



SHORT & LONG RANGE TRANSIT PLAN

2020-2050

May 2020

COTA

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A note on COVID-19

Dear friends and neighbors,

At the time of publishing this document our global community has entered a time of significant uncertainty as the world responds to the COVID-19 pandemic.

We are humbled by our dedicated operators, mechanics, and other frontline employees who are keeping COTA's essential mobility services available for our community during this crisis – and we are focused on ensuring the health, safety, and well-being of our employees, riders, and neighbors.

Now more than ever, COTA is dedicated to our mission to provide solutions that connect people to prosperity through innovation, dedication, and teamwork.

The items outlined in this Short and Long Range Transit Plan document still hold true as our vision for serving the Central Ohio community, but we may find we reach our goals by unexpected paths.

Whatever the future may hold, we promise to uphold our commitment to *move every life forward*.

Well wishes,

A handwritten signature in blue ink that reads "Kimberly Sharp". The signature is fluid and cursive.

Kimberly Sharp, AICP
Senior Director of Development

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1.0 INTRODUCTION

The Central Ohio Transit Authority (COTA) is the primary provider of public transit services for the greater Columbus and Central Ohio region, striving to deliver safe, reliable, and cost-effective transportation services to the public. This Short (2024) & Long (2050) Range Transit Plan (SRTP/LRTP) combines the mission, goals, and near and long-term initiatives of COTA into a single, comprehensive document.



COTA serves over 1.2 million residents and provided approximately 19.1 million fixed-route passenger trips and 265,000 ADA paratransit trips in 2019. Operationally, as of January 2020, COTA has over 1,100 employees and 41 fixed-route lines.

The Central Ohio region is growing both in terms of population and jobs. The Mid-Ohio Regional Planning Commission (MORPC) projects that Central Ohio will grow to 3 million people by 2050. Transit is intrinsic to smart growth patterns along with land use decisions, which support public mobility options.



In recent years, COTA made significant progress in expanding services and customer amenities through careful planning, technological enhancements, and green initiatives. Several corridor studies were conducted to better understand the economic and environmental impacts of alternative development scenarios through a partnership with MORPC, ULI, various municipalities, and other stakeholders. COTA will play a key role in managing increased population and job growth within the region by continuing to expand mobility options.

Complementing existing fixed-route and paratransit

services, the introduction of COTA Plus on-demand microtransit and COTA Connector fare payment app offer convenient and user-friendly options for customers to access COTA services. In an effort to protect the environment, COTA is also continuing to transition the fixed-route bus fleet from ultra-low sulfur diesel fuel to compressed natural gas by 2025, with a plan to begin integrating electric buses by 2021.

Mobility as an industry is evolving quickly, with a focus on innovation and technology to provide more frequent, reliable, and direct connections. COTA can expand opportunities for riders by collaborating and integrating with new mobility options. Mobility options now include on-demand micro transit services, transportation network companies (e.g., Uber and Lyft), electric bike and scooter rentals, and other technically-enhanced mobility options.

COTA and Central Ohio are focused on ensuring residents and visitors have access to job opportunities, healthcare, education, arts, entertainment and other important destinations, as well as helping to drive economic growth and foster sustainability. In 2016, the City of Columbus won the United States Department of Transportation Smart Cities Challenge*, reflecting the community's commitment to innovation, increased mobility options, and sustainability. COTA is a major partner with the City and other community and business stakeholders in this transformational effort.

This document serves to outline goals and initiatives that will be implemented as part of continued investment in public transit over the next 30 years.

*Smart Columbus: www.smart.columbus.gov/

1.0 Introduction

1.1 Strategic Plan, Vision & Guiding Principles

COTA's five-year strategic plan, "Moving Every Life Forward," articulates the strategic direction for the organization to reflect the changing mobility environment. The Strategic Plan serves as the backbone of the SRTP/LRTP, providing the mission, vision, and direction to succeed in executing future transit enhancements. Through a collaborative process, four guiding principles were established to focus the organization on those strategic areas that will enable COTA to achieve its mission and vision, shown in **Figure 1-1**.

Figure 1-1: COTA's Guiding Principles

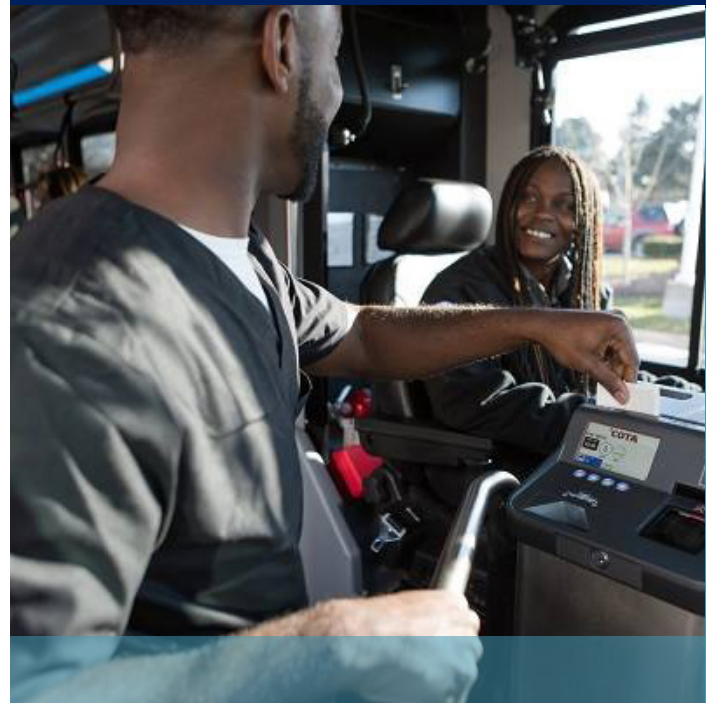
Our Guiding Principles

EQUITY, DIVERSITY & INCLUSION

- IMPROVE THE CUSTOMER EXPERIENCE**
To serve current and future customers and deliver a customer experience that is easy to use, reliable, and convenient.
- ACHIEVE ORGANIZATIONAL EXCELLENCE**
To make COTA employees focused, collaborative, and innovative.
- PROVIDE ACCESS TO MOBILITY OPTIONS**
To enhance service delivery to customers through partnership with innovative organizations.
- PRIORITIZE THE USE OF DATA & ANALYTICS**
To make better decisions, enhance services and enhance safety.



COTA's vision is
"To move every life forward"



The Authority's mission is
"We provide solutions that connect people to prosperity through innovation, dedication and teamwork."

1.2 Plan Purpose and Background

Plan Purpose

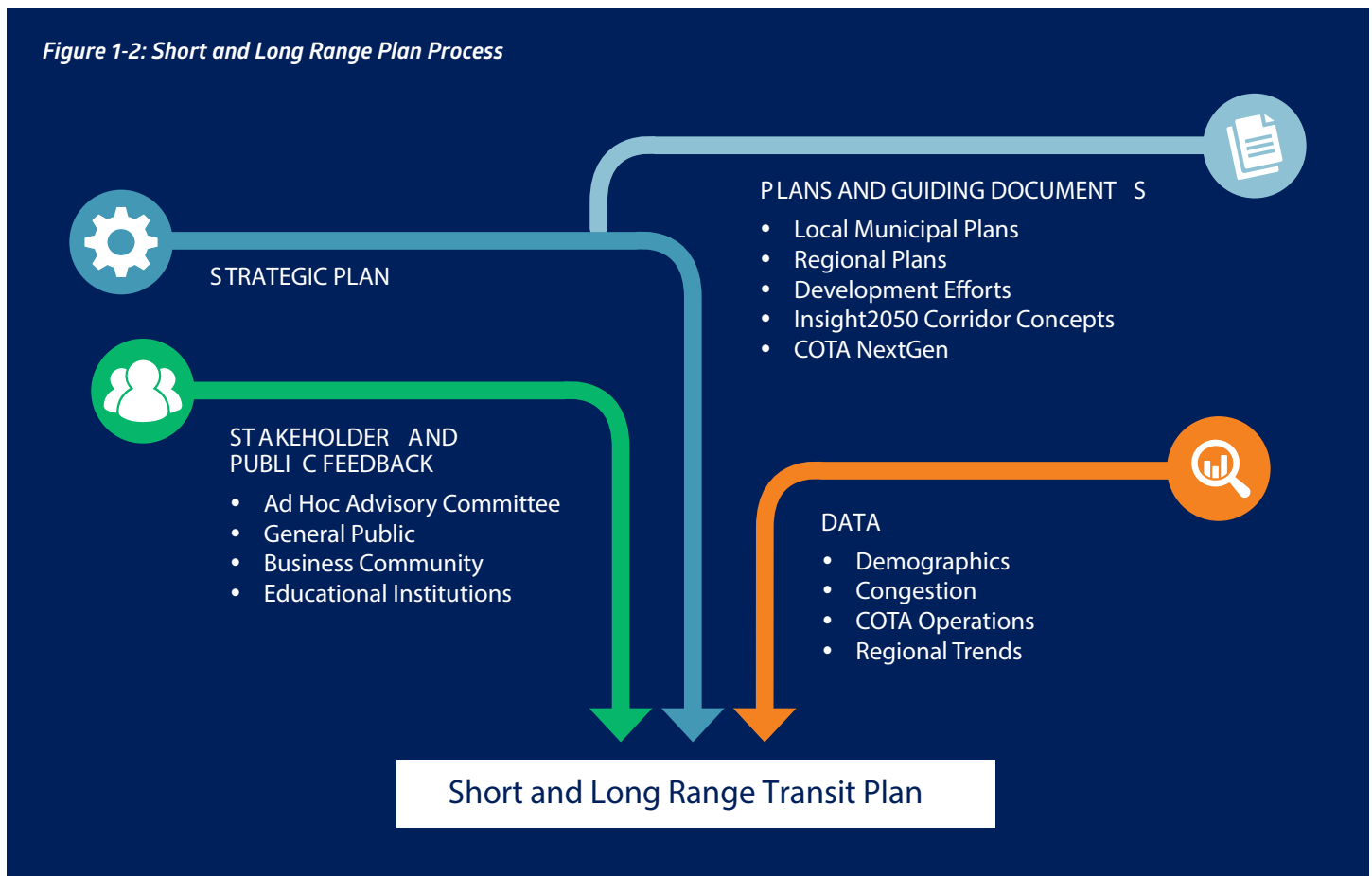
COTA's SRTP/LRTP is an inclusive document that serves several purposes. The Plan unites COTA's strategies, goals, and initiatives, as well as provides a snapshot of current and future transit conditions and initiatives on a regional and local scale. COTA may adjust the SRTP/LRTP based upon demographic, economic, and traffic conditions, as well as federal and state funding changes.

Short & Long Range Plan Process

The SRTP/LRTP is informed by local and regional reports, plans, data, and input from stakeholders and the general public. This process ensured a complete regional, local, and organizational overview of the current conditions, goals and objectives, as well as initiatives to promote COTA as the region's leader in mobility.



Figure 1-2: Short and Long Range Plan Process



1.0 Introduction

In alignment with the Ohio Department of Transportation (ODOT) and MORPC’s transportation improvement program (TIP) process, the SRTP portion of the Plan analyzes the transit market in Central Ohio and COTA’s ability to serve the market in a five-year timeframe. The SRTP serves as a vital tool to assess COTA’s current operations; describe future transit enhancements; and prioritize expenditures, service, and funding in order to serve the community’s mobility needs.

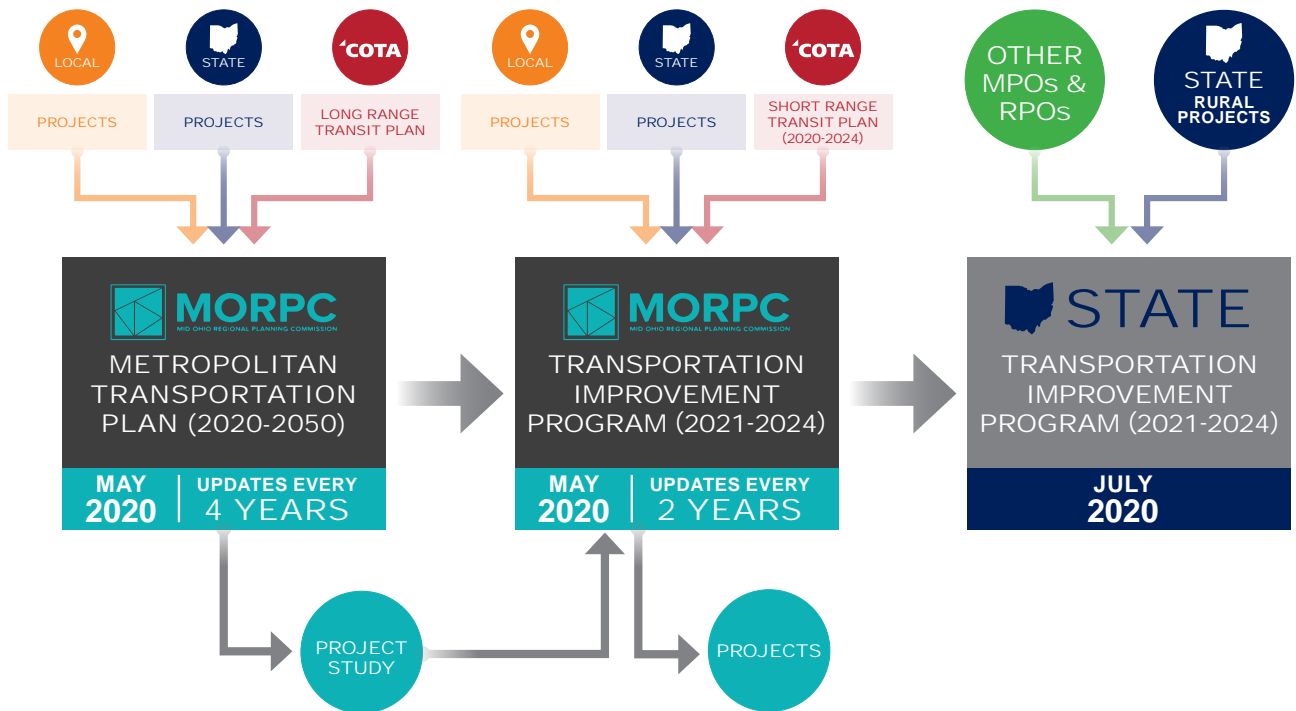
Typically updated biennially, the SRTP was developed as part of, or as a subset to, the LRTP. The LRTP continues COTA’s comprehensive strategy for enhancing mobility in the Central Ohio region through 2050. Utilizing a variety of methods to ensure public participation, COTA developed the LRTP with the goal of providing an expanded, reliable, and safe transit system for the extended future timeframe.

COTA submits short-range and long-range transit proposed projects and budgets per Ohio Department of Transportation (ODOT) and Mid-Ohio Regional Planning Commission (MORPC) budget schedules, which ultimately feed into federal transportation overviews. Due to a one-year postponement of the update to ODOT’s statewide

TIP, both the Short (2024) and Long (2050) Range Plan updates fell within the same year, 2020, and as a result, the Plans have been combined to form this document.



Figure 1-3: Metropolitan Transportation Plan and Transportation Improvement Program Process



1.3 Outcomes of COTA's Previous Plans

Between 2009 and 2019, COTA expanded its service hours by 63 percent, and is continuing to implement several large-scale service initiatives to best serve customers as the region changes and develops. Looking ahead, COTA will continue to offer solutions that will serve people in growing areas as the region's transportation leader.

Figure 1-4 represents an overview of COTA's major initiatives organized as: Plans and Studies, System Operations Enhancements, Rider Amenities, Infrastructure Improvements, and Environmental Protection Initiatives.

*Brief descriptions included below.

NextGen – NextGen presents a clear and strategic vision for the future, as well as identifies public transportation needs and opportunities through 2050.

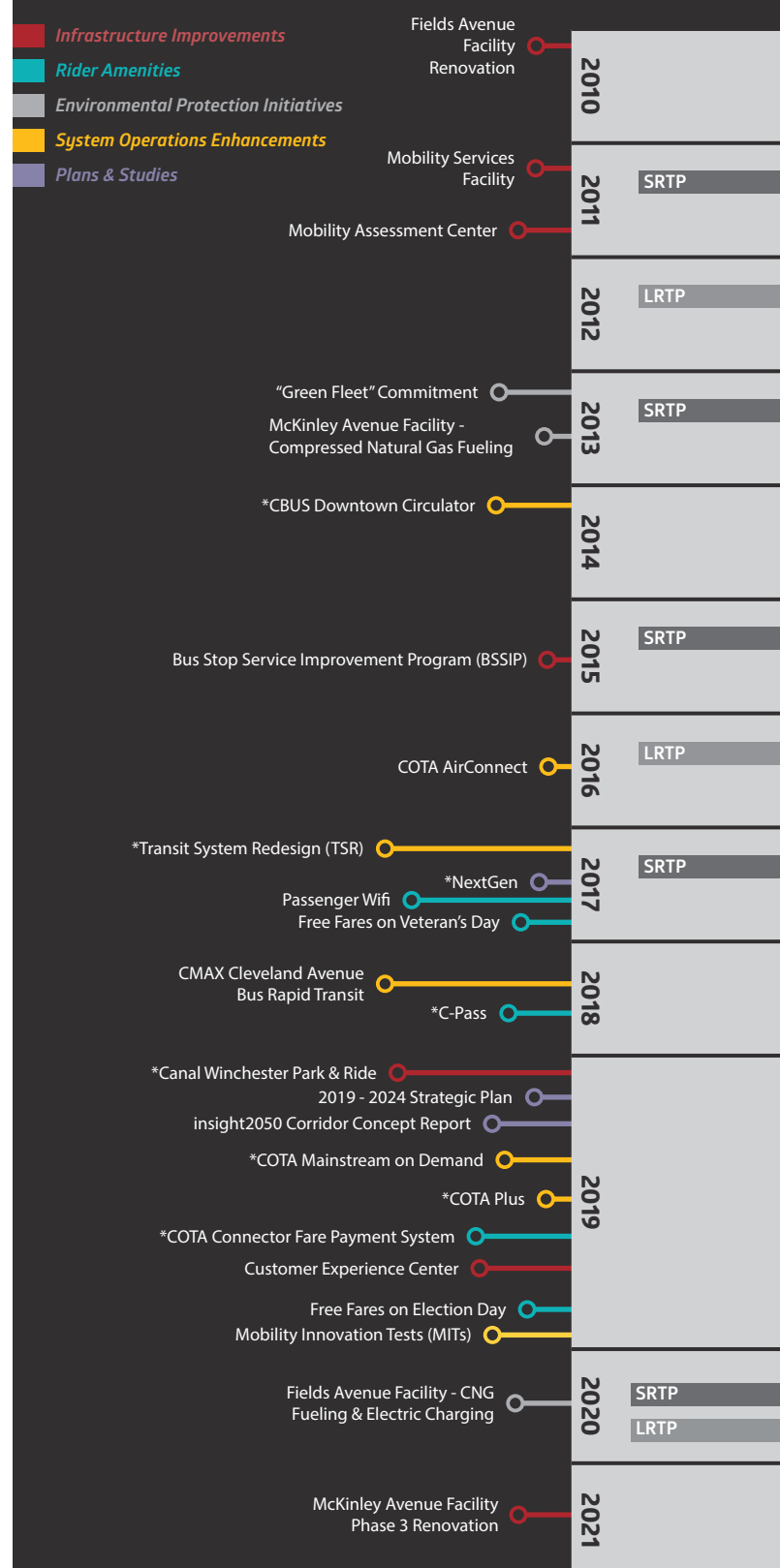
Transit System Redesign (TSR) – Fully launched in May 2017, COTA worked with public stakeholders and the Board of Trustees to develop a new bus network. The TSR features simplified routes, increased frequency and connections to more places and people, and reduced bus congestion downtown.

CMAx Cleveland Avenue Bus Rapid Transit (BRT) – Launched January 1, 2018, CMAx operates primarily along a 15.6-mile alignment on Cleveland Avenue between downtown Columbus and the OhioHealth Westerville Medical Campus.

CMAx provides riders with more travel options, reduces travel times, improves pedestrian access and safety, and fosters opportunities for economic development within the corridor.

COTA Mainstream on Demand – COTA Mainstream is a shared-ride public transportation service providing origin-to-destination transportation for people whose functional limitations prevent them from riding COTA's fixed-route buses for some or all of their trips. In 2019, COTA contracted with UZURV to provide private, accessible, same day, non-stop, door-to-door service. This also includes flexible advanced scheduling, guest permission, and requests for specific drivers.

Figure 1-4: Overview of COTA's Major Initiatives Since 2010



1.0 Introduction

C-pass – Using a combination of grant funding and a property-owner assessment, C-Pass provides unlimited access to COTA bus rides at no out-of-pocket cost to employees of eligible downtown businesses and agencies.

