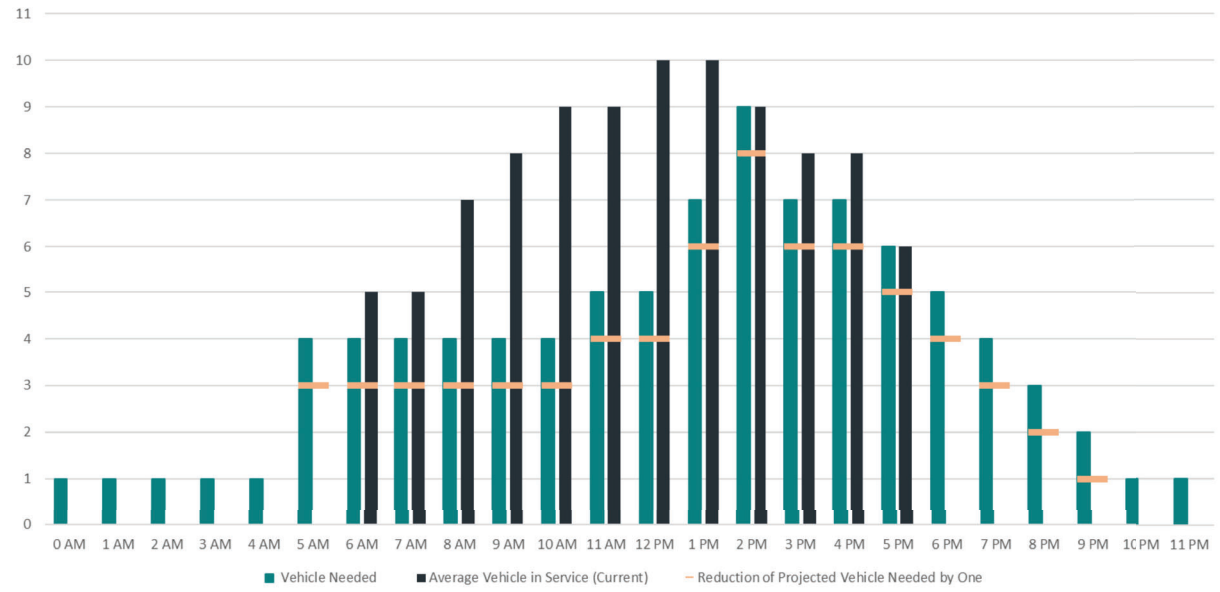
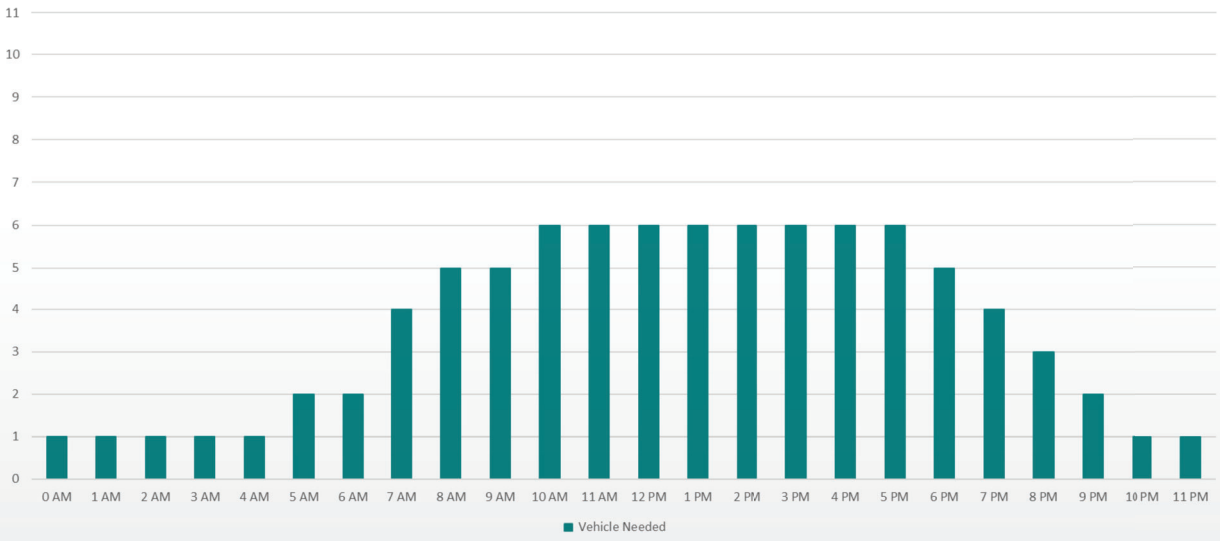


Figure 38 shows the estimated number of vehicles needed to provide weekend FLEX service in Delaware City within the 30-minute wait time target. Vehicle needs is correlated with service performance metrics of a wait time goal and target of 20 minutes. As this is a new service, there are only projections. These estimates are based on the projected ridership for the Delaware City zone on weekends.

Figure 38 *Projected Weekend Vehicle Needs – Delaware City FLEX*

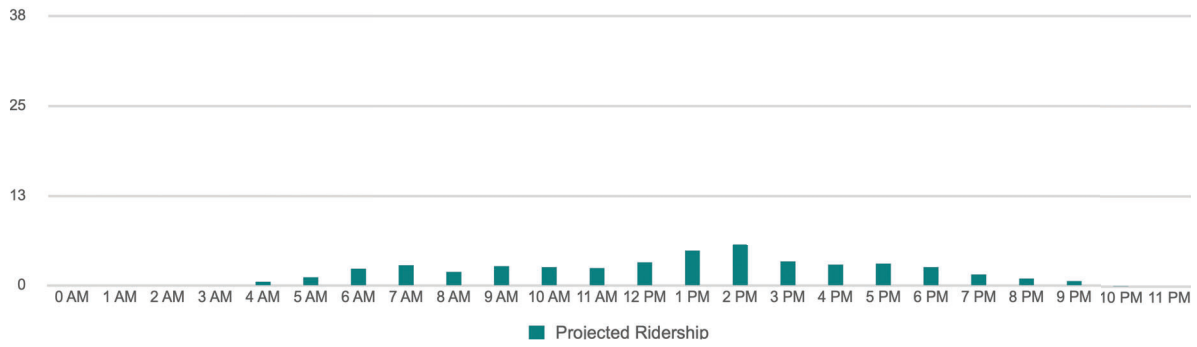


Sunbury FLEX Zone

The City of Sunbury has increased its population by over 36% in the last 10 years, with a population of over 6,500 residents.[2] This town abuts the I-71 corridor, attracting Columbus commuters as residents and tourists with their Tanger Outlet Mall. Sunbury is also an epicenter of future growth due to its proximity to Licking County, where new businesses have been located since the announcement of Intel in 2022.

Sunbury could be a good expansion of Delaware FLEX services, as it could aid in the congestion and human service needs of its residents. Using the same methodology as with Delaware City, the projected weekday ridership can be found in **Figure 39**.