COTA Connector – COTA Connector is an important enhancement in how riders can access COTA service without using cash. Customers can set up an account to electronically transfer any amount of money from their bank or credit card to a Connector account, and board COTA using the Connector App or a “smart” card.

COTA CBUS Downtown Circulator – COTA’s CBUS is the city’s free Downtown Circulator, traveling from the Brewery District through Downtown to the Short North and back again. CBUS runs every 10-15 minutes, 7 days a week.

COTA Plus – A first of its kind ride-hailing service that integrates technology with a microtransit solution to provide customers with further access to jobs, healthcare and more, while also offering a fast, convenient and comfortable transit solution.

“Green Fleet” Commitment – In 2013, COTA made the commitment to move their entire fleet to compressed natural gas within 12 years. Several initiatives have developed as a result of that funding, including the Electric Bus Pilot Program, the CNG Vehicle Replacement, and the renovations to the McKinley Avenue Facility. In 2019, the U.S. Department of Transportation awarded COTA a \$2.6 million Low and No Emissions Vehicle Program grant to use toward COTA’s transition to diesel-free buses by 2025.

- **Electric Bus Pilot** – COTA launched a program to incorporate electric buses into their fleet, with the first 10 buses expected in 2021.
- **CNG Vehicle Replacement** - The authority is currently purchasing 28 CNG buses per year.
- **Fields and McKinley Avenue Facility Renovations** – These facilities are being renovated to accommodate the transition to diesel-free buses and service electric and CNG buses.



1.4 State, Regional, and Local Initiatives

Local, regional, and state governments continuously develop reports and plans that influence transportation policies, investments, and implementation strategies. Many of these plans present initiatives that greatly influence COTA.

At the state level, **Access Ohio 2040**¹ is the most recent iteration of the state's long range transportation plan. Creating a public transit needs assessment for Ohio was one of 11 core recommendations of the plan. The resulting Ohio Statewide Transit Needs Study released in 2015 described an increasing demand for transit in Ohio, identified funding gaps, and made policy suggestions for meeting transit needs. The Ohio Department of Transportation is currently drafting the Access Ohio 2045 plan, which will provide new guidance for transit agencies in the state.

Within the Central Ohio region, Urban Land Institute (ULI) Columbus and Mid-Ohio Regional Planning Commission (MORPC) insight2050 produced a regional analysis and data-rich report (**insight2050 Scenario Results Report and Corridor Concepts: Options for Focused Growth and Mobility Report**²) that enables local and regional policy makers, business leaders, developers, and other stakeholders to evaluate the effect of future high-capacity, transit-supportive land use decisions that influence Central Ohio communities' quality of life. MORPC also conducted the **Rickenbacker Area Study**³ to assess transportation improvement needs in the area surrounding the Rickenbacker Airport, as well as other factors that influence the success of the area into a globally competitive logistics hub.

Local municipalities are also generating plans and reports that address the changes in mobility, such as **Connect Columbus** and the **Mobility: Northwest Corridor Mobility Study** (City of Columbus), **Westerville Mobility Plan** (City of Westerville), and the **Dublin Mobility Study** (City of Dublin).

1.5 Funding Sources

The success and continued expansion of COTA services can be largely attributed to local, state, and federal funding opportunities. COTA's request for renewal of a quarter-cent, 10-year renewable sales and use tax was approved overwhelmingly by voters in 2016 (71%). In addition to federal formula grant funds, COTA recently received \$2.6 million in federal funding to use towards their transition to diesel-free buses by 2025. At this time, based on current operating funding levels, COTA has reached its maximum hourly service level. Moving forward, COTA will pursue all possible funding sources to continue expansion of transit services to the community.

1.6 Engagement

COTA recognizes that a proactive and effective communications effort will enhance the outcome of all transportation planning activities. During the Plan update process, stakeholder and public meetings were held to gather input in the development of the Plan.

1.6.1 Stakeholder Involvement

During the development of the Plan, COTA was guided by an ad-hoc advisory committee comprised of a cross-section of community representatives. The role of the committee was to ensure that the needs and concerns of the community were being heard and addressed within the Plan. **Table 1-1** provides a general listing of the key stakeholders invited to attend and participate. Advisory Committee meetings were held in person at COTA's Administrative Office. Stakeholders are considered to be the business, civic, political and other groups to who outreach efforts for this plan will be targeted. Stakeholder Committee meetings were held twice throughout the planning process.

1 <https://transportation.ohio.gov/wps/portal/gov/odot/programs/access-ohio-2045>

2 <https://getinsight2050.org/corridor-concepts/>

3 <https://www.morpc.org/wordpress/wp-content/uploads/2019/11/RICKENBACKER-AREA-STUDY-FINAL-PDF-Reduced-Size.pdf>

1.0 Introduction

Table 1-1: Advisory Committee Member Organizations

Advisory Members			
<ul style="list-style-type: none"> · City of Columbus · City of Dublin · City of Groveport · City of Upper Arlington · City of Westerville · City of Worthington · Columbus City Council · Columbus Partnership 	<ul style="list-style-type: none"> · Columbus Regional Airport Authority · Columbus State Community College · DriveOhio · Franklin County · Greater Columbus Chamber of Commerce 	<ul style="list-style-type: none"> · Hines · Homeport Ohio · Metro Parks · Mid-Ohio Regional Planning Commission · NCT Ventures · Ohio Department of Development 	<ul style="list-style-type: none"> · Ohio Department of Transportation · One Columbus · The Ohio State University · Transit Columbus · Urban Land Institute

1.6.2 January 24, 2020 Advisory Meeting

For the first stakeholder meeting, there were approximately twenty-nine (29) people in attendance and included members of the COTA project team. The purpose of the meeting was for COTA to share an overview of the COTA Strategic Plan, purpose and schedule for the SRTP/LRTP, current COTA service, and COTA's financial overview. Following the presentation by COTA staff, the members were asked to break into four groups where they spent time discussing short range ideas and implementation ideas to improve COTA service for each of the four guiding principles of the COTA strategic plan.

1.6.3 February 19, 2020 Advisory Meeting

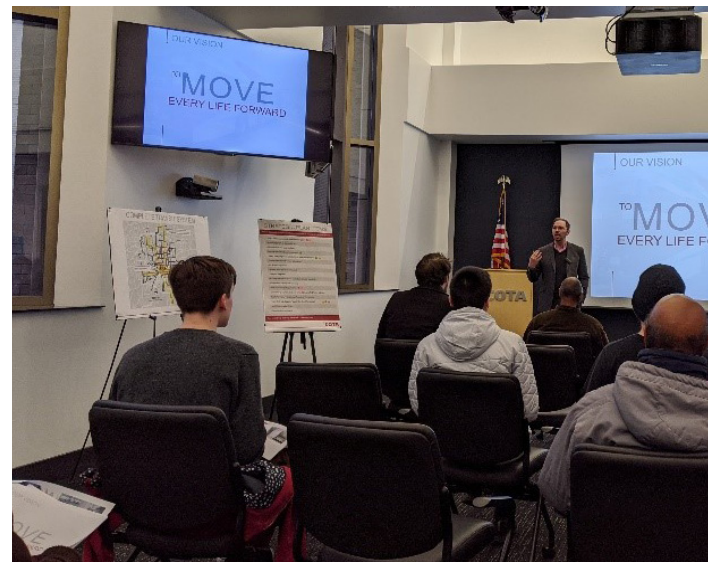
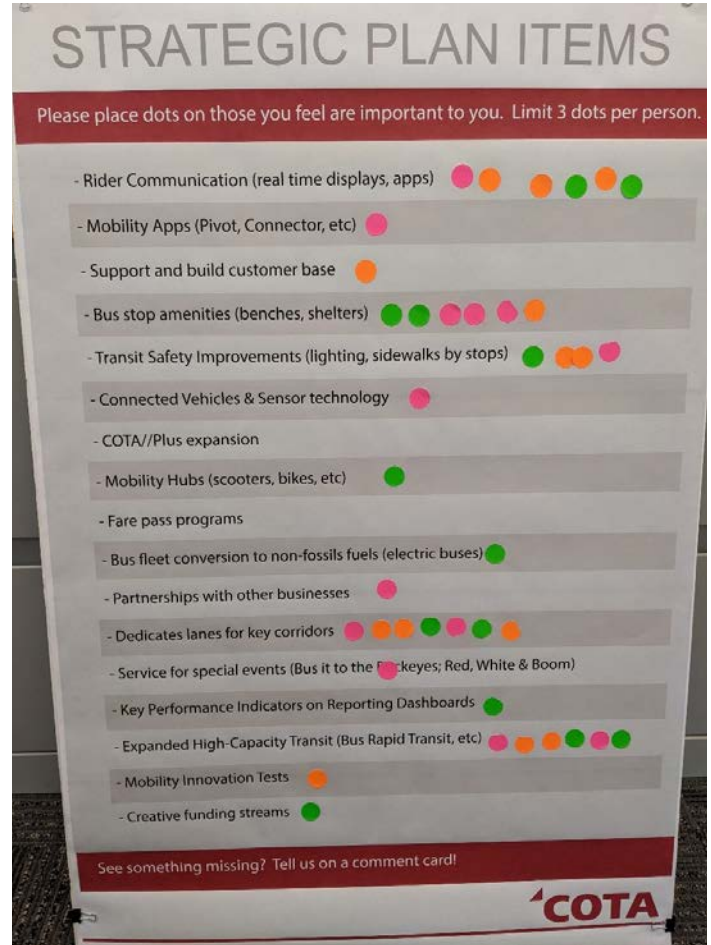
For the second stakeholder meeting, there were approximately thirty-five (35) people in attendance and included members of the COTA project team. The purpose of the meeting was for COTA to summarize the first meeting and share an overview of the short range initiatives from COTA's Strategic Plan and the financial summary for the first five years of the Plan. Following presentation by COTA staff, the members were asked to provide feedback on the long range initiatives as well as provide any suggestions for implementation as COTA and the City of Columbus move forward with high capacity corridor alternative analyses. Appendix F includes the list of attendees, presentation and summary from both meetings.



1.6.4 Public Meetings

Public meetings were held twice during plan development. The public meetings were held on March 3 and March 10, 2020 at COTA's Administrative Office. The purpose of the meetings was for COTA to share the status of the Plan, review the initiatives, and allow for comments and feedback. Public meetings were publicized through notices to the media, television news stories, press releases, and social media such as Facebook and Twitter, and the COTA website. Meeting notices were also posted on every bus a week before the first meeting.

During the public meetings, a formal presentation was given, followed by an open house where members of the public were provided an opportunity to view maps and other visual media, review plans and studies, speak with COTA staff, and provide oral and written comments on initiatives and projects of the Plan. Meeting attendees were given the opportunity to select COTA initiatives that were most important to them. Between the two Public Meetings, eighteen (18) members of the public were in attendance to provide their feedback. Additional public meetings were held at MORPC for their Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) open houses on February 26 and March 31, 2020, respectively, both including many components of COTA's SRTP/LRTP. Appendix F includes the powerpoint presentation and poster boards presented and displayed the meetings.



2.0 SERVICE AREA & AGENCY OVERVIEW

2.1 Service Area Overview

Beginning in 1974, COTA now provides public transit services within Franklin County as well as small portions of Delaware, Fairfield, Licking and Union counties that are included within the municipal corporation limits of Columbus, Dublin, Westerville and Reynoldsburg (Figure 2-1).

COTA's Service Area is home to 1.35 million people and 838,000 jobs (MORPC, 2019). According to MORPC's Travel Demand Model, the Service Area is projected to gain an additional 445,000 people (33 percent increase) by the year 2050. Additionally, the Service Area is projected to gain 244,000 jobs (29 percent increase) over the same time period.

2.1.1 Fixed-Route Bus Network

The TSR overhauled COTA's fixed route bus network, doubling the number of frequent bus lines with 15 minute or better headways. COTA highlighted this improvement

by re-branding its bus lines with headway-based service categories: Frequent, Standard, and Rush Hour-Only. The backbone of COTA's public transit system is fixed-route bus service. Fixed-route service is provided on a repetitive, fixed-schedule basis along specific streets, with vehicles stopping to pick up passengers at, and deliver passengers to, specific bus stop locations. COTA underwent a Transit System Redesign (TSR) of its fixed-route system in May 2017.

COTA reviews, implements improvements and makes adjustments to its fixed-route system three times a year. These changes occur in January, May, and September. As of January 2020, COTA operated 1,234,143 annualized scheduled service hours. To address increasing customer needs for fixed-route bus service, service changes focus on four key areas of improvement: increased service frequency, expanded service area coverage, expanded hours of operation, and decreased travel times.

Figure 2-1: COTA Service Area

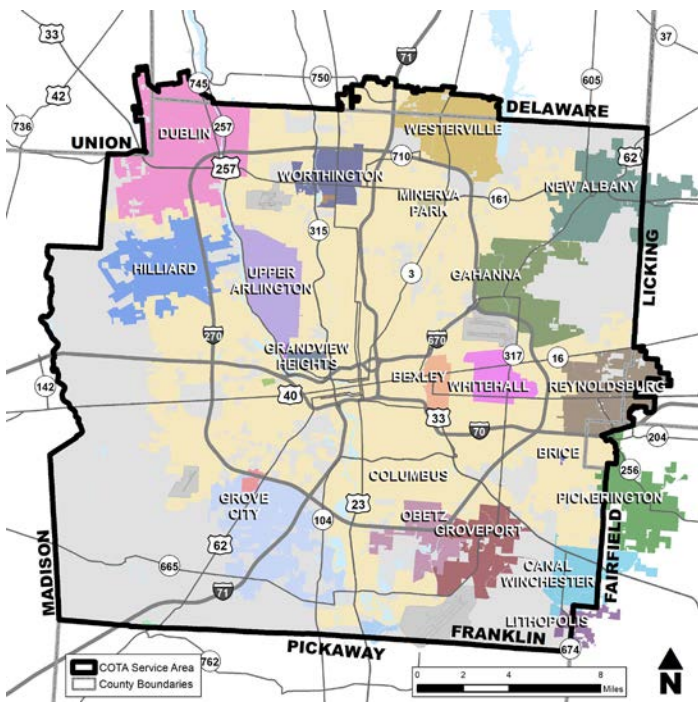
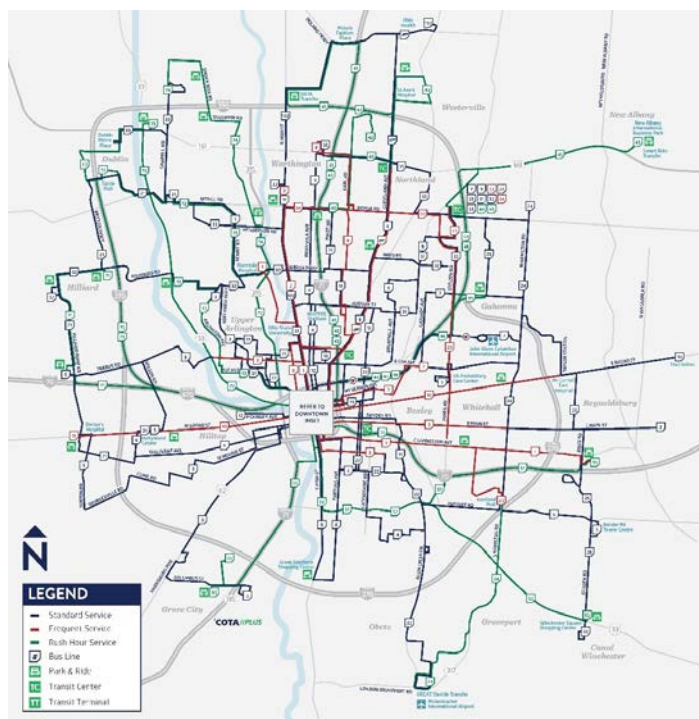


Figure 2-2: January 2020 COTA System Map





In addition to the headway-based fixed route service categories explained above, COTA has two special service categories: Bus Rapid Transit (BRT) and Limited Stop service.

In January 2018, COTA's first BRT service began along Cleveland Avenue called CMAX from downtown Columbus to Westerville. BRT is a premier service with branded buses, limited and enhanced bus stops, operating every 15 minutes or better. Additional characteristics of BRT service can include dedicated lanes, transit signal priority, level-boarding and off-board fare collection. CMAX is classified as a BRT and is operated as a premier service above frequent service.

COTA's 102 Polaris Parkway/N. High Street line operates with limited stops from Downtown Columbus to Morse Road to provide quicker travel times for passengers traveling longer distances along N. High Street. COTA anticipates adding more BRT and Limited Stop lines in the future.

2.1.2 Mainstream Paratransit

COTA provides American's with Disabilities Act (ADA) paratransit service named "Mainstream". Mainstream is a shared-ride public transportation service providing origin-to-destination transportation for people whose functional limitations prevent them from riding COTA's fixed-route buses for some or all of their trips. COTA Mainstream On-Demand is operated by UZURV. UZURV

provides private, accessible, same day, non-stop, door-to-door service. Non-ADA trips can be reserved up to 30 days in advance.

Figure 2-3 Service Categories and Their Characteristics

BUS RAPID TRANSIT



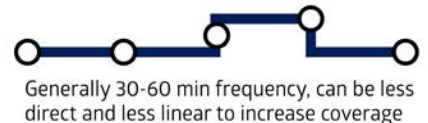
FREQUENT



LIMITED STOP



STANDARD



RUSH HOUR



COTA//PLUS



On-demand Microtransit service with smaller vehicles connecting to fixed route network to increase coverage, zone based

2.0 Service Area & Agency Overview

2.1.3 COTA Plus Microtransit

In 2019, COTA began COTA Plus, a first of its kind ride-hailing service that integrates technology with a microtransit solution to provide customers with further access to jobs, healthcare and more, while also offering a fast, convenient and comfortable transit solution. The first pilot began in the Grove City area.



2.1.4 COTA Facilities

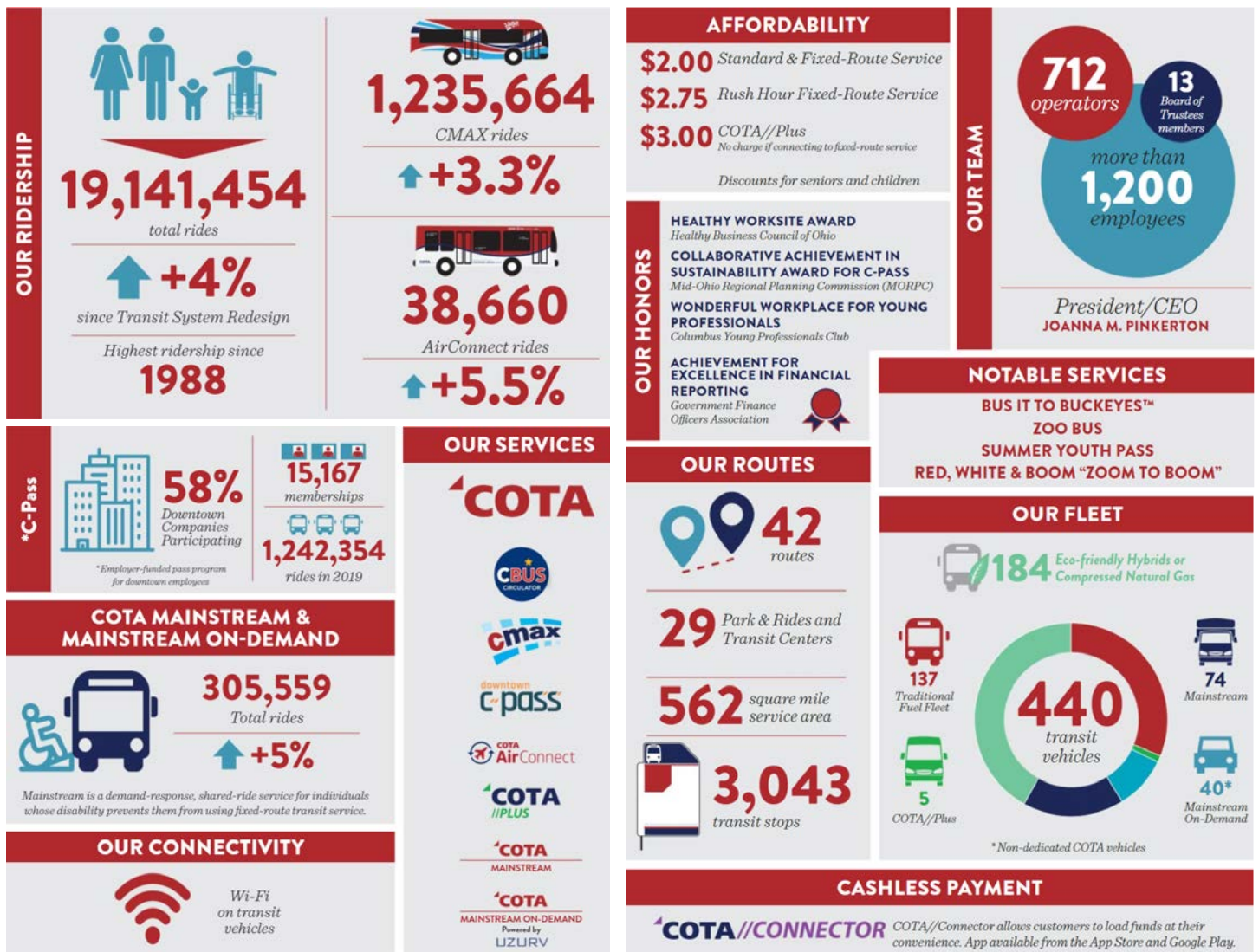
COTA facilities include 25 Park and Ride lots, four transit centers, the Administrative Office and Customer Experience Center (see below), McKinley Avenue Bus Storage, Maintenance, and Customer Service Call Center that includes a CNG fueling facility, Fields Avenue Bus Storage and Maintenance Facility, and Fields Avenue Mobility Services.