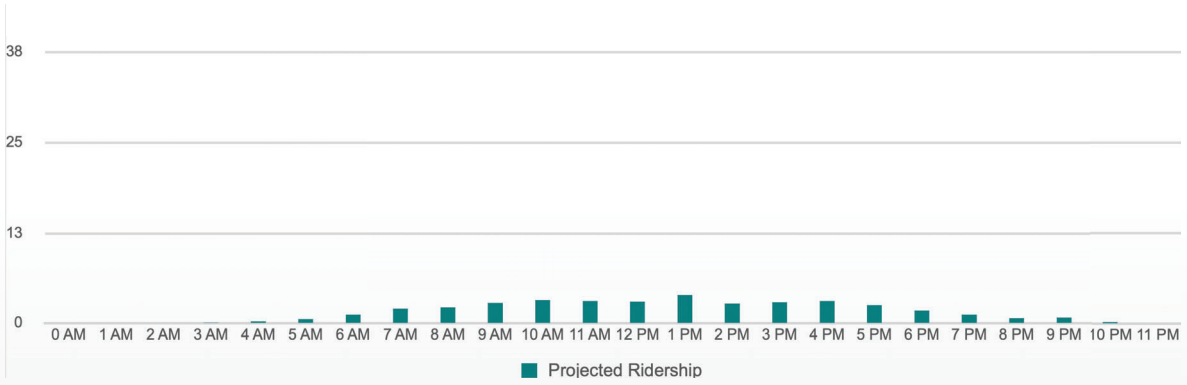
Figure 39 *Projected Weekday Ridership – Sunbury*



Despite the lower ridership projections than Delaware City, Sunbury's and Galena's growth may drive increased demand after the launch of the service. Currently, the only transit service available is the County-wide Demand Response, which charges riders based on mileage, as opposed to the FLEX fare of $2.00 per trip. This service gives DCT an ability to reach a new market of transit users.

Weekend ridership of Sunbury is lower than its weekday ridership levels, which could be attributed to more social and household trips, as opposed to work, medical, or educational needs.

Figure 40 *Projected Weekend Ridership – Sunbury*

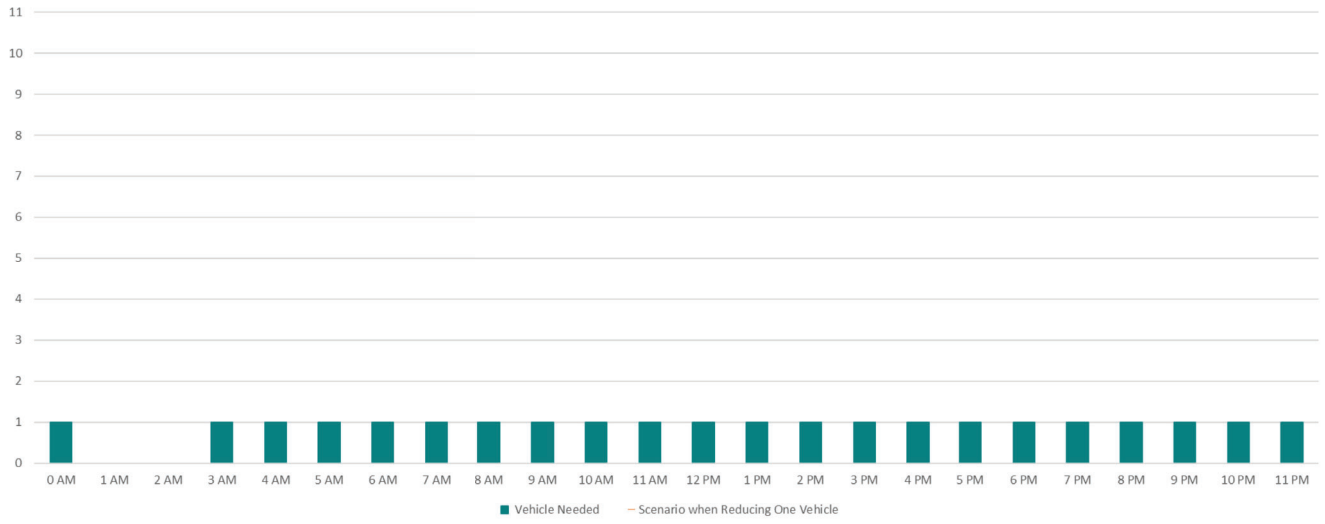


[2] 2012, 2022 ACS 5-Year Estimates, Table DP05

Projected Wait Times and Vehicle Needs

Since the ridership projection for weekdays is low, the wait time and vehicle needs for Sunbury make this expansion financially and operationally feasible for DCT. The projected weekday vehicle needs is one vehicle. However, for Microtransit to be successful, a minimum of three vehicles should be deployed to a zone to keep the wait times within the performance metrics set by the Board. This is a standard Microtransit procedure to accommodate the demand responsiveness. Weekend ridership would project the same number of vehicles to initially deploy the services.

Figure 41 *Projected Weekday and Weekend Vehicle Needs – Sunbury and Galena*



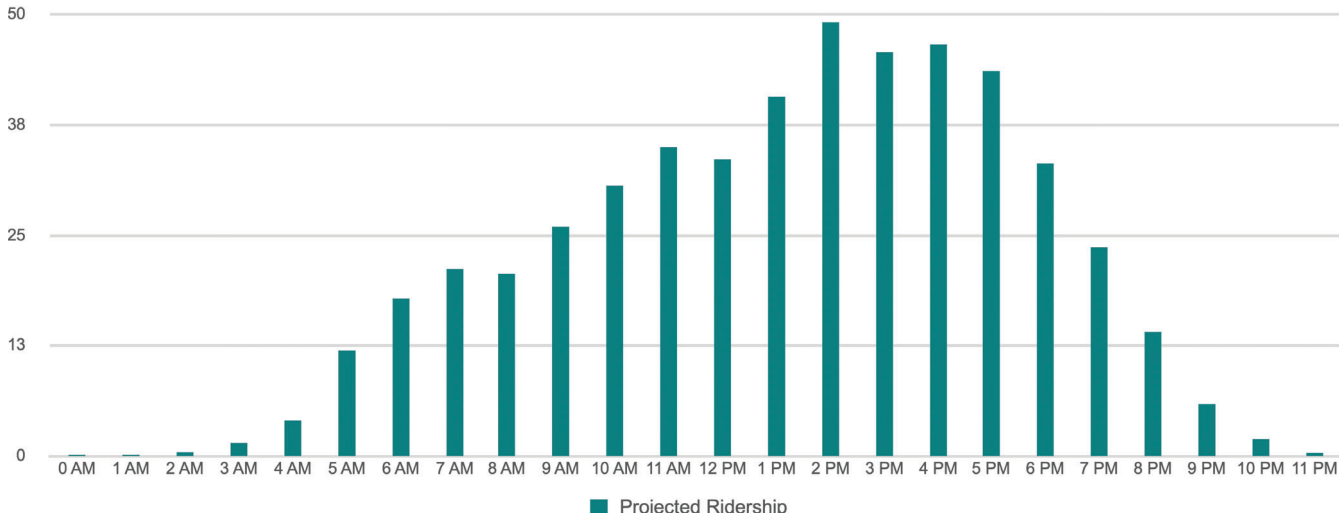
Weekend ridership would project the same number of vehicles to initially deploy the services to meet the projected ridership demand.

Southern Delaware FLEX Zone

The Southern Delaware zone consists of the Polaris commercial area, parts of the City of Westerville, and the City of Powell. This area abuts Franklin County and continues to grow with more businesses, commercial areas, and residential complexes. Through engagement, it was heavily heard that residents would like to take transit in and around the southern region of Delaware, as congestion and parking continue to be an issue.

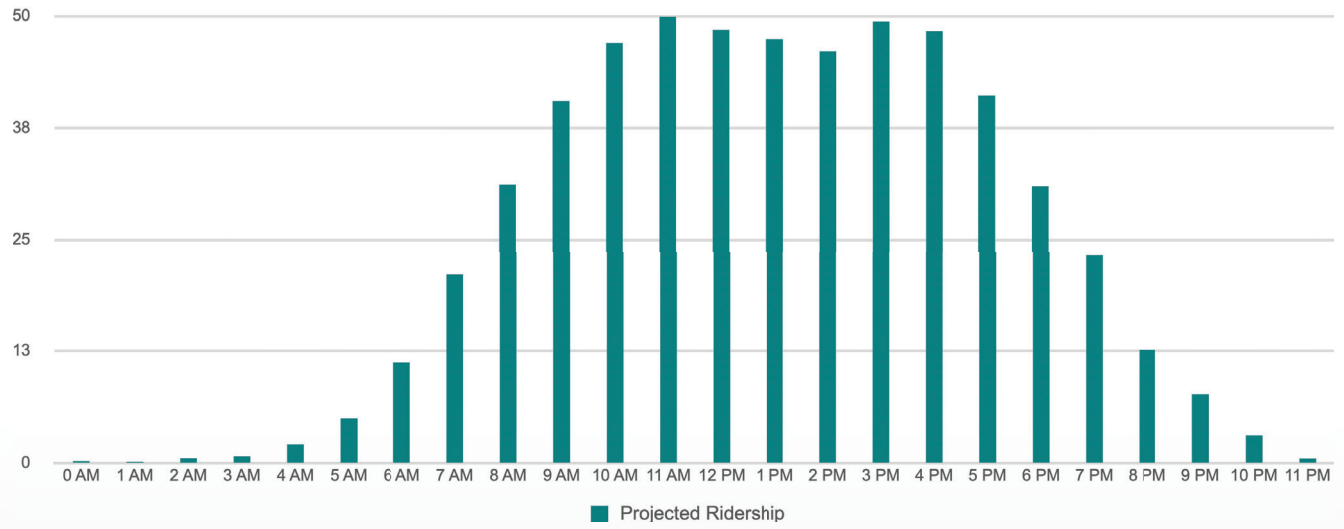
Using Replica, the projected weekday ridership is greater than 45 passengers per hour in the afternoon. The demand for transit in this area is greater than Delaware City FLEX.

Figure 42: *Projected Weekday Ridership – Southern Delaware County*



Weekend trips within the Southern Delaware portion are projected to be even higher than weekdays, which can be attributed to the shopping, dining, and entertainment that is located in the area.

Figure 43: *Projected Weekend Ridership – Southern Delaware County*



Projected Wait Times and Vehicle Needs

To accommodate the ridership demand and the service performance metrics of average wait time, an estimate of an additional 11 vehicles would be needed to serve weekday and weekend ridership.

Figure 44 *Projected Weekday Vehicle Needs – Southern Delaware County*

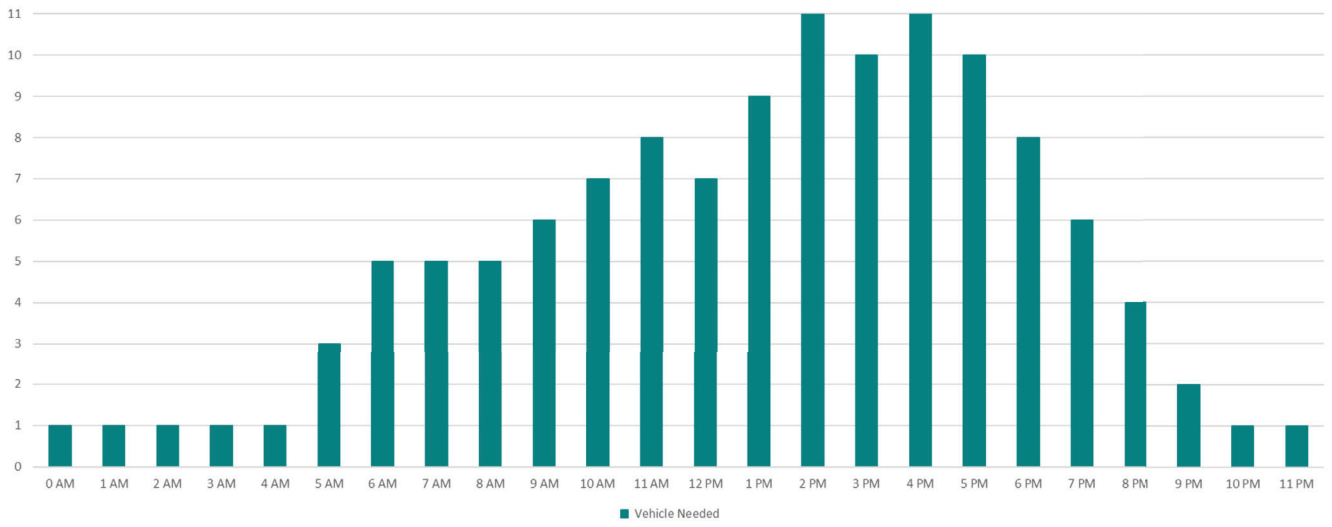
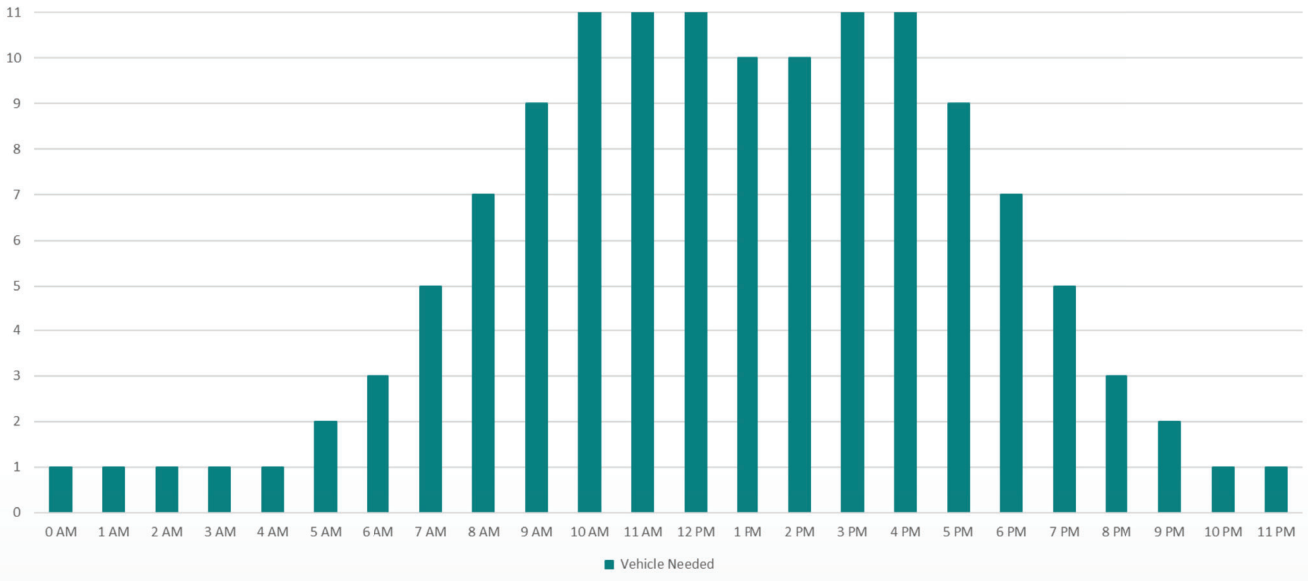