2019 Snapshot

A snapshot of COTA's service and 2019 highlights are found below in **Figure 2-4**. In 2019, COTA experienced the highest annual ridership since 1988 with 19.1 million passenger trips.

Figure 2-4: 2019 Snapshot



2.0 Service Area & Agency Overview

2.2 Demographics

The following section includes the current and projected (to the year 2050) population, employment, land use, and traffic congestion data.

2.2.1 Population and Employment Density

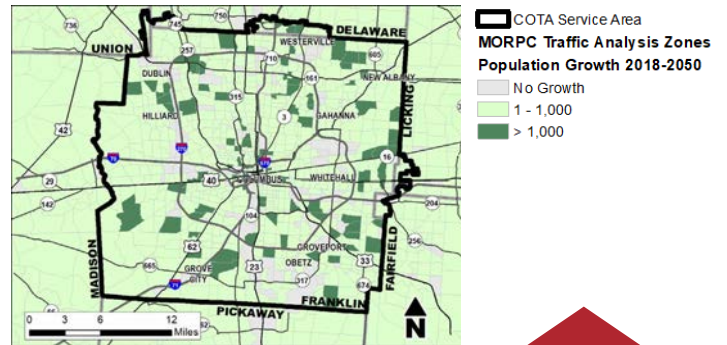
The following maps illustrate population and employment growth projections at the Traffic Analysis Zone (TAZ) level. TAZ areas are used by MORPC and ODOT to allocate the distribution of people and jobs into sub-county geographies. The darker green areas represent zones projected to see the highest amount of growth from 2018 to 2050. In terms of population, the high growth population areas are dispersed throughout Franklin County while the high growth job areas are clustered closer to the Columbus urban core. Within a quarter mile of COTA's fixed-route service, the combined population and jobs density is 13.1 people/jobs per acre, more than double the density level for the entire COTA Service Area. More information on the region's population and job growth can be seen in Appendix B.

2.2.2 Commuting Patterns and Trip Characteristics

As a whole, public transportation share in the United States has declined over the past three years. In Franklin County, 2.3 percent of workers use public transportation as their primary means to get to work according to the 2018 American Community Survey (ACS). While this figure is slightly lower than the 2010 share of 2.5 percent, the last three years have shown an increase in public transit share.

In addition to changes in commuting patterns, the mean travel time to work in Franklin County has also increased over the past three years, with an average travel time to work of 21.4 minutes in 2015 up to 22.0 minutes in 2018.

Figure 2-5: Projected Population Growth 2018-2050

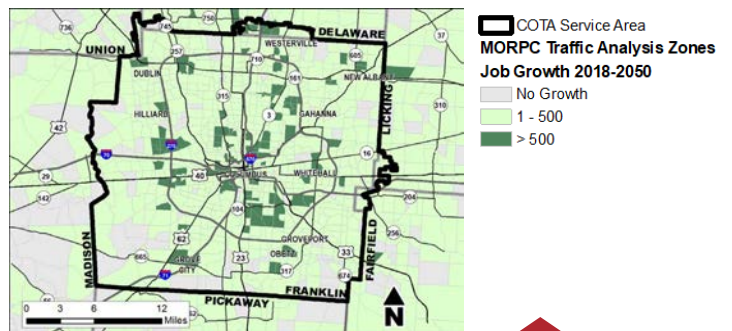


+250,000
ADDITIONAL RESIDENTS
PREDICTED WITHIN ¼ MILE OF
FIXED ROUTE SERVICE BY 2050

32%
POPULATION GROWTH
PROJECTED 2018-2050

Source: MORPC

Figure 2-6: Projected Job Growth 2018-2050

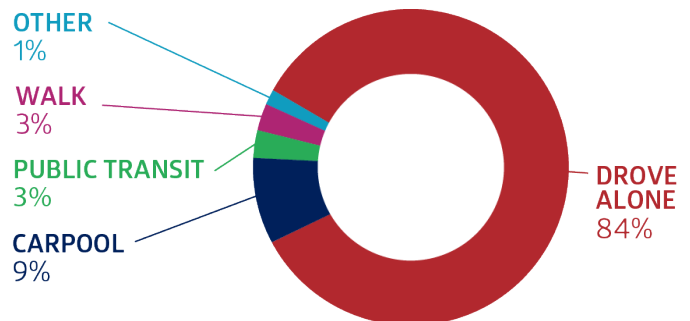


65%
JOBS CURRENTLY WITHIN A ¼
MILE OF FIXED ROUTE SERVICE

30%
JOBS PROJECTED TO BE ADDED
WITHIN SERVICE AREA BY 2050

Source: MORPC

Figure 2-7: Commuting Mode Share in Franklin County

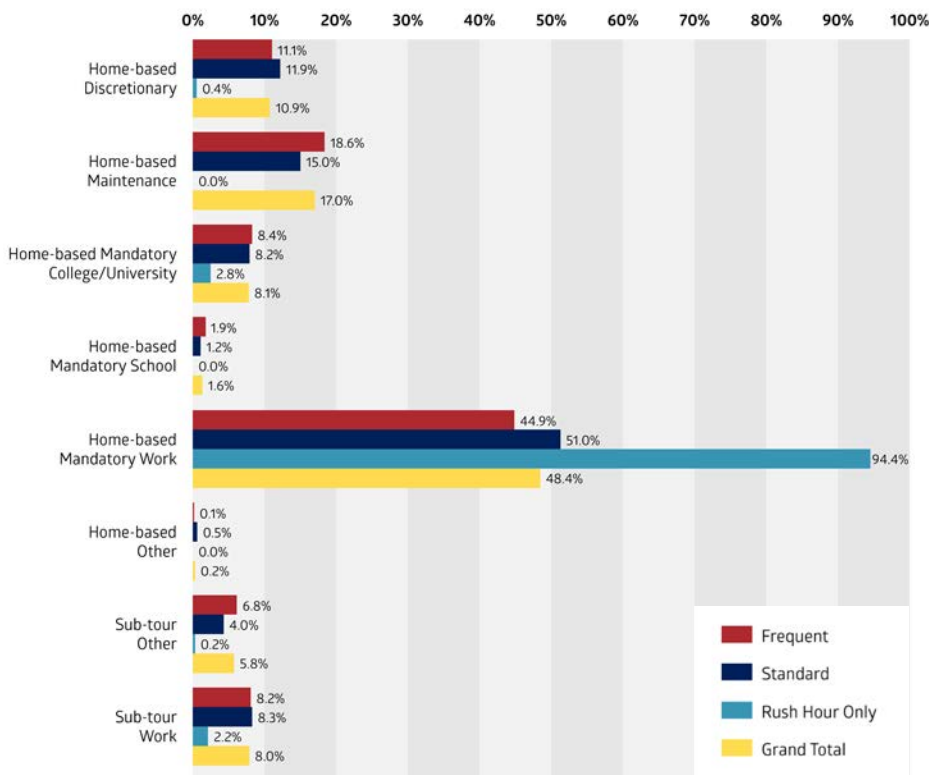


2.2.3 COTA 2018 On Board Survey

During the spring and fall of 2018, an On Board Survey (OBS) was conducted on all COTA bus lines. The purpose of the survey was to capture statistically accurate data about travel patterns and socio-demographic characteristics of COTA's transit passengers. The details obtained by the survey are being utilized to help update MORPC's regional transportation model, and assist with future transit planning and marketing efforts. Some key findings from the report can be found in Appendix C.



Figure 2-8: Trip Characteristics: Trip Purpose



56%
of COTA riders had a work-related trip purpose.

2.2.4 Zero Car Households

The concentration of households with no vehicle access is spread across a variety of neighborhoods within COTA's Service Area. Data indicates the Franklinton neighborhood contains the highest concentration of zero car households with a 34.8% share. Other high zero-vehicle neighborhoods include Downtown, Clintonville, Northland, and Eastland. **Figure 2-9** illustrates the percentage of households with zero cars by census tracts within the COTA service area.

7.4%

OF HOUSEHOLDS IN FRANKLIN COUNTY HAVE NO CAR



46%

OF HOUSEHOLDS IN FRANKLIN COUNTY HAVE <2 VEHICLES



2.0 Service Area & Agency Overview

2.2.5 Congestion

Figure 2-10 illustrates roadway congestion levels in and around Franklin County and projected out to the year 2050 based on population and job growth. Congestion will increase to and from job centers, leading to longer commute times, assuming the majority of people commute by single occupancy vehicle. Congestion can be mitigated by an increase in commute by public transit, car-pooling, biking and walking.

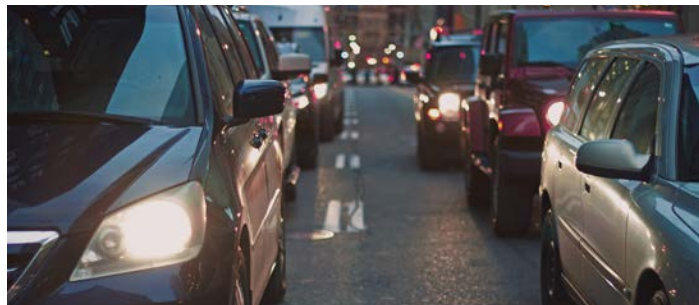


Figure 2-9: Percentage of Households with Zero Cars within COTA's Service Area

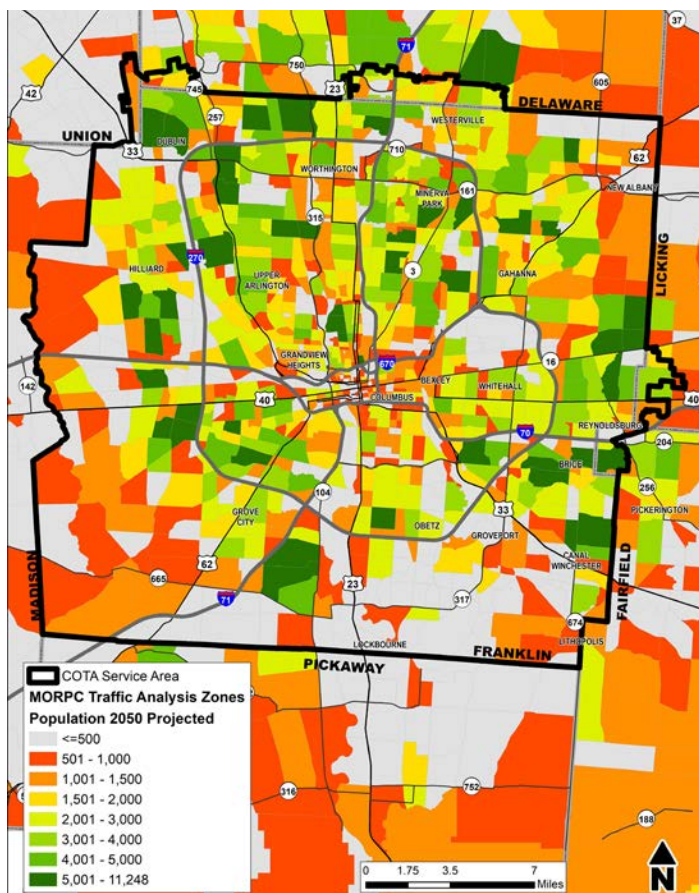
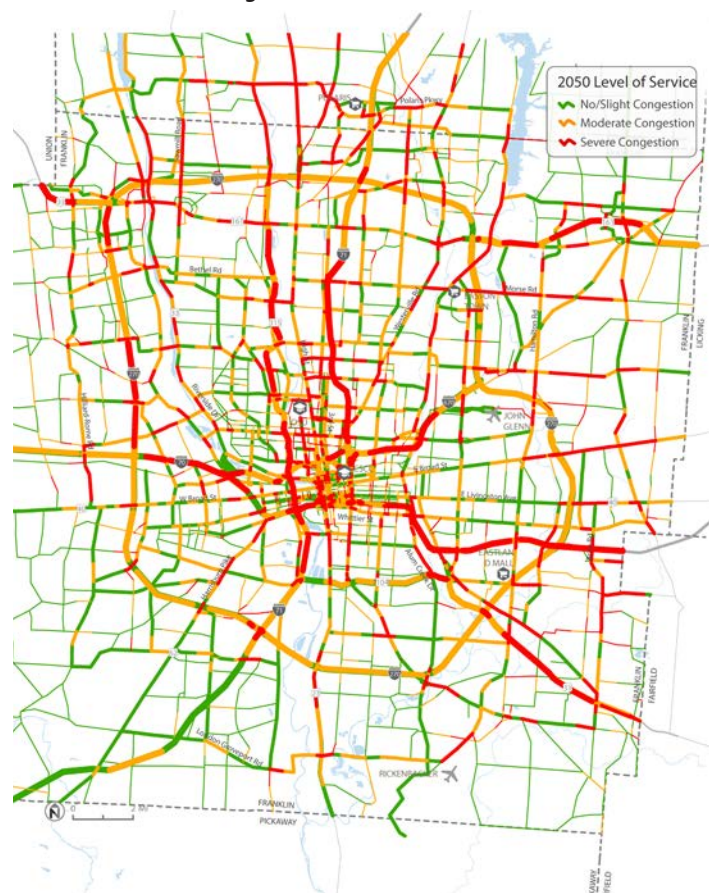


Figure 2-10: Projected Roadway Congestion Levels within and around Franklin County, 2050



2.2.6 Land Use

As part of the MTP, MORPC utilizes a modeling process to allocate existing and future land use through the region. **Figure 2-11** illustrates the projected land uses in 2050 within the COTA Service Area. Based on the land use maps, it is anticipated low-density residential development is expected to occur around the I-270 outer belt. Current real estate and development trends for increased density in core areas, in lieu of continued 'sprawl' development patterns, will be more transit supportive. Meaning, living an working in mixed-use areas make transit an easier mobility choice.

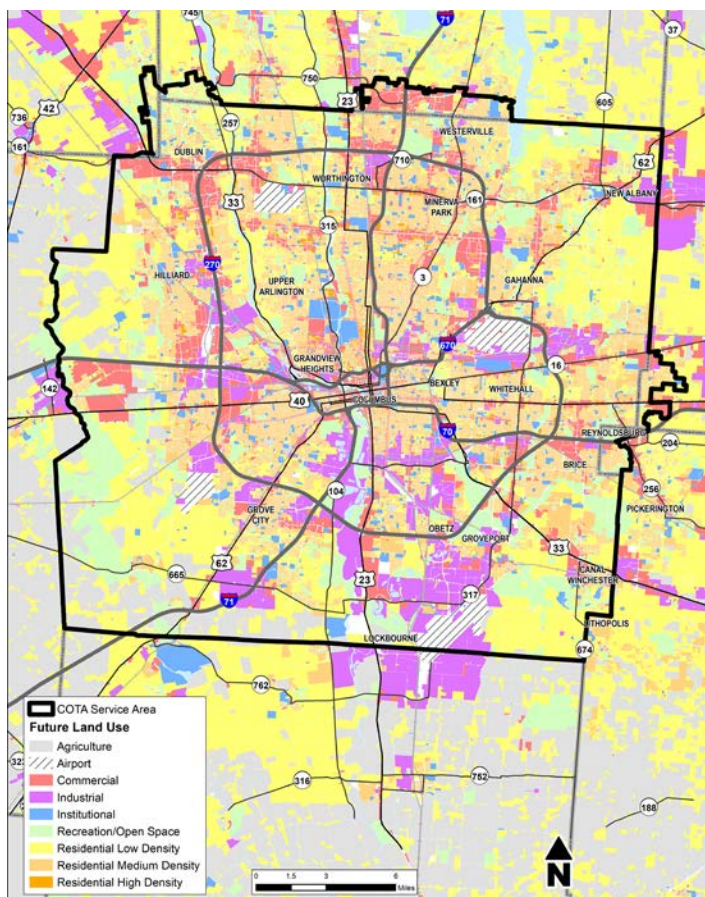
2.3 Role of COTA

Providing over 19 million annual passenger trips, COTA is integral to the social and economic well-being of Central Ohio. Transportation and mobility are the heartbeat of

any city, and what holds true is that an efficient, safe, and well-maintained transportation network is vital to the region's success. As the transportation ecosystem in Central Ohio undergoes significant shifts in the coming years, so will COTA's role as a mobility provider. For COTA, success is defined as providing solutions that connect people to prosperity through innovation, dedication and teamwork and ultimately to move every life forward.

COTA will be the mobility solutions provider for the future of Central Ohio, connecting people to jobs, healthcare, education, arts and entertainment. Continued community partnerships, innovation teams and collaborations with municipalities, institutions and the private sector drive our organization to be more agile with the changing demographics.

Figure 2-11: Projected Land Use, 2050

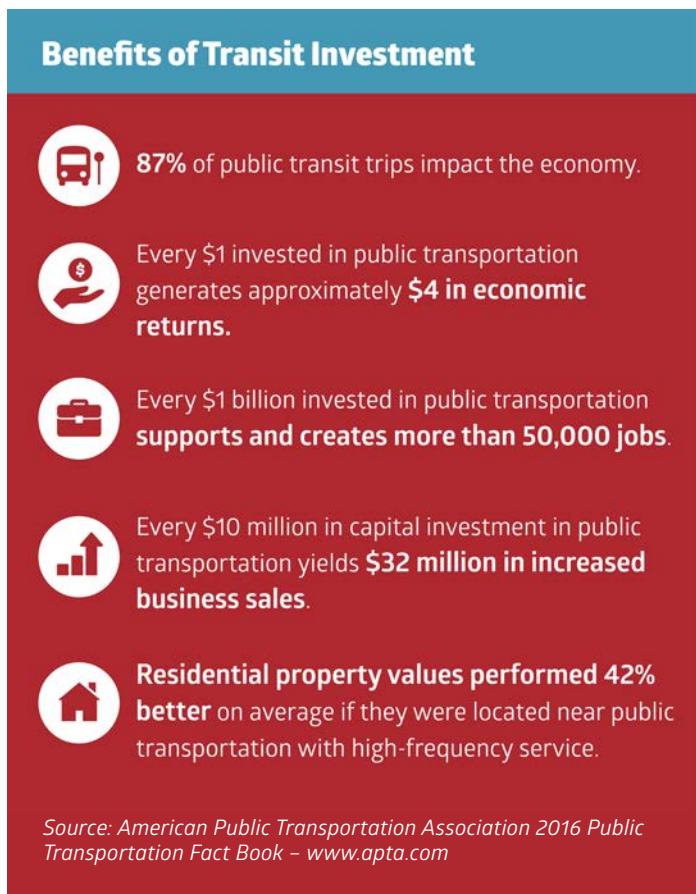


2.0 Service Area & Agency Overview

COTA's Role in the Economy

Around the world, transit systems ease traffic congestion, connect people with jobs and opportunities, and save consumers in commuting and parking costs. COTA takes its role in the overall health of the economy seriously. Research has shown that a robust transit system has positive impacts on the economy:

Figure 2-12: Benefits of Transit Investment



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

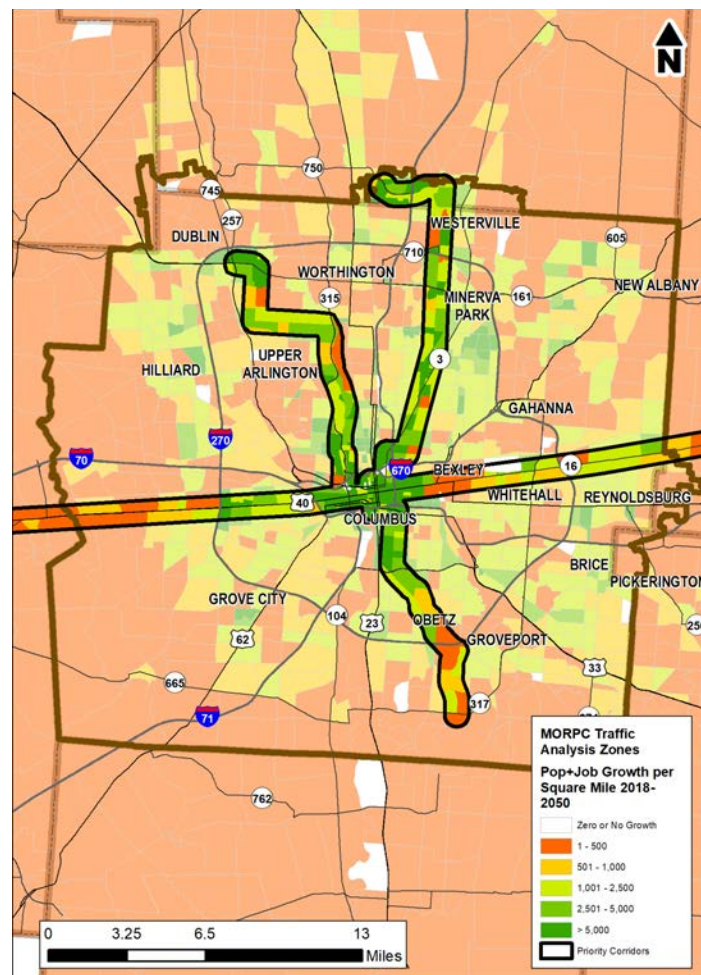
Significant investments are being made towards transportation on a federal, state, and local level. On a federal level, this includes the Fixing America's Surface Transportation (FAST) Act, Bus and Bus Facilities Competitive Grant Program, and the BUILD and INFRA grant programs. Major state and local investments include fuel, sales, and property taxes.