Figure 45 *Projected Weekend Vehicle Needs – Southern Delaware County*

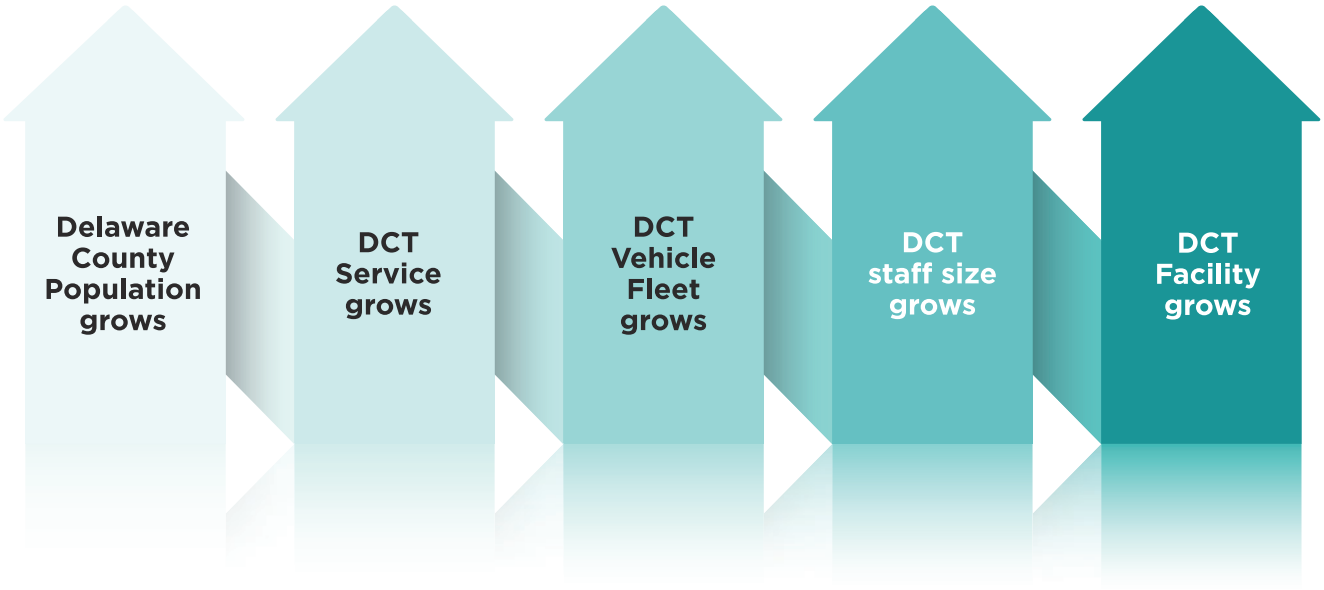


The service expansion analysis highlights that expanding current DCT FLEX service – for more times of day on more days of the week across more geographic areas – would create value for the community.

Maintenance Facility Analysis

DCT operates one facility for administrative and maintenance staff. This facility was renovated in 2019 and is located in Delaware City. The location of the facility is optimal to serve future zones of FLEX service. DCT owns over 6 acres of adjacent, flat land and can expand its facility footprint to best meet the future needs of DCT.

As Delaware County grows, DCT's service should grow as well to serve new residents and businesses. In the previous section, the analysis highlighted that additional vehicles will be needed to serve additional trip demand in the future. This section describes the need for a larger facility to store, maintain, and dispatch the larger fleet of the future.



There are several considerations when designing a larger facility for DCT. Each consideration adds to the overall cost of the facility. It is estimated that a new facility to accommodate additional transit vehicles, larger maintenance shop, larger administrative building, and an on-site fueling will cost roughly $29 million. This cost can fluctuate due to a variety of reasons.

Additional Administrative Space

Currently, DCT does not have enough office and administrative space for its current staff. As staff continues to grow as service expands throughout the County, additional offices and meeting spaces will be required. In addition, increased parking for staff and the general public will need to be accommodated. Currently, for a member of the public to access the facility via Transit, the bus needs to reverse out of the existing driveway, creating safety concerns.

Covered Parking for Transit Vehicles

As service increases, additional transit vehicles will be procured to meet the new demand. Having an expanded overhang or garage will protect vehicles from the elements, reduce maintenance, and possibly extend their useful life. In addition, it saves operator time by eliminating the need of preparing the vehicle if there is snow or icy conditions.

On-site Fueling

DCT currently fuels its fleet off-site at a public gas station. As more vehicles are procured, more fuel will be purchased to continue operations. There are three major benefits to having a dedicated fueling station on site at the maintenance facility.

Time
Having transit vehicles fueled on-site saves time and resources for operators and maintenance staff by being able to fuel before or after a shift while already at the facility. This means less downtime on the road, which corresponds to lower operating costs and improved productivity.

Consistent Fuel Prices
DCT can purchase fuel through a negotiated price point in bulk, which can mitigate financial loss during periods where gas prices may fluctuate for everyday consumers. Fuel can also be more accurately budgeted for.

Fuel management and control
Managing and controlling fuel is easier with on-site fueling. This makes it easier to spot discrepancies in fuel spend/consumption and decreases risks associated with shortages and price hikes.