2.4 Local / Regional Needs Assessment

Current Trends

MORPC's insight2050 findings note that population growth occurring today and over the next 30+ years is projected to be dramatically different than in the past. As a region and nation, there is an increasing proportion baby boomers and young adults. These age cohorts are slated to represent nearly 80% of the growth in Central Ohio over the next two to three decades. Both cohorts are increasingly expressing a demand for a broader range of housing types in more compact, walkable communities. Recognizing this trend, businesses are increasingly looking for compact, walkable cities when making location choices. As such, local governments around the region are attempting to attract new residents and businesses by creating vibrant, compact mixed use developments such as Dublin's Bridge Street District.

Figure 2-13: Change in Combined Population and Employment Density (2015-2050)



Compact development patterns are well-suited to public transportation. COTA is responding to this trend by working with regional players to focus compact growth where it can most cost-effectively be served by frequent and reliable public transportation.

The transportation industry is also experiencing substantial changes at all levels and scales. Like other major metropolitan areas across the nation, Central Ohio is at the precipice of a new generation of mobility options that must be carefully considered and weighed. Emerging technology will continue to have significant influence on transportation services regarding mobility, accessibility, safety, congestion, and planning. More importantly, customer expectations of service are changing in our connected world.

Transit-Supportive Planning Efforts

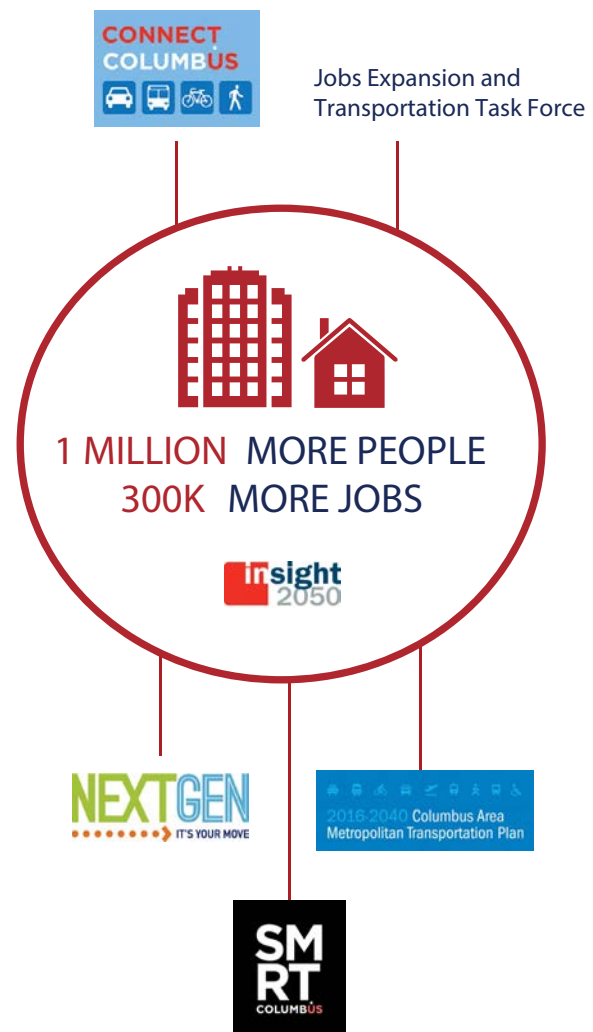
Many Central Ohio communities are undertaking planning efforts and defining visions for land use and transportation that support COTA’s vision of connecting people to prosperity. These include:

- Municipalities’ Complete Street Policies
- Smart Columbus Initiatives
- MORPC Metropolitan Transportation Plan
- Imagine Westerville Community Plan
- Westerville Strategic Mobility Plan
- City of Dublin’s Bridge Street District Plan and Mobility Plan
- Grove City’s Grove City 2050 Plan
- City of Columbus Connect Columbus Multimodal Thoroughfare Plan
- COTA NextGen
- MORPC’s and ULI Columbus’ insight2050 Scenario Results Report and Corridor Concepts: Options for Focused Growth and Mobility Report, and the Rickenbacker Area Study

Combined, the studies and plans are efforts that have developed strategies to position each community for success as the region grows and changes. As these and future planning efforts are conducted, COTA is working closely with communities to ensure its vision is tied to each community’s plans for the future of transportation.



Figure 2-14: Collaborative Efforts to Support Job and Population Growth



2.0 Service Area & Agency Overview

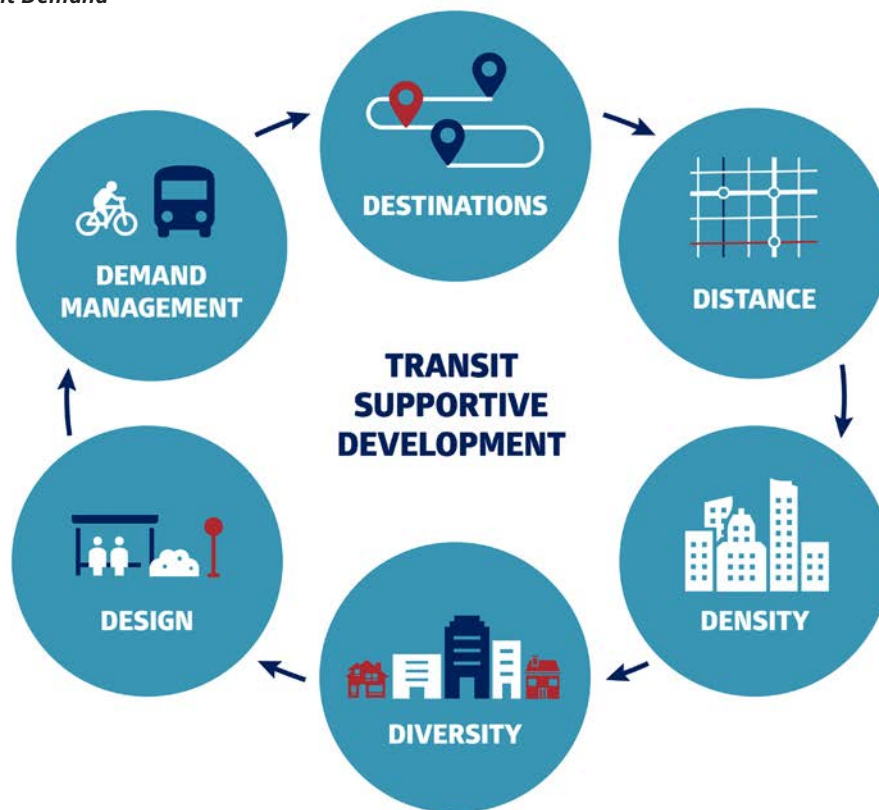
What Are The Needs?

Population and employment growth in the region will require that more people are moved in a more efficient manner every day. In addition to the sheer increase in the demand for mobility, changing demographics and preferences are furthering the case that transit can play a critical role in meeting needs and shaping development.

Transit demand is strongly related to development patterns, and in particular, the density of development shapes transit demand. However, there are additional

factors that influence the success of transit service and support the development of strong transit markets. Parts of Central Ohio, such as downtown Columbus and the Short North already exhibit these factors and support successful transit service. As communities plan for future growth, the “six Ds of Transit Demand” must be considered beyond the addition of people and jobs.

Figure 2-15: Six D's of Transit Demand



DESTINATIONS

Align major destinations along reasonably direct corridors served by frequent transit.

DISTANCE

Provide an interconnected system of Pedestrian routes so that people can conveniently access transit.

DENSITY

Concentrate higher densities close to frequent transit stops and stations and multimodal nodes.

DIVERSITY

Provide a rich mix of pedestrian-friendly uses to support street-level activity throughout the day and night.

DESIGN

Design high-quality pedestrian-friendly spaces that connect people seamlessly to transit.

DEMAND MANAGEMENT

Provide attractive alternatives to driving by managing parking, providing incentives not to drive, and/or providing programs to help educate people about driving alternatives.

Below includes a summary list of needs identified in several major mobility plans, reports, and studies (COTA NextGen, Westerville Mobility Plan, MORPC MTP, Complete Streets Toolkit, Connect Columbus Transportation Policy Framework, Grove City 2050, Dublin Mobility Study) for municipalities and organizations throughout the region:

Regional Transit Needs

-  Reduced transportation costs for the rising population living in poverty.
-  High quality transit service to retain recent influx of immigrants.
-  Premium transit, such as bus rapid transit and light rail, to support more focused development patterns and reduce suburban sprawl.
-  Promoting transit as an amenity to attract and retain young professionals seeking urban, walkable, communities as a place to live.
-  Pairing public transit with other mobility options such as CoGo Bike Share, Car2Go, and transportation network companies (such as Uber and Lyft) to extend the reach of transit networks. Housing and lifestyle preferences are influencing housing choices, especially among Millennials and Baby Boomers.
-  Demand in future years will be for communities that offer mixed uses, are walkable, have smaller dwelling unit sizes, and have public transit access.
-  Communities will require transit service that is flexible enough to operate effectively in lower density areas where long-time residents are aging in place or newcomers have sought more traditional housing. Emerging technology platforms for shared rides and on-demand services are changing the possibilities for providing quality and convenient transit service.
-  Road and highway infrastructure will need to support additional trips, and will likely experience an increased level of congestion.
-  Transit options that offer travel time savings will become more attractive and can be an effective investment for relieving congestion as the region grows.
-  The growing congestion levels also indicate a need to ensure reliable service in the future. For instance, high occupancy vehicle lanes on freeways or bus routes permitted to operate on freeway shoulders during congested times may need to be increased as congestion increases.
-  On arterials, the need for priority measures such as bus lanes or Transit Signal Priority, which increases the likelihood that a transit vehicle will not stop at a red light, may be necessary to reduce the impacts of growing congestion.
-  Need to create a pedestrian and bicycle system which is accessible, safe, convenient, and linked to priority destinations and transit.
-  Collaborate to reduce the need for vehicle travel through development regulations.
-  Create travel demand management (TDM) partnerships to reduce congestion.
-  Attract investment in alternative fuel vehicles and infrastructure.
-  Alleviate existing or anticipated congestion.
-  Improve fixed-route and demand-response transit service.
-  Support efforts to introduce fixed-guideway transit service.
-  Expand key linkages among air, rail, and roadway transportation modes.
-  Develop a regional multi-modal traveler information system.
-  Develop a transportation system to serve all demographic population groups.

2.0 Service Area & Agency Overview



All users should be considered during the entire life cycle of transportation projects.



Street furniture, such as bike racks or benches, should be considered as part of all projects.



Ensure appropriate pedestrian and wheelchair access is provided to and from transit stops.



Traffic-calming elements including, but not limited to, landscaping, street trees, and narrowing of lanes, should be considered where safe and appropriate.



Access management strategies should consider the placement of sidewalks and ramps to eliminate sight distance issues.



Design corridors to balance different users and modes of travel



Consider aesthetics and character of place in the design of all new roadways and redevelopment of existing roadways



Ensure that new developments are connected into the existing transportation network



Expand public transportation options



Enhance connectivity



Develop Mobility Hubs



Provide on-demand options supported by mobile apps



Focus on first/last mile connections, related to transit as well as cycling networks



Mobility as a Service (accessing mobility through public or private service-providers, rather than via personal vehicles)



Enact pedestrian-safety plans to reduce the number of annual serious or fatal traffic accidents (“Vision Zero” initiatives).

2.5 Fixed-Route Design Standards and Service Monitoring

Performance standards are the primary criteria for route evaluation and recommendation processes and are applied to both service changes and the design and monitoring of new routes. This section briefly highlights the standards used for the evaluation and recommendation of route, stop, and service changes and additions. More detailed information can be found in Appendix E.

2.5.1 Fixed Route Design Standards

COTA's Fixed Route Design Standards codify good transit planning and operational practices. These guidelines and standards serve several purposes:

- To inform decision-makers
- To the extent possible, provide an objective basis;
- To serve as a compass for both staff and decision-makers
- To support the route performance evaluation process

To measure the success of fixed-route service, every two years COTA monitors and evaluates each line against a set of operating and service metrics. These Fixed-route Service Monitoring metrics guide COTA in recommending changes to lines, such as increasing frequency or realigning a service. The goal of this process is to improve the productivity or effectiveness of its fixed-route network. The process includes:

- Fixed-route design standards when deciding to implement new service or modify existing service;
- Design service criteria to identify its purpose. The purpose of fixed-route lines fall into one of two categories, ridership or coverage;
- Determining recommendations for implementation using a 3 step process;
- Evaluating the cost of service; and
- Analyzing Title VI and Environmental Justice impacts.

2.5.2 Service Monitoring

Critical to the success of COTA is monitoring how fixed-route bus service is performing in relation to its purpose (ridership or coverage) and making adjustments to ensure resources are allocated in the most effective manner possible. Service is analyzed by service category as shown in **Table 2-2**. As such, each line must be assigned to appropriate categories.

Service shall be monitored and updated every two years with the update of the Short-Range Transit Plan.

Service found not performing well would be subject to modification. **Table 2-1** below displays the service monitoring standards which includes minimum frequency, minimum span of all-day frequency (frequent, 30 minute, 60 minute or trips per 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 entire network.

Table 2-1: Service Standards and Monitoring

CHARACTERISTICS OF SERVICE									METRICS	
									Ridership	Coverage
Service Category	Prevailing Purpose	All Day Frequency (min)	Min. Duration of All Day Frequency 7-days a week (hrs)	Min. Span of Weekday Service (hrs)	Min. Duration of Saturday Service	Min. Duration of Sunday Service	On-time Performance (%)	Max. % of seated capacity at peak load periods	Boardings/Revenue Hour Average	% of pop + jobs within 1/4 mi.
Frequent	Ridership	15	14	18	17	15	73.5	120%	24.77	-
30-Minute	Mixed*	30	14	18	17	15	73.5	120%	13.99	-
60-Minute	Coverage	60	14	14	14	14	73.5	120%	9.81	53%
Rush Hour	Coverage	2 trips/peak						100%	10.96**	-

*30-Minute lines can be ridership or coverage
 ** Rush Hour uses total service hours instead of revenue

For explanations of each of these metrics and how lines are assigned service categories, see Appendix E.



2.0 Service Area & Agency Overview

Table 2-2 shows the results of service monitoring for the Frequent service category. In 2019, all of COTA's frequent service meets the minimum characteristics of service including span of service for weekday, Saturday and Sunday. For the productivity measurement, all of the Frequent service meets the productivity standard of being 2/3's (66%) of the average productivity of 24.77 boardings per hour. The Frequent service that performed the best was the CBUS (121) at 153% of the average followed by line 2 N. High / E. Main Street with a productivity of 31.09 boardings per hour (126%) in 2019. The service monitoring results of the other service categories including 30 minute service, 60 minute service and Rush Hour service can be found in Appendix E. Service that does not meet the minimum characteristics or metrics will be evaluated for adjustments in future service changes.



Table 2-2: Frequent Service Monitoring Example

FREQUENT		CHARACTERISTICS OF SERVICE					METRICS	
Line #	Prevailing Purpose	All Day Frequency (min)	Min. Duration of All Day Frequency 7-days a week (hrs)	Min. Span of Weekday Service (hrs)	Min. Duration of Saturday Service	Min. Duration of Sunday Service	Boardings/Revenue Hour Average	% Compared to Average
		15	14	18	17	15	24.77	
1	Ridership	Y	Y	Y	Y	Y	27.37	110%
2	Ridership	Y	Y	Y	Y	Y	31.09	126%
5	Ridership	Y	Y	Y	Y	Y	18.45	74%
7	Ridership	Y	Y	Y	Y	Y	23.35	102%
8	Ridership	Y	Y	Y	Y	Y	17.00	69%
10	Ridership	Y	Y	Y	Y	Y	26.35	106%
23	Ridership	Y	Y	Y	Y	Y	17.17	69%
34	Ridership	Y	Y	Y	Y	Y	16.59	67%
101	Ridership	Y	Y	Y	Y	Y	27.07	109%
121	Ridership	Y	Y	Y	Y	Y	37.88	153%

Note: Y=Yes, meets the standard.

2.5.3 Transit Stop Design Guide

The Transit Stop Design Guide provides municipalities and developers reliable design criteria that is consistent with COTA Standards, including regulations set forth by the Federal Transit Authority (FTA) and the Americans with Disabilities Act (ADA). The manual is available for use and download at www.COTA.com.

The goal of the Transit Stop Design Guide is to improve the customer waiting experience, operational efficiency and safety, and ensure ADA access (wheelchair ramps, sidewalks, etc.).

In addition to the general guidelines, COTA also uses the following criteria when determining transit stop placement, illustrated in **Figure 2-16**.

Figure 2-16: Transit Stop Criteria



2.5.4 Distribution of Transit Stop Amenities & Criteria

COTA provides a variety of transit stop amenities to improve customer accessibility and comfort at bus stops. Bus stop amenities may include shelters, benches, simme-seats (small benches), trash cans, solar lights, concrete ADA pads, and more. COTA strives to provide comfortable and accessible waiting areas at all transit

stops, but resources must be prioritized due to limited resources.

2.5.5 Title VI Adherence and Environmental Justice

COTA has adopted the suggested methodology and framework set forth in Title VI objectives and the reporting guidelines (FTA Circular 4702.1B) for compliance assessment.

In 2019, COTA submitted a new Title VI triennial report to FTA, which documented the results of this methodology and showed COTA's compliance with the Title VI regulations during 2016-2019. The next Title VI triennial report will be compiled in 2022 for 2019-2022.

Figure 2-17: Objectives of the FTA Title VI Program

Objectives of the FTA Title VI Program

- To ensure FTA-assisted benefits and related services are equitably distributed without regard to race, color or national origin;
- To ensure that both the level and quality of transit services provide equal access and mobility for any person without regard to race, color or national origin;
- To prevent the denial, reduction, or delay in benefits related to programs and activities that benefit minority populations or low-income populations;
- To ensure that access to the planning and decision-making process is open and provided without regard to race, color or national origin;
- To ensure that decisions on the location of transit facilities and services are made without regard to race, color or national origin; and
- To ensure meaningful access to programs and activities by persons with limited English proficiency.

2.0 Service Area & Agency Overview

Environmental Justice (EJ)

Although no formal report is required, FTA requires transit providers to incorporate environmental justice and non-discrimination principles into transportation planning and decision-making processes as well as environmental review for specific projects. The two primary classes considered are minorities and low-income populations.

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

EJ policy requires analysis of transit activities if a low-income and/or minority population is impacted by such activities. The analysis compares the impacts of low-income and minority populations to those of non-low-income and non-minority populations. COTA reviews the results of the analysis to guide decision makers in choosing alternative actions that reduce the difference in impacts between low-income and minority populations and non-low-income and non-minority populations.



3.0 SHORT & LONG RANGE PLAN DETAILS

3.1 Short Range Plan: Short Range Vision and Capital Improvement Investments

COTA's vision, *Moving Every Life Forward* is supported by the 2019-2024 Strategic Plan. The plan defines and articulates the strategic direction for COTA for the next five (5) years. COTA's five-year SRTP, the basis for COTA's components in the MORPC Transportation Improvement Program (TIP), incorporates initiatives from the Strategic Plan. With a clear focus on equity, diversity, and inclusion, the Board of Trustees and Staff are committed to executing the Plan by providing affordable, cost-effective public transit services and making capital investments that will transform the region's mobility options.