As part of this analysis, two concepts were created of what the existing facility and property could be to accommodate future growth and expansion of DCT services. These two concepts will need to be further evaluated and refined to meet the specific needs of the agency.

The first concept includes additional administrative space and parking, keeping the maintenance facility attached to the administrative space. This concept includes on-site fueling on the far east end of the site, allowing the flow of transit vehicles to be separated from general traffic and parking. This also allows appropriate drop off of customers who may need to access the administrative offices.

The second concept is similar, which provides additional administrative and parking spaces and on-site fueling, but further separates the administrative and maintenance services. This concept also allows for an enclosed transit vehicle parking for protection from the elements.

Figure 46 *Concept 1 (for illustrative purpose only)*

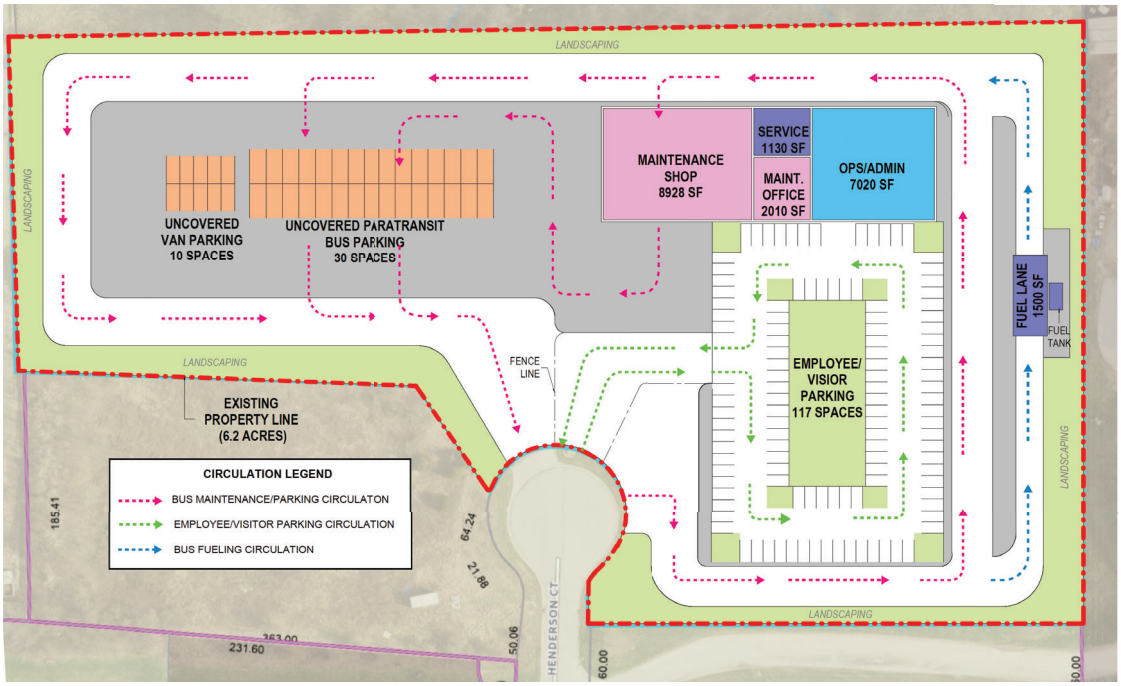
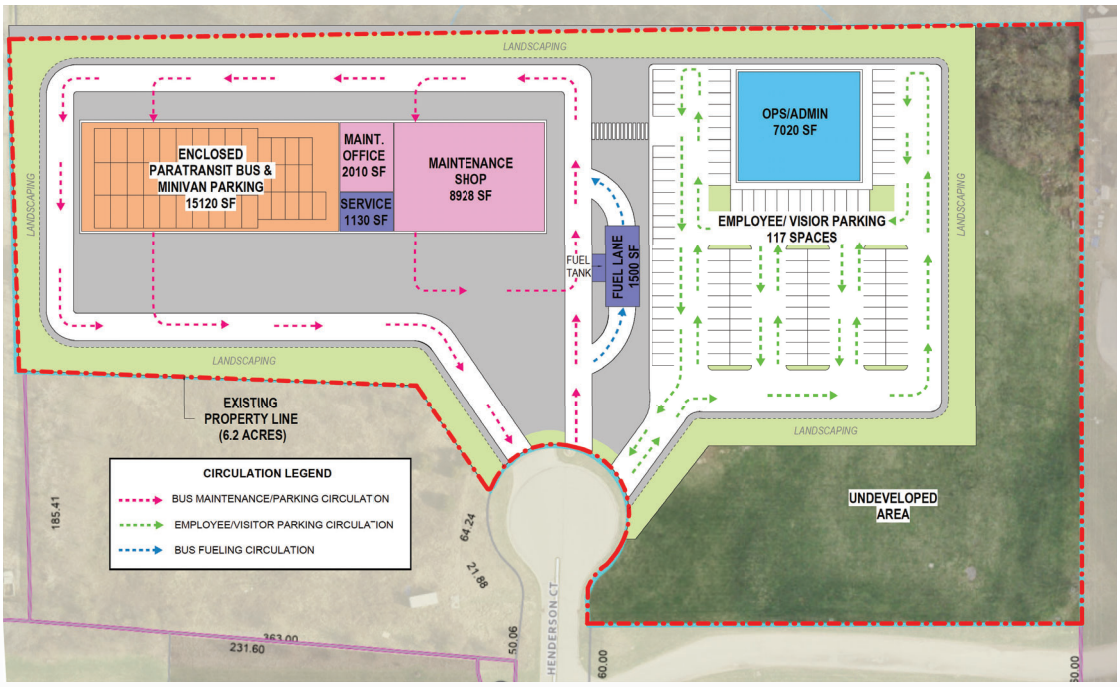


Figure 47 *Concept 2 (for illustrative purpose only)*



Each concept is for illustrative purposes only. They highlight that there are several potential facility layouts depending on a more detailed assessment of considerations and needs. A facility master planning process will be a useful tool for identifying the specifics of future facility design.

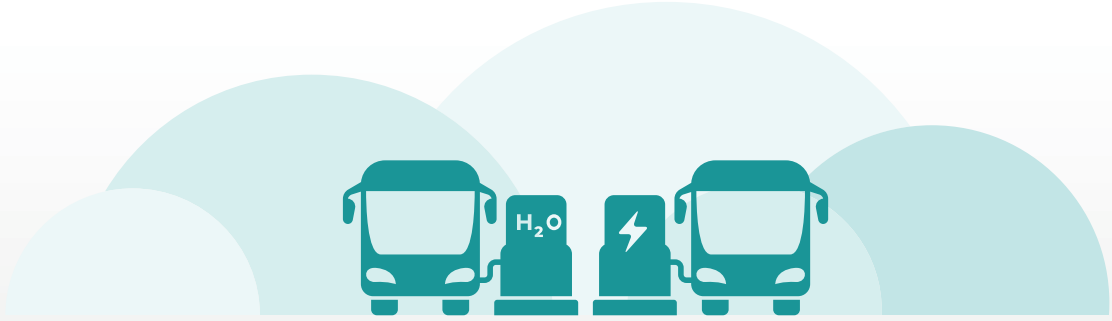
Fuel Considerations As Technology Evolves

DCT currently fuels with gasoline at local gas stations. The transit industry is witnessing a significant shift towards sustainable vehicle technologies to reduce greenhouse gas emissions. Zero Emission Buses (ZEBs) have the potential to lower operations and maintenance costs for fleets and have zero tailpipe emissions. In addition, zero emission mobility has the support of leaders, communities, and policymakers, which is reinforced by nationwide commitments to electrification and the availability of grants and incentives to reduce the costs of implementation.

In North America, Battery Electric Buses (BEBs) are leading the way in this transformation, producing zero tailpipe emissions. BEBs are gaining prominence for several reasons, including a growing market presence, a lower cost than other ZEB technology, and compatibility with the existing electric grid. The charging infrastructure for BEBs can be located at bus depots or along established bus routes using overhead or inductive (wireless) chargers. Charge times depend on technology, and have a limited operational range when compared to the conventional buses. However, as battery technology advances, more transit agencies are electrifying their fleets while maintaining service levels. Today's battery electric cutaways can provide 140 to 200 miles of range before needing to recharge; however, these numbers do not account for operations of the vehicles' HVAC systems, which can significantly reduce usable driving ranges.

Another ZEB technology that continues to grow in popularity is Hydrogen Fuel Cell Electric Buses (FCEBS). Transit agencies can either procure hydrogen through on-site generation or third-party delivery, with liquid hydrogen being the common choice as it offers advantages in infrastructure, space, and cost. FCEBs can refuel in as little as 10-15 minutes, making them attractive, zero-emission options for transit agencies with longer service deliveries.

As technology continues to evolve, DCT should evaluate its fuel needs as part of the facility master plan to determine if another fuel source would be more appropriate for the needs of Delaware County. Each fuel type, whether it is gasoline, battery electric, or hydrogen comes with a cost and need for appropriate storage and space to safely refuel and service transit vehicles.



Service Expansion Funding Analysis

As DCT considers expanding the FLEX on-demand services, additional funding will need to be identified. Implementation of these recommended expansions would require supplemental funding to cover:

- Increase in annual operating and maintenance (O&M) costs
- and capital costs
  - To procure the additional vehicles needed to provide the expanded service levels and
  - To construct a new maintenance facility to provide the capacity to store and maintain the existing fleet and the future, larger fleet.

Table 19 summarizes the annual O&M cost and capital cost estimates for the recommended expansions.

Table 19 *Estimated O&M and Capital Costs: Service Expansion, Vehicle, and Maintenance Facility (2023$)*

	No Change	Delaware FLEX Expansion	Sunbury Extension	Southern Delaware Expansion	TOTAL
Total Annual O&M Expenses	$4,567,243	$399,904	$705,786	$2,468,910	**$8,141,843**
Additional Vehicles			$357,507	$1,131,859	$1,668,366
Maintenance Facility					$29,600,000

The following sections provide an overview of four potential approaches that could be targeted to provide the supplemental funding needed to implement the recommended service expansions and associated capital costs. The approaches reflect a combination of existing locally controlled sources, a potential new local revenue source, and the pursuit of federal discretionary (competitive) grant programs. These approaches include:

1. Utilizing existing reserves
2. Updating the allocation of Section 5307 funding
3. Considering a local sales tax
4. Applying for federal grant opportunities.

The four options are not mutually exclusive and can complement one another to create a balanced funding approach for future DCT needs.

DCT's Existing Reserve Balance

DCT currently has approximately $5 million invested in the State of Ohio's State Treasury Asset Reserve of Ohio (STAR Ohio) Program. STAR Ohio is an investment pool that allows government subdivisions—from municipalities to school districts—to invest in high-grade, short-term securities, while offering safety, penalty-free liquidity, and comparatively higher yields. At this time there are no DCT Board policies in place that define how and when these funds can be used. The following provides an overview of potential policies that could be implemented regarding the future use of the STAR OHIO invested funds for operating and capital needs.

Operating Reserve

The Operating Reserve fund would provide sufficient financial resources to ensure timely payment of DCT's operating expenses as authorized and defined by the Board. Potential uses for the Operating Reserve fund would be spikes in fuel costs; opportunities to advance urgent, high-priority service needs or demands; cover an unforeseen reduction or delay in a state or federal revenue source; and augment and/or balance the annual operating budget.

Across the country, transit agencies typically maintain a three-month operating reserve which is equivalent to 25 percent of the annual operating budget. Based on DCT's FY 2023 Operating Budget of $4.0 million, a three-month operating reserve would be approximately $1 million. Additionally, if the recommended service expansions shown in Table 19 were implemented, the three-month operating reserve would need to be increased by $0.9 million.

Capital Reserve

The Capital Reserve would be established and maintained as a fund to support future capital costs associated with vehicle replacements, acquiring new vehicles, and building the new maintenance facility. The objective would be to build up a reserve of funds before capital expenditures are incurred in or after the start of a fiscal year. These funds would be used to pay for the capital expenditures in full or as the required local match for state and federal grant awards.

From the experiences of other transit agencies, the size of the capital reserve fund is based on the near-term (Five-Year) capital improvement plan that typically includes a projection of cost associated with vehicle purchases and other capital infrastructure needs. In addition to establishing the fund to address the typical 20 percent local match requirement for grants, agencies also use this reserve to establish a contingency fund for upcoming major capital investments that would be used to cover unexpected cost increases during construction on the order of 10 to 20 percent of the cost estimate. Based on the capital costs shown in Table 20, building up funds to cover a potential 20 percent local match for grants to acquire the 14 buses would be approximately $0.33 million, and providing the local match for the new maintenance facility would be approximately $6.0 million. Further, establishing a 10 percent contingency fund for the maintenance facility would be approximately $2.9 million.