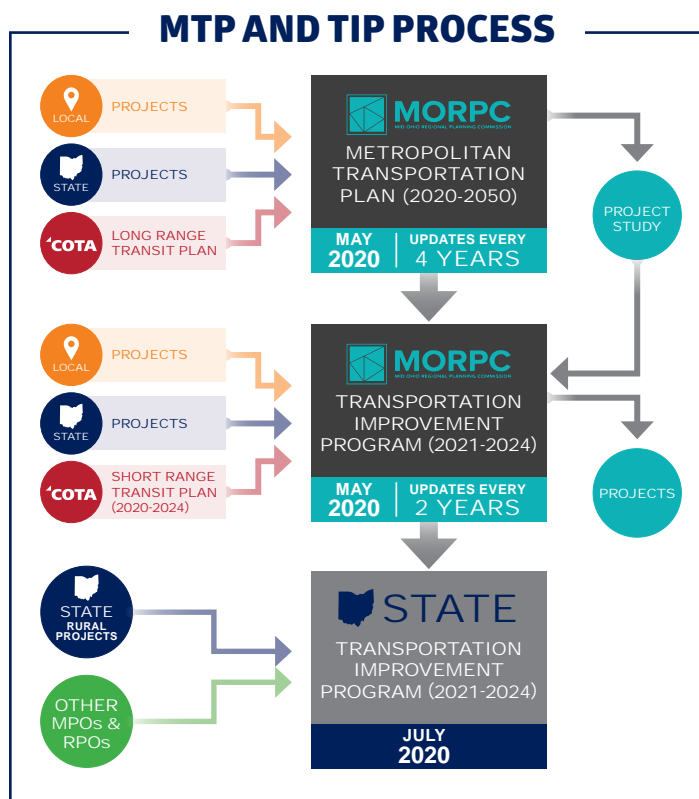
ODOT's Statewide Transportation Improvement Program (STIP) and MORPC's regional TIP delineates a four-year operating and capital plan. Listed in **Figure 3-1** and **Figure 3-2** (seen on pages 29 and 30) are COTA's annual service levels, operating and capital expenses, and anticipated funding levels. The TIP spans four state fiscal years (2021-2024) while COTA's Short Range Transit Plan (SRTP) covers five calendar years.

The COTA SRTP captures the first five years of COTA's Strategic Plan and visions to the year 2050. The total five-year Capital Acquisitions Plan is projected to cost over \$206.1 million as identified in **Table 3-2**. 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 mobility services in the Central Ohio area.

3.1.1 Strategic Plan

The 2021-2024 four-year TIP operating plan represents 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" organized within four guiding principles: Improve the Customer Experience; Achieve Organizational Excellence; Provide Access to Mobility Options; and, Prioritize the Use of Data Analytics.

See <https://www.cota.com/who-we-are/strategic-plan/> for additional information.



3.0 Short & Long Range Plan Details

3.1.2 Short Range Financial Summary

COTA's major source of local funding is 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 additional ten-year renewable 0.25% sales tax renewed in 2016 by 73% of the voters. This allows for continued service enhancements through at least 2026. Between 2010 and 2019, sales tax revenue increased an average of 4.4% annually. COTA has presented sales tax revenue estimates that reflect the uncertainty associated with the COVID-19 pandemic. With the highest level of unemployment since the Great Depression, COTA anticipates a significant reduction in sales tax revenue between 2020 and 2022 with no additional growth projected in 2023 and 2024.

Figure 3-1 and **Figure 3-2** present 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 2024. This five-year plan (2020-2024) takes into account numerous public and stakeholder comments received during the development of the 2020 Short and Long-range transit plan updates, numerous public service change meetings, input from operators, the NextGen long-range visionary document (2017) and stakeholder input received during development of the 2020-2024 strategic plan. While COTA planned to maintain service hours at approximately 1.24 million annually, services have been significantly impacted by COVID-19, with ridership levels declining over 60%. Consequently, COTA has reflected an adjustment in fixed route service hours in 2020, 2021 and 2022 in response to the changing needs of the community. COTA remains committed to serving the community in the most responsible manner possible.

Since the passage of an additional 10-year renewable 0.25% sales tax in November 2006, and subsequent renewal in 2016, COTA has implemented many transit enhancements described in the 2006 LRTP as well as additional improvements documented in succeeding plan updates (Transit System Redesign, CMAX BRT, WiFi on buses, COTA Plus, account-based fare payment, etc.). While sales tax revenue is anticipated to continue to

fund a large percentage of the Authority's expenditures, staff will be seeking ways to diversify 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 to capture revenue generated from development and redevelopment efforts in order to help fund mobility improvements that will benefit the region. Additionally, COTA will explore the possibility of funding improvements through the use of long-term financing.

The revenue estimates for the five year plan for passenger revenues reflect the actual and projected decrease in ridership due to the pandemic. COTA does not anticipate reaching pre-COVID levels of passengers and passenger revenues until mid-2022. Beyond 2022, a 1% growth in passenger revenue has been projected. No change in the existing fare structure is incorporated in the plan.

Given the significant decrease in revenue anticipated between 2020 and 2022, expenses will need to be controlled. CARES Act funding in the amount of \$49.8 million in 2020 will help offset the loss in revenue for the first year but moving forward, absent additional sources of revenue or a quick return to pre-COVID economic conditions, operating revenues are not anticipated to cover operating expenses. Healthy levels of reserves allow for this to occur in the short-term, but reductions in expenses combined with growth in revenues will need to be considered.

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

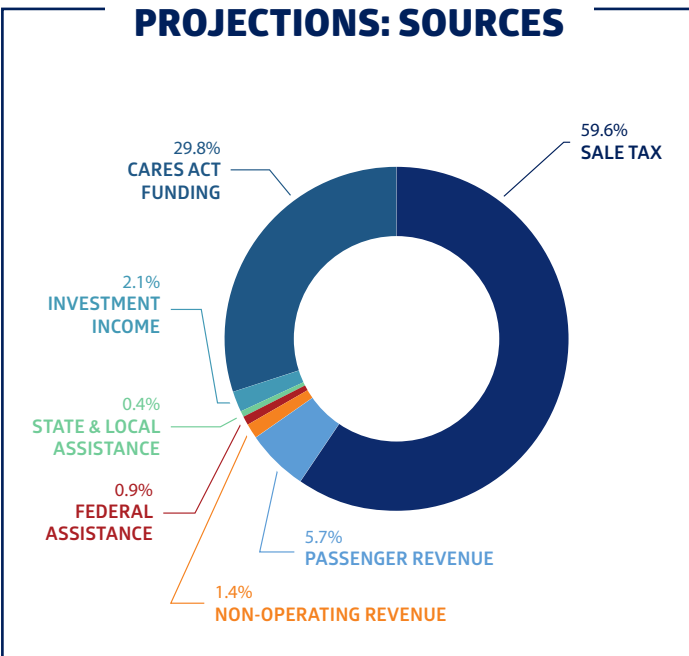
- Continued level of Fixed route and Paratransit service
- Fixed-Route and Paratransit Vehicles Replacements
- COTA Plus Expansion
- Non-Revenue Support Vehicles
- IT Hardware/Software
- Facility and Equipment Replacement and Upgraded
- Land Acquisition
- COTA Facility Renovations/Improvements
- Rickenbacker Mobility Center
- High Capacity Corridor Developments and Improvements
- Transit Center and Shelter Improvements
- Electric Charging Stations
- Park & Ride Construction Improvements

Table 3-1: Financial Summary

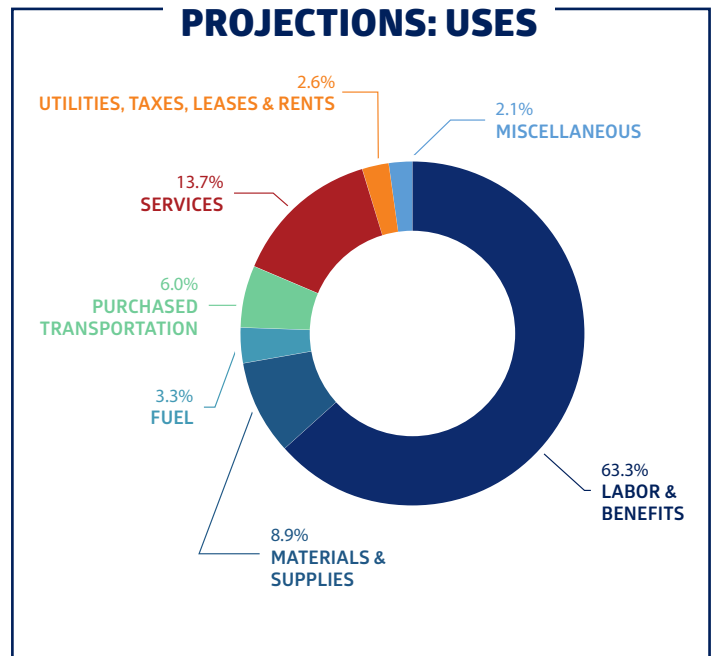
	PROJECTED 2020	PROJECTED 2021	PROJECTED 2022	PROJECTED 2023	PROJECTED 2024
Fixed Route Service Hours	845,509	1,014,611	1,217,533	1,244,509	1,244,509
Passengers	10,470,432	14,110,107	19,979,332	19,979,332	19,979,332
Sources					
Sales Tax	\$ 99,943,321	\$ 97,379,287	\$ 133,035,433	\$ 134,365,787	\$ 134,365,787
Passenger Revenue	\$ 9,578,535	\$ 21,181,120	\$ 20,990,120	\$ 21,023,272	\$ 21,223,504
Non-Operating Revenue	\$ 2,357,255	\$ 2,530,868	\$ 2,530,868	\$ 2,530,868	\$ 2,530,868
Federal Assistance	\$ 1,574,404	\$ 1,574,404	\$ 1,574,404	\$ 1,574,404	\$ 1,574,404
State & Local Assistance	\$ 674,633	\$ 674,633	\$ 674,633	\$ 674,633	\$ 674,633
Investment Income	\$ 3,600,000	\$ 1,111,760	\$ 1,080,839	\$ 1,022,672	\$ 999,669
CARES Act Funding	\$ 49,878,307	-	-	-	-
TOTAL SOURCES	\$ 167,606,455	\$ 124,452,073	\$ 159,886,297	\$ 161,202,636	\$ 161,378,866
Uses					
Labor & Benefits	\$ 105,936,376	\$ 104,829,331	\$ 104,829,331	\$ 104,829,331	\$ 104,829,331
Materials & Supplies	\$ 14,964,541	\$ 14,964,541	\$ 15,722,121	\$ 16,115,174	\$ 16,518,053
Fuel	\$ 5,563,903	\$ 5,563,903	\$ 5,563,903	\$ 5,563,903	\$ 5,563,903
Purchased Transportation (Paratransit)	\$ 10,090,900	\$ 10,090,900	\$ 10,090,900	\$ 10,090,900	\$ 10,090,900
Services	\$ 22,927,673	\$ 22,250,005	\$ 22,250,005	\$ 22,250,005	\$ 22,250,005
Utilities, Taxes, Leases & Rents	\$ 4,285,440	\$ 4,285,440	\$ 4,285,440	\$ 4,285,440	\$ 4,285,440
Miscellaneous	\$ 3,545,173	\$ 2,618,811	\$ 2,618,811	\$ 2,618,811	\$ 2,618,811
Debt Service	-	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000
TOTAL USES	\$ 167,314,006	\$ 164,762,931	\$ 164,762,931	\$ 164,762,931	\$ 164,762,931
NET (OPERATIONS)	\$ 292,449	\$ (40,310,858)	\$ (4,876,634)	\$ (3,560,295)	\$ (3,384,065)
Local Capital Requirement	\$ (28,086,002)	\$ (17,058,433)	\$ (11,582,666)	\$ (3,983,600)	\$ (2,948,800)
ENDING CASH BALANCE	\$ 151,001,455	\$ 93,632,164	\$ 77,172,864	\$ 70,108,970	\$ 63,936,105

Note: These numbers may be subject to change due to the impacts of COVID-19. Numbers were adjusted in mid-May 2020. 2020 was changed from budget to projected.

**COTA FY2020
PROJECTIONS: SOURCES**



**COTA FY2020
PROJECTIONS: USES**



3.0 Short & Long Range Plan Details

During this SRTP timeframe and in alignment with the Authority's Strategic Plan, COTA will prioritize capital expenditures aimed at strengthening and providing new transit services in the Central Ohio area. For the capital projects, COTA evaluated the comprehensive list of capital projects from long range planning including the COTA NextGen plan. A prioritized list of projects was developed based on the likely local funds needed for projects and likely sources of revenue (i.e. grant funding).

To offset additional expenses, additional sources of revenue were identified, including debt financing. The highest priority projects were incorporated into short term financial model. The total five-year Capital Acquisitions Plan is projected to cost over \$169.7 million as identified in Table 3-2. An average of 40% of projects are anticipated to be funded by COTA with the remainder coming from grants. The total amount of local funds needed is \$70 million.

Table 3-2: System Capital Program

	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
	2020	2021	2022	2023	2024
Sources					
Federal Funding	\$ 39,832,200	\$ 15,680,960	\$ 23,111,520	\$ 14,474,400	\$ 14,515,200
State & Other Grant Funding	\$ 2,494,000	\$ 2,964,000	-	-	-
Long-Term Financing	-	\$ 2,000,000	\$ 16,250,000	-	-
TOTAL SOURCES	\$ 42,326,200	\$ 20,644,960	\$ 39,361,520	\$ 14,474,400	\$ 14,515,200
Uses					
Fixed Route & Paratransit Vehicles	\$ 18,540,250	\$ 20,572,231	\$ 20,054,330	\$ 18,093,000	\$ 18,144,000
Non-Revenue Support Vehicles	\$ 23,000	\$ 360,000	-	-	\$ 360,000
IT Hardware/Software	\$ 5,367,482	\$ 6,132,605	\$ 650,000	\$ 650,000	\$ 650,000
Facility & Equipment Replacements & Upgrades	\$ 186,598	\$ 2,292,500	\$ 305,000	\$ 1,205,000	\$ 520,000
COTA Facility Renovations/Improvements	\$ 44,244,872	\$ 250,000	-	-	-
Rickenbacker Area Transit Center	\$ 1,250,000	\$ 5,750,000	-	-	-
Bus Rapid Transit (Corridor Developments & Improvements)	\$ 500,000	\$ 2,000,000	-	-	-
Park & Ride Construction & Improvements	\$ 300,000	\$ 346,057	\$ 300,000	\$ 300,000	\$ 300,000
TOTAL USES	\$ 70,412,202	\$ 37,703,393	\$ 21,309,330	\$ 20,618,000	\$ 19,624,000
Local Capital Requirement	\$ (28,086,002)	\$ (17,058,433)	\$ (11,582,666)	\$ (3,983,600)	\$ (2,948,800)

3.2 Long Range Plan: Service Needs and Long Range Vision

Central Ohio is predicted to grow by approximately 445,000 people by 2050, as a result the region will need to support a significantly increased level of travel demand. A natural outcome of increased demand will be increased congestion, which has been predicted by MORPC's regional model. As a result, COTA is actively investing in high capacity transit corridors throughout Central Ohio.

COTA's Transit System Redesign made up a large part of its near term service plan in its previous Long Range Transit Plan. Along with the Transit System Redesign was the NextGen plan. NextGen (2017) represents the community's vision for the future of transit and is a transformative effort to keep Central Ohioan's on the move to the year 2050. The NextGen plan identifies corridors best suited for development of a high capacity transit network in our region. Beyond the high capacity transit network are smart mobility options and improvements to the bus network. NextGen calls for the

improvement and expansion of existing transit service, the implementation of new types of mobility services, and the development of high capacity transit such as bus rapid transit (BRT), light rail, streetcar, and/or commuter rail. COTA's bus network, implemented in May 2017, took crucial first steps in transforming the bus network into a more effective system with resources that exist today.

With Central Ohio predicted to grow significantly, it is more important than ever that residents are able to access jobs in the safest, most convenient and efficient way possible. NextGen's combination of technological innovations, high capacity transit, and on demand services facilitates this movement so Central Ohio can continue to thrive.

During this LRTP 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. COTA is continuously evaluating a comprehensive list of capital projects from long range planning including the COTA NextGen. At its inception, NextGen was developed without defined funding sources or budget constraints in order to create a vision that is tailored to the aspirations and needs of the region. It will, however, require building new infrastructure, acquiring more vehicles, and expanding budgets to operate and maintain new and enhanced transit services. Additional sources of local, state and/or federal funding will be needed to make the vision outlined in NextGen a reality. To offset additional expenses, additional sources of revenue will need to be identified through exploration of new or expanded funding streams, including debt financing. COTA will explore the possibility of funding improvements through the use of long-term financing.

This thirty-year plan (2020-2050) takes into account numerous public and stakeholder comments received during development of the 2020 Short and Long-range transit plan updates, the NextGen long-range visionary document (2017) and stakeholder input received during the development of the 2020-2024 Strategic Plan. COTA plans to increase service levels to add new high capacity transit, add fixed-route and mobility services, implement commuter and limited stop bus service, and

Benefits of Transit Investment



87% of public transit trips impact the economy.



Every \$1 invested in public transportation generates approximately **\$4 in economic returns**.



Every \$1 billion invested in public transportation **supports and creates more than 50,000 jobs**.



Every \$10 million in capital investment in public transportation yields **\$32 million in increased business sales**.



Residential property values performed 42% better on average if they were located near public transportation with high-frequency service.

3.0 Short & Long Range Plan Details

add frequency, to approximately 2 million service hours annually between 2020 and 2050. However, COTA will continue to monitor the performance of existing routes to help ensure that the transit system is operating efficiently and to ensure operational resources can be allocated in the most efficient manner.

The following is a summary of operating and capital expenses for 2020-2050:

- Expanded fixed-route service hours
- Fixed Route and Paratransit Vehicles Replacements
- COTA Plus Expansion and Sustainability
- Facility & Equipment Replacement and Upgrades
- System of BRT corridors
- High Capacity Corridor Developments and Improvements
- Mobility Center/Park and Ride Improvements
- Electric Charging Stations
- Bus Shelter Improvements

Figure 3-1: Phased Implementation Timeline

TODAY - 2025	<ul style="list-style-type: none"> • Implement one high capacity transit corridor • Operate high frequency network until 9 p.m. • Add capacity to routes with crowding • Upgrade three routes to high-frequency route status • Implement limited stop service on East and West Broad • Add two commuter bus routes to regional job centers and two local bus routes • Expand number for dedicated bus lanes • Upgrade user technology, including mobile fare payment and wifi • Implement emerging mobility pilot programs, including autonomous vehicles, first/last mile solutions, and night owl service
2025 - 2040	<ul style="list-style-type: none"> • Implement three high capacity transit corridors • Upgrade four routes to high frequency service • Add three new commuter routes to regional job centers and one new local route • Operate all local service at least every 30-minutes all-day • Expand smart mobility programs to more job centers
2040 - 2050	<ul style="list-style-type: none"> • Implement seven high capacity transit corridors • Upgrade the frequency of three routes • Add two local routes and four new commuter routes • Further expand smart mobility programs to include municipal partnerships

Figure 3-2: COTA's Long Range Initiatives

THREE LONG RANGE INITIATIVES



High Capacity Transit

... which moves more people, faster, in less physical space, attracts new development and focuses growth.



Smart Mobility Options

... such as self-driving vehicles first/last mile services, and smart apps, which makes planning paying for transportation services and job access easier than ever.



Enhanced Bus Service

... that runs more frequently, to more places—ensures residents can access jobs and employers can attract employees because transportation is accessible 24-hours a day.

3.3 Short and Long Range Initiatives

The Short and Long Range initiatives have been organized into categories with a general description and specific initiatives within those categories labeled as Short Term or Long Term.

FIXED-ROUTE SERVICE

The backbone of COTA's public transit system is fixed-route bus service, which operates a fixed-schedule along specific streets. Buses pick up and drop off passengers at specific bus stop locations. COTA reviews and makes adjustments to its fixed-route system three times a year. As of January 2020, COTA operates 1,244,509 annualized scheduled service hours. At the end of 2020, actual service hours will be less, due to the impacts of COVID-19.

To address increasing customer needs for fixed-route bus service, service changes focus on four key areas of

improvement: increased service frequency, expanded service area coverage, expanded hours of operation, and decreased travel times.

Based on the long range initiatives, projections demonstrate an additional 800,000 annual service hours. Focusing on how service is provided, enhancements include continued evaluation to optimize service, developing alternatives to provide service in less dense areas, connecting job sites with residential areas, and how technology can support these improvements.

Figure 3-3: COTA's Annual Service Hours

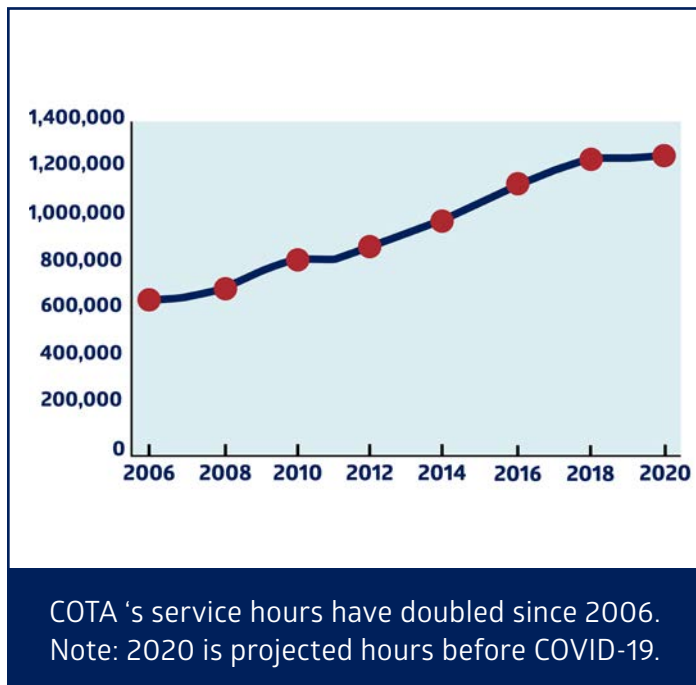
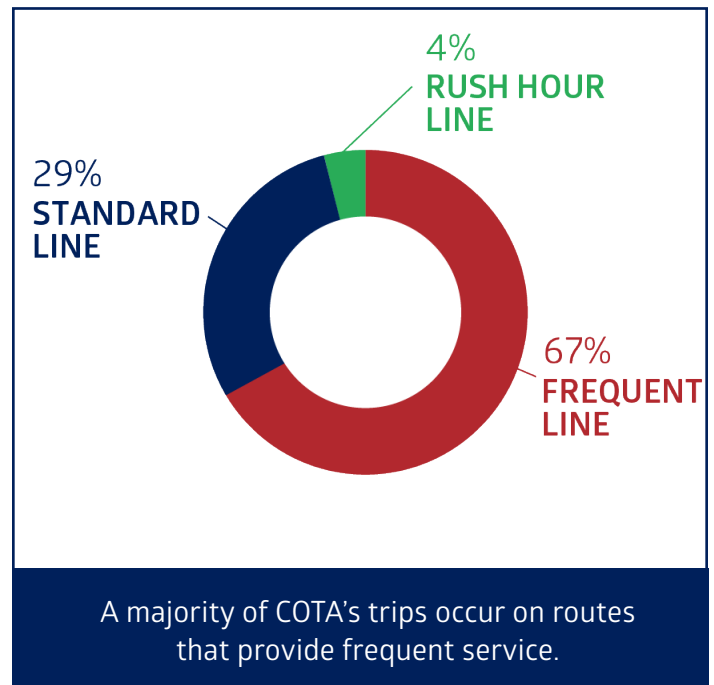


Figure 3-4: Percentage of Passengers by Service Type



3.0 Short & Long Range Plan Details

Figure 3-5: NextGen Local Bus Network Improvements

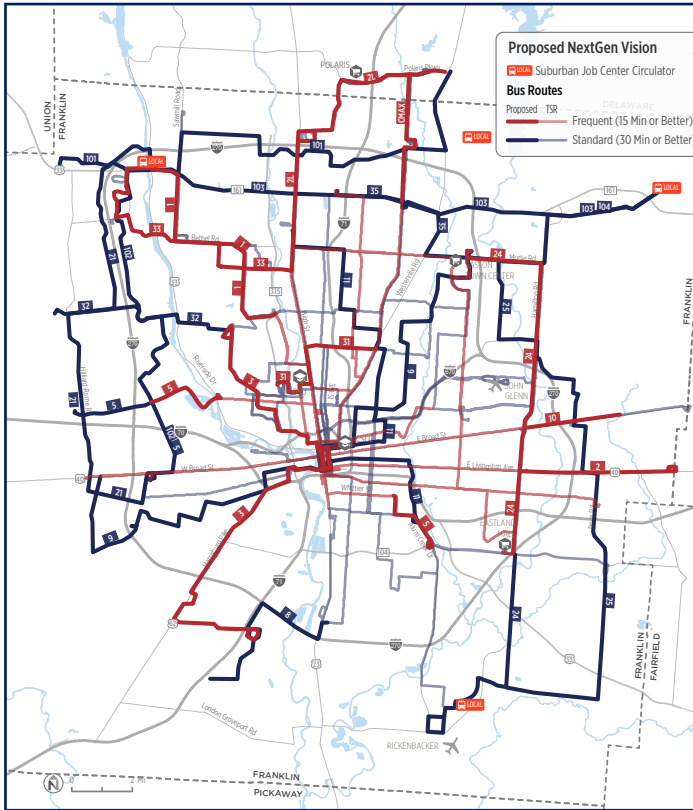
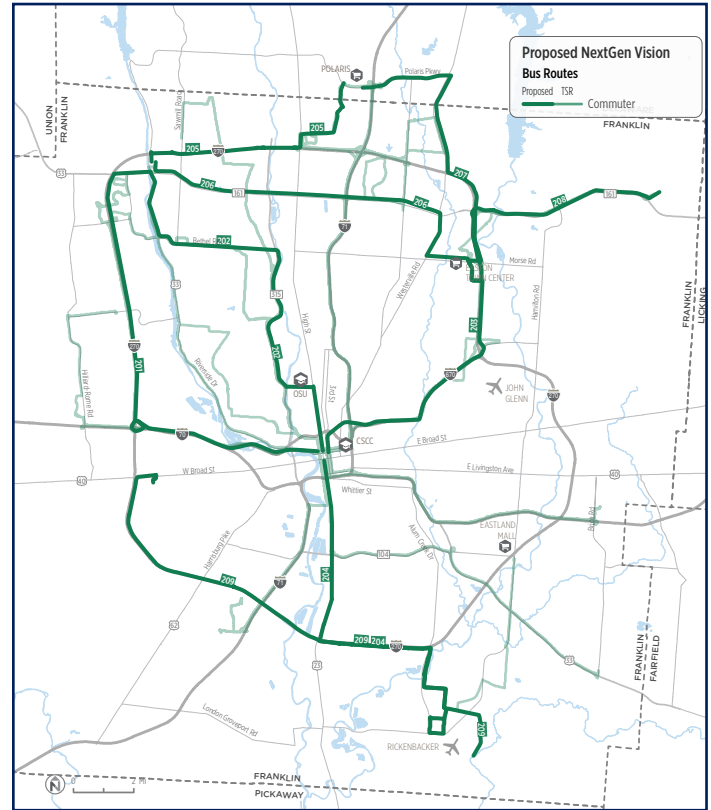


Figure 3-6: NextGen New Suburb to Suburb Commuter Line Concepts



FIXED-ROUTE SERVICE PLAN INITIATIVES

SHORT RANGE 2020-2024

- Continued level with incremental improvements.
- Explore the feasibility of 24-hour service on selective lines.
- Evaluate routes to determine opportunities for additional capacity, expansion, optimization, and express routing. Identify route and service expansion opportunities for disadvantaged communities.
- Increase dedicated bus-only lanes to reduce travel times.
- Explore the feasibility of adding additional Limited Stop lines to decrease travel times.

LONG RANGE 2020-2050

- Increased service hours (up to 800,000 annual service hours).
- Expand Hours of Operation – multiple 24-hr lines.
- New Suburb to Suburb commuter crosstown service.
- New lines and line extensions to keep up with regional population and job growth.
- Increased frequency, all 60-min lines become at least 30 minutes” or “All Standard routes with 30 minutes or better frequency.

HIGH CAPACITY TRANSIT & BUS RAPID TRANSIT

High capacity transit has spurred development in concentrated corridors across the United States. This makes the economic benefits for high capacity transit outweigh the investment costs. During the 2020-2024 timeframe, COTA will continue efforts to implement high capacity transit service along more corridors in Central Ohio. In addition to expanded bus service, NextGen outlines 14 corridors in which high-capacity transit may be applicable. Developed by MORPC, City of Columbus, ULI-Columbus, COTA, and other local municipalities and stakeholders, the insight 2050 Corridor Concepts Study Report (April 2019) focused on five of those corridors as a means of holistic corridor job and housing growth in dense development that better serves a high-capacity system. The insight2050 Corridor Concepts laid the groundwork for implementing a system of high-capacity transit corridors. The network as proposed will only work with high-density development focusing on job and housing growth along these corridors.

Figure 3-7: insight2050 High-Capacity Corridors including additional corridors for further study including in MORPC's MTP, MORPC

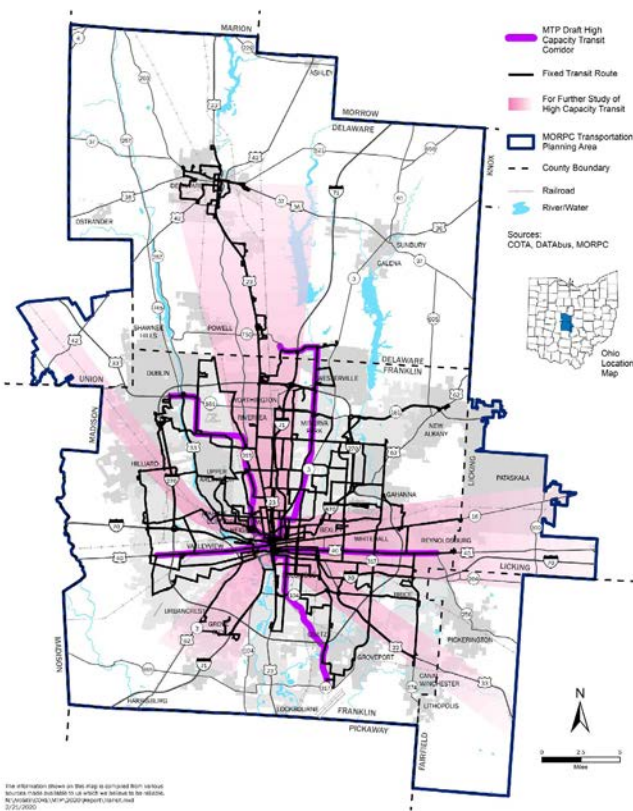
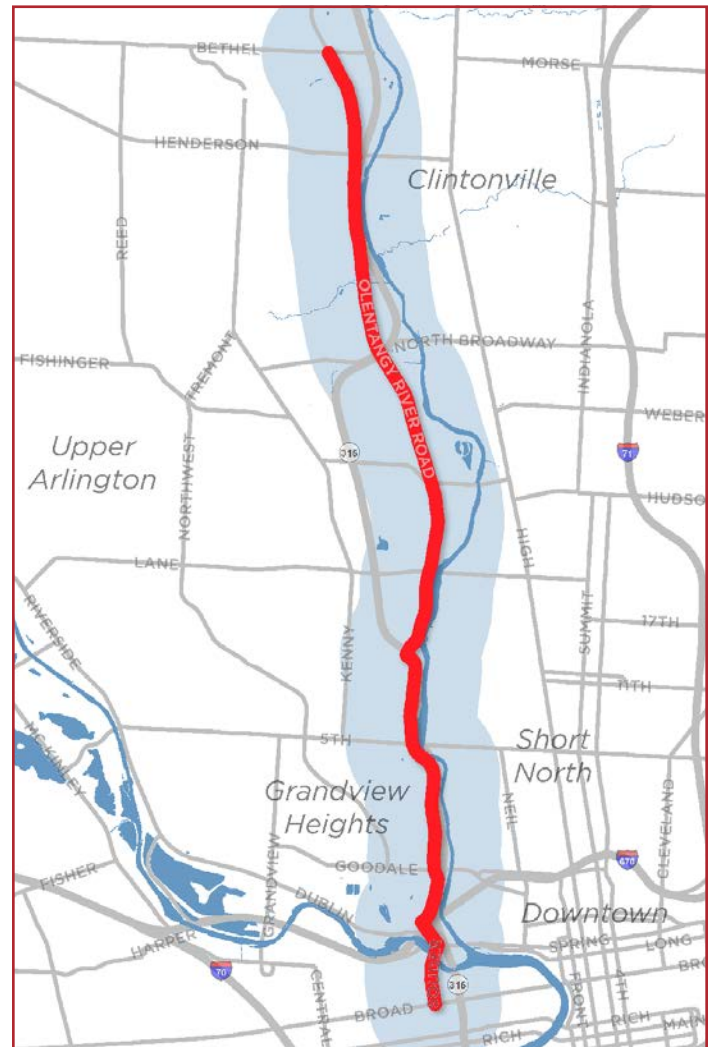


Figure 3-8: Northwest Corridor High Capacity Transit Alternatives, City of Columbus



The Northwest Mobility Study led by the city of Columbus began in 2019 to create a vision for the Northwest Corridor including high capacity transit alternatives.

3.0 Short & Long Range Plan Details

The 2020-2024 budget includes the Northwest Corridor Mobility Study, which the City of Columbus is managing with COTA as a partner; an East-West Corridor Analysis and preliminary design of a high-capacity transit system; a match for federal grant request for Transit-Oriented-Development and potential dedicated bus lane analysis for the Cleveland Avenue corridor, continued investment in the existing BRT system; as well as two to three “end of the line” enhancements for other corridors.

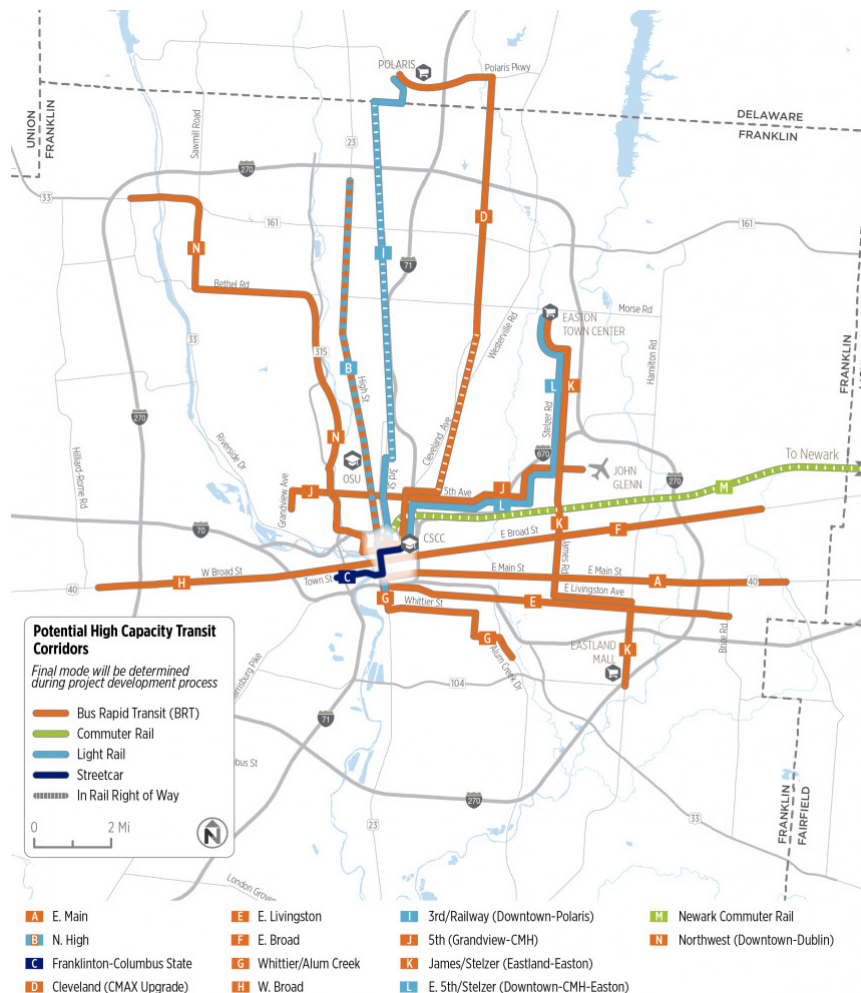
COTA will continue to work with local cities, Franklin County and larger institutions along the corridors to develop holistic and progressive initiatives along all potential high-capacity transit routes through the Link US mobility corridor initiative. Link US seeks to provide a complete mobility system along the region’s most important corridors, including high capacity, technology

solutions, bicycle and pedestrian improvements, and land use changes.

Within the next 5 years, COTA will evaluate how these high capacity corridors connect in Downtown Columbus, where the majority of the routes meet, to determine appropriate space and location for bus arrivals and departures.

CMAX, COTA’s first bus-rapid transit (BRT) service, was launched in January 2018, from downtown Columbus to Westerville along Cleveland Avenue. BRT is a premier service with branded buses, limited and enhanced bus stops, operating every 15 minutes or better. COTA anticipates to add more BRT into fixed route improvements in the future.

Figure 3-9: NextGen’s 14 Corridors Suitable for High Capacity Transit



Note: Additional corridors may be developed as communities grow and update plans to support high capacity transit.



HIGH CAPACITY TRANSIT & BUS RAPID TRANSIT PLAN INITIATIVES

SHORT RANGE 2020-2024

- Evaluate corridors to understand capacity, best modes, development, real estate projections.
- Northwest Corridor Mobility Study
- East-West Corridor Analysis
- Transit-Oriented-Development and potential dedicated lane analysis for the Cleveland Avenue corridor
- Strategic Land Acquisition to integrate BRT stations into High Capacity Corridor Developments

LONG RANGE 2020-2050

- Evaluate the feasibility and effectiveness of alternative capacity methods (e.g. platooning, headway adherence) for high demand routes to improve efficiency
- Build a system of BRT integrating with focused corridor development. BRT lines will include frequent service, dedicated bus-only lanes, pre-board fare collection and level platform boarding to reduce travel times.

3.0 Short & Long Range Plan Details

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

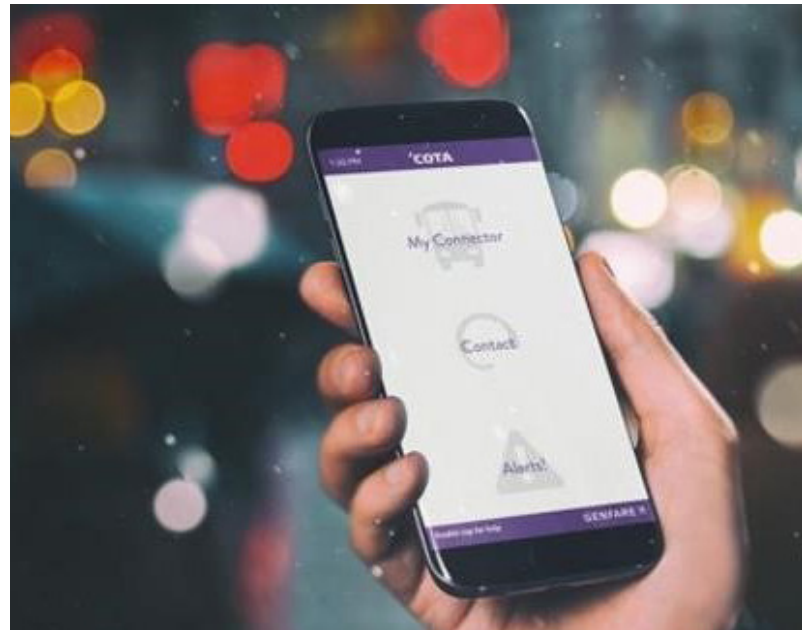
ITS is an application of various technologies that improve information, control, and communication systems for a region's transportation system, including public transit. COTA aims to leverage artificial intelligent technologies to improve mobility within the Central Ohio Region. COTA's ITS applications are designed with the ability to provide real-time schedule updates to the public at various passenger facility locations (i.e., CMAX Cleveland Avenue BRT stations, transit centers, COTA's website, and on various mobile apps). The NextGen vision includes smart mobility options that will lead to the development of technologies and services that improve access to jobs; connect Columbus residents to safe, reliable transportation; better connect our visitors to transportation options; and develop a more environmentally sustainable transportation system. Options for evaluation and implementation include first and last mile services, mobility hubs and centers, smart apps, traffic signal priority systems, enhanced fare collection systems, and real time information.

In some cases working with regional partners, COTA plans to add to and expand existing ITS components, including:

- Traffic signal priority systems that adjust signal timing to expedite bus service
- Enhanced fare collection systems, which provide best fare options for customers
- Real time information for passengers including arrivals and departures
- Smart card and mobile payment technologies
- Onboard automated stop announcements
- Automated passenger counters (APC); and
- Safety and security systems

In fall 2019, COTA unveiled a mobile payment option, COTA Connector, providing occasional customers an option for a convenient, secure, and cashless form of paying for and boarding COTA's fixed-route mass transit services. In August 2019, a mobility app called Pivot was introduced in Central Ohio. Powered by Smart Columbus, Pivot helps users get around town based on their preferred way to travel, such as the bus, bike, scooter, or personal vehicle.