Potential Fully Funded Reserve

As shown in **Table 20**, in total, the suggested Operating and Capital Reserve targets described above would exceed DCT's current reserve balance of approximately $5 million. These targets could provide a framework to integrate the establishment of the Operating and Capital Reserves as part of the annual budgeting process and near-term, multi-year financial planning process with a goal of fully funding the reserve

Table 20 *Estimated Fully Funded Reserve*

Operating Costs	Total Costs	Reserve	Total Operating Reserve
Operating & Maintenance	8,141,843	25%	2,035,461
Capital Costs	**Total Costs**	**Match**	**Total Local Match**
Vehicles	1,668,366	20%	333,673
Facility	29,600,000	20%	5,920,000
Facility Contingency Fund	29,600,000	10%	2,960,000
		TOTAL	**$11,249,134**
	STAR Ohio Investment Amount		$5,000,000
	Difference/Potential Target		**($6,249,134)**

Allocation of Annual Federal Formula Funds

As described in the Existing Conditions section, the Columbus Urbanized Area (CUA) receives a share of FTA's total annual Section 5307 Urbanized Area Formula Funds, Section 5340 Growing States and High-Density States Formula Funds, and Section 5339 Bus and Bus Facilities Funds annually, based on an allocation methodology that incorporates population levels, levels of service provided, and ridership variables to distribute these funds to urbanized areas across the country. On an annual basis, and in partnership with MORPC, the three transit systems within the CUA - COTA, LCTB, and DCT - agree to allocate the full apportionment of Section 5307 Urbanized Area Formula Funds, Section 5340 Growing States and High-Density States Formula Funds, and Section 5339 Bus and Bus Facilities Funds based on the same methodology FTA uses to allocate funds nationally. As shown in **Table 21**, based on FTA's allocation methodology for the CUA's FY 2021 FTA formula fund allocation from the FTA, DCT would receive approximately 5 percent of the total funds ($1.1 million).

Table 21 *FTA Formula Fund Allocations Methodology Results (FY 2021)*

Transit Provider	Section 5307 & 5340	Section 5339	Total
CUA Total Funds	**$19,039,511**	**$2,175,906**	**$21,215,417**
COTA	$17,811,429	$2,040,287	$19,851,716
DCTB	$973,240	$106,392	$1,079,632
DCTB	$254,842	$29,227	$284,069

However, in addition to using FTA's allocation methodology, there is a second local step that determines the final distribution of funds among the three transit agencies. Each year the three transit agencies and MORPC meet to review the allocation results and then agree on what each agency needs in terms of federal formula funds for the next fiscal year. Based on the results of this meeting, the agencies agree to a revised federal formula funds allocation, which for FY 2021 is summarized in **Table 22** and reflects DCT's share of federal formula funds decreased from $1.1 million to $0.28 million. In reviewing **Tables 21** and **Table 22**, federal formula funds are transferred from both DCT and LCTB to COTA. The final element of the second local step in the allocation methodology is that COTA transfers a portion of its local dedicated transit sales tax to the other two transit agencies to off-set the transfer of federal formula funds.

Table 22 *Allocation of Federal Funds based on Meeting (FY 2021)*

Transit Provider	Section 5307 & 5340	Section 5339	Total
CUA Total Funds	**$19,039,511**	**$2,175,906**	**$21,215,417**
COTA	$18,632,500	$2,175,906	$20,808,406
DCTB	$276,774	$106,392	$276,774
DCTB	$130,237	$29,227	$130,237

The current two-step allocation approach has been in place since 2013. With the completion of this study, it may be the right time to revisit the current approach given DCT's planning efforts to expand service levels and move forward with a major capital investment project as well as to address the growth in employment and population within Delaware County over the last 10 years, to determine if there is a more equitable approach to allocate annual federal funds.

Potential New Local Source – Transit Sales Tax

Within the State of Ohio, counties are eligible for two separate sales taxes – a county sales tax and a transit sales tax on top of the 5.75 percent state sales tax. The county sales tax rate can

range up to 1.50 percent, while the transit sales tax rate can range up to 1.00 percent. As shown in **Table 23**, there are currently ten counties in the State that implement a transit sales tax to provide a supplemental, locally-controlled dedicated revenue source to support service and capital needs. Transit sales tax rates vary from a low of 0.10 percent in Allen County to a high of 1.0 percent in Cuyahoga County.

Table 23 *Ohio Transit Sale Tax Rates*

County	County Tax Rate	Transit Tax Rate	State Tax Rate	Total Sales Tax Rate
Cuyahoga	1.25%	1.00%	5.75%	8.00%
Hamilton	1.25%	0.80%		7.80%
Franklin	1.25%	0.50%		7.50%
Lake	1.00%	0.50%		7.25%
Lucas	1.50%	0.50%		7.75%
Summit	0.50%	0.50%		6.75%
Mahoning	1.25%	0.25%		7.25%
Portage	1.00%	0.25%		7.00%
Stark	0.50%	0.25%		6.50%
Allen	1.00%	0.10%		6.85%

To provide context for the potential level of revenue that a dedicated transit sales tax could generate locally, Delaware County's annual sales tax revenue collected over the FY 2013 to FY 2022 period was reviewed and estimates based on the incremental revenue level that would have been generated based on transit sales tax rates of 0.1 percent, 0.25 percent, and 0.5 percent.

As shown in **Table 24**, the level of sales tax revenue collected within Delaware County (1.25 percent rate) has nearly doubled since 2013, increasing from $43.8 million to $87.4 million. The compound average annual growth rate over this period was approximately 8 percent and represents a strong and stable revenue source for the County.

Table 24 *Delaware County Historical Annual Sales Tax Revenue Collected: 2013-2022 ($, in millions)*

FY	County Revenue: 1.25% Rate	Year-over-Year Change
2013	$43.8	
2014	$47.3	8.1%
2015	$50.9	7.6%
2016	$52.8	3.8%
2017	$57.6	9.1%
2018	$62.3	8.2%
2019	$66.6	6.9%
2020	$67.5	1.4%
2021	$79.8	18.2%
2022	$87.4	9.4%

Table 25 provides a very conceptual comparison of the level of transit sales revenue that could have been generated over the 2013 to 2022 period if there was a transit sales tax within Delaware County. As shown in the Table, over the 10 years annual revenues from a 0.10 percent rate would have increased from $3.5 million to $7.0 million; a 0.25 percent rate would have increased from $8.8 million to $17.50 million; and a 0.50 percent rate would have increased from $17.5 million to $34.9 million. The amount of revenue would help offset the costs needed for transit service expansion within Delaware County.

Table 25 *Conceptual Annual DCT Transit Sales Tax Levels: 2013-2022 ($, in millions)*

FY	.10% increment	.25% increment	.50% increment
2013	$3.3	$8.3	$16.6
2014	$3.5	$8.8	$17.5
2015	$3.8	$9.5	$18.9
2016	$4.1	$10.2	$20.4
2017	$4.2	$10.6	$21.1
2018	$4.6	$11.5	$23.0
2019	$5.0	$12.5	$24.9
2020	$5.3	$13.3	$26.6
2021	$5.4	$13.5	$27.0
2022	$6.4	$16.0	$31.9

Impact of COTA's Existing Transit Sales Tax Collected in Delaware County

The City of Columbus extends into Delaware County, which allows COTA's existing 0.5% transit sales tax to be collected within the Polaris Town Center area. This area includes a number of major retail establishments, impacting the amount of sales tax that is generated. As summarized in **Table 26**, over the 2019 to 2022 period the 0.5% COTA sales tax annually generated between $9.4 million and $12.2 million within Delaware County. Despite being within Delaware County, these establishments support COTA, and not DCT operations.