Over the next five years, COTA will continue to pursue the implementation and enhancement of the real-time mobility apps. COTA will continue to work closely with the Smart Columbus project team, who are implementing new technologies for smart mobility options; including but not limited to Pivot; self-driving vehicle shuttle pilots, Smart Mobility Hubs, and the Smart Columbus Operating System.



INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN INITIATIVES

SHORT RANGE 2020-2024

- Smart booking for paratransit (Mainstream On-demand)
- Smart Mobility Hubs
- Smart Columbus Operating System
- Waycare real time roadway data
- On-Time Performance analytics
- Enhanced fare collection systems

LONG RANGE 2020-2050

- AI for modeling customer behavior
- Connected vehicle and sensor technology
- Continue to align COTA usage with other future technologies

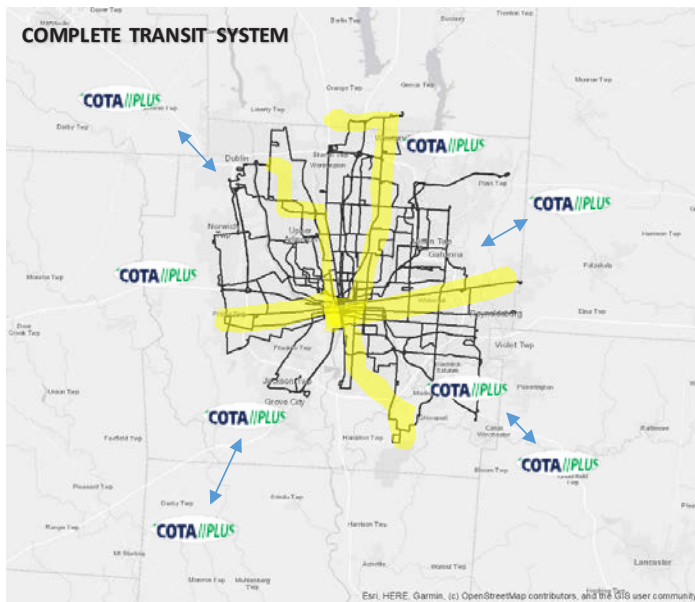
MICROTRANSIT

In 2019, COTA launched COTA Plus in Grove City. This on-demand service integrates technology with a microtransit solution to provide customers with further access to jobs, healthcare and more, while also offering a fast, convenient and comfortable transit solution. Further microtransit solutions are planned for additional first-mile/last-mile solutions.

COTA will identify and expand community and business partnerships to provide service offerings and innovative partnerships. Both public and private partnerships will need to be pursued. One initiative will be to identify the potential to leverage corporate/community funding sources for developing new mobility hubs and routes

(e.g. COTA Plus route servicing a specific large business). COTA will also continue to work with developers and employers to site developments close to transit.

Figure 3-10: COTA Plus Implementation Approach



COTA Plus vehicle

MICROTRANSIT PLAN INITIATIVES

SHORT RANGE 2020-2024

- COTA Plus Expansion: Advance a method to deploy multiple first-mile/last-mile microtransit 'zones', connecting the region to the fixed-route bus system
- Integrate community partners into each zone.

LONG RANGE 2020-2050

- Sustainable business model for microtransit options
- Build a system of first-mile/last-mile connections, including multiple mobility solutions

3.0 Short & Long Range Plan Details

MAINSTREAM PARATRANSIT

COTA provides American's with Disabilities Act (ADA) paratransit service named "Mainstream", which is an on-demand shared-ride service providing origin-to-destination transportation for people whose functional limitations prevent them from riding COTA's fixed-route buses for some or all of their trips. Due to the rising cost of and increased demand for Mainstream service, COTA continues to explore methods of cost reduction while meeting the transportation needs of the community. COTA plans for routine replacement of existing Mainstream cutaway and Ford Transit vehicles that will be approaching their expected useful life over the next five year planning cycle. COTA intends to utilize federal Section 5307 monies to help fund future vehicle purchases through 2024.

As such, the replacement schedule for these vehicles is based on FTA's criteria for the minimum useful life of transit buses and vans. For planning purposes, COTA follows a minimum four-year and 200,000 mile limit or seven (7) years, whichever comes first, minimum life FTA criteria for paratransit vehicles. The Mainstream fleet is currently at 74 vehicles, including 35 Ford Transit ADA accessible vans. During the 2020-2024 planning cycle, COTA has estimated \$10.5 million on the replacement of Mainstream vehicles.

COTA is also applying new technologies to increase paratransit efficiencies. Mainstream On-Demand, launched in 2019, uses app-based booking and dispatching technology that allowed COTA to shrink the

booking window from 24 hours in advance of trips, to as little as 2 hours in advance - a significant improvement for our customers.



MAINSTREAM PARATRANSIT PLAN INITIATIVES

SHORT RANGE 2020-2024

- Paratransit Vehicle Replacement(s) per FTA regulations
- Explore cost efficiency elements
- Expand travel training across the region including multiple modes
- Explore restructuring ADA service delivery using the model trialed by Mainstream On-Demand

LONG RANGE 2020-2050

- Paratransit Vehicle Replacement(s) per FTA regulations

FLEET

Replacement of aging existing fixed-route coaches, paratransit and on-demand micro-transit vehicle expansion plans are a priority. COTA has begun a fleet conversion from diesel buses to lower emission vehicles. This includes replacing diesel fixed route buses with lower emission compressed natural gas (CNG) vehicles, and testing battery-powered electric buses, which have zero tailpipe emissions. Both technologies support COTA's commitment to environmental sustainability, and have the added benefit of reducing noise pollution as compared to diesel vehicles. COTA has utilized a phased approach, dependent upon funding, by replacing up to one-twelfth of its fleet annually.

New to the fleet, electric buses will be pilot tested for performance and overall cost/ benefit analysis. COTA was awarded approximately \$8.8 million in grant funds through the Federal government and AEP to be applied to the purchase of the electric powered buses. Most recently, in January 2020, the Ohio Diesel Emissions Reduction Grant (DERG) Program awarded COTA \$1,439,496 to cover 16 percent of the cost to replace nine model year 2009 diesel-powered buses with nine new electric-powered buses. COTA will procure at least 10 electric buses by 2021. Options for further electric investment include conversion of a particular route to all electric operations or entering into a public private partnership to facilitate a larger transition to electric vehicles. Additional CNG-powered vehicle purchases are anticipated during this time period to replace older diesel and CNG powered buses.

As replacement continues in the short term, COTA will

evaluate the feasibility and impact of converting COTA's fleet to an alternative energy source and identify the components needed to develop an alternative energy strategy including workforce preparation. Evaluation will include the implementation analysis of charging infrastructure.

Finally, COTA is improving our processes for maintaining our vehicles in top condition. COTA will pursue implementing a new parts inventory system that integrates with predictive analytics to help our engineers develop best practice maintenance solutions.



FLEET PLAN INITIATIVES

SHORT RANGE 2020-2024

- Replace all diesel buses with lower emission vehicles such as CNG
- Explore Electric Buses as another form of alternative fuels
- Predictive maintenance and technology

LONG RANGE 2020-2050

- Evaluation of alternative energy sources for replacement
- Implement a parts inventory system

3.0 Short & Long Range Plan Details



Rendering of Fields Ave Facility's new CNG Fueling Station, to be completed in 2020

FACILITIES

COTA facilities include 25 Park & Rides lots, 4 transit centers, the William J Lhota Building (Administrative Office, Mobility Lab, and Customer Experience Center), McKinley Avenue Bus Storage, Maintenance, and Customer Service Call Center that includes a CNG fueling facility, Fields Avenue Bus Storage and Maintenance Facility, and Fields Avenue Mobility Services.

COTA will continue to provide additional external facility improvements and additions as well as strategic land purchases. COTA will evaluate existing Park & Ride lots and transit centers for renovation and the possibility to expand. This evaluation will investigate creating additional Mobility Hubs and Mobility Centers that will incorporate Smart Columbus projects and future

technologies such as real time information, connected vehicle communications, electric charging, and an interface with other modes of transportation. In an effort to boost permanent revenues, COTA will identify and evaluate opportunities to leverage current facilities (e.g. parking lots, wash bays, facilities) to share with other entities and explore lease options to diversify revenue streams.

Transit Oriented Development

Transit-Oriented Development (TOD) is aimed at providing conditions that are beneficial to patrons (to use transit) as well as transit agencies (to provide transit service). COTA will evaluate locations and work with partners within its service area to incentivize and allow for development opportunities that encourage higher density and transit friendly facilities.

Facility Construction Projects

Continued renovation of the Fields and McKinley Avenue bus storage and maintenance facilities is included in the five year capital plan. These projects expand CNG fueling capabilities, as well as future electric vehicle charging stations, to support the transition away from diesel coaches and modernizes facilities to account for current and future operations. Facilities construction projects within this plan cycle also include a new transit center in the Rickenbacker area to provide access to that major jobs center.



COTA's new Customer Experience Center



Rendering of McKinley Ave Facility Renovation, work to begin in 2021

The **Fields Avenue** project consists of constructing a CNG fueling station and upgrading storage and maintenance facilities to permit CNG operations. This is critical as coach conversion to CNG has surpassed the 50% mark and it will not be feasible to operate all CNG buses out of COTA's McKinley Avenue facility within two years. This project also addresses facility infrastructure concerns such as roof replacement, a new bus wash, new vehicle maintenance equipment and facilities, new facilities maintenance spaces, and charging infrastructure for future electric bus operations. Construction started in 2019 and is expected to be complete by the end of 2020. COTA plans to use local money for this project; however, staff will make every effort to pursue available federal or state funding opportunities if they arise.

The **McKinley Avenue** renovation project is the final phase, completing design efforts in 2020. Construction is anticipated to begin in early 2021. COTA plans to use local money for this project; however, staff will make every effort to pursue available federal or state funding opportunities if they arise.

COTA is committed to protecting the environment and advancing the electrification of the Central Ohio region. The Fields Avenue and McKinley Avenue facility renovation projects include work to facilitate the operation of electric charging and service of electric buses.

The **Rickenbacker Area Mobility Center (RAMC)** is a conceptual transit center that is expected to be built in 2022. It is envisioned as a mobility center connecting COTA fixed route service with various workforce shuttle options, including the Groveport Rickenbacker Employee Access Transit (GREAT) as well as an interface with public transportation from Fairfield and Pickaway counties. RAMC is envisioned as a partnership between the State of Ohio, COTA, the Columbus Regional Airport Authority, and various county and local municipality stakeholders.

Strategic Land Purchase

Population growth, volatile gas prices, and an increased awareness of potential cost savings and environmental benefits derived from the use of public transit remain strong factors for development of future 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. Within the last three years, COTA has constructed the Northland Transit Center, Northern Lights, and Canal Winchester Park & Rides. COTA owns or leases twenty-five Park & Ride facilities serving the bus network. During this SRTP timeframe, COTA will investigate the feasibility of developing portions of select COTA-owned Park & Ride facilities that have excess or underutilized land areas.

3.0 Short & Long Range Plan Details

COTA will continue to purchase property to be used for Park & Rides, future facilities or expansions to existing facilities, operating corridors, properties of current or future development potential, and any property that COTA feels is a wise investment in the community or its operation. In total, COTA has programmed \$46.8 million of local funds in the 2020-2024 TIP for strategic investment planning and acquisitions that provide transportation or development options in the region.

Finally, bus stops are the gateway to the COTA system. As such, COTA will continue to pursue capital investments at bus stops like shelters, benches, and trash cans. COTA will continue to work with local governments to improve sidewalk connections and ADA accessibility at and around our bus stops.



FACILITIES PLAN INITIATIVES

SHORT RANGE 2020-2024

- Mobility Center(s) / Park & Ride Improvements
- Bus Shelter improvements – amenities and safety
- Rickenbacker Area Mobility Center
- Electric Charging Stations
- Support and partner to launch multiple Mobility Hubs

LONG RANGE 2020-2050

- Mobility Center(s) / Park & Ride Improvements
- Bus Shelter improvements
- Electric Charging Stations

RIDER ENGAGEMENT

COTA will continue to explore personalized service offerings to meet customer preferences, ensuring those in need of COTA's services are served with dignity, making it easier to interact with COTA and aligning services to capture new customers.

Focusing on enhancing the overall customer experience and access to service are COTA's strategies to build on its customer base.

Primary objectives that focus on enhancing customer service and access include:

- Targeted and Partner Promotions
- Augmented Customer Amenities
- Enhanced Communications
- Understanding the market
- Improving Connections to Transit
- Improving Stops and Transfers



RIDER ENGAGEMENT PLAN INITIATIVES

SHORT RANGE 2020-2024

- Establish new Key Performance Indicators (KPI's) to align with the Strategic Plan's Vision and Guiding Principles.
- Expand rider communication initiatives (real-time passenger alerts and real-time signage)
- Continue to pursue strategies to better understand the market, and rider behavior trends through customer and community insight programs and community outreach plans.
- Evaluate current transit stop spacing standards.
- Target improvements to pedestrian infrastructure along transit corridors and between bus stops and destinations.
- Improve amenities at transit stops (shelters, lighting, benches, lean bars, trashcans, stop pads, real-time displays, cameras and schedule information)
- Online customer service
- Evaluate and improve transit stop lighting to improve safety. Install reflective strips on stops and upgrade to solar powered lights.
- Expand COTA's Ambassador Program.
- Increase travel training and outreach for new riders.
- Expand installation of digital kiosks/displays and include information on how to purchase and use bus passes for new customers.
- Continue to improve social media presence across platforms, website, email newsletters and COTA advertisements (e.g. billboards). Consider developing a social media policy.

LONG RANGE 2020-2050

- Evaluate and improve upon the "last stop" destination notifications via bus header signs.
- Develop community outreach initiatives and purchase marketing materials for events.
- Engage in strategic partnerships and identify/attend speaking opportunities to improve COTA's visibility.
- Evaluate current communication approaches. Host community events/volunteer days for employees and residents to increase brand recognition in the community.
- Develop a real time customer survey and leverage the existing non-customer survey information.
- Utilize origin and destination data and other resources (such as opt-in rider programs) to evaluate trends around Sharing v. Point to Point Routing. Determine the most optimal service type for specific geographies/demographics (fixed route bus, microtransit, TNC, etc.)
- Study current non-customer base (demographics, geography, etc.) to understand how COTA can best expand its services to reach new customer bases (e.g. elderly, disabled)
- Explore AI for modeling behavior
- Improve operator and rider safety through improvements such as safety glass, plain clothes security, security cameras, banned passenger system, and passenger identification software.

FARES

Fare pricing and payment options have an impact on transit ridership levels. A delicate balance must be struck between the entities needed to support operations from a financial perspective and providing a competitive and affordable product from a price perspective. The following initiatives achieve three primary objectives:

- Introduce New Technology
- Introduce New Fare Programs
- Fare Policy Changes



FARES PLAN INITIATIVES

SHORT RANGE 2020-2024

- Maintain and expand innovation pass partnerships like CPASS, and the OSU pass program
- Further enhance the fare management system to include the ability to accept contactless EMV and mobile payment features like Apple and Google Pay.
- Deploy Pivot common payment system app.
- Undertake a Fare Study to review fare policies to evaluate how to make the system easier to understand and to try to increase ridership.

LONG RANGE 2020-2050

- Evaluate existing pass program to ensure program efficiency and optimization. Identify opportunities to expand pass programs to other customer bases.
- Evaluate the fare programs to increase ridership and promote the COTA brand. Develop a consistent framework for fare structure analysis with geographic/ demographic component to improve fare equity.

PARTNERSHIPS

COTA has had the opportunity to work closely with various entities in Central Ohio (Governments, Communities, and Businesses) to bring about major infrastructural and technological improvements to the region, share data and resources, and promote innovative transportation practices.

Smart Columbus

COTA will continue to work with Smart Columbus to develop technologies that improve access to jobs through expanded mobility options in major job centers; share open, secure data from a variety of mobility providers and

other stakeholders from the Smart Columbus Operating System; connect Columbus residents to safe, reliable transportation that can be accessed by all; better connect our visitors to transportation options; and develop a more environmentally sustainable transportation system.

Continue to work with developers and employers to site developments close to transit

As population and employment in Central Ohio continues to grow, location becomes ever more important. Employers are increasingly recognizing transit as an important amenity for their employees. Additionally,

3.0 Short & Long Range Plan Details

local municipalities are recognizing that quality transit helps attract job centers to their communities. COTA has an important role to play in the economic development of our region. Competition for employees is strong in the region, transit gives employers a competitive edge, opening up a larger workforce.

Additionally, building residential neighborhoods near high-frequency transit and with a site plan that allows quick, easy access to stops is becoming more and more popular, particularly among young professionals and retired persons. To accomplish this strategy, COTA will be included in discussions with developers and site selection professionals to highlight the benefits of locating near quality transit.

Encourage municipalities to develop transit-supportive policies, guidelines and practices

Municipalities and other governments controlling zoning and building ordinances have the ability to shape how communities grow and develop. Promoting development that supports COTA's frequent network not only increases ridership but also creates neighborhoods and areas that are walkable and attractive, providing a greater variety in places to live. COTA will work with municipal leadership to change how our communities manage growth.

Private and Public partnership for flex route or feeder services

Having access to transit service is a challenge in less dense suburban areas or areas that have difficult to navigate street networks. In these areas, flex route service that deviates from the primary alignment to pick up passengers, demand responsive shuttle or car sharing services provide transportation within a community and/or connection directly to the bus network. These services generate ridership by bringing new riders access to the service or allowing current fixed-route lines with low productivity to reinvest that service elsewhere. As with first mile/last mile connections, partnerships play a vital role in implementing these types of services.

Examples of COTA's existing partnerships to provide feeder service to our network include the Groveport Rickenbacker Employee Access Shuttle (GREAT), a partnership with the City of Groveport, Village of Obetz,

and Rickenbacker employers, and SmartRide New Albany, a partnership with the City of New Albany. COTA will continue to pursue innovative partnerships to benefit our riders. Both public and private partnerships will need to be pursued. Partnerships could include other mobility services companies such as Lyft, Uber, etc. COTA will work with municipalities and private companies to provide necessary access.

Energy Efficiency Partnerships and Private Investment in Electric Infrastructure

COTA will partner with businesses and utilities to develop revenue streams associated with excess energy generation from solar powered lights, panels on bus shelters, etc.

Funding Opportunities and Government Partnerships

COTA will identify and track various potential funding sources such as grants and will look at the possibility of developing regional funding programs to leverage current funding and assets. Partnerships with local governments will be investigated to allow for bus stop standardization through cost sharing also.

Community and Business Partnerships

COTA will identify and expand community and business partnerships to provide service offerings and innovative partnerships. Identify potential to leverage corporate/community funding sources for developing new mobility hubs and routes (e.g. COTA Plus route servicing a specific large business).

Bike & Bus and Service Bundling

Integrating bicycles with transit provides numerous benefits. Bicycling increases bus stop accessibility and provides greater mobility to customers at the beginning and end of their transit trips. Bicycle on transit services provide bicyclists with option to use transit to avoid riding after dark, in poor weather, or in areas that do not provide comfortable bicycle access. Improving bicycle and transit connections may also help to decrease automobile traffic congestion and reduce air pollution by reducing motor vehicle trips.

COTA supports and encourages bicycle access to its terminals, facilities, and services by providing accommodations for customers using bicycles when

practicable. COTA will continue to build on the progress of its successful Bike & Bus program through collaboration with partners such as MORPC, municipalities and bicycling advocate groups. In addition, bicycle parking will continue to be included, where feasible, when upgrading or building new facilities. Additionally, COTA will continue to evaluate business models for developing a bike sharing, car sharing, and scooter sharing partnership to support first/last mile mobility options and improve access to COTA transit.

Regionalism

COTA will explore partnership opportunities with regional/state agencies where COTA may serve as a partner, service provider, consultant, mobility manager, etc. This could include developing partnerships with businesses and trip planning companies to add COTA passes to a pre-planned trip to Columbus (e.g. hotels, airfare, events).



PARTNERSHIPS ENGAGEMENT PLAN INITIATIVES

SHORT RANGE 2020-2024

- Continue to work with developers and employers to highlight the benefits of locating near quality transit and incorporating transit stops and facilities into designs.
- Continue to encourage municipalities to develop transit-supportive policies, guidelines and practices.
- Develop private and public partnerships for flex route or feeder services.
- Data Sharing: Continue to work with Smart Columbus Operating System to visualize and share open, secure data.
- Service Bundling: Continue to build on the progress of its successful Bike & Bus program through collaboration with partners such as MORPC and bicycling advocate groups.
- Innovative Lab: Continue the Innovative lab to develop partnerships with mobility services companies such as Lyft, Uber, SHARE, etc.
- Work with Metro Parks to provide accessibility to the Metro Parks network
- Evaluate business models for developing a scooter sharing partnership to support first/last mile mobility options and improve access to COTA transit.
- Partner with City of Columbus as part of its new Vision Zero Initiative.
- Evaluate business models for developing a bike sharing partnership to support first/last mile mobility options and improve access to COTA transit.
- Identify and track various potential funding sources such as grants.