Table 26 *COTA 0.5% Sales Tax Revenue Collections within Delaware County*

	Annual Total @ 0.5%
2019	$9.4
2020	$9.1
2021	$10.7
2022	$12.2

Source: https://tax.ohio.gov/government/resources/distributions-sales-tax

There cannot be two different transit sales tax in one area. To provide preliminary understanding of the potential impact on COTA's sales tax collection within the Polaris Town Center area would have on a future DCT transit sales tax, a range of adjusted annual estimates were calculated based on a 2021 article from the Delaware County auditor[3] and estimate of the share of potential sales tax base for the Polaris Town Center Area relative to the total for Delaware County. In the 2021 article, the County auditor indicated that as an estimate, the Polaris Fashion Place Mall accounts for approximately 18 percent of Delaware County's total sales tax revenue. Additionally, comparing the estimated sales tax base generated from Delaware County's 1.25 percent sales tax reported in the FY 2022 Single Audit to the estimated sales tax base for COTA transit sales tax within Delaware County indicates that approximately 33 percent of the County's total sales tax base is within COTA sales tax boundary. The 18 percent and 33 percent levels were applied to the values previously shown in **Table 27** to generate adjusted conceptual annual DCT annual sales tax revenue. Table 27 summarizes the adjusted conceptual annual DCT annual sales tax revenue that would have been captured between 2013 and 2022.

Table 27 *Conceptual Annual DCT Transit Sales Tax Levels Adjusted for Removing the Polaris Town Center Area: 2013-2022 ($, in millions)*

Year	0.10% Range	0.25% Range	0.50% Range
2013	$2.2 - $2.9	$5.6 - $7.2	$11.2 - $14.4
2014	$2.4 - $3.1	$6.1 - $7.8	$12.1 - $15.5
2015	$2.6 - $3.3	$6.5 - $8.3	$13.0 - $16.7
2016	$2.7 - $3.5	$6.8 - $8.7	$13.5 - $17.3
2017	$2.9 - $3.8	$7.4 - $9.4	$14.7 - $18.9
2018	$3.2 - $4.1	$8.0 - $10.2	$15.9 - $20.4
2019	$3.4 - $4.4	$8.5 - $10.9	$17.1 - $21.8
2020	$3.5 - $4.4	$8.6 - $11.1	$17.3 - $22.2
2021	$4.1 - $5.2	$10.2 - $13.1	$20.4 - $26.2
2022	$4.5 - $5.7	$11.2 - $14.3	$22.4 - $28.7
2023	$4.8 - $6.2	$12.1 - $15.5	$24.2 - $30.9
2024	$5.2 - $6.7	$13.0 - $16.7	$26.1 - $33.4

Potential DCT Transit Sales Tax Rate Compared to Proposed Service and Capital Enhancements

Given the scale of the recommended service level and capital expansions, the level of transit sales tax revenue that could be generated by a 0.10 percent sales tax could be the starting point for future discussions among DCT, the County, and other public and private stakeholders to determine if there is a desire to go to the voters at some point in the future to request the enactment of a DCT transit sales tax.

[3] https://www.dispatch.com/story/news/local/2021/04/11/delaware-county-polaris-fashion-place-shooting-safety/7092866002/

Further, if the County's sales tax revenue were to continue annual increases of approximately 8 percent based on the historical compound average annual growth rate, and accounting for removal of sales tax collected within the Columbus city limits within Delaware County, a 0.10 percent sales tax rate would generate between $6 million and $10 million annually over the next five years to support implementation of the recommended service level and capital expansion. Assuming a 4 percent annual growth rate, the 0.10 percent sales tax rate would generate between $5 million and $8.0 million annually.

Federal Discretionary Grant Opportunities

In addition to the annual federal formula funds that are allocated to the CUA and ultimately to DCT, the FTA has two discretionary grant programs that could be targeted to provide supplemental federal funding for the capital costs associated with the additional vehicles that would be needed and the new maintenance facility.

Buses and Bus Facilities Program

This program provides funding to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no-emission vehicles or facilities.

Funding Potential: Over the last two years, the FTA has awarded grants ranging from less than $1 million to $54 million to support transit agencies' efforts to purchase buses and improve, expand, or build maintenance facilities. Examples of grants awarded within the State of Ohio include:

- Western Reserve Transit Authority: $4.3 million to reconstruct and expand its maintenance and administrative facility.
- Greater Dayton Regional Transit Authority: $4.4 million to rehabilitate its maintenance and administrative facility with a new heating/cooling system and roof.
- METRO Regional Transit Authority: $37.8 million to modernize the Hilton Bus Garage for battery-electric buses.

This grant opportunity could assist DCT in constructing its maintenance and administration facility to prepare for additional vehicles needed to meet the future service demands of Delaware.

Low or No Emission Buses

This program provides funding to purchase or lease zero-emission and low-emission transit buses as well as the acquisition, construction, and leasing of required supporting facilities.

Funding Potential: Over the last two years, the FTA has awarded grants ranging from less than $1 million to $116 million to support transit agencies' efforts to transition to low or no-emission fleets. Examples of grants awarded within the State of Ohio include:

- Southwest Ohio Regional Transit Authority: $9.8 million to buy hybrid electric buses to replace older diesel buses.
- Ohio Department of Transportation (ODOT) on behalf of 10 subrecipients: $29.3 million to support 10 transit agencies serving both rural and urban communities, to buy dozens of low or no-emission buses that will replace older vehicles, expand fleets to support essential services, train workers in good-quality careers, and begin the decarbonization transition for several of Ohio's major transit systems.
- Stark Area Regional Transit Authority: $2 million to acquire compressed natural gas buses.
- Portage Area Regional Transportation Authority: $3 million to replace diesel-powered vehicles that have exceeded their useful life with compressed natural gas vehicles.
- COTA: $26.7 million to replace diesel buses that have exceeded their useful life and replace them with battery electric buses and chargers.

Typical Application Cycle: January to March

This is another grant opportunity that DCT could apply to help support the capital costs associated with increased service operations. In addition, this would create positive environmental impacts and provide cutting-edge technology and sustainability to the region.

In addition, there are a variety of other grant programs through the United States Department of Transportation (USDOT) and FTA which DCT could partner with the County or local jurisdictions to pursue other federal grants for infrastructure investments that would provide benefits beyond DCT's infrastructure needs but could benefit the entire region. These include:

USDOT:

- Rebuilding America Infrastructure with Sustainability and Equity (RAISE)
- Reconnecting Communities and Neighborhoods (RNC)
- Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation Program (PROTECT)
- Safe Streets and Roads for All (SS4A)
- Strengthening Mobility & Revolutionizing Transportation (SMART)
- Active Transportation Infrastructure Investment Program (ATIIP)

FTA:

- Advanced Driver Assistance Systems (ADAS)
- Areas of Persistent Poverty (AoPP)
- Innovative Coordinated Access and Mobility Grants (ICAM)