LONG RANGE 2020-2050

- Partner with businesses and utilities to develop revenue streams associated with excess energy generation from solar powered lights, panels on bus shelters, etc.
- Identify regional agencies that collect relevant data and develop data sharing partnerships to promote regional collaboration and planning.
- Develop partnerships with businesses and trip planning companies to add COTA passes to a pre-planned trip to Columbus (e.g. hotels, airfare, events).
- Identify and expand community and business partnerships to provide service offerings and innovative partnerships. Identify potential to leverage corporate/community funding sources for developing new mobility hubs and routes (e.g. COTA Plus route servicing a specific large business).
- Explore future technologies and modes to determine if they can support first/last mile mobility options and improve access to COTA transit.
- Evaluate business models for developing a car sharing partnership to support first/last mile mobility options and improve access to COTA transit.
- Explore partnership opportunities with regional/ state agencies where COTA may serve as a partner, service provider, consultant, mobility manager, etc..

SERVICE OPTIMIZATION

COTA optimizes our fixed route transit services based on three primary objectives:

- Improving Service Frequency
- Decreasing Travel Times and Improving Reliability
- Improving Overall Service Design

Fixed-Route Bus Service will continue to be evaluated for the optimization of service miles and maximize the number of passengers. COTA NextGen and TSR developed non-high capacity improvements to the transportation network in Central Ohio. Continued evaluation for route optimization will contemplate how autonomous vehicles, flex services and other modes could work in the region. The service optimization

evaluation will identify which enhancements could be implemented by 2025 as well as how to fund these alternatives. Service changes occur every trimester and are designed to improve the productivity of existing and planned services. They include schedule, frequency, and alignment changes. Initiatives will be employed by COTA to continually analyze routes and make changes. Service enhancements focus on micro-and para-transit opportunities as well as technology investments. Enhancements include continued evaluation to optimize service, developing alternatives to provide service in less dense areas, connecting job sites with residential areas, and investigating in how technology can support these improvements.

SERVICE OPTIMIZATION PLAN INITIATIVES

SHORT RANGE 2020-2024

- Right-of-way and Curb Management: Evaluate in-street lanes dedicated to buses on streets and highways to improve travel time and schedule reliability.
- Continue to provide supplementary bus service for special events including: Red, White & BOOM! , Bus it to the Buckeyes service and Columbus Blue Jackets games. Explore the feasibility of providing supplementary bus service for summer festivals, community events, conventions and Columbus Crew games.
- Explore the use of dedicated lanes during these events to keep service on normal alignment, on schedule and to promote transit use. Ensure limited disruption for normally scheduled service.
- On-Time Performance (OTP) Analytics: Evaluate innovating testing to improve OTP through operator education, improving the accuracy in the new Transit Master system.
- Improve data management through conversion of manual/paper processes to electronic format.

LONG RANGE 2020-2050

- Develop a cross-functional team of Data Stewards to execute content/document management and data inventory tracking in preparation for data transformation projects (e.g. ERP/BIS).
- Improve data quality and prevent loss of data through reporting automation and streamlining data collection.
- Evaluate and implement a user friendly, cloud based business enterprise software with cross-division data accessibility.
- Improve incident management systems to better understand and predict areas of risk, specifically around security, claims and legal.
- Evaluate and implement a user friendly, cloud based business intelligence software with cross-division data accessibility.

SERVICE OPTIMIZATION PLAN INITIATIVES

SHORT RANGE 2020-2024

- Explore Transit Signal Priority (TSP) and Preemption technology to determine tactical locations for implementation.
- Continue to follow data driven standards for changes to service.
- Continue to implement Mobility Innovation Tests to pilot infrastructure and other tools to improve bus usability and reliability. Including the continued deployment of pop-up bus lanes. Study the feasibility of deploying “time of day” dedicated bus lanes and vehicle traffic restrictions (downtown & HOV).
- Evaluate and update the triannual operator scheduling process to optimize schedules and provide operators with the ability to request their work schedule via an online tool and eliminate the paper board process.

LONG RANGE 2020-2050

- Evaluate and prepare for future Rapid Speed Transportation Infrastructure (RSTI). This could include either Hyperloop or High Speed Rail. Plan for potential integration of service with either mode/technology that could be developed.
- Evaluate the feasibility and impact of autonomous vehicle technology and take steps to prepare for future implementation.
- Evaluate the feasibility and effectiveness of alternative capacity methods (e.g. platooning, headway adherence) for high demand routes to improve efficiency.
- Conduct right-of-way analysis and identify solutions to improve the ability to safely load/unload vehicles in the curb space.

LEVERAGE ASSETS

COTA will continue to evaluate ways to increase financial efficiency, leverage our assets, and seek new and diverse revenue streams. For example, COTA may explore leveraging transit shelters and benches as assets in a partnership with an advertiser to boost revenue.

COTA will inventory our assets and facilities (e.g. parking lots, buildings, wash bays, fueling stations, etc.) and determine which might be leveraged for innovative lease deals or other revenue generating partnerships.

LEVERAGE ASSETS PLAN INITIATIVES

SHORT RANGE 2020-2024

- Efficiency Partnerships
- Diversify Revenue Streams
- Form partnerships to maximize facility space (i.e. extra Park & Ride spaces)
- Advertising Partnerships
- Explore Placemaking and Public Art integration into existing transit amenities

LONG RANGE 2020-2050

- Diversify Revenue Streams
- Develop regional funding programs



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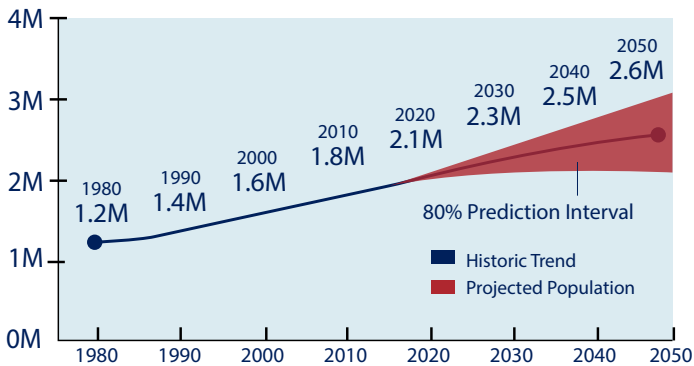
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4.0 CONCLUSION

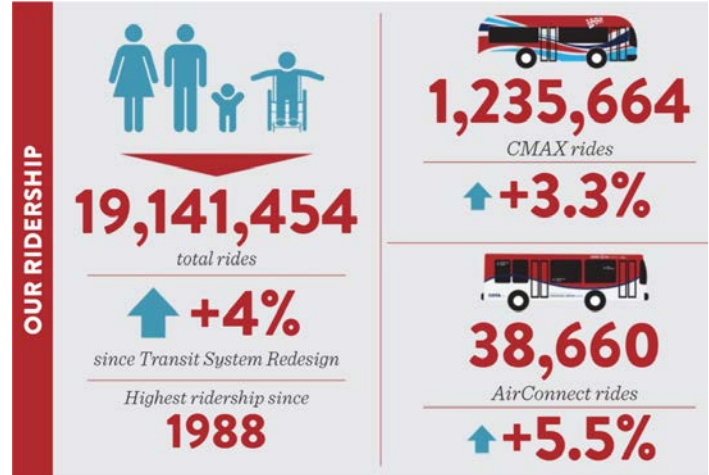
Central Ohio is growing unlike anywhere else in the State. COTA will plan for increased service, promote mobility options and secure public and private partnerships in preparation of this growth.

Figure 4-0: Central Ohio Population Projections. Source: MORPC



Where COTA Is Now

COTA has dramatically expanded its service offerings and capabilities in the last 10 years. Between 2009 and 2019, COTA has expanded its service hours by 63%, with the highest recorded ridership in 31 years, with more than 19 million passenger trips in 2019.



In June 2016, the City of Columbus won the U.S. Department of Transportation (USDOT) \$40 million Smart City Challenge. Columbus has been working with this program to implement a holistic vision for how technology equitably improves mobility options for all residents.

Several new individualized mobility services and mobile apps are being offered to expand the customer base and enhance the user experience. **COTA Mainstream**, provides origin-to-destination transportation for people whose functional limitations prevent them from riding COTA's fixed-route buses for some or all of their trips. Launched in 2019, **COTA Plus** is the region's first public, on-demand microtransit service, connecting customers to fixed-route transit, major job centers, food services, shopping and health care access in Grove City. Users can also take advantage of **COTA Connector**, an online app that allows the user to link their funds to the app and scan a QR code as they ride for a quick and convenient payment option.

4.0 Conclusion

COTA facilities are equipped with technologies that promote environmental sustainability and operational efficiencies. In 2019, COTA completed renovations to their **Customer Experience Center** with upgraded customer amenities such as ticketing and informational kiosks and a video wall displaying COTA's services. In 2013, COTA made the commitment to move their entire fleet to compressed natural gas within 12 years. Additionally, electric buses will be tested as COTA received federal grant funding to replace diesel-powered buses with new electric-powered buses. COTA will pilot two electric buses in 2021. The **Fields Avenue and McKinley Avenue Facilities** are being renovated to accommodate the transition from diesel buses to lower emission natural gas and electric buses.

Completed in January 2018, the **CMAX Cleveland Avenue Bus Rapid Transit (BRT)** provides high-frequency service at uniquely branded stations and offers improved travel times and reliability, new pedestrian amenities and real-time, next bus arrival display information.



Where COTA Is Going

Strategic Plan

In 2019, COTA developed a five-year strategic plan, titled “Moving Every Life Forward,” that articulates the strategic direction for the organization to reflect the changing mobility environment. The strategic plan serves as the backbone of the SRTP and the genesis of the LRTP, providing the mission, vision, and direction to succeed in executing future transit enhancements. Short Range and Long Range initiatives were developed to implement the guiding principles of the strategic plan.

Short Range Initiatives

COTA has developed a list of initiatives designed to generate ridership by providing a higher quality experience.

COTA desires to leverage artificial intelligence technologies to improve mobility within the Central Ohio Region through **Intelligent Transportation Systems (ITS)**. Over the next five years, COTA will continue to pursue the implementation and enhancement of the real time data and mobility apps. COTA will continue to work closely with the Smart Columbus project team to implement new technologies for smart mobility options; including but not limited to PIVOT, the multimodal trip planning and payment system; **self-driving vehicle shuttle pilots**; **Smart Mobility Hubs**, and the **Smart Columbus Operating System**. In addition, COTA plans to utilize artificial intelligence as a means to give the Operator Call Center real-time live data of road conditions and any other situations that affect a route.



COTA aims to develop a bus network that allows riders to live a transit lifestyle. To reach this goal, COTA must pursue strategies beyond service expansion. COTA will utilize **Automated Passenger Counters (APC)**, **Customer and Community Insights Programs**, and **Community Outreach and Education Plans** to analyze and understand the market.

COTA will continue to explore and expand services to attract new customers, such as online customer service, and provide on-demand access in the form of micro-transit (**COTA Plus**), and personalized services for specific populations (**COTA Mainstream**).

Following the successful launch of COTA's \$48.6 million CMAX Cleveland Avenue bus rapid transit (BRT) line in January 2018, during the 2020-2024 timeframe, COTA will continue efforts to implement high capacity transit service along more corridors in Central Ohio. The 2020-2024 budget includes the **Northwest Corridor Mobility Study**, which the City of Columbus is managing with COTA as a partner; an **East-West Corridor Analysis and preliminary design** of a high-capacity transit line; a match for federal grant request for Transit-Oriented-Development and potential dedicated lane analysis for the **Cleveland Avenue corridor**, continued investment in our existing BRT system; as well as two to three “end of the line” enhancements for other corridors.



4.0 Conclusion

Continued renovation of the **Fields and McKinley Avenue Facilities** is included in the five year capital plan. These projects expand CNG fueling capabilities, as well as future electric vehicle charging stations, to support the transition away from diesel coaches and modernize

facilities to account for current and future operations. Facilities construction projects within this plan cycle also include a **new transit center** in the Rickenbacker area to provide access to that major jobs center.

Short Range Initiatives (2020-2024)

FIXED-ROUTE SERVICE

- Continued level with incremental improvements
- One to two 24-hour lines

HIGH CAPACITY TRANSIT

- Multiple corridor BRT system designed; multiple BRT lines integrate specific funding mechanisms and enter FTA funding pipelines
- Strategic Land Acquisition to integrate BRT stations into High Capacity Corridor Developments

MICROTRANSIT

- COTA Plus Expansion: Advance a method to deploy multiple first-mile/last-mile microtransit 'zones', connecting the region to the fixed-route bus system
- Integrate community partners into each zone.

MAINSTREAM PARATRANSIT

- Paratransit Vehicle Replacement(s) per FTA regulations
- Explore cost efficiency elements
- Expand travel training across the region including multiple modes
- Explore restructuring ADA service delivery using the model trialled by Mainstream On-Demand

FLEET

- Replace all diesel buses with alternative sources such as CNG
- Explore Electric Buses as another form of alternative fuels

FACILITIES

- Mobility Center(s)/Park & Ride Improvements
- Bus Shelter improvements
- Rickenbacker Area Mobility Center
- Electric Charging Stations
- Support and partner to launch multiple Mobility Hubs

Funding

Based on existing funding levels and revenue sources, the five-year financial plan projects COTA is limited in fixed-route bus service hours expansion. COTA's major source of local funding is 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 additional ten-year renewable 0.25% sales tax renewed in 2016 by 73% of the voters.

While sales tax revenue is anticipated to continue to fund a large percentage of the Authority's expenditures, staff will be seeking ways to diversify 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. Additionally, COTA will explore the possibility of funding improvements through the use of long-term financing.

Long Range Initiatives

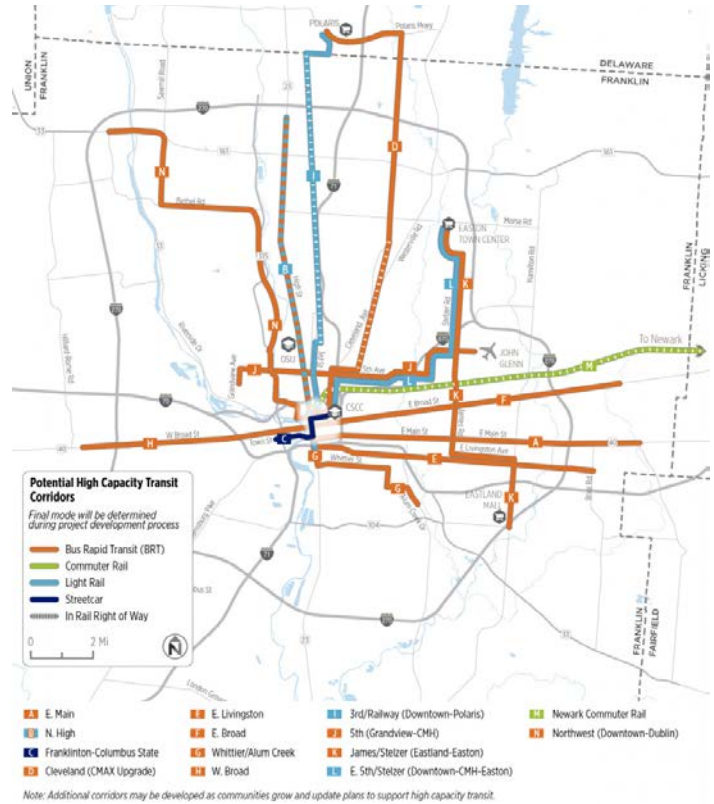
With Central Ohio predicted to grow by up to 1 million people by 2050, the region will need to support a significantly increased level of travel demand. As a result, COTA plans to increase service levels to add new high capacity and fixed routes, add mobility services, implement commuter and limited stop service, and add frequency, to approximately 2 million service hours annually between 2020 and 2050.

COTA plans to add to and expand existing **Intelligent Transportation Systems (ITS)** components during this planning period, including traffic signal priority systems, enhanced fare collection systems, real time information for passengers, smart card and mobile payment technologies, onboard automated stop announcements, automated passenger counters, artificial Intelligence (AI) for modeling customer behavior, connected vehicle (V2I) and sensor technology, and safety and security systems.

COTA will continue efforts to implement high capacity transit service along more corridors in Central Ohio. In

addition to expanded bus service, COTA's NextGen 2050 long range visionary document outlined 14 corridors in which **high-capacity transit** may be applicable.

Figure 4-1: Potential Future High Capacity Transit Corridors



4.0 Conclusion

COTA will continue to work with local cities, Franklin County, and larger institutions along the corridors to develop holistic and progressive initiatives along the rest of the potential high-capacity transit routes. COTA may also evaluate how these high capacity corridors connect in Downtown Columbus, where the majority of the routes meet, to determine appropriate space and location for bus arrivals and departures.

Long range initiatives projections are showing a need for an additional 800,000 service hours annually. Service enhancements will focus on micro-and para-transit opportunities as well as technology investments. Enhancements include continued evaluation to optimize service, developing alternatives to provide service in less dense areas, connecting job sites with residential areas, and how technology can support these improvements.

PLAN INITIATIVES

SHORT RANGE 2020-2024

Rider Engagement

- Real time passenger communication
- ITS improvements
- Improve transit stop amenities, access and safety
- Using data for customer feedback

Fares

- Fare Study and Pass Program evaluation
- Enhance new fare payment system

Fleet

- Evaluate electric bus pilot program
- Replace fleet with CNG buses

Partnerships

- Public and Private
- Data Sharing
- Service Bundling
- Innovation Lab
- COTA Plus expansion

Service Optimization

- ROW and Curb Management
- High Capacity Corridor development
- On Time Performance analytics
- Mobility Innovation Tests

External Facility/Land Investments

- Transit Oriented Development
- Fields Avenue and McKinley Avenue facilities renovations
- Rickenbacker Area Mobility Center
- Strategic Land Purchase

Leverage Assets

- Diversify revenue streams

LONG RANGE 2020-2050

Rider Engagement

- Real time passenger communication
- ITS improvements
- Improve transit stop amenities and safety
- Ambassador Program
- Connected Vehicle Technology

Fares

- Continue to enhance fare payment system

Fleet

- Alternative energy sources for replacement

Partnerships

- Data Sharing
- Service Bundling
- Energy Efficiency
- Regionalism
- Coordination with potential future services (hyperloop, autonomous vehicles, passenger rail)

Service Optimization

- ROW and Curb Management
- On Time Performance analytics
- Service expansion
- High Capacity Corridor/BRT expansion

External Facility/Land Investments

- Transit Oriented Development
- Mobility Centers
- Strategic Land Purchase

Leverage Assets

- Advertising Partnerships
- Diversify revenue streams
- Develop regional funding programs

During this LRTP 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. To offset additional expenses, additional sources of revenue will need to be identified, including debt financing. While sales tax revenue is anticipated to continue to fund a large percentage of the Authority's expenditures, staff will be seeking ways to diversify and grow its non-sales tax revenue, working with partners in the private and public sector to obtain additional grant funding and capture revenue generated from development and redevelopment efforts.

The revenue estimates for the thirty year plan for passenger revenues are based on no change in the existing fare structure and a 1% growth in passenger revenue annually. COTA has used a conservative growth projection for annual revenues of 2.75% from 2020-2050, balancing historical growth with the current economic outlook for the region. Along with assumed growth in sales tax revenue, this results in an average of \$171.7 million in operating revenue annually between 2020 and 2050.

COTA will continue to seek ways to "Move Every Life Forward" by improving transit for the residents and visitors of Central Ohio, enhancing economic vitality and quality of life.



5.0 ACKNOWLEDGMENTS / COTA CONTACT INFORMATION

5.1 Acknowledgments

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External Stakeholders

- City of Columbus - City Council
- City of Columbus - Development
- City of Columbus - Mayor Andrew J. Ginther
- City of Columbus - Public Service
- City of Dublin
- City of Upper Arlington
- City of Westerville
- City of Worthington
- Columbus Chamber of Commerce
- Columbus Regional Airport Authority
- Columbus State Community College
- Columbus Urban League
- DriveOhio
- Franklin County
- Hines
- Homeport Ohio
- Metro Parks
- Mid-Ohio Regional Planning Commission
- NCT Ventures
- Ohio Department of Development
- Ohio Department of Transportation
- One Columbus
- Smart Columbus
- The Columbus Partnership
- The Ohio State University
- Transit Columbus
- ULI Columbus
- Village of Groveport

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